

The image shows a complex industrial smelting plant. Large, curved pipes and metal structures are visible, with a bright light source illuminating the scene. The overall atmosphere is industrial and technical.

BOLIDEN

Strengthening competitive position

Kerstin Konradsson, President Boliden Smelters
Capital Markets Day 2017 | 21 November

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BOLIDEN

Strengthening competitive position



Improving
process
stability

Optimising raw
material mix

Strengthening
technical
capabilities

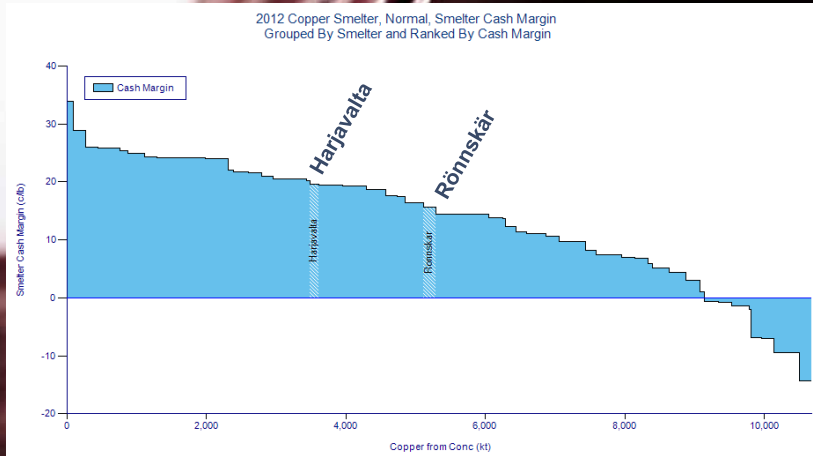
WIM BOLIDEN

Improved competitiveness for most of our smelters...

