



2023 ESG Report

Forging Connections. Advancing Growth.

Governance / Planet / People /
Prosperity / Projects





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About KCB



Platinum member



KCB is an award-winning engineering, geosciences and environmental consulting firm with offices in Canada, USA, Australia, Peru, Brazil, Ecuador, Ireland and the UK. Since 1950, we have helped to sustainably develop resources, reclaim landscapes, build communities and stimulate economies by participating in some of the largest and most challenging projects in the world. We have a strong reputation for quality work and technical experience. Our commitment to excellence is the driving force behind everything we do.

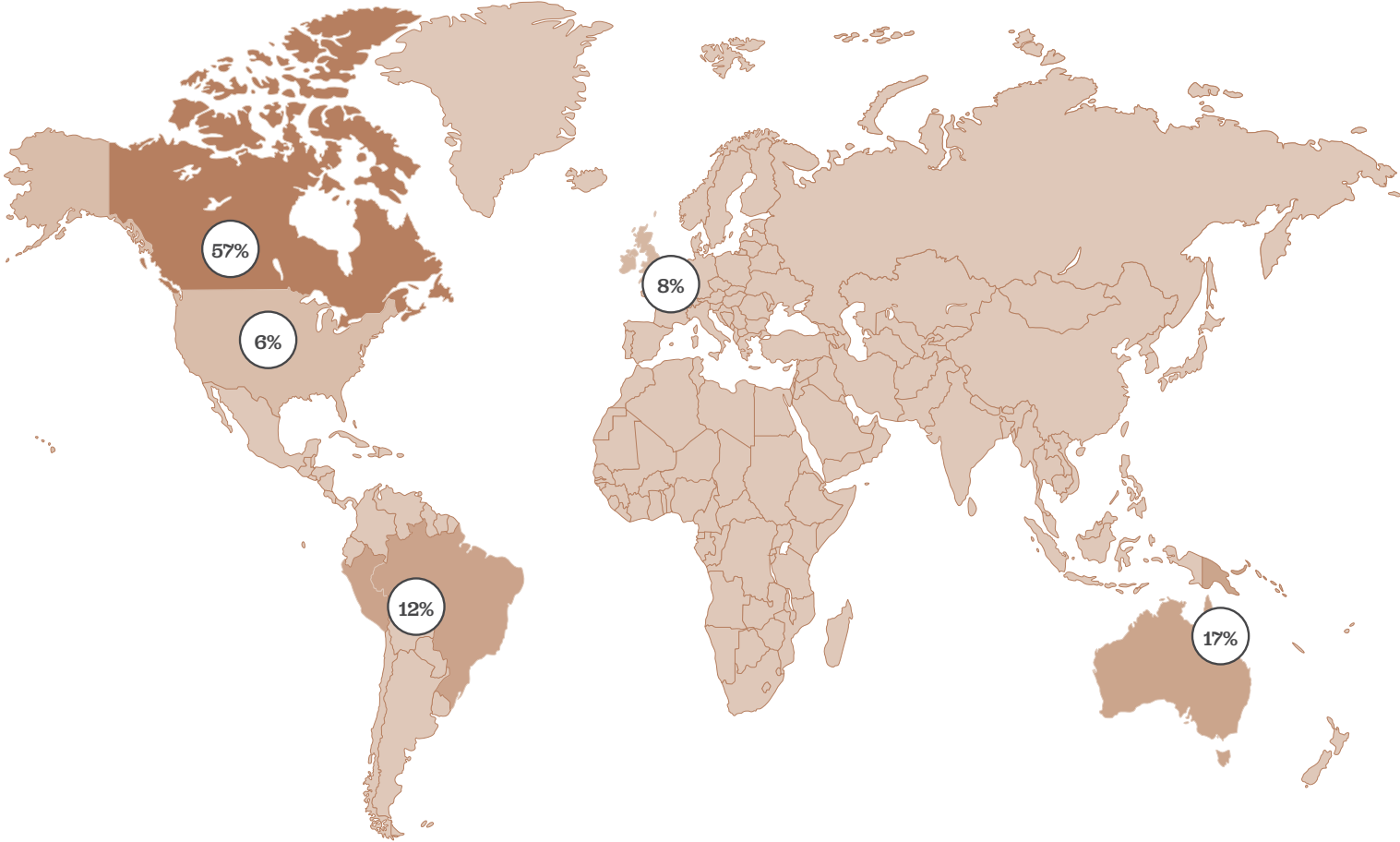


Geographic Breakdown

Employees

Canada	477
Australia	143
Peru	122
Brazil	56
England	17
Ecuador	7
USA	3
Ireland	2

Revenue by Region



Our Purpose, Mission, Vision and Values



Purpose

Creating robust, resilient and location-appropriate solutions that stand the test of time.

Mission

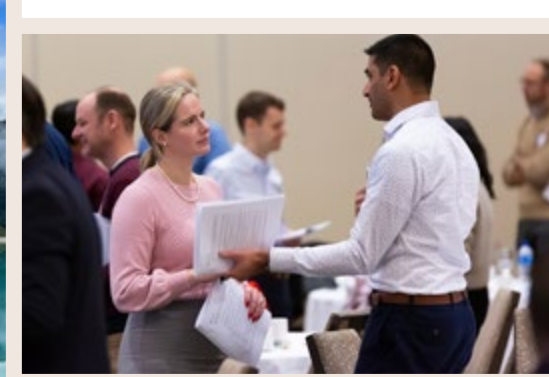
Delivering sustainable solutions for the natural and built environment, everywhere.

Vision

To attract and develop talented employees who work closely with our clients and stakeholders.

Values

- Collaboration
- Passion
- People First
- Professionalism
- Quality and Innovation
- Respect
- Sustainability
- Technical Excellence



Message from the President



Ryan Douglas, P.Eng., P.E.
President & CEO



Last year, we released our first-ever Environmental, Social & Governance (ESG) Report, which represented 10 years of KCB's sustainability reporting and an evolution in our understanding of responsible business practices.

Over the year, we have taken a look at our internal processes and external impact with an aim to strengthen our commitment and progress towards building a better future.

ESG Journey

With the increasing global focus on climate change, we recognized our role in upholding sound ESG business practices and formed an ESG Committee in 2022 to help guide the development and execution of our

ESG strategy. The committee has been critical in championing ESG practices across our offices and driving our ESG strategy forward.

We remain committed and accountable to reducing our environmental impact and tracking our emissions across our offices across the world. For the third year in a row, KCB is a carbon neutral company, partnering with climate solution specialist, Climate Impact Partners, to offset carbon emissions from our business operations and air travel. We are working towards becoming a net zero organization.

Implementing sustainable development practices across all

aspects of our business is our focus as we move into the future. We are guided by the UN's Sustainable Development Goals which highlight the interconnectedness between the environment, society, and the economy. We are always looking for ways to meaningfully contribute to the UN's SDGs in our project work and across our operations.

People First

Organic growth has been a key focus of our organizational efforts in the last year. Our Latin American business unit, made up of offices in Peru, Brazil, and Ecuador, has experienced exponential growth over the past 18 months. We are proud to welcome



new members to our teams who share our commitment to sustainability and will champion ESG in those regions.

At KCB, we strive to be an inclusive and welcoming community for our employees, clients, and partners. In 2022, we strengthened our focus on equity, diversity and inclusion (EDI) with the formation of the Initiate Committee. Since this time we have found ways to deepen our commitment to EDI through our retention and recruitment efforts, workplace policies and community partnerships.

The committee works to advance our EDI strategy, provides support to related committees and championing EDI-related issues both within the company and across our industry.

In April 2023, we partnered with Mercer, an external consulting firm, to facilitate our first-ever Equity, Diversity, and Inclusion survey for employees, in hopes of better understanding their experiences and learning how equitable, diverse, and inclusive our workplaces can be.

Responding to Risk

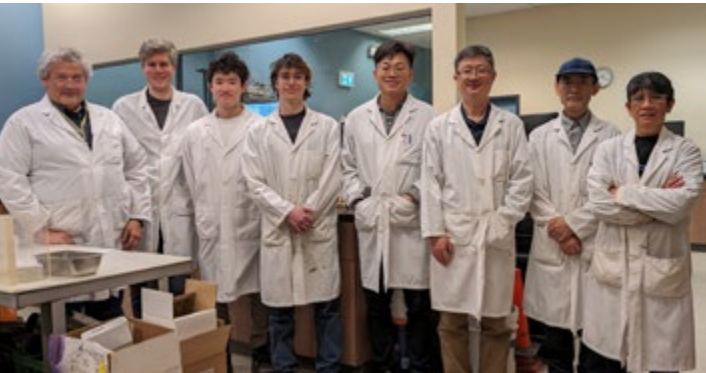
One of the lessons learned from the pandemic was how quickly situations can get out of control. With this in mind, we looked for ways to strengthen our ability to identify and mitigate risks. We developed a Crisis Communications Plan to enhance our emergency plans in the event of a crisis.

Recognizing the need to identify risks in our project work, our Risk Assessment Committee (RAC) is working with project managers

across our offices to gain more in-depth clarity into our higher risk projects, looking at where risks may lie, and determining where assistance may be needed on our projects, for our staff and the community.

