



Mines update

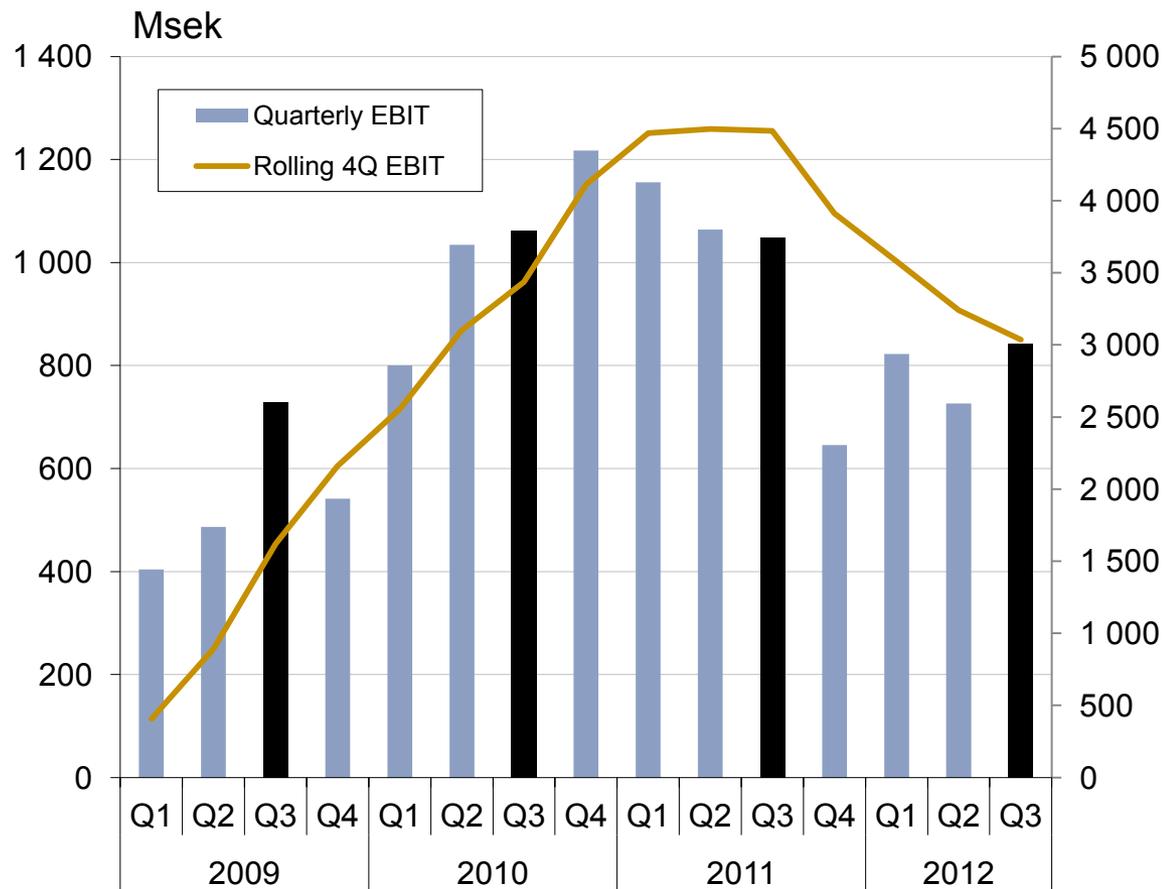
Capital Markets Day
November 23rd 2012

Jan Moström
President, Boliden Mines

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Mines – Summary

- EBIT 842 (1,047) MSEK
 - 726 MSEK in Q2 2012
- Write-down in Tara, -79 MSEK
- Lower average prices
 - End-of-period price effect positive
- Zinc grades lower in (Garpenberg)
- Easing cost pressure
- CAPEX 701 (505) MSEK
 - 753 MSEK in Q2
- Projects on plan



Boliden Mines, status

- Aitik
 - Aitik 36 Mton and further expansions
- Boliden Area Operations
 - Commissioning of gold leaching and the Tellurium process
- Garpenberg
 - Garpenberg expansion project including ramp up of mine production
- Tara
 - Challenging cash cost position, comprehensive cost cutting program