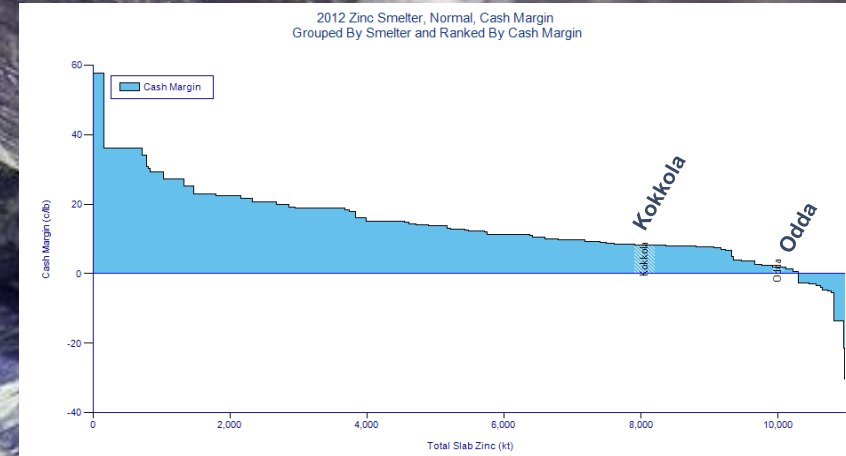
Cu

Zn

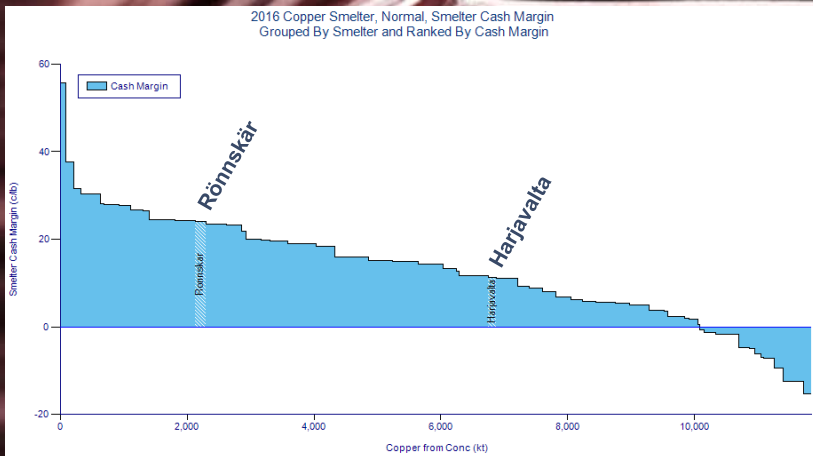
2012



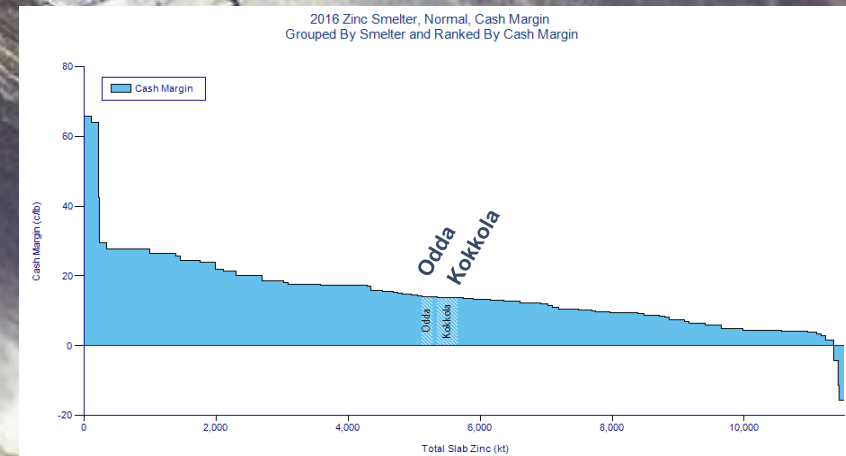
2012



2016



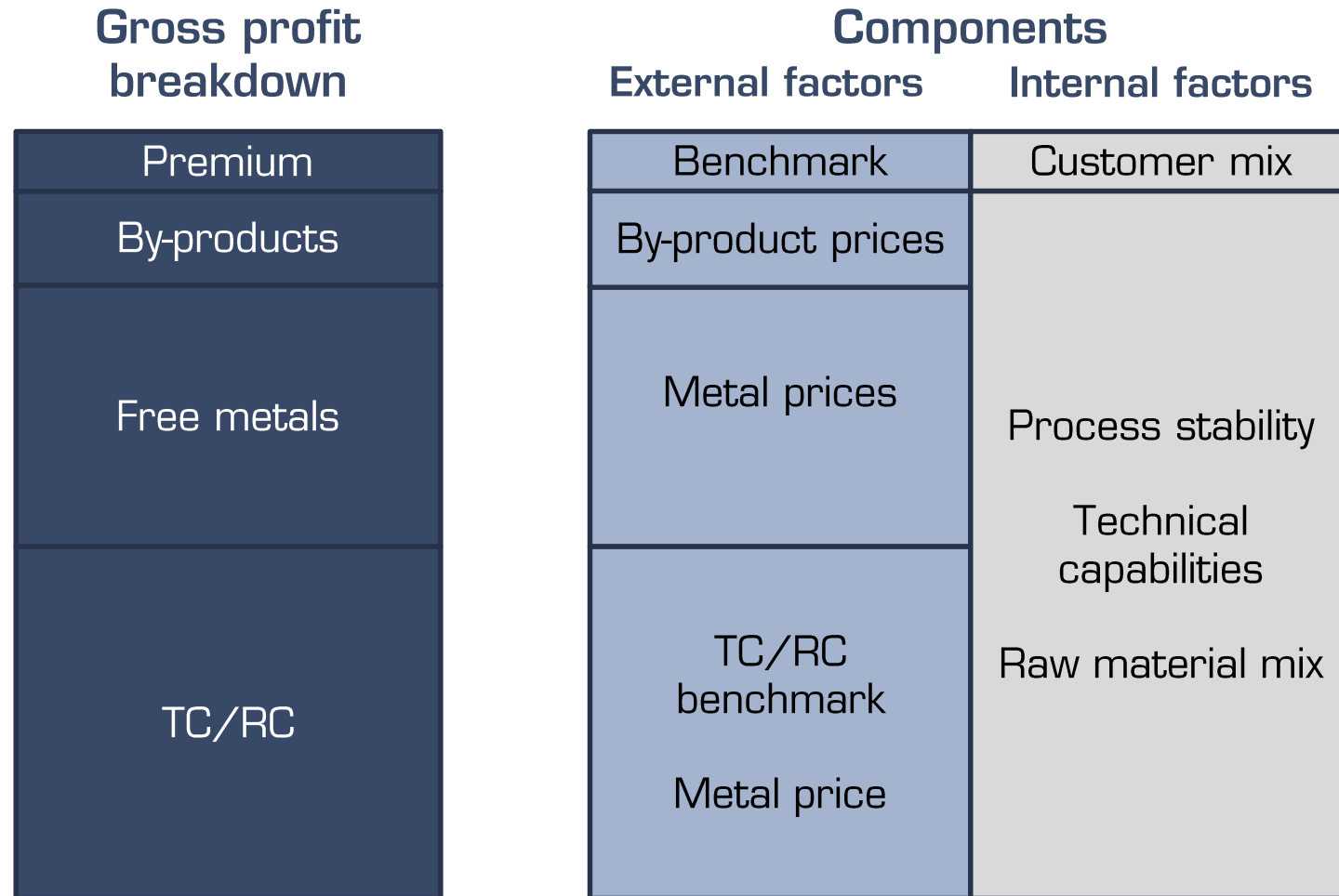
2016



Note: Cash margin.

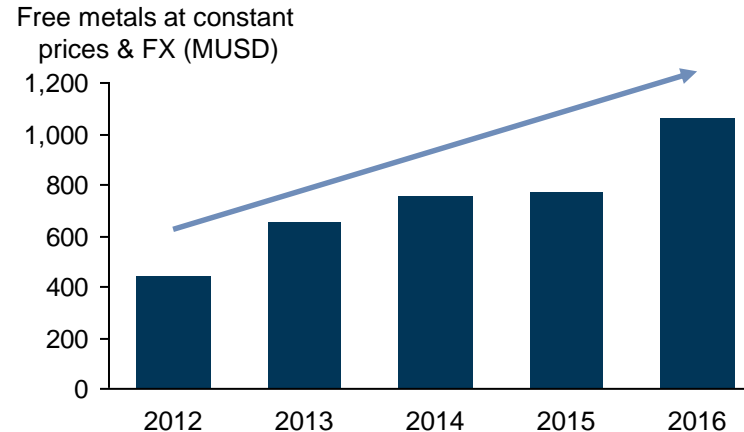
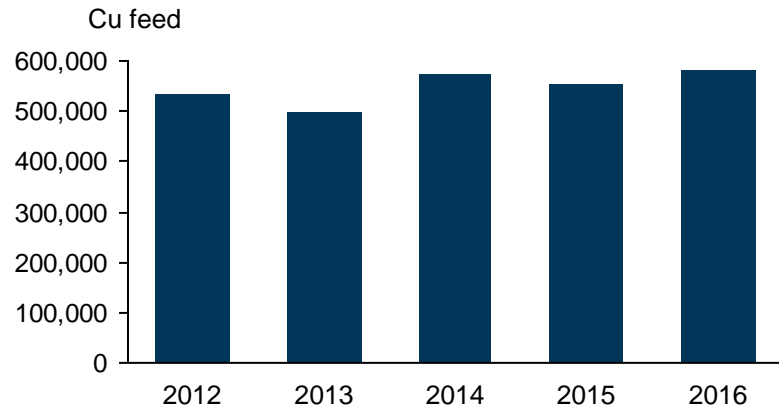
Source: Wood Mackenzie Q41012, Wood Mackenzie Q4 2016.

