A GLENCORE COMPANY

Steelmaking Coal

An essential ingredient in the production of steel – a key component of modern life.

Elk Valley Resources (EVR) is one of the world's largest seaborne exporters of steelmaking coal, also known as metallurgical coal or coking coal.

Steelmaking coal is used in about **70%** of global steel production.

From everyday household appliances to critical infrastructure such as rail, bridges, hospitals and schools, steelmaking coal is an essential input for most steel, which can be used in products to improve the quality of life for people around the world.

Meeting the global demand

Global population growth, increased urbanization, and a growing middle class are expected to drive long-term demand for steel and the steelmaking coal required to produce it. EVR can help meet these evolving needs while supporting responsible resource development, environmental stewardship, and the economic and social well-being of communities in the Elk Valley.

Why we need steelmaking coal

Steel has an important role in society today.

Steel goes into many things we touch and use everyday, from fridges and stoves to cellphones and computers:

Gas stove
68 kg steel = 53 kg steelmaking coal

Refrigerator
69 kg steel = 53 kg steelmaking coal

Steel supports the energy transition in Canada and globally through its use in renewable energy products:

Average wind turbine –
260,000 kg steel = 200,000 kg steelmaking coal

Each megawatt of solar power requires up to 45,000 kg of steel, which requires 35,000 kg of steelmaking coal

Steel is a vital resource in building critical infrastructure and transportation at home and around the world:

Vancouver's Lions Gate bridge -
10,200,000 kg steel = 8,000,000 kg steelmaking coal

High-voltage transmission tower –
27,000 kg steel = 21,000 kg steelmaking coal

40-foot shipping container –
4,000 kg steel = 3,100kg steelmaking coal

1 km of light rail track -
112,000 kg steel = 87,000 kg steelmaking coal

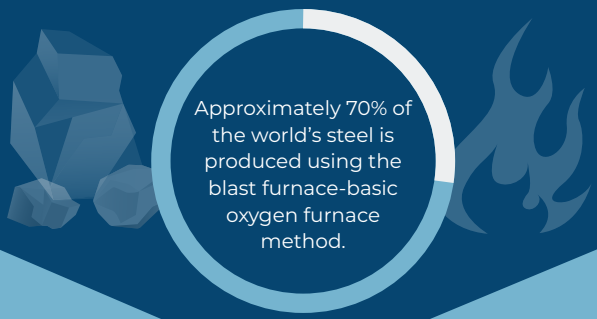
Boeing 787 – 10 aircraft –
13,500 kg steel = 10,500 kg steelmaking coal

Average compact car –
900 kg steel = 700 kg steelmaking coal

Bicycle –
5 kg of steel = 3.9 kg of steelmaking coal

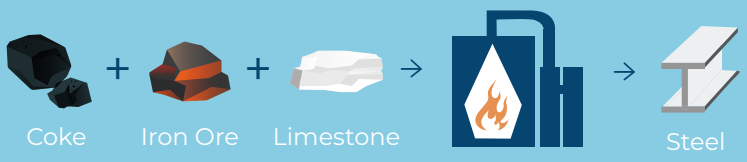
How steel is made

Coal is a naturally occurring rock, formed over millions of years as plants and other organic materials are buried and subjected to geological forces. Heat and pressure cause physical and chemical changes that result in carbon-rich coal.

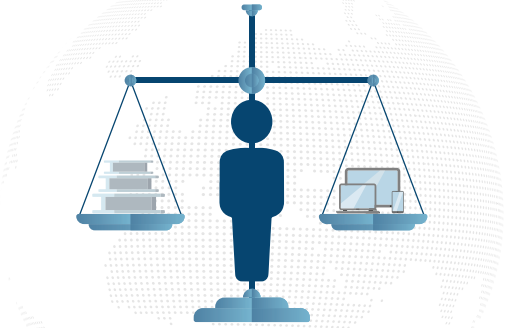


To make steel using this method, steelmaking coal is first brought to a high temperature (around 1100°C) in an oxygen-less oven that drives off its impurities and produces coke, a pure form of carbon.

Then, individual layers of coke, iron ore, and limestone are added to a blast furnace to make hot metal that is finally refined into steel.



Production efficiency in the blast furnace process is highly dependent upon the quality of raw materials used. A blast furnace fed with high quality coke will require less coke, lowering production costs and resulting in a higher quality hot metal.



Globally, 219 kg of steel was used in new products per person in 2023.

Steel Production: Blast furnace

On average, to produce 1,000 kg of crude steel based on the blast furnace-basic oxygen furnace, the main inputs are roughly:

1,370 kg iron ore	**270 kg** limestone
780 kg steelmaking coal	**125 kg** steel scrap

EVR operates four steelmaking coal mines in the Elk Valley of British Columbia, providing jobs for more than 5,000 people. We are committed to responsible resource development, environmental performance and building strong partnerships with communities and Indigenous Peoples.

Learn more at evr.com

At EVR, we produce high quality steelmaking coal.