Boliden Mines, looking forward

- Exploration
 - Near mine to develop sustainable ore expansions of operations
 - Brownfield to deliver exploration project
- Technology
 - Develop processes addressing deposits with a challenging mineralization
 - Mine automation
- Environment
 - Develop techniques to minimize environmental impact and develop optimal reclamation technology



Boliden Mines

Aitik 36 Recap and further expansions



Aitik 36 Summary

1. CAPEX over budget

- 6,2 billions



2. On time

- Commissioning Q1 2010 (Q1 2010)
- Production target (2014)



3. Capacity tested

- 34,8 Mt R4Q 2012 Q3
- 38 Mt/year Q2 2012



4. Competitiveness

- CC1 50 percentile



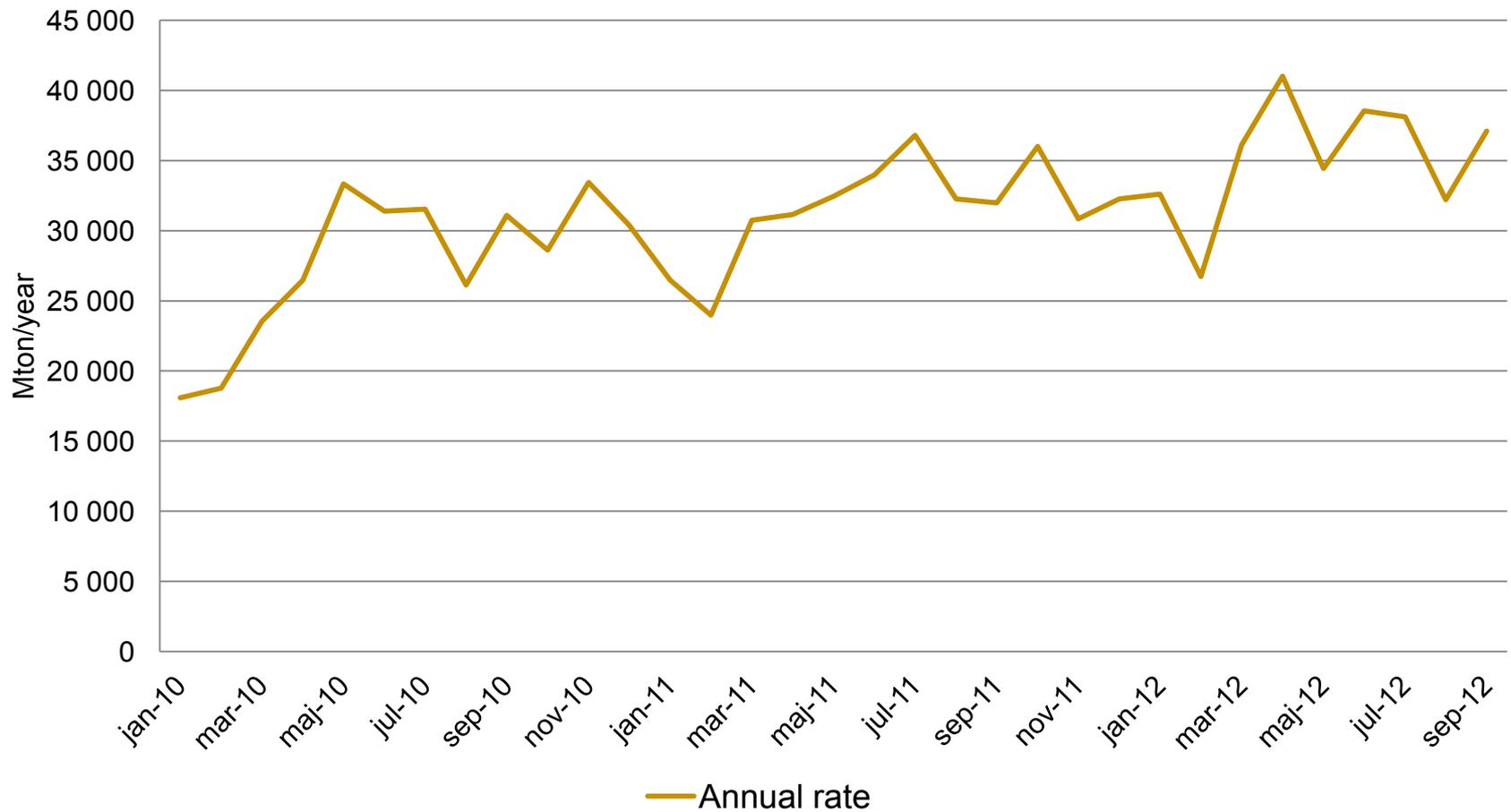
Crushers



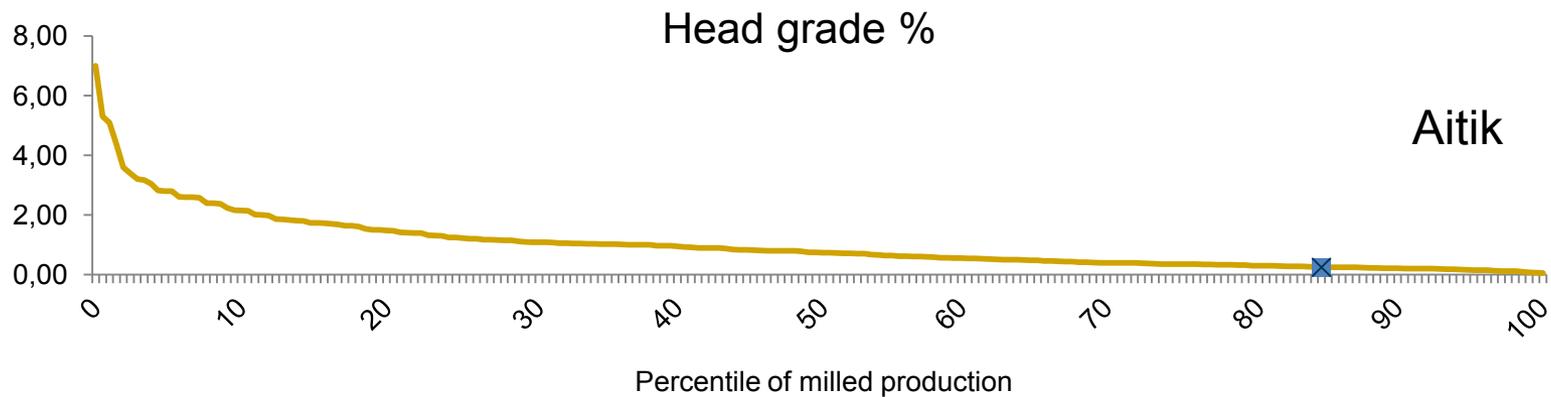
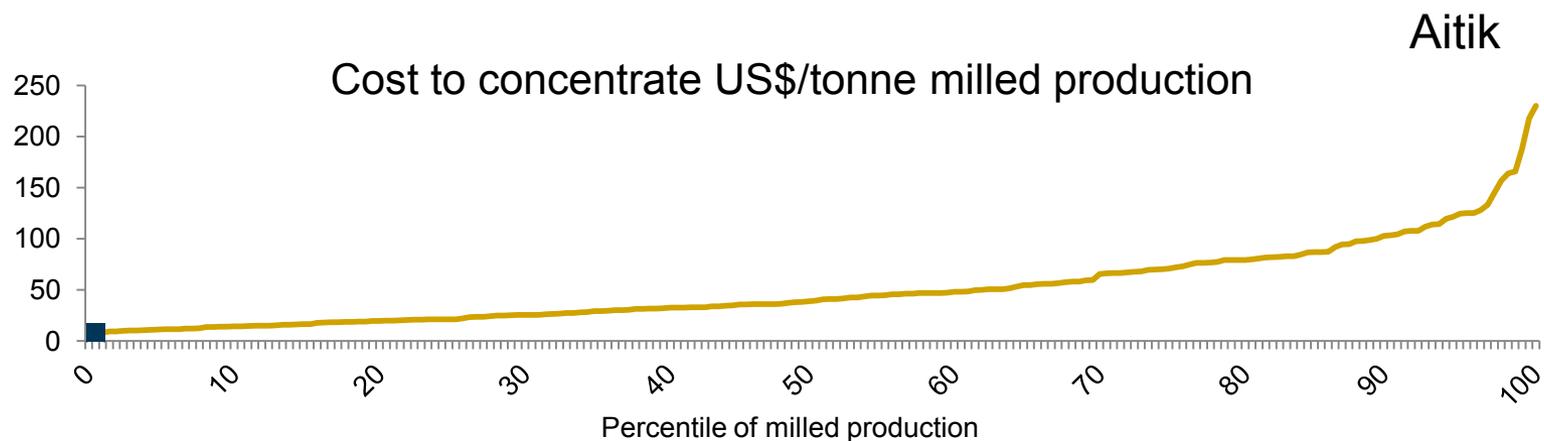
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Production 2010 – 2012