...by stabilising & strengthening capabilities to optimise raw material mix

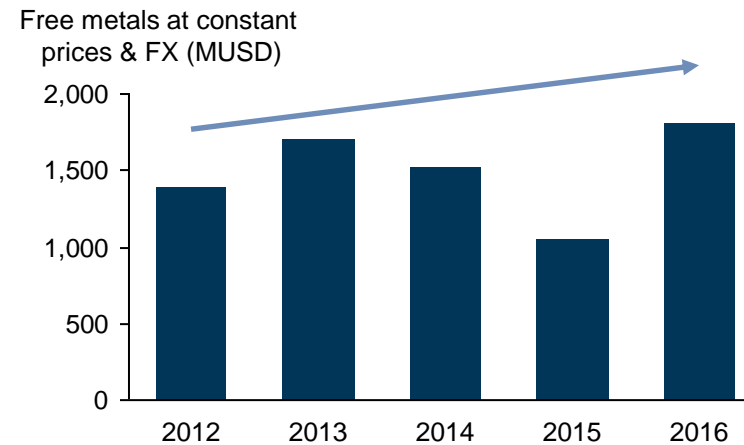
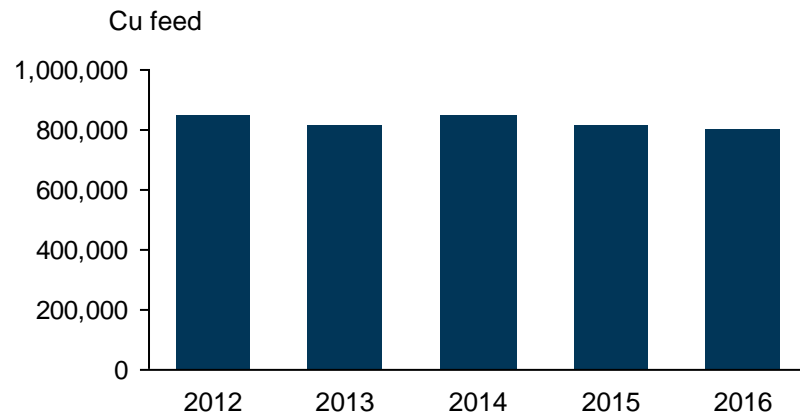


