



Greenhouse Gas Emissions

Teck Trail Operations

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Teck

Climate Change is one of Teck Trail Operations' sustainability key focus areas. We take action to reduce GHG emissions by improving our operational efficiency and implementing low-carbon technologies. Climate Change is a challenge that requires decisive action to address. We recognize the important role we play in the shift to a low-carbon economy and Teck has established a strategy with short-term and long-term goals for reducing emissions, with the ultimate goal of being carbon neutral by 2050.



- Trail Operations emits about 415,000 tonnes of CO₂e per year, which is world-leading for carbon emissions for an integrated lead and zinc smelter (PwC, 2019)
- Replacement of blast furnaces with the KIVCET lead furnace in 1997 had a significant carbon emissions benefit.
- Our zinc production uses low-carbon electricity from the Waneta Dam.
- For comparison, if our zinc was produced in another jurisdiction that was powered by electricity generated from fuel at the average global emission factor, it would increase our GHG by 830,000 mt CO₂e (200% increase). This is the equivalent of adding 180,000 internal combustion engine vehicles to the road.
- The current lead smelting process is a high-heat, carbon-based chemical reaction. Non-fossil fuel chemical processes for large-scale production are not yet commercially viable, but we continue to work on operational efficiencies to further enhance our environmental performance while assessing potential new technologies.
- Opportunities for near-term improvements include operational efficiencies with our use of coal, natural gas, and coke.
- An example of an improvement project is the KIVCET Burner Upgrade. This project received funding support from CleanBC and aims to improve burner efficiency in the KIVCET by adopting technology from the copper smelting industry. This technology has the potential to reduce GHG emissions by about 6,750 mt CO₂e/year; the equivalent to taking 1,500 passenger vehicles off the road (CleanBC, 2019).

In 2019, Trail Operations' Community Engagement Process found that Lower Columbia residents care about climate change and want to know how we are addressing impacts. Trail Operations is positioned well for GHG emissions by employing world-leading smelting technology and by having access to low-carbon emitting electricity. We are making operational efficiency improvements, while assessing potential new technologies, in order to meet our goal of continuous improvement.