Not yet fully stable – adjustments in Sep-Oct

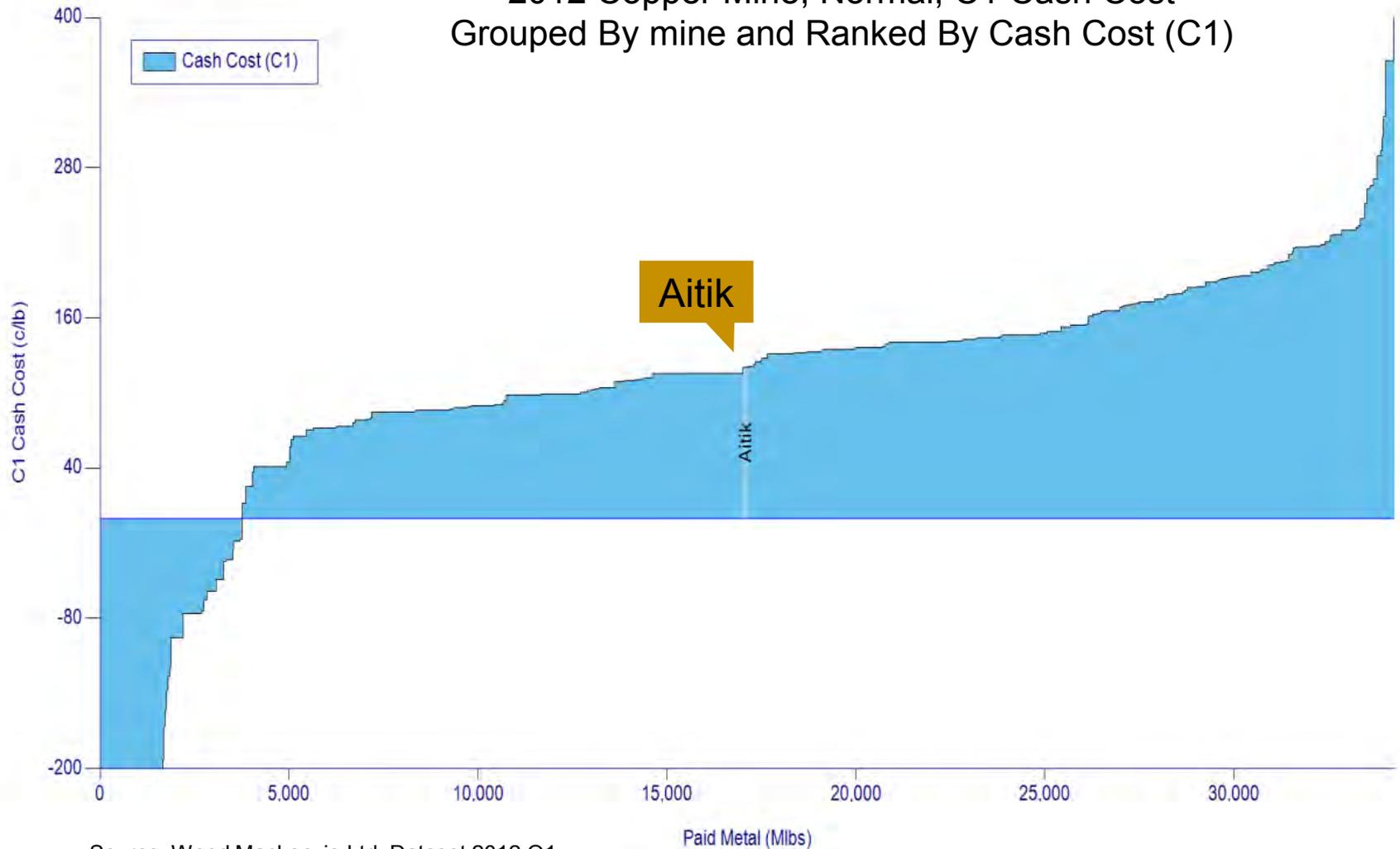