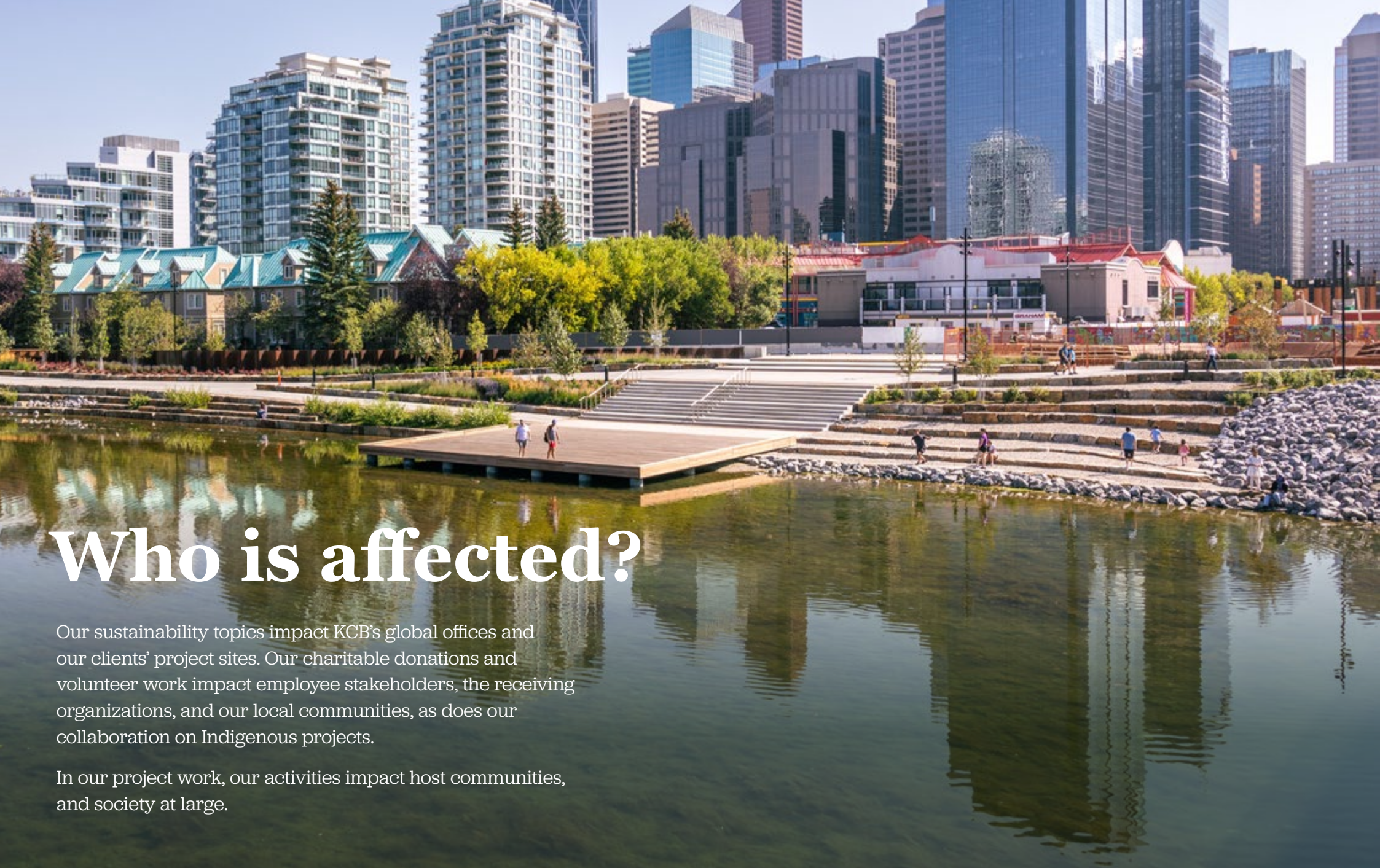
We invite you to learn more about our ESG journey in this report.

Material Issues Affecting Stakeholders



This year, our ESG Committee completed a materiality survey to understand the key issues impacting our business. KCB identified the impact of these sustainability topics through quantitative due diligence including: comparisons over time; surveys of employees and clients; qualitative feedback from clients and employees; the expectations of industry regulators and those who set guidelines; the goals of society at large; and the overall direction of our business.





Who is affected?

Our sustainability topics impact KCB's global offices and our clients' project sites. Our charitable donations and volunteer work impact employee stakeholders, the receiving organizations, and our local communities, as does our collaboration on Indigenous projects.

In our project work, our activities impact host communities, and society at large.

2023-2025

Strategic Focus

January 2023 marked the start of our next 3-year strategic planning cycle. Our 3-year Strategic Plan guides our direction for 2023 to 2025 and focuses on three key aspects of our business: talent management and development, and attracting and growing our client base.

Our Team



Demonstrating the values of diversity, collaboration, and innovation to be an employer of choice for industry professionals.

Development of Future Leaders



Providing well-rounded development opportunities that prioritize internal growth and ensure our teams have a global perspective on industry challenges.

Strategic Clients



Expanding work in core capabilities with existing strategic clients and developing new opportunities to form trusted partnerships.

Forging Connections Advancing Growth



The theme of our report, 'Forging Connections, Advancing Growth,' epitomizes our progress as we endeavored to establish strategic ties with clients, communities, and our people. We aimed to diversify our business while extending our global influence and impact. In line with our *People First* value, we implemented measures to prioritize the well being and professional development of our employees, partnering with an external consulting firm to further our EDI strategy with a focus on eliminating barriers that hinder workplace success.

Governance





Operating Committee

The Operating Committee (OC) is responsible for governing KCB's global operations. Members of the OC include KCB's President & CEO; Chair of the Board of Directors; Corporate and Business Unit Vice Presidents; and Corporate Leads appointed by the President. The role of the OC is to act as an advisory group to the President.

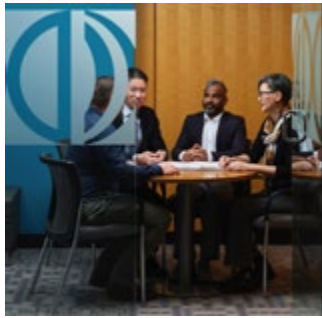
OC meetings are held quarterly and are the forums to report on all aspects of our operations, including business performance and financials. Decisions made by the OC during these meetings guide the future direction of KCB.

In 2023, Joseph Quinn, Manager of our York office, was appointed to the role of Vice President, Alberta, succeeding David Mack.

Chris Strachotta, Director of Business Development and Marketing, was promoted to the role of Vice President, Corporate Strategy and Business Development.

Together, the OC is responsible for the implementation, review, and continual improvement of our IMS.

Integrated Management System



KCB's business is governed using an integrated management system (IMS) consisting of quality, health and safety, and environment policies and procedures.

KCB's IMS steers our business conduct, the way we undertake our projects, how we interact with clients, the community, and the environment, while meeting the legal requirements in each jurisdiction we work in. Our IMS is audited externally every year and internally on a quarterly basis.

Our IMS is registered to the following standards: [ISO 9001](#), [ISO 14001](#), [ISO 45001](#).



ISO 9001 Quality

- Client focus
- System for managing project risk
- System for loss prevention



ISO 14001 Environment

- Environment focus
- System for understanding our interaction with the environment
- System for reducing environmental impact



ISO 45001 Occupational Health & Safety

- People focus
- System for managing workplace hazards
- System for preventing harm

Global Quality, Health & Safety Team, and Related Committees

The Global QHSE Team and the Director, Business Processes, manage and maintain our IMS. Their responsibilities include developing initiatives and an improvement plan based on audit results, business objectives, and stakeholder consultation and feedback. Local Joint Health and Safety Committees and ESG Committees, established across KCB's offices, support the work of the QHSE team.



Assessing Risks

For risks related to the company's operations and projects, KCB has developed the following tools:

- Company Risk Register
- Compliance Register
- Safe Work Practices (SWPs)
- Job Hazard Analyses (JHAs)

More details on these tools are available in *Health and Safety*.

Many of the risks associated with KCB's business are related to the projects for our clients. Risks related to KCB's project work are overseen by the company's Risk Assessment Committee (RAC), who monitor that proposals are within the business risk tolerances of the Company, and that risky clients or projects are objectively assessed.

The RAC is comprised of three members: the President & CEO; Vice President, Technical; and Vice President, Finance.

Communicating in a Crisis

Looking for ways to strengthen our ability to respond to incidents of importance, ranging from public health to cybersecurity, we developed a Crisis Communications Plan that works alongside existing emergency plans to help us respond to critical incidents impacting our organization.



Conducting Business Ethically

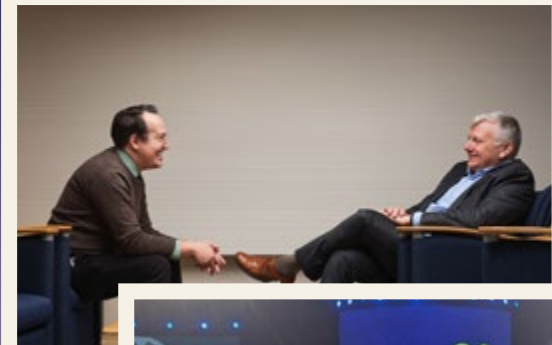
KCB conducts our business ethically, with integrity and honesty. We reinforce this expectation in our Code of Business Conduct and Ethics for employees, subconsultants, subcontractors and suppliers.