Higher free metal value in copper smelters through improved stability

Harjavalta



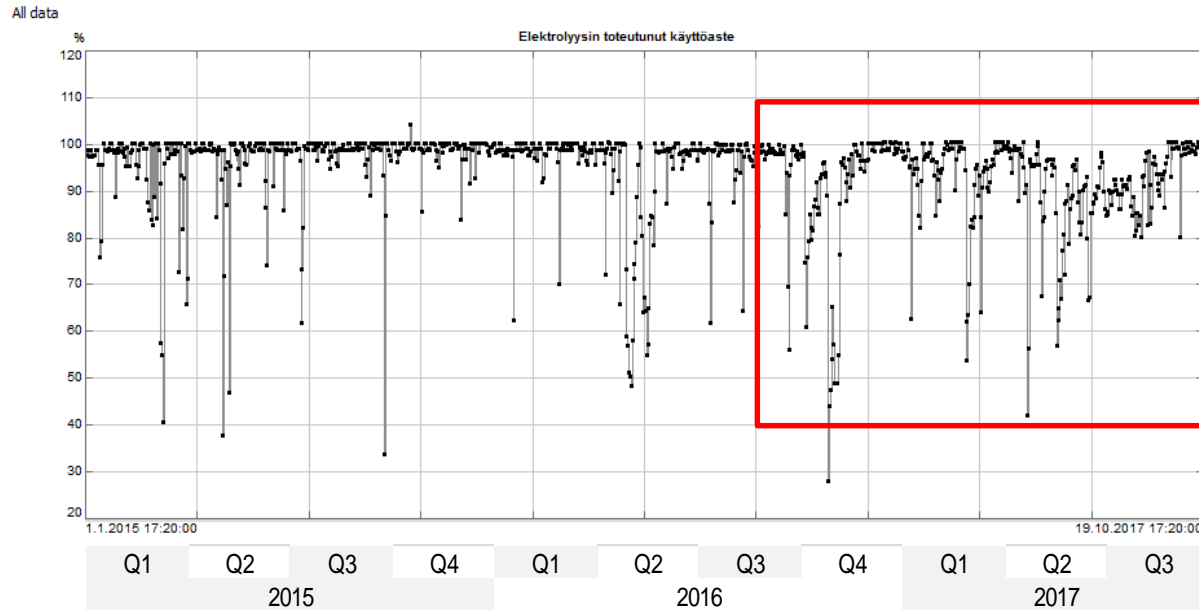
Rönnskär



*Metal price as per Metal Bulletin LME Monthly average Sep 29 2017

Kokkola improving process stability

Capacity utilization of Cellhouse



Upgrading
of
equipment
in
cellhouse

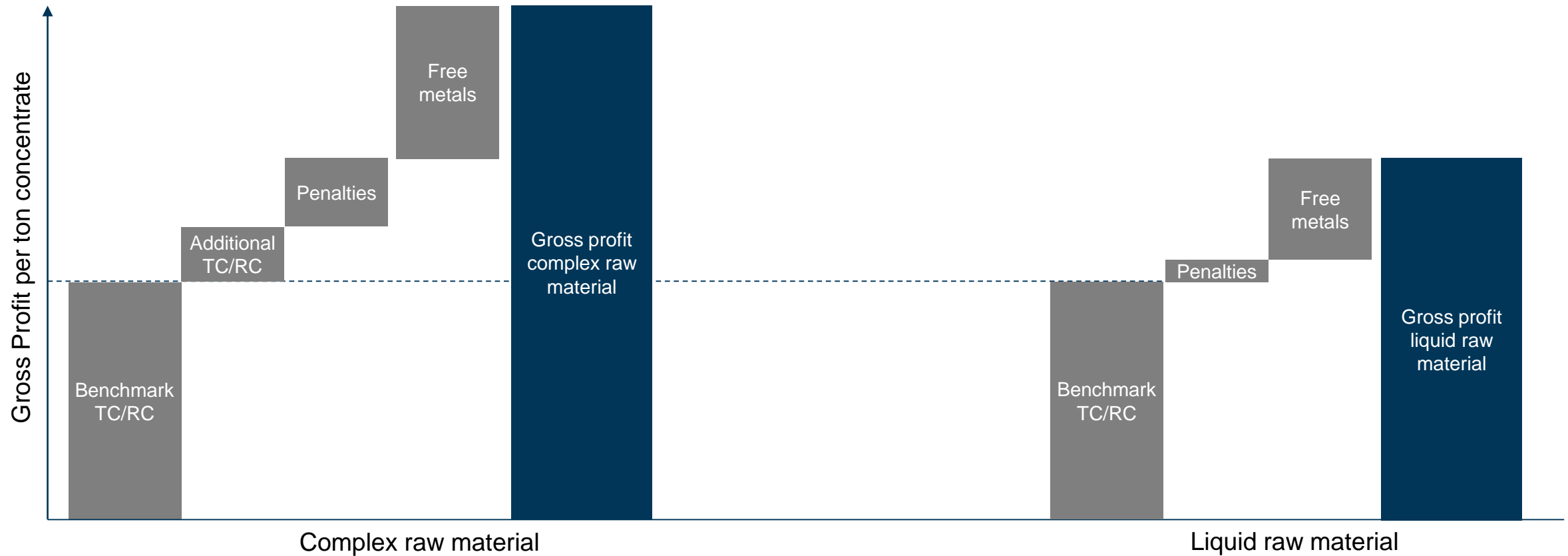


Improve
process
stability

Managing
process
balance

Technical capabilities to treat complex raw materials increase margins...

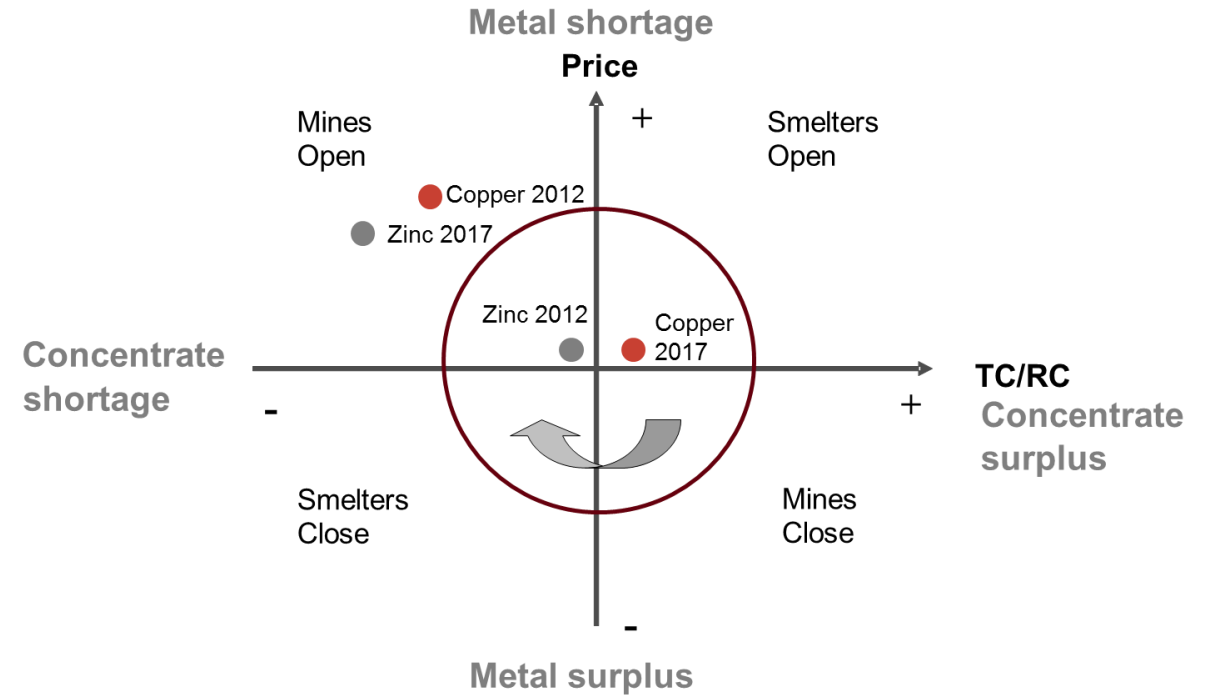
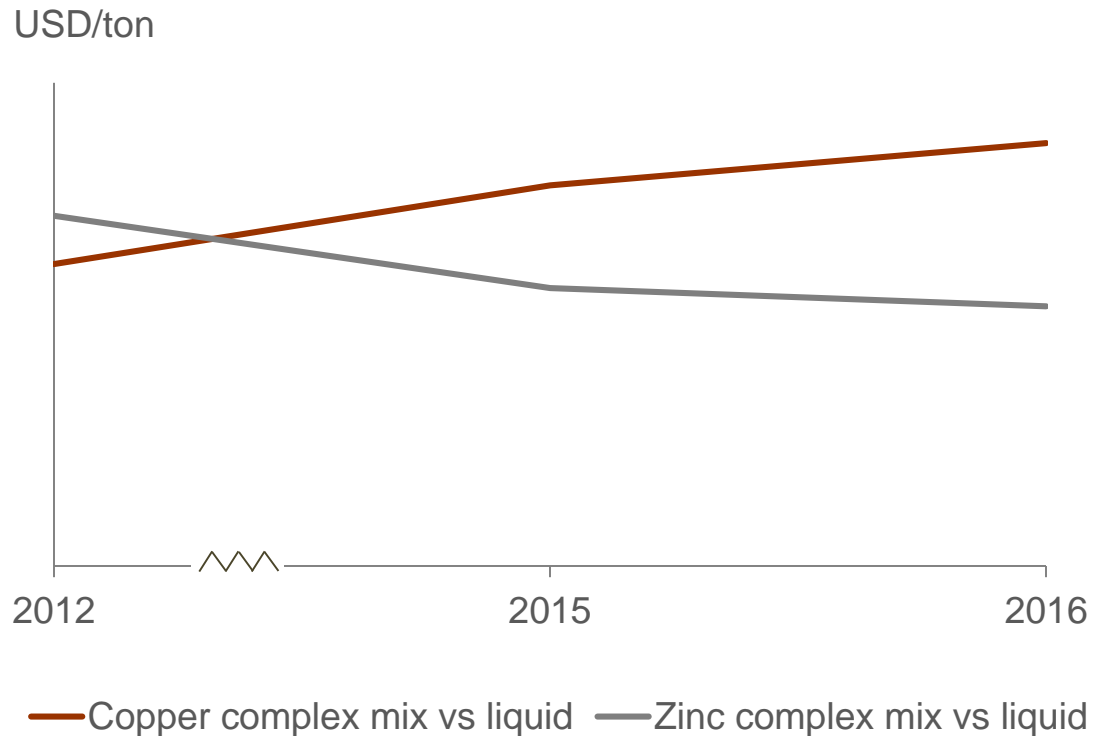
Gross profit development for a complex vs liquid material



