

Fact Sheet

SMELTING

BACKGROUND

Creating finished copper and other products from the ground is a complex process. It takes several stages and many different mechanical and chemical process to create the products used to build our homes or power our cars.

After extraction, the "ore", or crushed up rock is finely ground and then concentrated, smelted and refined. Each stage removes more of the impurities and creates a more pure copper product.

At Oyu Tolgoi, the onsite processing stops at the 'concentrating' stage. The Copper Concentrate, a fine powder containing up to 30% copper, is then sold to customers.

WHY DOESN'T OT SMELT AND REFINER THE COPPER AND GOLD?

Many companies don't sell finished products, instead getting the best prices they can from their products before they are processed by someone else. It's the same for Oyu Tolgoi. OT is primarily a mine, rather than a smelting or refining company.

This means we get the minerals out of the ground and get them to market quickly to create value for the business and all stakeholders.

SO WILL YOU BUILD A SMELTER IN THE FUTURE?

The next priority for OT is to build the underground section of the mine and ensure a power station within Mongolia has the capacity to supply the mine's power needs.

However, OT will help the Government to investigate the economic case for building a smelter within Mongolia. This is a commitment that we made as part of the Investment Agreement.

SMELTING FACTS

- *Smelting is an expensive, capital intensive industry*
- *Smelters have to be located close to copper mines to be economically viable*
- *Smelters have huge energy requirements*
- *Smelters have big environmental impacts on surrounding areas*

ECONOMIC STUDY INTO BUILDING A MONGOLIAN SMELTER

Oyu Tolgoi is committed to supporting the Government to study the viability of building a smelter in Mongolia. Within three years of the commencement of production, Oyu Tolgoi will, if requested in writing by

the Government, prepare a research report on the economic viability of a party constructing and operating a Mongolian copper smelter.

In 2012, OT worked with the Government to prepare a Memorandum of Understanding (MOU) on analysing the viability of a copper smelter being built. OT is

ready to work with the Government to finalise the MOU and decide how best to conduct studies that examine the economic case for smelting.

This would be a big decision for the Government and OT stands ready to provide support.

HOW MUCH MORE MONEY WOULD OT MAKE IF IT HAD ITS OWN SMELTER?

First of all, if OT built its own smelter it would have to invest billions of dollars more. This would delay the mine from making profits and paying dividends to the shareholders, including the Government. Smelters are also very expensive to run. The quickest and most effective way for Oyu Tolgoi to be a success is to sell copper concentrate at international prices.

There is lots of information about Oyu Tolgoi and how the business works at www.ot.mn/about-us

HOW COPPER IS PRODUCED

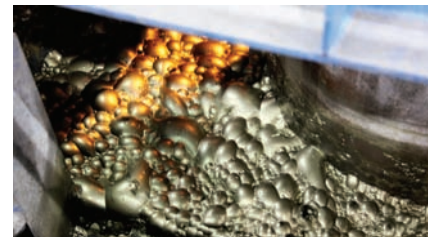
01

"Ore" is mined from the ground. It contains copper, other metals and waste rock



02

The OT concentrator crushes and grinds the ore before using mechanical and chemical processes to turn it into "concentrate" of up to 30% copper



03

The concentrate is shipped to customers and royalties and taxes are paid to the Government



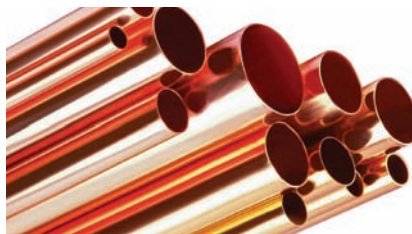
04

Smelters heat the concentrate at well over 1000 degrees Celsius. This creates a substance of between 30 and 70% copper



05

The copper is then traded and sent to a refinery which uses a series of complex processes to create almost pure copper



06

The copper is then sold for use in construction and manufacturing