Competitiveness

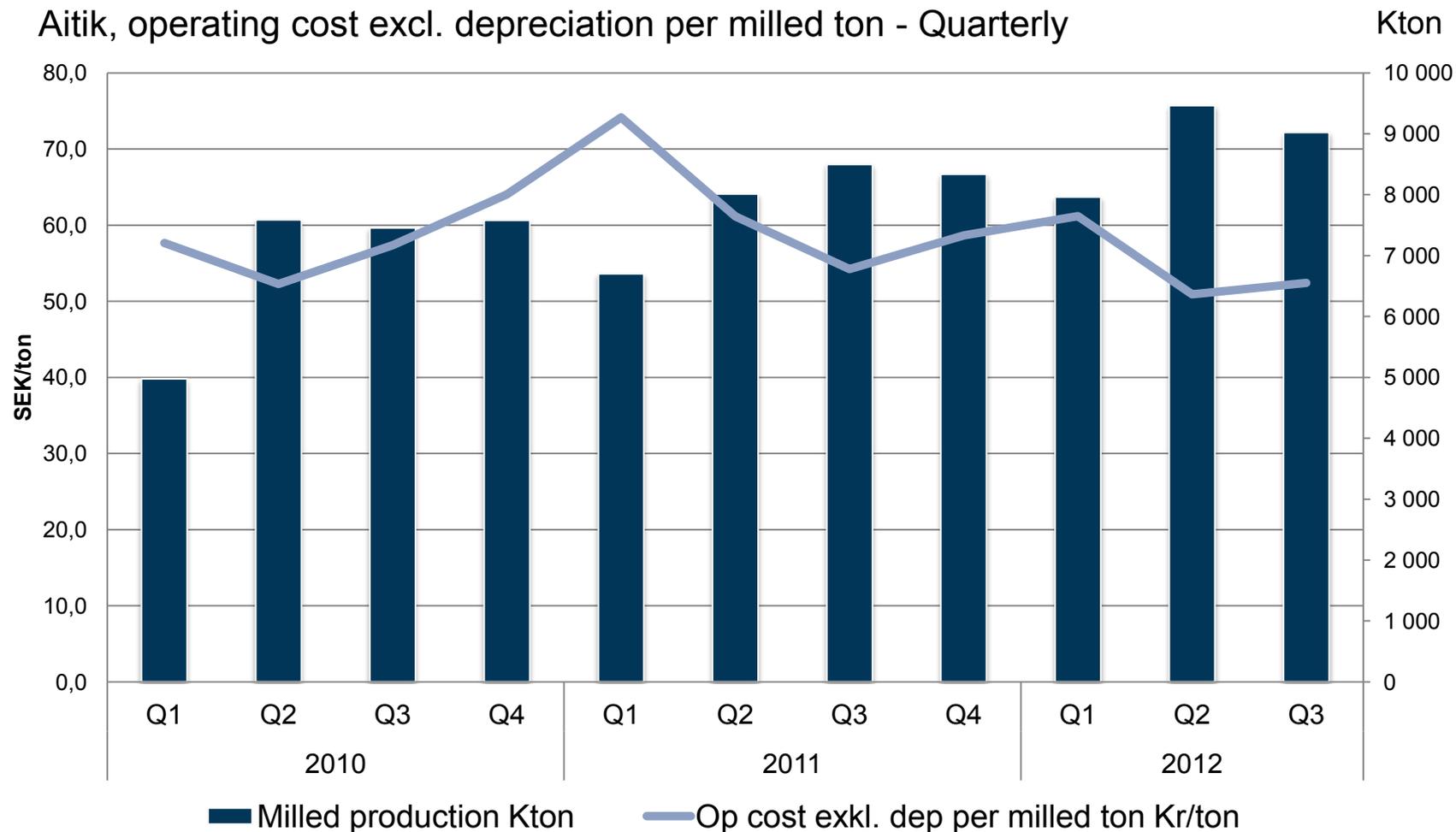


Competitiveness

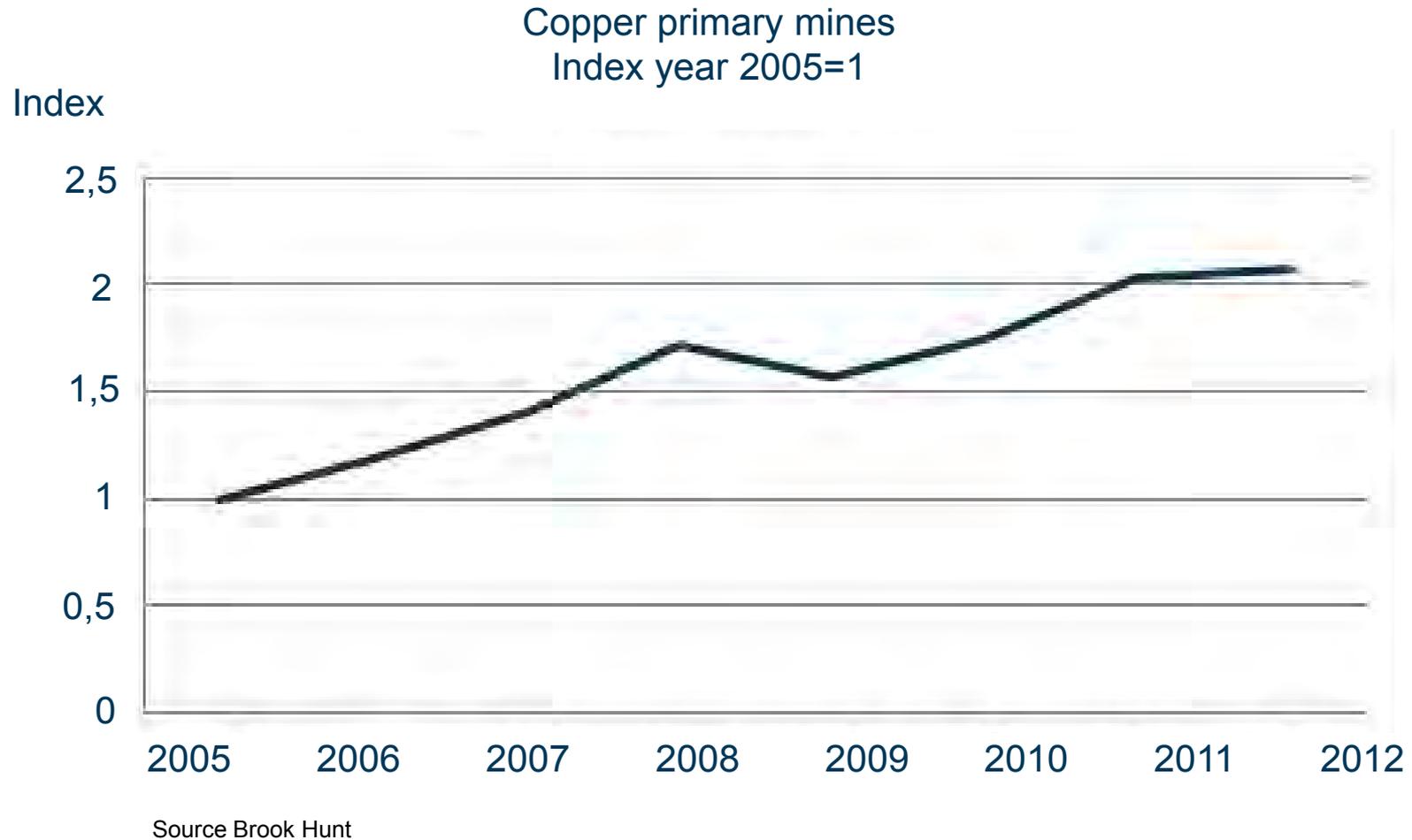
2012 Copper Mine, Normal, C1 Cash Cost Grouped By mine and Ranked By Cash Cost (C1)