Code of Conduct

The Code of Conduct is based on the Values in KCB's Charter. Violations to the Code of Conduct or the Charter are reported to the Ethics Officer, or to a third-party provider, IntegrityCounts, which ensures reports are anonymous and protected, whether they come from employees, community members, subconsultants or clients. All reports are investigated and if found in violation are acted upon. Violations to our Code of Conduct are not tolerated.

Anti-Bribery and Corruption

KCB takes pride in its ethical business practices and conducts itself according to applicable laws and standards in our region of business. Training on bribery and corruption is provided to all employees, during their onboarding process and all employees are required to complete an annual refresher.



Awards and Accolades



Best Managed Company

KCB retained our status for another year as one of Canada's Best Managed Companies. We are recognized for our continued financial success, effective strategic planning, and commitment to improvement.

PSMJ'S Circle of Excellence

Each year we compare our performance to about 300 industry peers in North America by participating in PSMJ's Financial Performance Survey. Based on 13 metrics, KCB continues to be in the top 20% of companies and is the only company to achieve this result every year since 2009.

Safest Employer

KCB was recognized as Canada's Safest Mining & Natural Resources Employer by the Canadian Occupational Safety in 2023. This is the third year we have received this designation.

ABA Employer of Choice

For the 9th year in a row, KCB's Australasia group was recognized as an Employer of Choice at the Australian Business Awards. This award is given to organizations that maximize the full potential of their workforce through effective employee recruitment, engagement, and retention.



Planet



GHG Emissions


(scope 1, 2 & 3)



3,359

KCB offset 3,359 tonnes of CO₂ (measured as CO₂ equivalents) through projects that tackle global climate changes and improve people's lives across the globe.*

**Based on 2022 estimates and includes both office energy consumption and air travel.*

Office Energy Consumption (MWh)



Air Travel (km)

(Based on Business Unit)



Material Usage

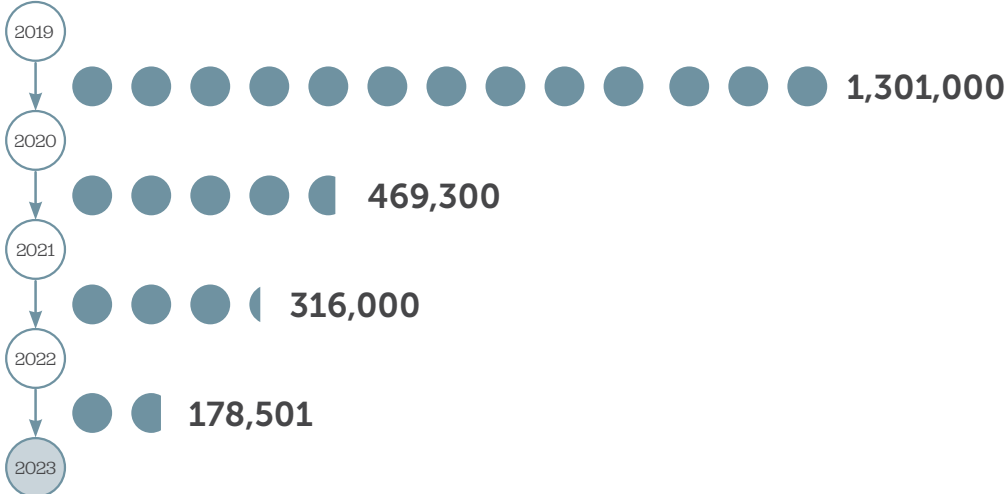
Paper Consumption (sheets)

Canada
92,100

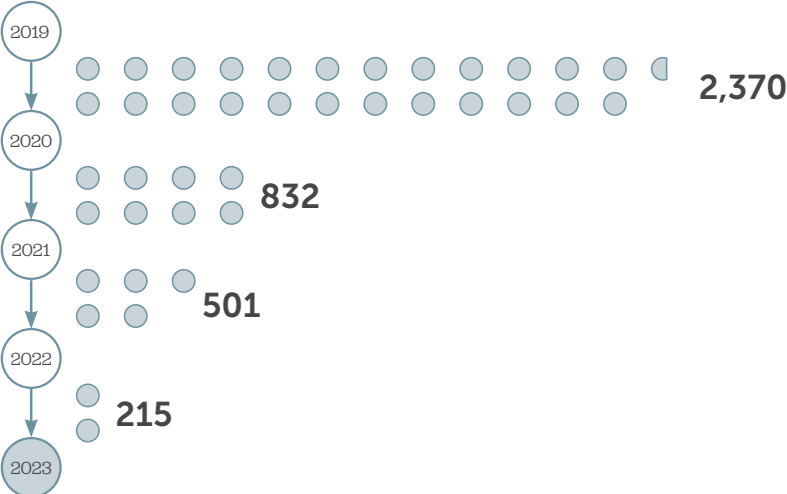
Australasia
46,450

Latin America
39,951

Paper sheets purchased



Sheets per person



SUSTAINABILITY SPOTLIGHT

Brisbane office



In September, KCB's Brisbane operations underwent a significant change, moving from its existing office located in South Brisbane to a new office location, downtown, in the Midtown Centre located on Mary Street. As part of the move, numerous ESG-related decisions were planned and implemented.

An Australian first, Midtown Centre sets a benchmark in adaptive reuse, representing a new era of sustainably designed commercial office space. Re-purposing two ageing inner-city office towers by strategically merging them has resulted in the creation of single macro commercial floorplates. Midtown Centre has become

an exemplar of how to sustainably repurpose an underutilised asset into an innovative, contemporary workplace with minimized environmental impact. The heritage-listed Walter Reid facade has also been respectfully reconditioned, improving the connection within its context and the repurposing of the new building. Landscape has been used to mark various transitions between old and new structures in key locations. The creation of an internal, publicly accessible link between Mary and Charlotte streets provides the 'missing piece', connecting seven city blocks through a collection of laneways.

It is estimated to be 231%

more environmentally friendly due to adaptive reuse of the structure, rather than utilizing a demolish and new build approach. It achieved carbon savings of roughly 11,000 metric tonnes per year (concrete and steel). The construction methodology allowed for a 38% carbon emission reduction versus a new build, with 90% of the demolished materials being recycled. The embedded carbon savings means the property runs carbon neutral (net zero emissions) for over 4 years.


Following selection of the new office space, numerous ESG initiatives were planned by the Australian ESG committee and

implemented during the office move.


These included the following:

- Contractor selection focused on reducing carbon footprint and waste management.
- ISO compliant contractors for moving and IT recycling.
- IT equipment repurposing and E-waste
- Waste reduction - segregated recycling and waste streams with tracking and reporting conducted by the building manager


ESG highlights of Midtown Centre:

 Centrally located within the Brisbane CBD, close to abundant retail, parkland amenity and major public transport nodes

 Unparalleled tenant facilities and sustainability credentials.

 UV sterilised conditioned air, perimeter, and internal zone control to reduce bacteria and air contaminants in the air by 99.7%.

 Carpets and paints with low volatile organic compounds.

 Efficient modern facade which reduces heat loads.



Clean Up Australia Day

Our Brisbane office participated in Clean Up Australia Day, the largest community-based environmental event in Australia, collecting trash from around the neighbourhood.

Earth Day

Team members, and their families, from our Vancouver office spent the day hiking and removing invasive weeds (e.g. Scotch Broom) from the Coquitlam Crunch, a popular hiking location.



People

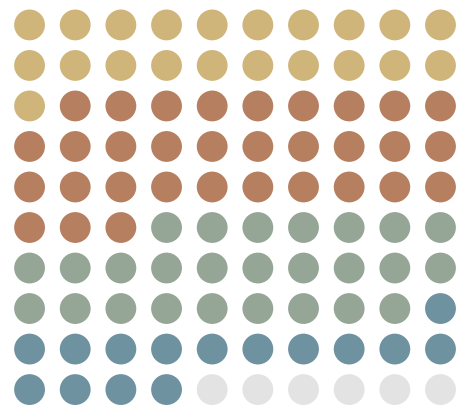


Employee Stats

827
Employees

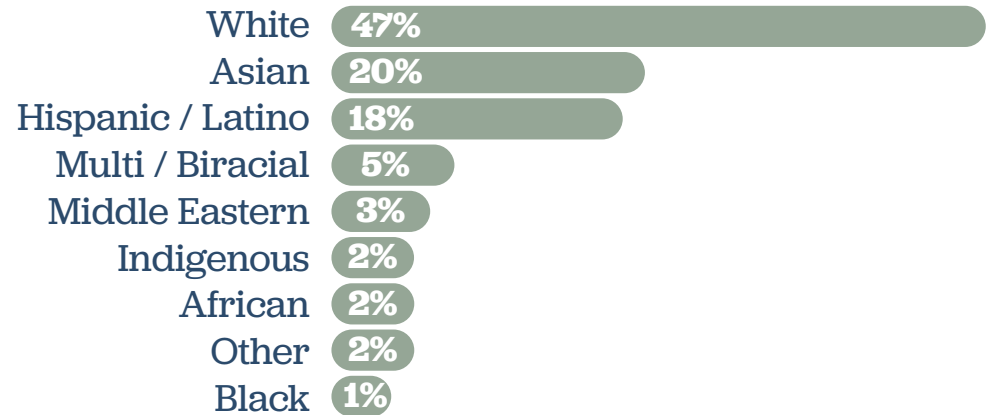


Age



- Under 30 = 21%
- 30 – 39 = 32%
- 40 – 49 = 26%
- 50 – 59 = 15%
- 60+ = 6%

Race / Ethnicity





DIVERSITY AND INCLUSION

Reducing Barriers to Success

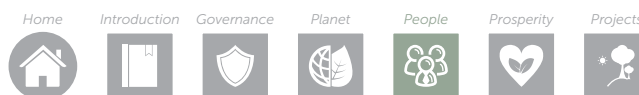
At KCB, we live our value of ‘People First’, by developing initiatives that prioritize employee well-being and professional development.

