

WESTERN CANADA

SUSTAINABILITY OVERVIEW

Building Progress for People and the Planet 2023





LAFARGE SUSTAINABILITY OVERVIEW

At Lafarge, we are proud to be a global leader in sustainability. We strive for continuous improvement in our operations and products to reduce our impact on the environment while transforming the entire construction value chain. We are building for tomorrow.

At Lafarge, we are dedicated to playing a role in the transition towards a net-zero and more inclusive future.

Our sustainability program revolves around 4 key pillars:

Climate and Energy Circular Economy

Nature and Water

People and Communities

CLIMATE AND ENERGY

We are dedicated to our mission of reducing our scope 1+2 and 3 carbon footprint. We know this supports a more sustainable industry and helps our customers reduce the embodied carbon in their buildings and infrastructure over the whole lifecycle.



Reduce gross **scope 1** GHG emissions by **22.4%** per tonne of cementitious material by 2030, vs. 2018 baseline. Reduce gross **scope 2** GHG emissions by **65%** per tonne cementitious material by 2030, vs. 2018 baseline. Reduce **scope 3** GHG emissions from downstream transport and distribution by **24.3%** per tonne of materials transported by 2030, vs. 2020 baseline.

KEY ACTIONS

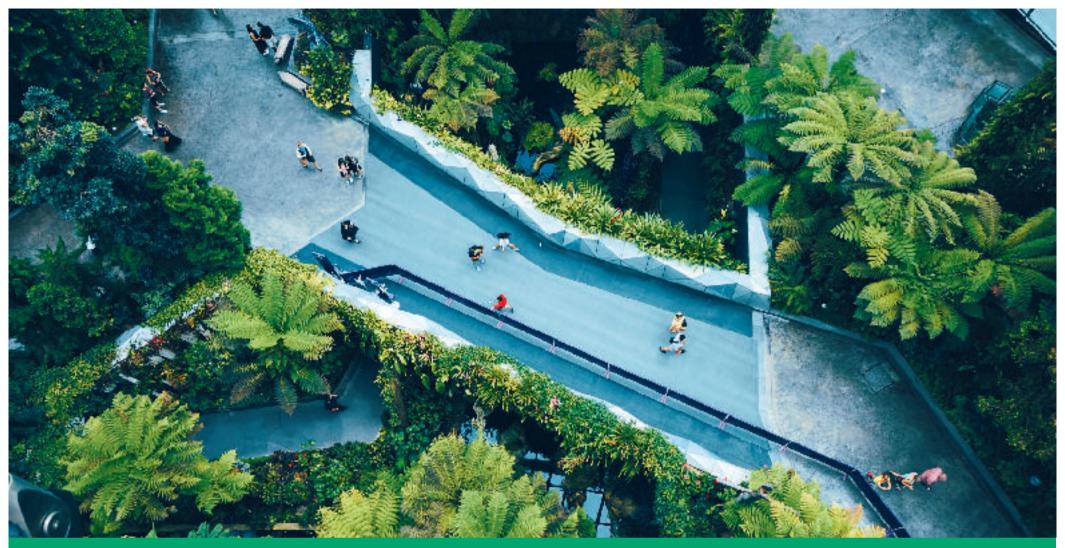
- 1. Transition to Portland Limestone Cement (PLC) has resulted in ~10% reduction in CO₂ emissions associated with cement production.
- 2. Pilot carbon capture system, <u>Project CO2MENT</u>, to capture 1 tonne of CO₂ per day at Richmond, BC cement plant.
 - Utilization technology is planned to be implemented in 2023
- 3. Increased use of Supplementary Cementitious Material (SCM) helps produce low carbon ready-mix concrete and concrete products to reduce environmental impacts.
 - <u>Fly Ash Beneficiation project</u> will recover landfilled fly ash and manufacture a suitable SCM for concrete production.
 - Our Seattle facility grinds imported slag granules from the production of pig iron and uses the byproduct as an SCM in concrete. This replaces up to 80% of cement in concrete, significantly reducing CO₂ emissions.

- 4. Where possible, asphalt production has moved from hot mix to warm mix, reducing the associated CO_2 by ~10%
- 5. Exshaw Power Purchase Agreement (PPA) supplies wind power for ~40% of the plant's power consumption.
- 6. <u>R50 Renewable Diesel</u> introduced in October 2022 at select ready-mix and Quarry sites is a 50% renewable diesel and has a 46% reduction in carbon emissions on a life cycle basis.
- 7. In mid-2023 our Richmond cement plant became the first cement plant within the Holcim Group worldwide to qualify 100% of its cement production as ECOPlanet.



