

# Our Supply Chain Impacts and Risks

Novelis' recycled inputs target is a central focus of our sustainability strategy because our most material environmental impacts and social risks occur "upstream" in our value chain through our sourcing of primary aluminum. As a result, the most significant way that Novelis – the world's largest purchaser of primary aluminum – can reduce its environmental and social impacts is by decreasing our reliance on primary aluminum.

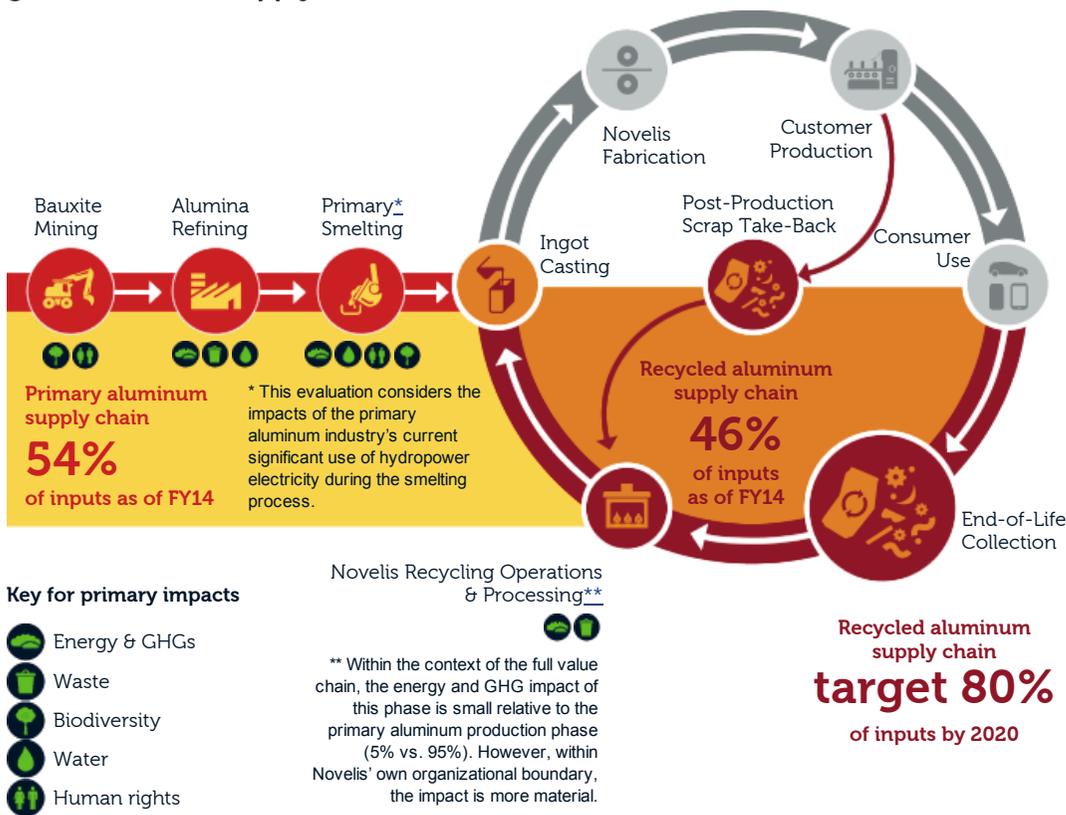
Primary aluminum is produced through a process of extracting alumina from the mined substance bauxite and then refining it into liquid metal. While primary aluminum producers have increased their resource efficiency substantially over time, primary aluminum production remains a relatively water- and energy-intensive process, and therefore generates significant amounts of greenhouse gas (GHG) emissions.

Mining operations also have the potential to impact local biodiversity, water quality and other natural resources. In addition, because some mining operations take place in locations where laws regarding working conditions and human rights are not well-established or consistently enforced, they also have the potential to present a range of social risks.

At the end of FY14, primary aluminum comprised 54% of Novelis' aluminum inputs. Our goal is to reduce primary aluminum to 20% of our inputs by 2020, with the remaining 80% made up of recycled aluminum. Recycled aluminum requires approximately 5% of the energy needed to produce primary aluminum, so when we reach our goal we will eliminate 10 million metric tons of GHGs from our value chain and cut our absolute GHG emissions in half – even with increased production volumes.

However, even when we reach 80% recycled inputs, we will continue to utilize primary raw materials. As a result, we are involved in industry associations, such as the Aluminum Stewardship Initiative, that are working to find ways to minimize the environmental impacts and social risks associated with primary aluminum production and raise the performance bar across the industry. Through initiatives such as this, we are able to engage directly with our primary aluminum suppliers – which also have their own sustainability programs in place – as well as a range of other stakeholders to continue to find ways to support reducing the impacts of primary aluminum production.

**Figure 3: Novelis' Supply Chain**



[Security of Aluminum Supply \(security-aluminum-supply.html\)](http://security-aluminum-supply.html)