In April 2023, we partnered with external consulting firm, Mercer, to facilitate our first-ever Equity, Diversity, and Inclusion survey for employees.

Survey feedback will guide KCB as we develop an EDI strategy that promotes the representation and participation of individuals of all diverse

backgrounds and identities, and ensures fair treatment, access to opportunity and advancement for all, with a particular focus on reducing barriers that may prevent individuals from succeeding in the workplace.

The survey provides an EDI baseline for the Company to measure our future progress.





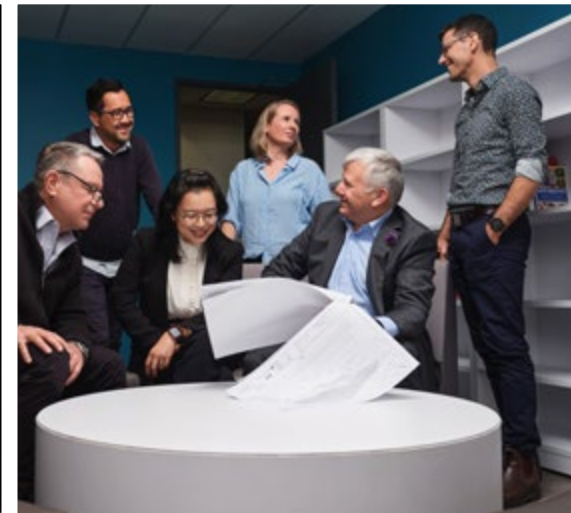
5%
identify as
LGBTQ+



4%
indicate a mental or
physical disability
DISABILITY



62%
work in a
COUNTRY
different from where
they were born



56%
are
CAREGIVERS



23%
speak a
LANGUAGE
at home that is
different than the
primary language in
the office



Gender

We compare our gender diversity between 2021 and 2023 based on our full-time and part-time employees, and excluding all temporary, casual and co-op employees.

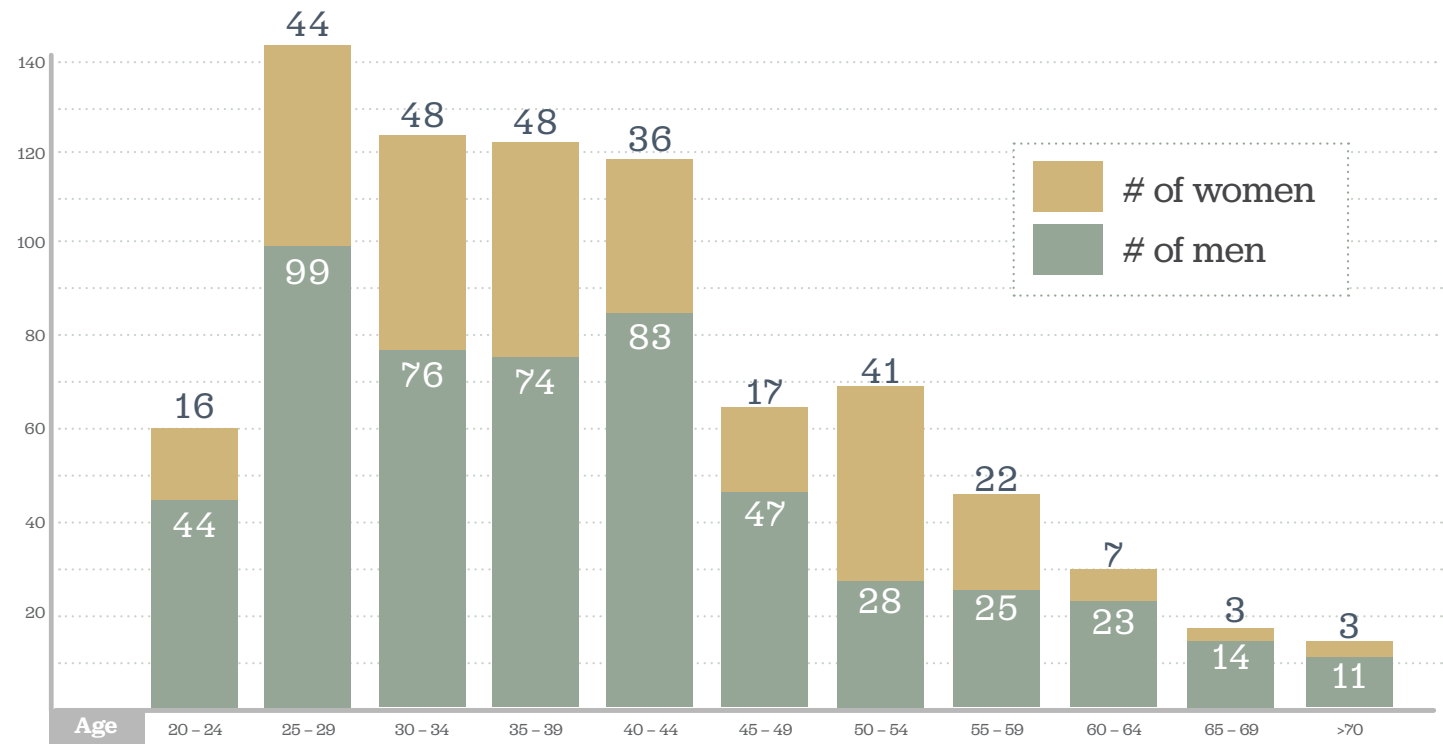
KCB's employee count has grown by 28%, from 571 to 829. Between 2021 and 2023, the percentage of males and females in our share ownership and management positions has remained relatively constant. In our population of engineers, scientists and technicians, 25% are female.

In 2023, we saw a 2.5% reduction in female employees compared to 2021.

2021



2023



SUSTAINABILITY SPOTLIGHT

Latin America

Our fastest growing business unit, Latin America (LAM), is championing ESG values across their offices.



A LAM ESG committee was established in 2022 as part of our global ESG strategy. The LAM ESG committee meets every month to develop, implement and review ESG initiatives across the LAM region.

In Brazil, our initiatives focused on the impact of recycling and repurposing materials, and finding new uses for residual oil and coffee grounds.

Electronic Waste Recycling

Since 2022, the LAM offices have been collecting electronic waste. Employees contribute unused

equipment, which is then recycled by Emile, an organization specializing in equipment reuse, recycling and disposal.

Turning Coffee to Fertilizer

Coffee grounds are collected by the Belo Horizonte staff for composting. Once the compost is ready, it is distributed among staff to use as fertilizer.

In Lima, employees found ways to celebrate sustainability while supporting their local communities.

Celebrating Sustainability Days

Monthly flyers are shared about relevant sustainability days (e.g. World Car-Free Day, World Recycling Day, World Day of Environmental Education) to promote awareness and understanding to employees.

For World Water Day, LAM employees celebrated with a drawing and photo contest. Employees and their families sent in pictures showing the beauty of water landscapes. Many employees and their families in Lima pledged their commitments to water conservation on a mural.





The Lima office organized a beach clean-up day and collected garbage at a popular beach near the office. Participants also encouraged other beachgoers to participate in a trash collection campaign, promoting awareness of the impact of littering.

Techo Partnership

In partnership with Techo, a nonprofit organization that fights extreme poverty in Latin America by constructing transitional housing, employees in Lima built two emergency houses for low-income families. The initiative was made possible by donations from KCB employees and a matching donation from KCB. KCB and Techo volunteers spent a weekend building the houses and celebrating this achievement with the recipient families.



PEOPLE

Next Generation of Leaders

In developing our future generations of leaders, we are finding new ways to engage with Young Professionals from across our offices.

Over the last year, we developed initiatives to engage and support our global group of Young Professionals (YPs). In January, six YP representatives from across our offices were invited to present their feedback on employee retention at KCB's leadership group meeting focused on Human-Centred Design.

In October 2023, KCB hosted its first KCB YP Summit in Vancouver. The YP Summit, organized

by the Vancouver YP Committee, was an opportunity for KCB's next generation of leaders to improve their business and communication skills. YPs heard from their peers on key project lessons, explored business development and contract negotiation topics with senior leaders, and participated in a workshop on effective communication.

Health & Safety



KCB's health and safety management system is COR-certified in British Columbia, Alberta and Saskatchewan.

1,369,517 hours worked

5 minor medical aid injuries

0 fatalities

Occupational Health and Safety Management System

At KCB, we take a proactive approach to occupational health and safety, integrating it with our management system and instilling a mindset of health and safety in our employees through policies, training and ongoing feedback and communication.