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CIRCULAR ECONOMY

The circular economy is focused on behaviours and processes that keep materials in use and out of the landfill. At Lafarge, we're creating value from waste by transforming it into fuel and raw materials for all our production processes. Check out our <u>Circular Economy Policy</u> to learn more.



KEY ACTIONS

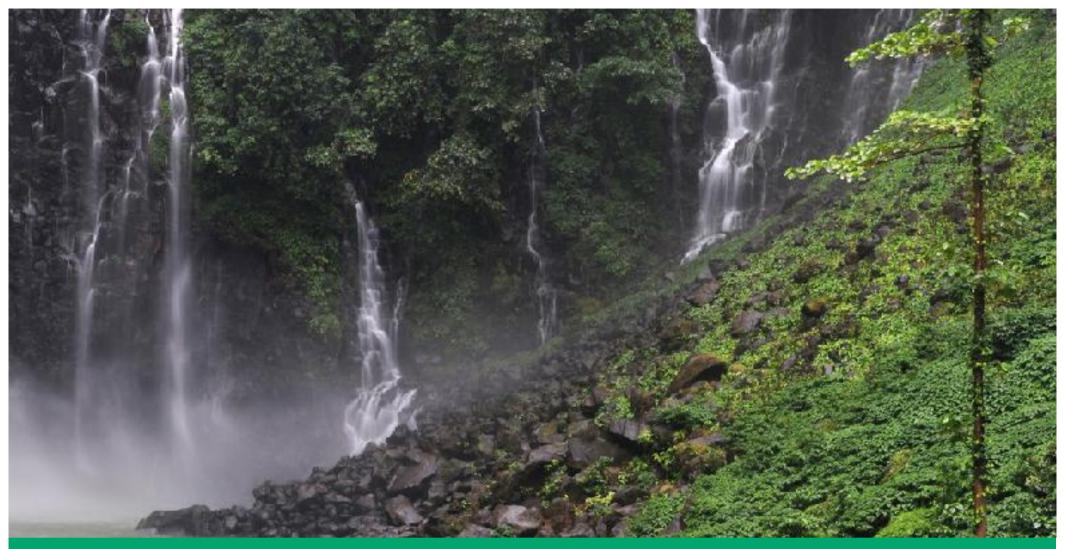
- Alternative fuel systems provide a useful purpose for waste that would otherwise end up in the landfill. In 2022, over 44,000 tonnes of waste material was utilized for fuel.
- 2. Our Richmond and Exshaw facilities use pre-consumer recycled materials as raw materials when possible. In 2021, mill scale, slag, spent catalyst, bottom ash and water treatment residue accounted for over 140,000 tonnes of materials used.
- 3. Through the completion of a waste audit, we optimized bin locations and tripled our recycling rate at our Winnipeg Pre-cast Hollowcore site.
- 4. Within the Greater Vancouver Area, Lafarge partners with a local municipality to blend wastewater treatment biosolids with our onsite waste solids. This diverts biosolids from the landfill, while creating a product that supports the mine reclamation process to enhance biodiversity and support a circular economy.

- 5. Introduction of recycled asphalt pavement (RAP) into Asphalt saves 1 tonne of CO₂ emissions for every 10 tonnes of RAP that is used in asphalt each year.
- 6. We use construction and demolition materials throughout all of our product lines: as an alternative raw material, in our Aggneo, a high quality 100% recycled aggregate product and replacing virgin aggregates in our concrete Ready Mix to produce EcoPact+, a product with up to 90% less CO₂ emissions.



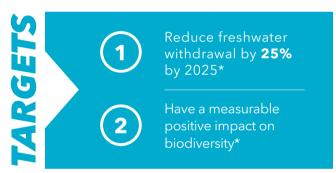
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WATER AND NATURE

Our operations are strongly linked to natural resources, which is why we aim to reduce our impact on the environment. We support biodiversity and sustainable land management in the areas we operate, while reducing freshwater use.