Complex raw material contains elements or have physical properties that few smelters can handle and are therefore more difficult to put on the market
Liquid raw material contains elements that many smelters can treat and are therefore easy to put on the market

... and increases ability to secure feed in tougher markets

Additional Raw material margin from selected feed mix vs a liquid alternative



Competitive advantage from treating different types of raw materials

1

Strong technical capabilities

2

Sustainable waste solutions

3

Broad range of smelters

Rönnskär – Multi-metal smelter with high flexibility

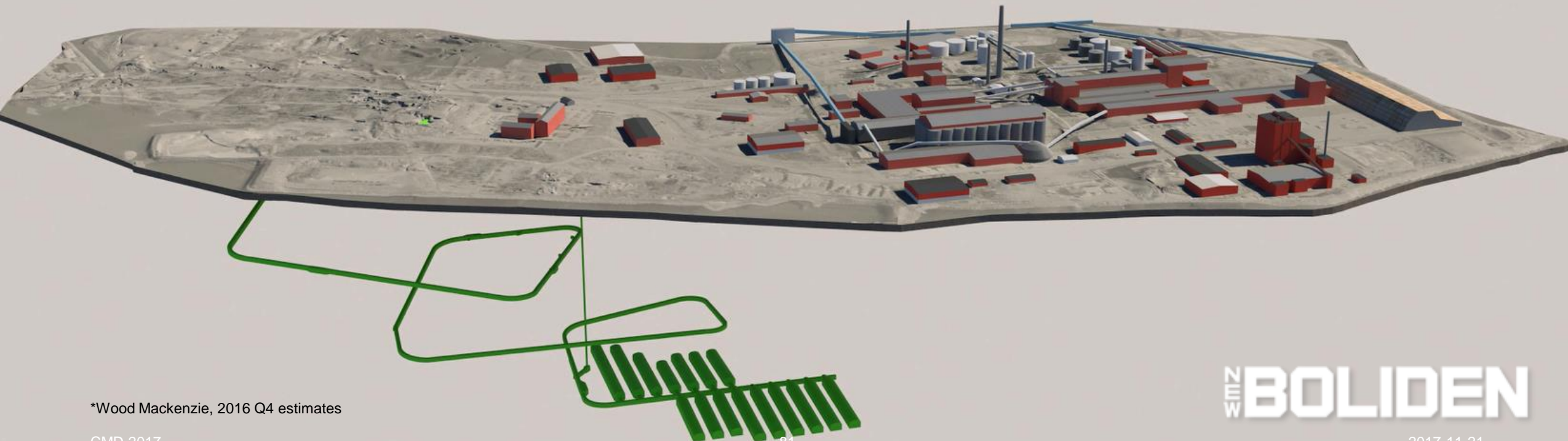
- Technical capabilities and waste solution

- Fuming furnace
- Lead kaldo
- E-kaldo
- Roasting furnace
- Deep underground repository



- Competitive position*

- Size 61st percentile
- Cash cost position 93rd percentile
- Cash margin position 18th percentile



*Wood Mackenzie, 2016 Q4 estimates

Odda – Technical skills and attractive location

- Technical capabilities and waste solution
 - Direct leaching
 - Roasting furnace
 - Mountain caverns
- Good availability of green electricity

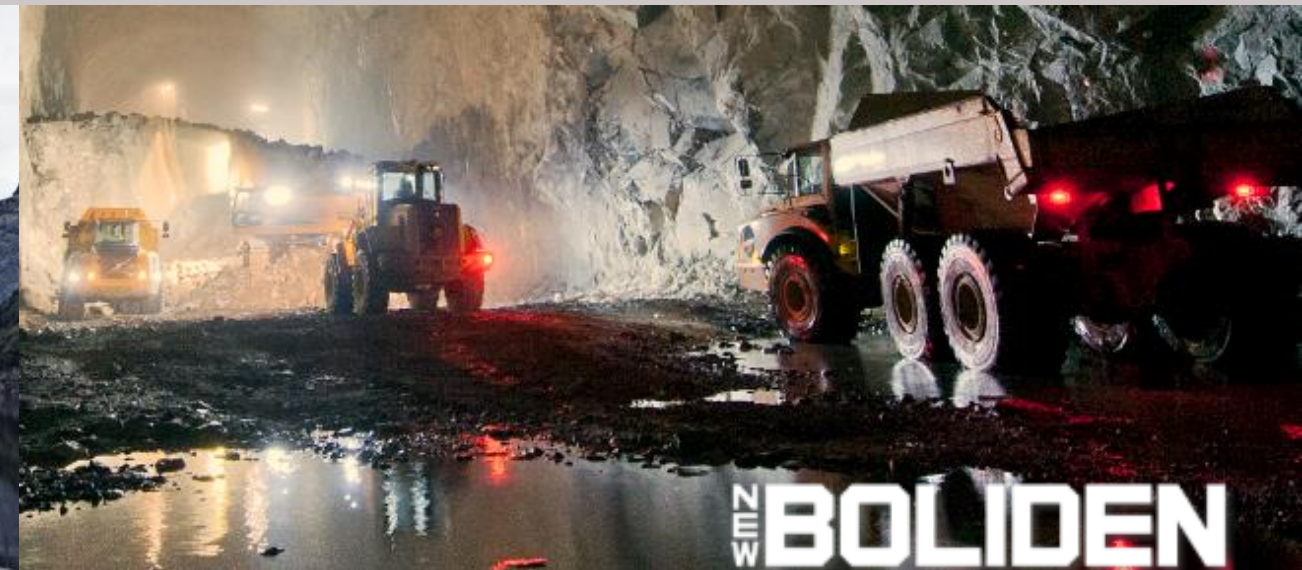


- Competitive position*
 - Size 36th percentile
 - Smelter total conversion cost position 19th percentile
 - Cash margin position 44th percentile