Our OHS management system is for workplace hazards and the

prevention of injury or illness. It is governed by the principle that everyone in the workplace is accountable and responsible for health and safety, and we recognize that our employees, subcontractors, and visitors have the right to work in a safe and healthy environment. We consult and collaborate with our employees, and train and coach our supervisors, to promote a strong, safe, and healthy culture by identifying workplace hazards and planning for

hazard mitigation. Wherever we work, our goal is to always work safely and prevent harm.

Our system is implemented to ensure we comply with applicable legislative, regulatory, and client requirements for occupational health and safety. Our employees are expected to actively participate in understanding, following and continually improving the system. We reinforce this responsibility through leading

by example, training, audits, and setting company objectives. We are committed to continually improving the effectiveness of our system in collaboration with our employees, clients, and other stakeholders.

Health and Safety Training

Each year, our employees are expected to complete two proactive safety reports. New employees complete mandatory and role-

specific training, and their progress is monitored until the end of their 3-month probationary period.

All employees are required each year to complete QHSE Refresher training, which includes recent updates to applicable OHS regulations and improvements to our OHS management system. Mandatory training includes Health and Safety 101, Ergonomic Awareness, Hazard Assessments and Managing Hazardous Products (formerly WHMIS training).

Annually, our offices participate in safety-related campaigns, including Safety and Health week (formerly NAOSH week) and mental health campaigns such as the “R U Ok?” campaign in Australia and Bell’s “Let’s Talk” campaign in Canada.

Communicating Health and Safety

In addition to mandatory safety reporting, we encourage employees to share first-hand experiences in the field by presenting 15-minute presentations as part of our ‘KlohnSafe’ sessions and we periodically survey our employees on company health and safety culture.

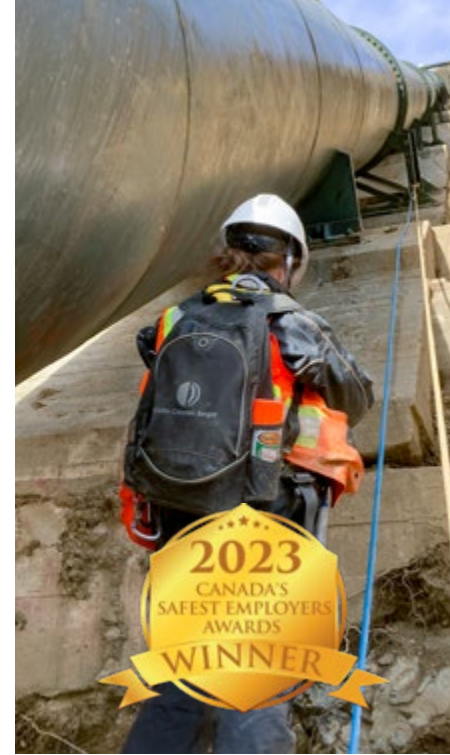
We keep health and safety “top of mind” by sharing safety shares at the start of meetings. Safety shares are short stories about recent health and safety items, and we maintain a safety share library for company presentations or client meetings.

Our President includes a safety or health-related notice in his regular message to employees and each quarter, the senior management team reports on the status of our safety culture, based primarily on employees’ safety reporting and incident statistics. Quarterly summaries are issued to employees and compiled into an annual IMS performance report.

Preventing and Mitigating Occupational Health and Safety Hazards

Hazard assessment at KCB is undertaken at multiple levels, including at the company, manager/supervisor, project, and employee levels.

At the company level, we assess the potential health and safety hazards related to our work, along with their operational controls, and related



regulatory and other requirements. The Compliance Register is the foundation of the company’s risk assessment for OHS, and maps the hazards related to our work to legislation and KCB’s controls, with the goal of reducing the risk to as low as reasonably achievable.

The Compliance Register is reviewed and updated on an on-going basis with input from our Global QHSE group, whose members collate feedback from employees in their location. In March 2021, we refreshed our Compliance Register by reviewing

each hazard, through the lens of the COVID-19 pandemic, and reassessed the company’s risk assessment for OHS.

At the project level, project managers lead the hazard assessment of project field assignments by developing a health, safety, and environment plan with the project team.

At the employee level, we coach our people to become safety leaders who can identify and act to address hazards they observe in the workplace. We involve our employees in preparing safe work practices, which are general guidelines on how to safely perform common work tasks, and job hazard analyses, which include a series of detailed steps for safely completing a critical task.

Our OHS management system continues to evolve with changes to work environments, geographic locations, regulatory framework and/or market sectors.

Training & Education































\$2.1M
invested in training

24,386
employee training hours



Industry and Professional Associations

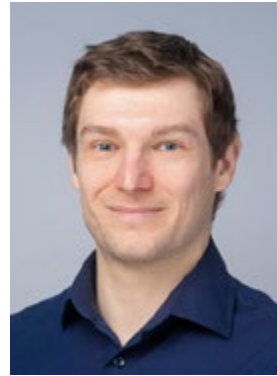
 <p>Alberta Native Plant Council (ANPC)</p>	 <p>Alberta Chamber of Resources (ACR)</p>	 <p>American Railroad Engineering and Maintenance-of-Way Association (AREMA)</p>	 <p>ANCOLD</p>	 <p>Association of Consulting Engineering Companies (ACEC-BC)</p>	 <p>Association of Consulting Engineering Companies (ACEC-SK)</p>
 <p>Association of Professional Engineers and Geoscientists of Saskatchewan (APEGGS)</p>	 <p>Australian Geomechanics Society (AGS)</p>	 <p>British Columbia Geophysical Society (BCGS)</p>	 <p>Canadian Dam Association (CDA)</p>	 <p>Canadian Geotechnical Society (CGS)</p>	 <p>Canadian Institute of Mining, Metallurgy and Petroleum (CIM)</p>
 <p>Canadian Land Reclamation Association (CLRA) - Atlantic</p>	 <p>Canadian Standards Association Group (CSA)</p>	 <p>Consulting Engineers of Alberta (CEA)</p>	 <p>Engineers and Geoscientists BC (EGBC)</p>	 <p>Geoprofessional Business Association (GBA)</p>	 <p>Earthquake Engineering Research Institute - BC Chapter (EERI-BC)</p>
 <p>International Committee on Large Dams (ICOLD)</p>	 <p>International Geosynthetics Society (IGS)</p>	 <p>Mining Association of Canada (MAC)</p>	 <p>Ontario Mining Association (OMA)</p>	 <p>Queensland Resources Council (QRC)</p>	 <p>Queensland Tailings Group (QTG)</p>
 <p>Society for Mining, Metallurgy & Exploration (SME)</p>	 <p>United States Geological Survey (USGS)</p>	 <p>United States Society on Dams (USSD)</p>	 <p>Vancouver Geotechnical Society (VGS)</p>		

New Associates



MAGGIE MACKAY, P.ENG.

Maggie joined the Fredericton office as a hydrotechnical engineer in 2019. She has 12 years of experience in dam safety studies, mine water management, municipal flood studies, construction water management, and dam breach assessments in Canada and internationally. She has worked in the mining industry in various roles and has experience in tailings water management and dam safety assessments.



ROBERT BEAUMONT, P.ENG.

Robert joined KCB's Power & Transportation Group in the Vancouver office in 2014. Rob has 12 years of engineering experience in the energy and mining industries. He has extensive experience with the design, analysis, review, and inspections of large mechanical equipment, including gates and guides, lifting beams, large valves, hoists, gantry cranes and rails, generators, and turbines. Robert is proficient in the provision of on-site technical assistance, project management, project coordination, contractor monitoring, and dam safety services.



BLAIR LAWRENCE, P.ENG.

Blair joined KCB's Power & Transportation Group in the Vancouver office in 2013. Blair has over 14 years of electrical engineering experience, focused on hydroelectric design, technical support, submittal review and site construction monitoring. He has experience working with utility building power supplies, equipment condition assessment and mine site power supplies. He is currently working on the Site C Clean Energy project in British Columbia, coordinating contractor submittal reviews and design changes, and providing engineering design support for construction activities.



SACHIN PATEL, P.ENG.

Since joining KCB in 2018, Sachin has worked from both the Calgary and Saskatoon offices primarily on projects in the mining sector. He has over 10 years of geotechnical experience including performance monitoring of active tailings storage facilities, large scale geotechnical site investigation programs, mine cut-off walls, ground improvement, dam breach studies, retaining walls, geohazards, linear infrastructure, and municipal subdivisions.



K. WARD ALGAR, P.ENG.

Ward joined KCB in 2011 as an engineer in training in the Calgary office. Since then, he has enjoyed a diverse 12-year career with KCB, and is a team lead in the Resources Group. Ward has worked on a variety of projects spanning the hydropower, mining, and oil sands industries, for key clients including TransAlta, Teck Metals, and Shell Canada.



JEFFREY MACLEAN, P.ENG.

Jeffrey started his career with KCB as student completing two co-op terms in 2009 and 2010. After graduating from the University of Waterloo in 2011, he joined the KCB Calgary office as a geological engineer. Jeffrey has over 12 years of experience in the mining industry, working on dam breach assessments, earth fill dams, soil liquefaction assessments, pitwalls, dry stack tailings, waste dumps, site investigation planning, geological and geomorphological mapping, core logging and rockfall hazard risk assessment.



JARRET MACDONALD, P.ENG.