KEY ACTIONS

- Rainwater harvesting, stormwater management and water recycling
- 2. Our Winnipeg Hollowcore site captures wastewater from the collection pits and reuses it to clean the Hollowcore beds. This effort saves 798,000L of water per year.
- 3. In September 2022, as part of our Biodiversity program at Lafarge's Berrymore Aggregate Pit, we held our 12th annual owl banding event with the Royal Alberta Museum.
- 4. Onoway Aggregate Wash Plant wildlife monitoring program engages employees in amphibian and bat identification and monitoring onsite.
- 5. Through our Villenueve Pollinator Enhancement Project, trained Lafarge employees maintain beehives and collect honey annually.

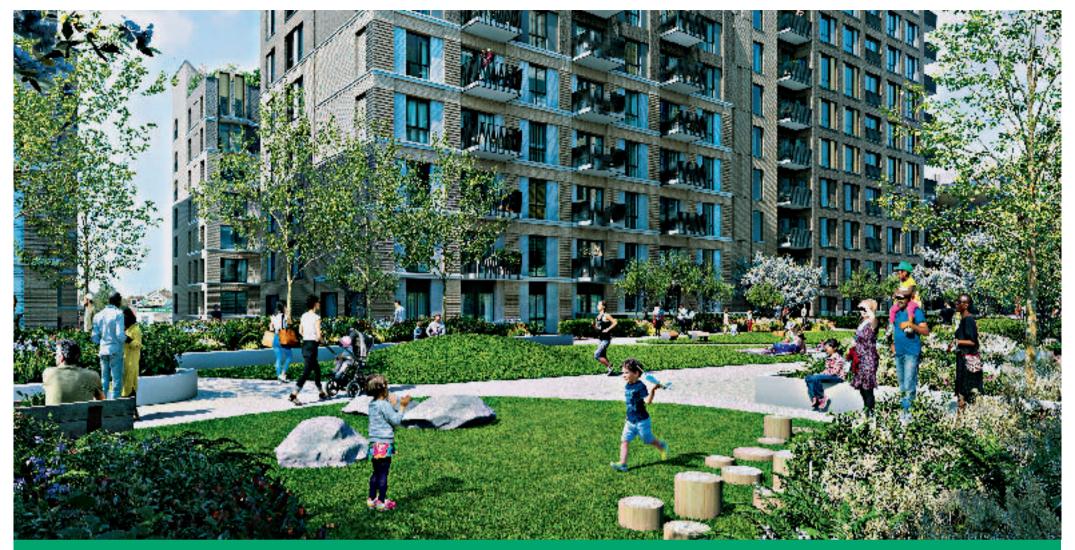
- 6. We regularly complete Biodiversity Indicator Reporting System (BIRS) assessments at our aggregate sites to monitor our biodiversity impact.
- 7. Exshaw has reduced freshwater withdrawal from the Bow River by over 80% by installing a cooling tower to recycle and reuse water in the process.
- 8. Improvements to the water system at Surrey readymix save 6 million litres of freshwater annually. The 3 sedimentation ponds increase the capacity and efficiency of treating processed water and stormwater that is recycled back into concrete production.



^{*} compared to a 2017 baseline

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PEOPLE AND COMMUNITIES

At Lafarge we put people at the heart of everything we do. We aim to improve the communities in which we live and work, by giving back and supporting sustainable, affordable and smart infrastructure.

TARGETS



Improve living standards for all by accelerating access to adequate housing and infrastructure.



Support communities through initiatives that cover health, education and skill building.



Develop **inclusive infrastructure solutions**, such as scalable affordable housing and sustainable rural roads.



100% of cement plants and grinding units will have human rights assessments, formal stakeholder engagement and action plans in place by the end of 2023.

KEY ACTIONS

- 1. <u>5 year In-Kind donation commitment</u> with Nicomekl Enhancement Society to improve biodiversity in BC
- 2. Annual public engagement event at Berrymoor Pit allows the public to see and hold owls as part of our biodiversity program and hear from industry specialists, such as wildlife biologists, about the role of aggregate operations in supporting fossil discovery in AB.
- 3. Lafarge operates within and acknowledges the traditional territories of Sumas Nation and the Sto:lo Nation in BC and the Stoney Nakoda First Nation in Alberta.

We work to sustain good relationships with these Indigenous communities and in 2021 we reached an economic benefits and service agreement with Sumas First Nations to support employment growth and expand social development.

To learn more about our targets and actions, please visit the latest Holcim Climate Report or the Lafarge Canada Sustainability page.

