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Copper market – Strikes in mines in 2018

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market information, to approximately 30-38 collective labour agreements in copper mines world-wide may be renegotiated. The mines where pay talks will be held account for 5-7 million tons of copper production per year (25-35% of the mined copper per annum). By comparison, in the years 2011-16 the average volume of output threatened as a result of pay agreements renegotiation was 1.7 million tons (of annual production). Most of these talks will be held in Chile and Peru which account for approximately 40% of the global copper production. After the stoppages which took place in early 2017 in the biggest Enscodida and Grasberg mines, one may expect next year's negotiations to be equally demanding. In our opinion, potential stoppages may have a positive effect on the prices of this raw material at the beginning of the year, provided the economic environment in Chine does not deteriorate suddenly. In early 2018, also KHGM will conduct negotiations at Sierra Gorda in Chile. We expect that also in Poland miners may demand pay increases.

Following changes in the labour code in Chile and a significant raise of copper prices at the turn of 2017, mine workers in the country that accounts for the largest share of copper production in the world (27% of mined copper production in 2016) will probably expect pay funds to increase. It is highly probable that in 2018 the managements of mines in Chile will negotiate pay deals with 32 trade unions. In Chile the standard practice is to conclude 4-5 year collective labour agreements with miners setting forth work parameters and the pay fund.

According to market information, in 2018 approximately 30-38 collective labour agreements in copper mines world-wide may be renegotiated. The mines where pay talks will be held account for 5-7 million tons of copper production per year (25-35% of the mined copper per annum). Most of them are located in Chile and Peru (both countries produce 39% of global copper output). By comparison, in the years 2011-16 the average volume of output threatened as a result of pay agreements renegotiation was 1.7 million tons (of annual production).

In 2018, the biggest copper producer in the world (Codelco) will have to negotiate 19 contracts with its workers.

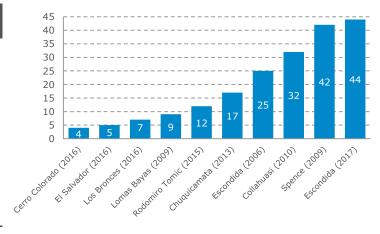
Early next year (2018), also KHGM will begin pay negotiations in Chile. According to KGHM's president, the pressure from the unions is greater than in Poland, which means that the company expects tough negotiations. In January and May 2015, Sierra Gorda concluded a collective agreement with unions No 1 and 2 for 48 and 44 months respectively. Both agreements expire in January 2019. In our opinion, a failure to reach a settlement with the workers in Chile could lead to production at Sierra Gorda being stopped.

For more on the potential strikes in 2018 go to: https://goo.gl/UjtcaS https://goo.gl/wfSxJM

List of the largest mines in Chile which in 2018 will have to renegotiate collective agreements with miners (production; millions of tons per year) / Longest strikes in copper mines in Chile (days)

Mine	Project co-ordinator	Copper production (millions of tons)
Escondida	BHP Billiton	1.20
Collahusi	Anglo Aamerican/Glencore	0.45
El Teniente	Codelco	0.43
Las Pelambres	Antofagasta	0.40
Chuquicamata	Codelco	0.35
Rodomiro Tomic	Codelco	0.33
Cerro Colorado	BHP Billiton	0.20
Gabriela Mistral	Codelco	0.20
Spence	BHP Billiton	0.20
Ministro Hales	Codelco	0.17







List of abbreviations and ratios contained in the report.

EV – net debt + market value (EV – economic value) **EBIT** – Earnings Before Interest and Taxes

EBITDA – EBIT + Depreciation and Amortisation
PBA – Profit on Banking Activity
P/CE – price to earnings with amortisation

P/CE - price to earnings with amortisation
MC/S - market capitalisation to sales
EBIT/EV - operating profit to economic value
P/E - (Price/Earnings) - price divided by annual net profit per share
ROE - (Return on Equity) - annual net profit divided by average equity
P/BV - (Price/Book Value) - price divided by book value per share
Net debt - credits + debt papers + interest bearing loans - cash and cash equivalents
EBITDA margin - EBITDA/Sales

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