Jarret joined the Calgary office in 2012. He is a geotechnical engineer with over 13 years of experience. Jarret spent his first few years with KCB at CNRL's Albion Sands Jackpine Mine where he gained valuable experience in instrumentation and construction monitoring, as well as geotechnical site investigations. Since then, he is a project manager and geotechnical lead for the design of several tailings and mine waste structures in the oil sands industry. More recently, Jarret participated in the design of a water retention dam in southern Alberta. In 2021, Jarret became a team lead for the Alberta Business Unit's Resources Group.

Indigenous Collaboration

NAIDOC Week

Our Brisbane office celebrated National Aborigines and Islanders Day Observance Committee (NAIDOC) Week from July 3rd to 7th. The week celebrates the history, culture, and achievements and is an opportunity to participate in a range of activities that support Aboriginal and Torres Strait Islander peoples in Australia. To raise awareness, the office sent a daily email and hosted a lunchtime trivia competition.

National Day for Truth and Reconciliation

In recognition of Canada's National Day for Truth and Reconciliation, we had the honour of hearing from Métis/Cree speaker, Roy Pogorzelski. In his presentation, he shared his experience as an Indigenous person, and how government policies have impacted Metis, First Nations and Inuit people in Canada. He educated us on the term "Indigenous Intersectionality" and discussed the Truth and Reconciliation Commission and the ways organizations can lead transformation, create inclusive workspaces and advance reconciliation.



Prosperity



Giving Back

KCB has long recognized the importance of giving back to our local communities and have for many years donated generously to numerous local charities. Recognizing the increasing generosity of our employees, we wanted to give employees an opportunity to give back to local charities of their choice by implementing a program where we offer staff eight hours of paid volunteer time per year.



\$117,000
donated to charitable
initiatives in 2023

*2023 United Way Campaign not included in total due to reporting timeframe

>\$100,000

donated to United Way
in 2022

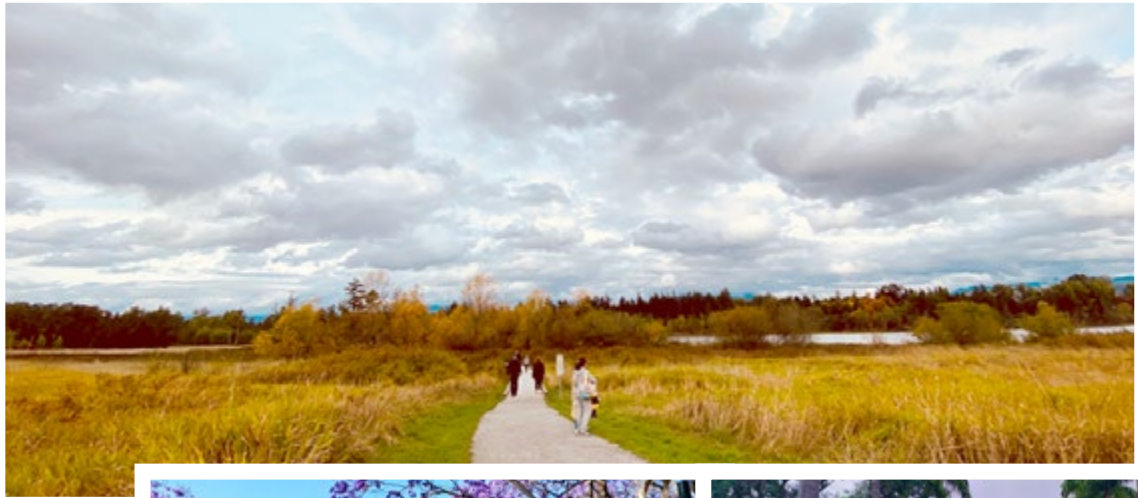
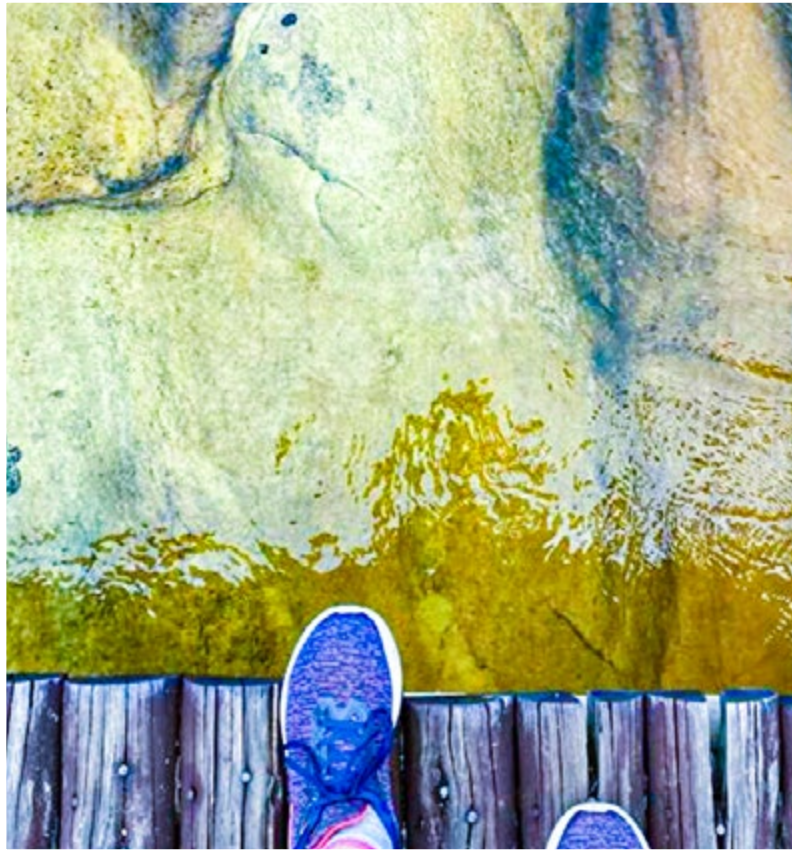




Since 1992, KCB has supported the United Way (UW) and their work to provide local communities with access to basic needs and resources, in an annual campaign run in November.

For the second year, we supported UW's Period Promise Campaign and donated funds to distribute menstrual products to communities in need.

Recent wildfires devastated many areas of British Columbia and the Northwest Territories. KCB and our staff raised \$40,000 in support of BC and NWT residents as they recover emotionally and physically from the devastation of wildfires.



Mental Wellness



From October 10th to 20th, KCB ran our Mind & Move Challenge, in support of World Mental Health Day. This event challenged employees to find ways of improving their wellness.

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Calgary Corporate Challenge

KCB supported the Calgary Drop-In Centre as part of the 'Charity Challenge' of the Calgary Corporate Challenge. Employees, with support from the Hilton Garden Inn Calgary, collected over 60 bath towels and a box full of assorted personal hygiene items for the drop-in centre.



Mustard Seed

A yearly tradition for our Edmonton office is to spend an evening cooking and serving meals to community members in need at a local Edmonton non-profit, The Mustard Seed.



International Women's Day

Many of our Canadian offices came together to support charities creating safe, inclusive spaces to help women thrive in their communities.

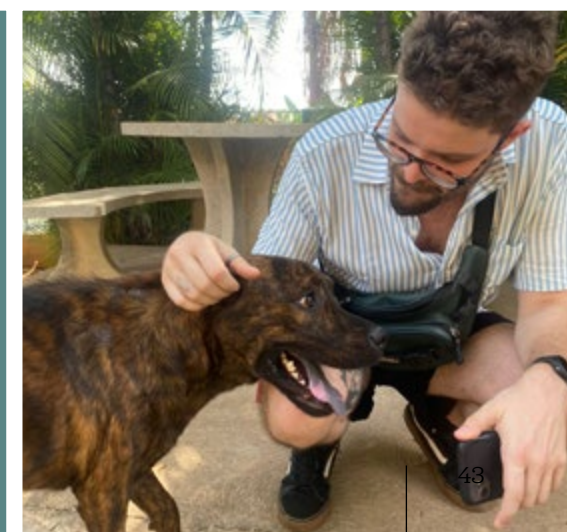


Warm Clothing Drive

Our Young Professionals group from our offices in Edmonton, Calgary, and Saskatoon organized winter clothing drives to support The Mustard Seed.

Cão Viver

KCB employees from our Belo Horizonte office raised donations for the non-profit animal shelter, Cão Viver. The donation, matched by KCB, helps support more than 200 homeless dogs and cats at the shelter.



Research and Development

KCB supports scholarship programs at universities including the University of British Columbia, University of Northern British Columbia, University of Alberta, University of Calgary, and Imperial College London. We also partner with universities around the world to support research and innovation in engineering and geosciences that helps address some of our industry challenges.



Institution

Institution	Institution	Institution	Institution	Institution
Georgia Institute of Technology, Colorado State, UC Berkley, University of Illinois	University of Alberta	University of Alberta	University of British Columbia, University of Waterloo, Queen's University	University of Toronto, Department of Civil Engineering
Project Name	Project Name	Project Name	Project Name	Project Name
TAILENG Research	Implementation of New Monitoring Approaches for Geohazard Risk Management in Canada	Partially Saturated Tailings Liquefaction	Canadian Tailings Dam Breach Research (CanBreach)	Assessment of Residual Strength of Tailings Using the Cone Penetration Test and Simplified Numerical Modelling

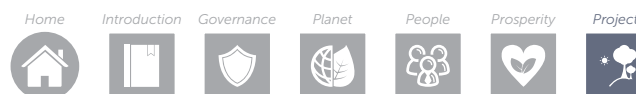
Projects





Adopted by the United Nations in 2015, the 17 Sustainable Development Goals (SDGs) are a plan for addressing the world’s social, economic, and environmental challenges by 2030, with the intent of creating a sustainable future for all people. At KCB, we align with the UN’s SDGs and look for ways to contribute to them in our operations and project work.