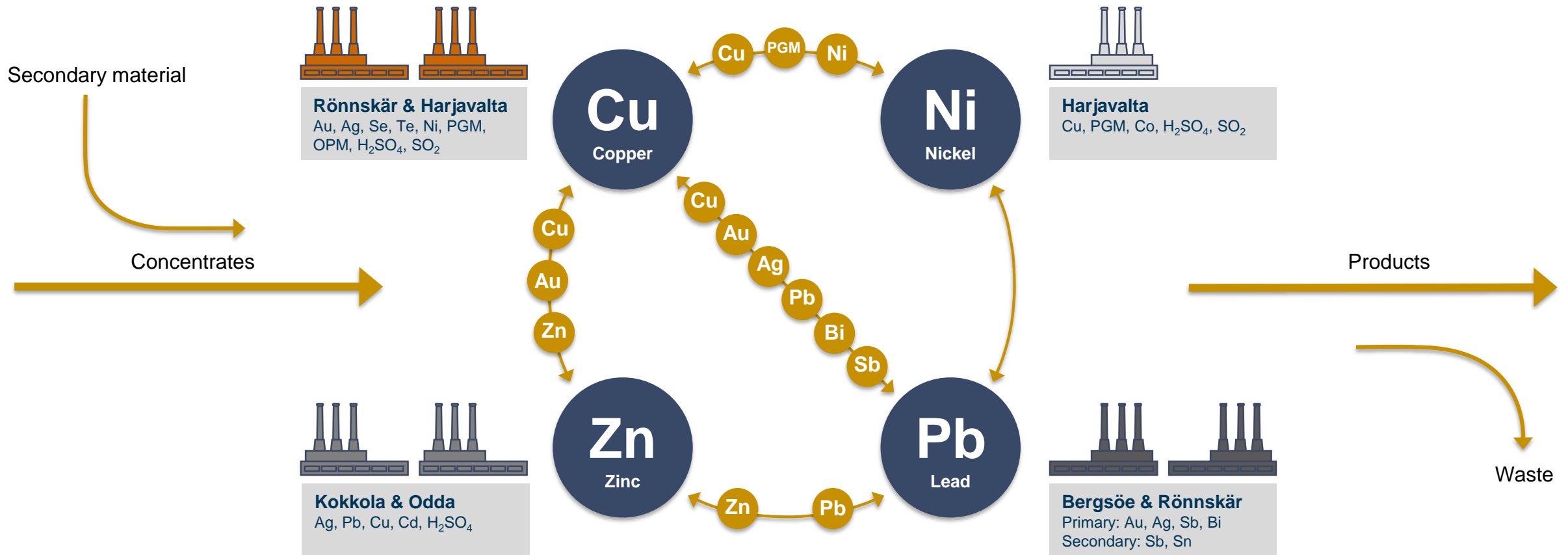
*Wood Mackenzie, 2016 Q4 estimates

CMD 2017



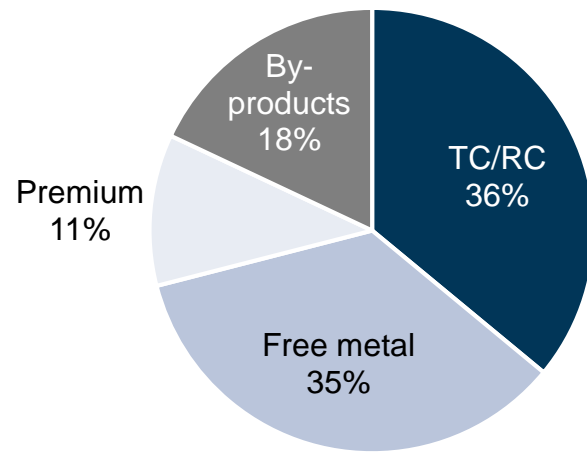
NEW BOLIDEN

Our broad range of smelters further helps optimise production and reduce waste

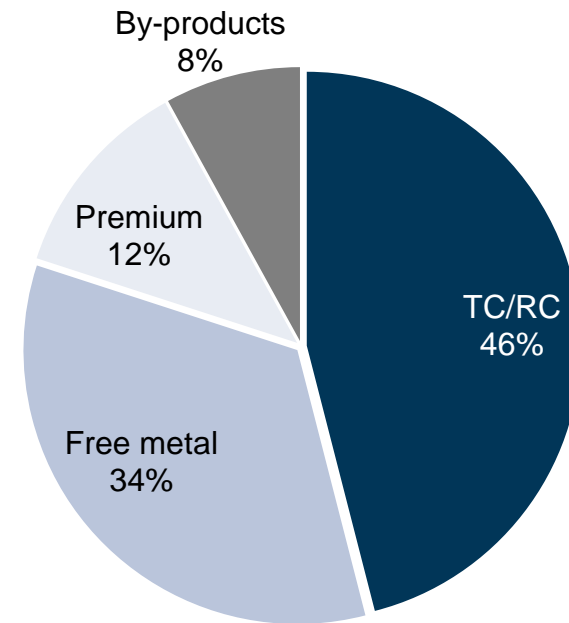


Improving stability and strengthening capabilities contributes to higher profits

Gross profit 2012
7 288 MSEK



Gross profit 2016
9 376 MSEK



Gross profit Components

TC/RC: For all concentrates and secondary raw materials

Free metal: Recovery above payable metal

