

## Minera Antucoya Moves to Convert Mining Operations to 100% Renewable Energy in 2022

Minera Antucoya, which is owned 30% by Marubeni Corporation (hereinafter, “Marubeni”) and 70% by Antofagasta plc (hereinafter, “Antofagasta”), one of the world’s leading copper producers, has signed a power purchase agreement on May 23<sup>rd</sup>, 2019 with ENGIE Energía Chile S.A (hereinafter, “ENGIE Energía Chile”). The terms of the agreement state that, beginning in 2022, all Minera Antucoya mining operations will convert from coal fire to renewable energy.

The Antucoya copper mine is jointly operated by Antofagasta and Marubeni, which acquired 30% of the mine in 2012. The mine is located in the northern II Region of Chile, 180km northeast of Antofagasta City and produces copper cathodes utilizing the SX-EW\* process. Antucoya commenced production in 2015 and is expected to produce about 80,000 tonnes of copper cathodes annually over a period of approximately 20 years.

In 2014, Minera Antucoya signed a power purchase agreement with ENGIE Energía Chile on the basis of coal fired power. However, under the terms of new agreement, ENGIE Energía Chile will supply around 300GWh of power generated by renewable energy sources to Minera Antucoya each year. This will eliminate annual emissions of approximately 134,000 tonnes of CO2. The Antucoya copper mine will become the second copper operation in the Chilean mining industry to run 100% on renewables.

Marubeni’s objective in securing high quality copper assets is to meet the expected increase in demand for such assets due to use in electric vehicles and the development of an IoT society. Additionally, Marubeni will contribute to the stable supply of copper in Japan, reduce the environmental burden of copper mines, and continue to further strengthen its copper business foundation from a long-term perspective.

\* Solvent Extraction and Electrowinning is a method by which an organic solvent is added to the leach solution containing copper recovered in the leaching process. Copper ions are selectively extracted, and then electrorefining is performed to obtain refined copper with a purity of 99.99%.

### < Antofagasta >

Company Name : Antofagasta plc  
Location : London, United Kingdom  
Founded : 1888  
Business Activities : Mining, Transportation, Water business  
HP : <http://www.antofagasta.co.uk/>

# Marubeni

## < ENGIE Energía Chile >

Company Name : ENGIE Energía Chile S.A (Chile subsidiary of the French power and gas company, ENGIE S.A.)

Location : Santiago, Chile

Founded : 1981

Business Activities : Generation, transmission and supply of electricity and the transportation of natural gas in Chile

HP : <https://www.engie.cl/>

## < Minera Antucoya >

Location	: Republic of Chile, II Region (Antofagasta)	
Ore Reserve	: 641Millon tonnes, Cu Grade 0.34% (As of Dec, 2018)	
Copper Production	: Apporx. 80,000 tonnes (anual)	
Production Period	: 2015 – 2039	
Ownership	Company	Share
	Antofagasta PLC	70%
	Marubeni	30%

## < Reference >

- November 6<sup>th</sup>, 2013

Signing of Project Finance Agreements for Chilean Copper Mining Project

<https://www.marubeni.com/en/news/2013/release/00060.html>

- December 15<sup>th</sup>, 2011

Marubeni to become 30% Partner in Antucoya Copper Project in Chile with Antofagasta plc

[https://www.marubeni.com/en/dbps\\_data/news/2011/111215e.html](https://www.marubeni.com/en/dbps_data/news/2011/111215e.html)