KCB has established a system to track SDGs on each of our projects. We plan to track the number of projects that contribute to each SDG.



Klein Lake Dam Removal

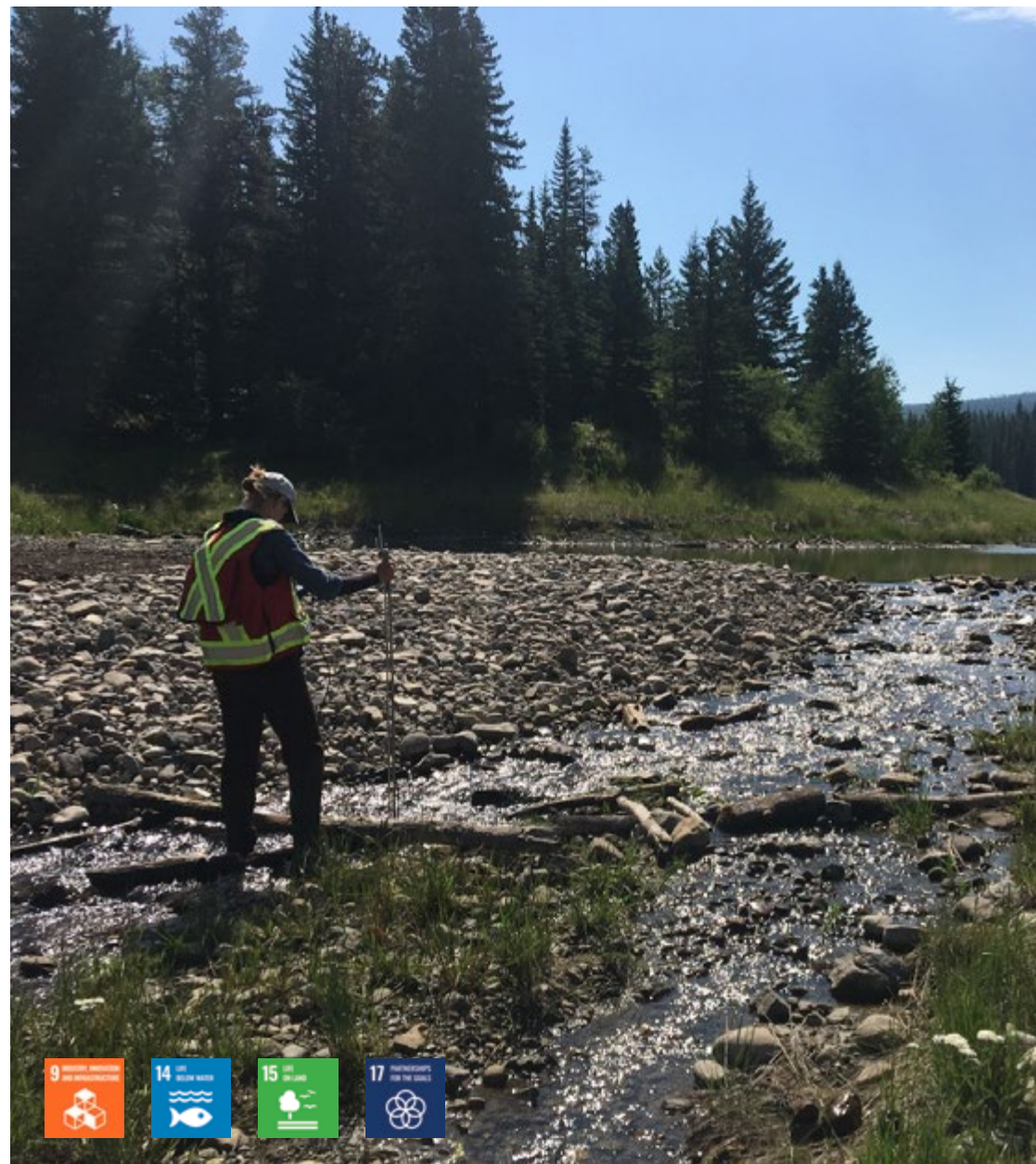
ALBERTA, CANADA

Klein Lake is located 80 km southwest of Sundre, Alberta, in the Rocky Mountain foothills region. The dams impounding Klein Lake were initially constructed in 1965 by the Government of Alberta (GoA) to increase the size and depth of the lake for fishing and recreation.

The dams were damaged during the flood of June 2013 and an assessment was undertaken to identify if there was value in rebuilding the structures or returning the area to a more natural condition. The lake had never provided the intended fisheries benefits due to seepage through the dam structures, and other deficiencies had been noted. The GoA decided to decommission the project by removing both dams at Klein Lake.

KCB conducted design, environmental assessment, and permitting to support dam removal. The dam removal design basis included economically and safely removing the dam structures, revegetating the former lakebed and minimizing sediment release to the outlet creek, and protecting downstream land users and private development from changes in the hydrologic characteristics in the Klein Lake catchment.

An Environmental Evaluation was prepared by KCB during the dam removal design process to identify environmental sensitivities and to support identification of suitable mitigation strategies. Bull trout, a fish species listed as Threatened under the Species at Risk Act, was noted





to occur within Klein Lake and the outlet creek. Removal of the dams was expected to increase the potential for Bull Trout and other fish species to access available habitat associated with Klein Lake and the upstream creek flowing into the lake. However, a key concern was the potential to cause adverse effects on existing fish populations including documented spawning habitat within the outlet creek.

Significant regulatory consultation was required to support permitting. Input from numerous stakeholders was considered in the design and permitting process, including the provincial public lands officer and rangeland agrologist, local residents and recreational land users, resource

companies, Forest Management Agreement holder, grazing allotment holder, and trapping lease holder. Consultation with Indigenous Groups was coordinated on behalf of GoA by KCB subconsultant, DEMA Land Services, and included meetings with the project team to describe and discuss the project intent, site visits to assess existing conditions, and follow-up discussions to receive input and address questions. The project received the support from consulted Indigenous groups, and a traditional ceremony was held by one group prior to the commencement of the work. Historical Resources Act approval was also required, necessitating that KCB's subconsultant, Bison Historical

Services conduct an Historical Resources Impact Assessment at the site to confirm that adverse effects could be avoided.

The project team initiated early engagement with regulatory agencies to solicit feedback on design concepts and strategies for managing environmental risks. A solution was proposed to mitigate the now uncontrolled flood flows by conveying excess flows via a high flow diversion channel around an area of concern. This allowed for the condition of the existing creek channel to be maintained through a section where spawning habitat, used by Bull Trout, had been documented. A mitigation strategy was also developed in consultation with regulators to allow

for instream work to occur during the Restricted Activity Period.

The decommissioning design considered the change in flood routing behaviour of the outlet creek. A design for dam removal was developed and the dam was removed. The design promoted enhancement of aquatic and terrestrial habitat in the renaturalized watershed and fish passage was restored in the area. This approach also removed the downstream risk of a dam failure. A key outcome for the project was that consensus was achieved between government partners, local landowners, First Nations groups and other potential stakeholders in the region.



Galwey Brook Culvert Rehabilitation

ALBERTA, CANADA

The Galwey Brook culvert crossing structure at Highway 6 was assessed by KCB during the 2020 inspections for the Alberta Watercourse Crossing Program (WCP). Fish passage concerns were identified including a drop between the outlet of the box culvert and the streambed; deposited wood debris and substrates that have created a drop and high velocities at the culvert inlet; and rapid shallow flow in the culvert barrels. KCB was retained by Alberta Transportation and Economic Corridors to provide engineering and environmental support to repair the crossing structure.

The crossing structure repairs were expected to restore fish passage and allow for the movement of fish into habitat that previously had limited accessibility. The site was identified as a significant fish passage barrier that was potentially impeding Bull

Trout from accessing spawning grounds. The population of Bull Trout that potentially occurs in Galwey Brook is listed as Threatened under the Species at Risk Act. One of the most significant threats to Bull Trout noted in the Recovery Strategy for the species is habitat fragmentation (GoC 2023). This project was proposed to restore passage and reestablish connectivity to fragmented habitat.

Bull Trout are a species characteristic of cold clean, fast flowing water, and they are susceptible to disturbance and degrading habitat conditions, and are Alberta's provincial fish, sought after by catch and release anglers. Their continued presence is important to naturalists and anglers alike. Bull Trout are top predators and are naturally limited in abundance; and suitable habitat in Alberta has been restricted by various factors.





The WCP broadly aims to repair and upgrade water crossings along roads, railways and trails to reduce their impact on fish habitats and water quality, with an emphasis on prioritizing rehabilitation works that affect species at risk. Alberta Transportation and Economic Corridors contributed to the collaborative inter-departmental WCP by assessing and prioritizing sites for repair, then implementing the repair works.