By-products: Revenue from non-main metals

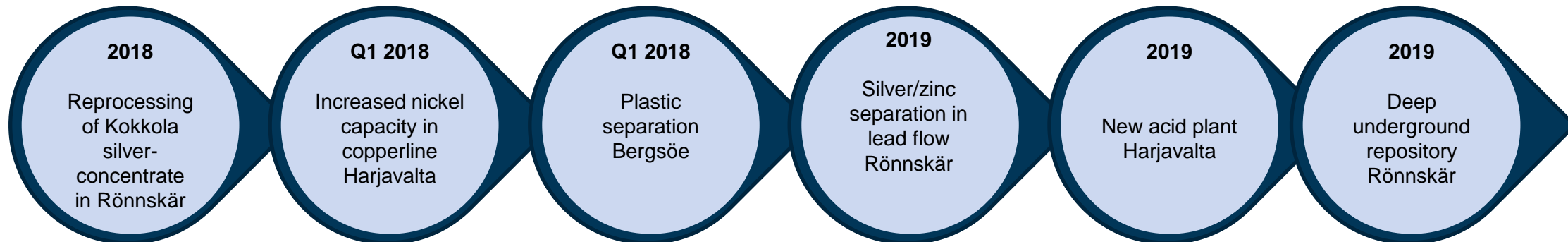
Premiums: Paid above LME

Activities to strengthen our competitiveness

Accomplished

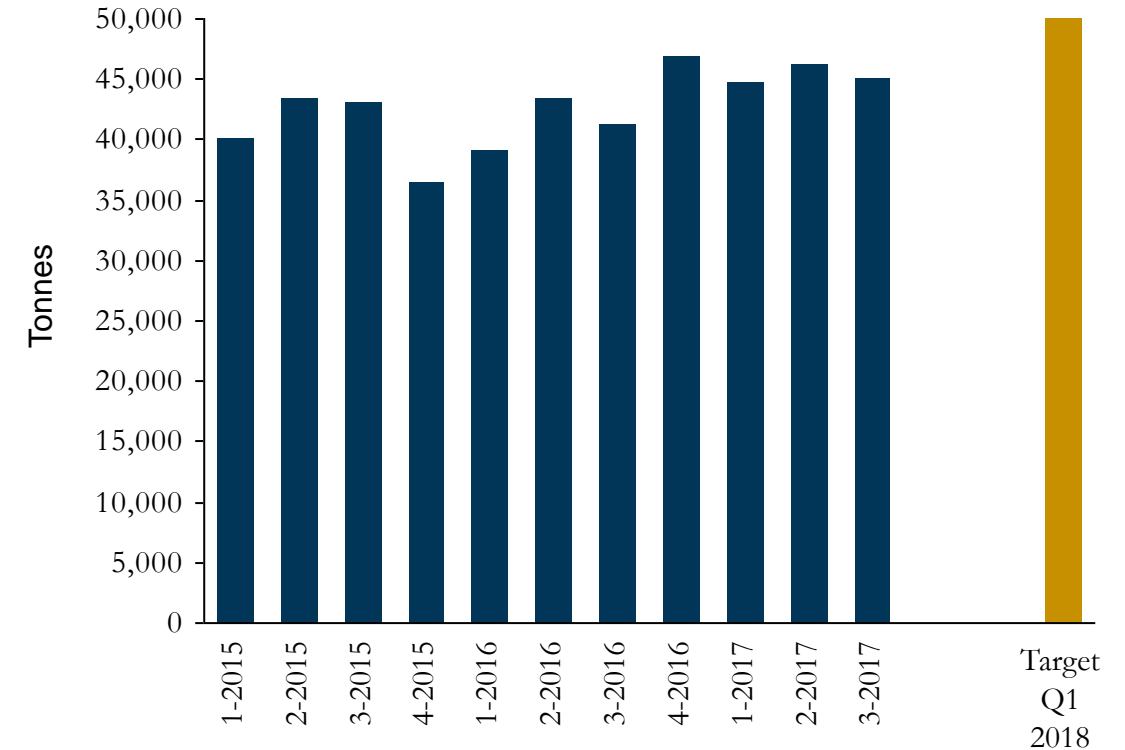


Planned



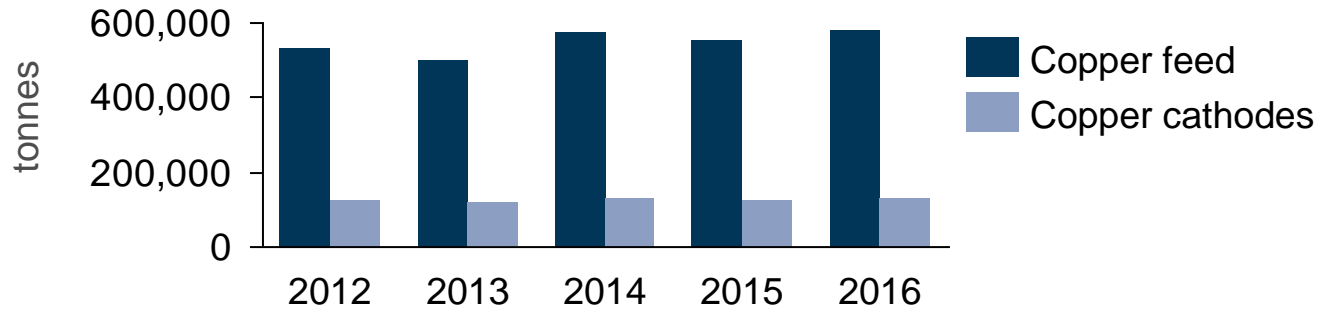
Odda has expanded to 200 ktonnes zinc per year...

- Capex on plan, 350 MNOK
- 200 ktonnes production pace achieved in May 2017
- Process stability problems have restricted operations
- Full capacity utilisation from December 2017