The inlet and approach were repaired by excavating the creek bed to eliminate the drop, and restore a gradual transition to the culvert entrance. The culvert barrels were addressed by adding riprap substrate along the culvert bottom with steel substrate holders. A Rock Ramp Fishway was constructed by placing riprap and boulders, fibre reinforced concrete, and a bedding layer in the stream for approximately 20m downstream of the culvert outlet to eliminate the drop and

create hydraulic conditions which are passable for fish. The concrete bedded riprap was proposed in order to provide sufficient resistance to scour in high flow events, while also maintaining flow at surface for fish passage under low flow conditions, as large flood flows from the flashy system had displaced previous armour repairs. KCB provided environmental monitoring during construction to document compliance with water quality criteria during instream works, provide feedback

for managing effects on the aquatic environment, and conducting fish rescue within the isolated work area. Despite the work being scheduled for late summer, cliff swallows were raising a second brood of young in the culvert and monitoring was required to confirm that disturbance could be avoided, and the sequence of work was altered to allow for the breeding activity to conclude before work occurred inside the culvert barrel.



Yarwun RMA 2023 Raise Design

QUEENSLAND, AUSTRALIA

The Yarwun Residue Management Area is a facility located 10 km west of the Yarwun Refinery near Gladstone in Central Queensland. The facility receives alumina waste from the refinery via an overland pipeline and deposits the material, as residue, into the dam. Since 2018, KCB has been designing incremental raises to the dam each year with a view of continuing in this vein until the life of facility geometry is reached in the next ten years.

An integral part to KCB's design is the clay core and sand drain which form the internal zones of the dam. The low permeability core minimises water flow from the dam with the drain, immediately downstream of the facility, providing a path for water to flow to cylindrical chambers built around the facility where water is pumped to storage ponds for testing and, in turn, back to the refinery.

KCB continues to design the dam to

allow storage for significant rainfall events during wet seasons; which is one of the requirements stipulated by the Queensland Government which regulates the facility.

The facility is designed in a manner which helps protect both life below water and above land. As mine waste is deposited in the facility, it is allowed to dry and the movement of the resulting effluent is controlled and allows for testing before it reaches the

surrounding environment. The same also applies for other processed water that reaches the facility.

KCB's design considers the fact that the ultimate discharge point for these materials is the Coral Sea and the southern reaches of the Great Barrier Reef and works to minimise the likelihood of water discharging offsite.

QR Mill

BRITISH COLUMBIA, CANADA



The QR Mill site is located approximately 58 km southeast of Quesnel, British Columbia. Existing infrastructure at the site includes the QR Mill itself, open pits such as the Main Zone Pit (MZP), and a conventional tailings storage facility (the TSF). QR Mill has operated intermittently from 1994 to 2021, processing ore from QR Mine and the Bonanza Ledge mine, 50 km to the north near the town of Wells, British Columbia. Slurry tailings produced at the QR Mill have been stored in the TSF and MZP.

KCB is the Engineer of Record for the tailings facilities and is performing the

design and water quality modelling for the upcoming Cariboo Gold Project (CGP).

For CGP, ore will go through crushing and ore sorting at the Bonanza Ledge site and the sorted concentrate will be trucked to the QR Mill for further processing. This processing will create approximately 2.5 million tonnes of potentially acid generating (PAG) tailings which will be managed at QR Mill site. These tailings will be pressure filtered and placed in the existing TSF, following the treatment and discharge of the existing tailings pond.

Filtered tailings technology was chosen to incorporate sustainability principles for the facility during operations and closure. Sustainable development considerations for the filtered tailings facility include:

- Use of Best Available Technology (BAT) - reduction in geotechnical risk profile and processing water requirements compared to conventional tailings.
- Reduction in land disturbance by using the existing facility footprint.
- Decrease in greenhouse gas emissions by reducing construction efforts and haul distance

- Removal of the tailings pond, so the filtered stack can be reclaimed as a landform which meets end land use objectives.

KCB also produced an integrated site-wide water balance water quality model to inform mitigation measures and design to protect surface and groundwater resources. These include water treatment, temporary covering of the tailings, and seepage interception and pump-back.

WEF

Reporting Framework

KCB's 2023 ESG Report references the 21-core metrics of the World Economic Forum's Stakeholder Capitalism Metrics. The metrics are related to four pillars: governance, planet, people, and prosperity. The metrics were developed by WEF to create a unified global standard for ESG reporting and includes disclosures from the Global Reporting Initiative (GRI), Sustainability Accounting Standards Board (SASB) and the Taskforce on Climate-Related Financial Disclosures (TCFD). Our report addresses all metrics that are material to our business as an engineering consulting firm.

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	About the organization	About KCB - Pg. 3
	About the report	President's Message - Pg. 6 Forging Connections, Advancing Growth - Pg. 11
Governance		
GRI 102-26	Setting Purpose	Purpose, Mission, Vision, Values - Pg. 5
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GRI 102-21, 102-43, 102-47	Material issues impacting stakeholders	Pg. 8
GRI 205-2, GRI 205-3	Anti-corruption	Conducting business ethically - Pg. 17
GRI 102-17	Protected ethics and reporting mechanisms	Conducting business ethically - Pg.17
GRI 102-15	Integrating risk and opportunity into business processes	Integrated Management System - Pg. 14 Assessing risks - Pg. 15
Planet		
GRI 305:1-3, TCFD	Greenhouse gas (GHG) emissions	Pg. 20
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Core Metric	Disclosure	Location/Comment
People		
GRI 405-1b	Diversity and inclusion	Our People - Pg. 24 Note: Employee statistics are reviewed for a 12-month period ending in June. The data in this section reflects the reporting period of June 2022-June 2023.
GRI 405-2	Pay equality	At KCB, we are committed to equality and opportunity for all employees regardless of race, nation of origin, religion, sex, marital status, physical disability. All decisions regarding compensation are determined based solely on an individual's qualifications and job performance. Employees are offered a robust compensation package which includes a competitive salary, benchmarked against the industry and reviewed annually.
GRI 202-1	Wage level	
GRI 408-1b, 409-1	Risks for incidents of child, forced or compulsory labour	The sub-consultants and subcontractors whose services that KCB engages are of a very low likelihood for this type of risk. We do not hire factory workers or manufacturers and very rarely hire labourers. KCB does not hire sight-unseen subs to conduct labour work. KCB identifies such risks and potential mitigations through applicable procedures. All subs are required to agree to abide by our Code of Conduct.
GRI:2018 403-9a&b, GRI:2018 403-6a	Health and safety	Pg. 32
GRI 404-1	Training provided	Training and education - Pg. 34

Core Metric	Disclosure	Location/Comment
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Prosperity

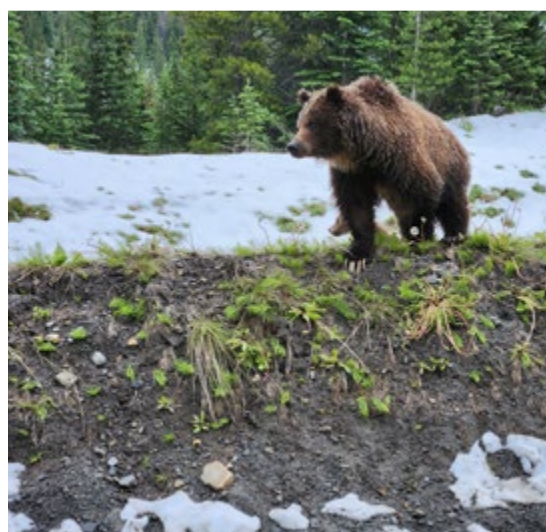
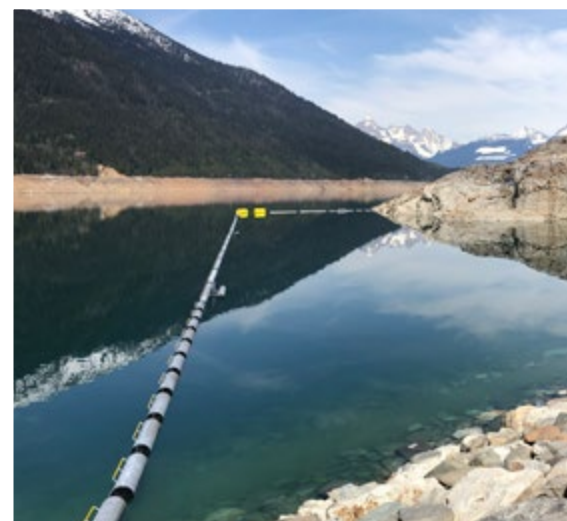
GRI 401-1a&b	Absolute number and rate of employment	Our People - Pg. 24 Note: Employee statistics are reviewed for a 12-month period ending in June. The data in this section reflects the reporting period of June 2022-June 2023.
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Core Metric	Disclosure	Location/Comment
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GRI 201-1, GRI 201-4	Economic contribution	As a private firm, KCB does not publicly disclose financial information related to operating revenues, operating costs, wages and payments. Community investment - Pg. 40
IAS 7	Financial investment contribution	As a private firm, KCB does not publicly disclose this financial information.
US GAAP ASC 730	Total R&D expenses	KCB supports research in the engineering and geosciences through both monetary and in-kind donations.
GRI 201-1	Total tax paid	As a private firm, KCB does not publicly disclose financial information related to taxes.



Down to Earth.
Up to the Challenge





Contact us

📍 500 - 2955 Virtual Way, Vancouver BC, Canada

✉ info@klohn.com

☎ 604.669.3800

www.klohn.com