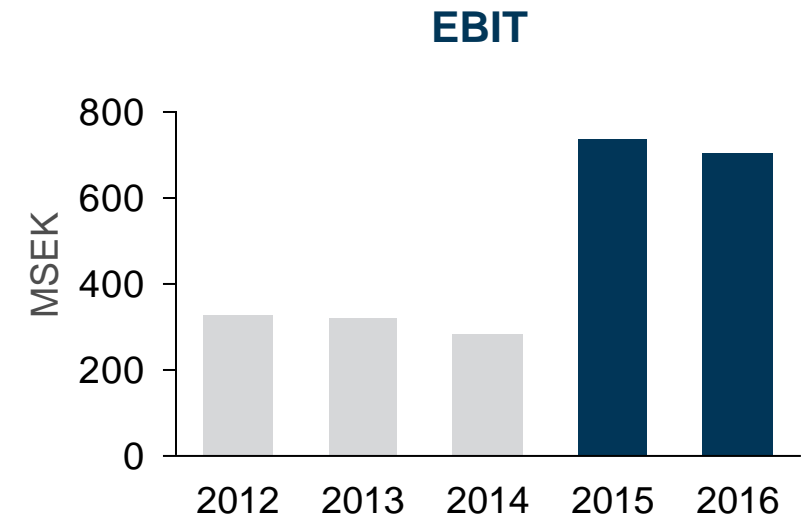
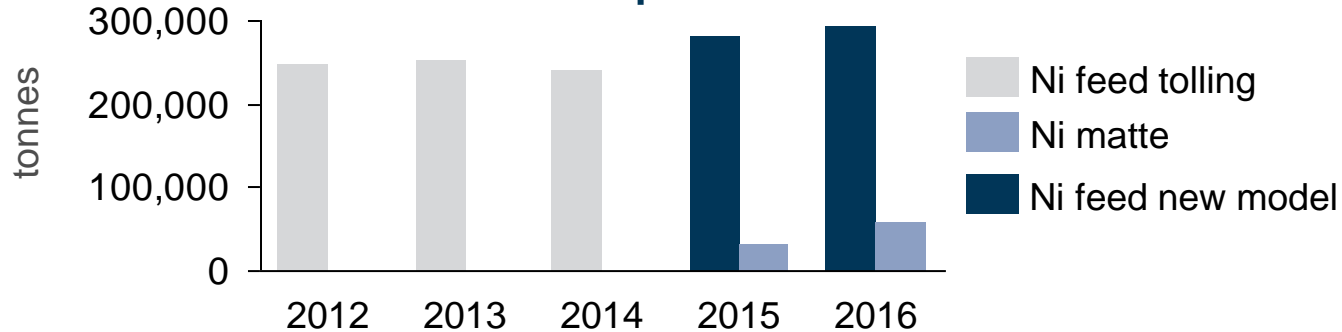


...and Harjavalta's new nickel strategy is contributing to higher earnings

Copper feed and production

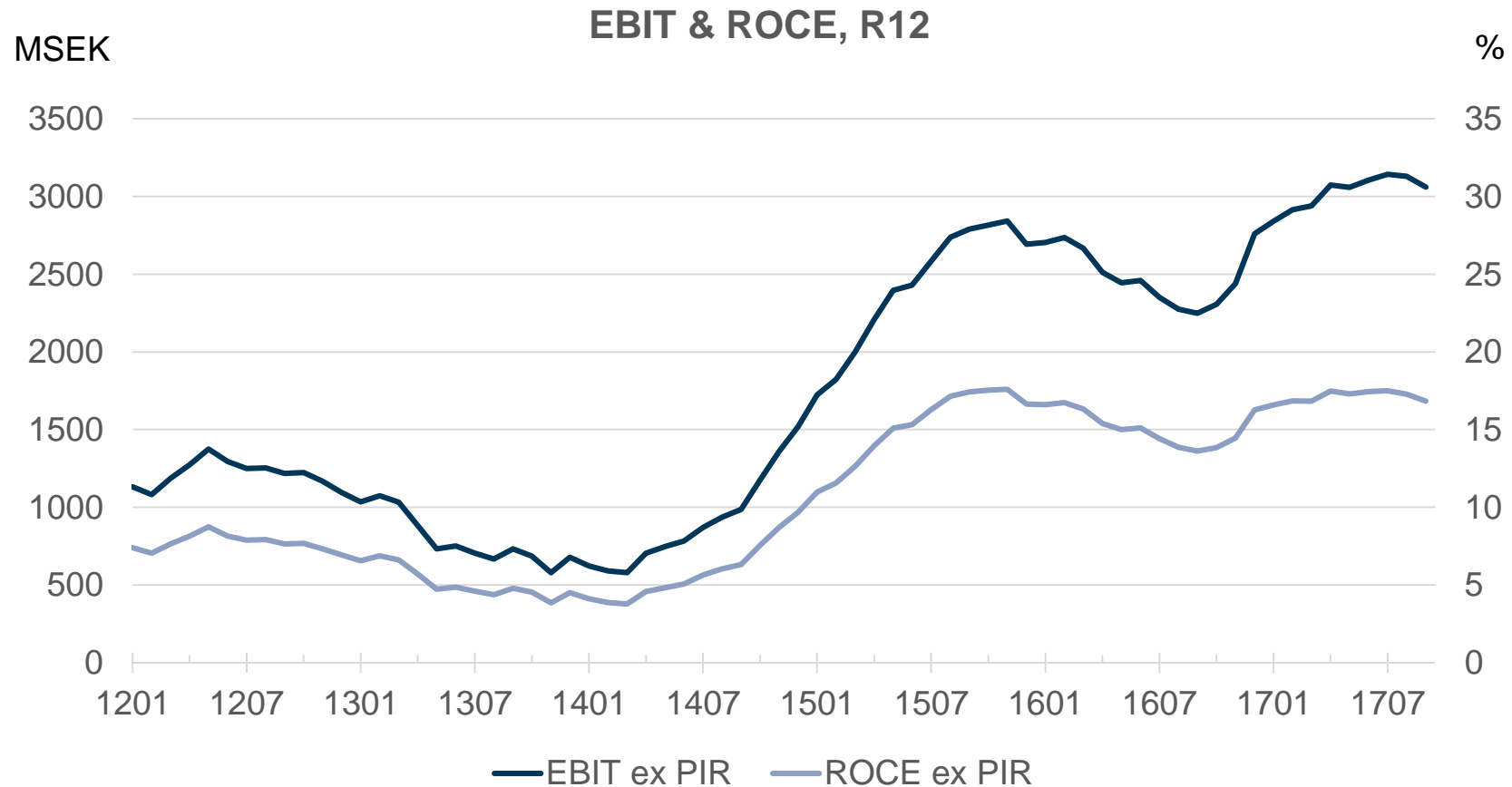


Nickel feed and production



Note: New business model implemented 1 July 2015.

Consistent strategy with focus on returns



Note: EBIT and ROCE ex PIR



Q&A

Strengthening
competitive position

Improving
process
stability

Optimising raw
material mix

Strengthening
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capabilities

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