Unit cost



Cost to concentrate BH data 2012



Lessons learned

- Pre-projecting/strategic work
- Underground work
- Media, electricity and pipes
- Transfer of projects to operations
- Transfer of complicated contracts to operations

- New technology
 - Challenging conditions
 - Be the best, technical risks

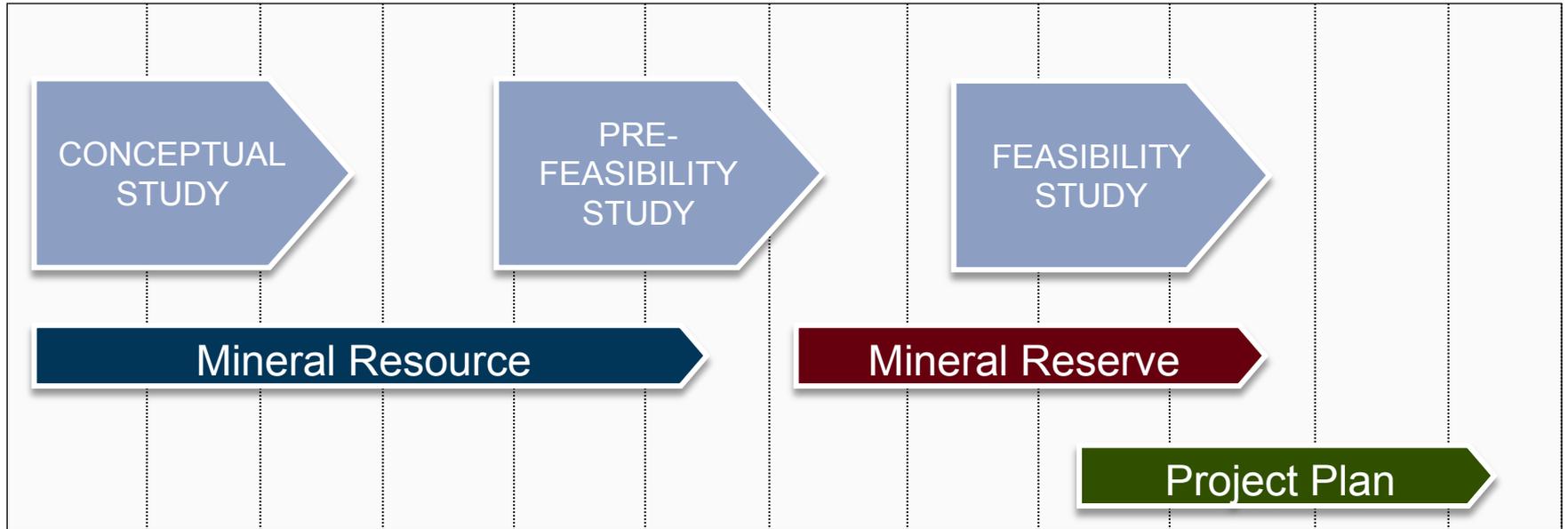


Aitik - Further expansions



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Resource Development Work Flow Model

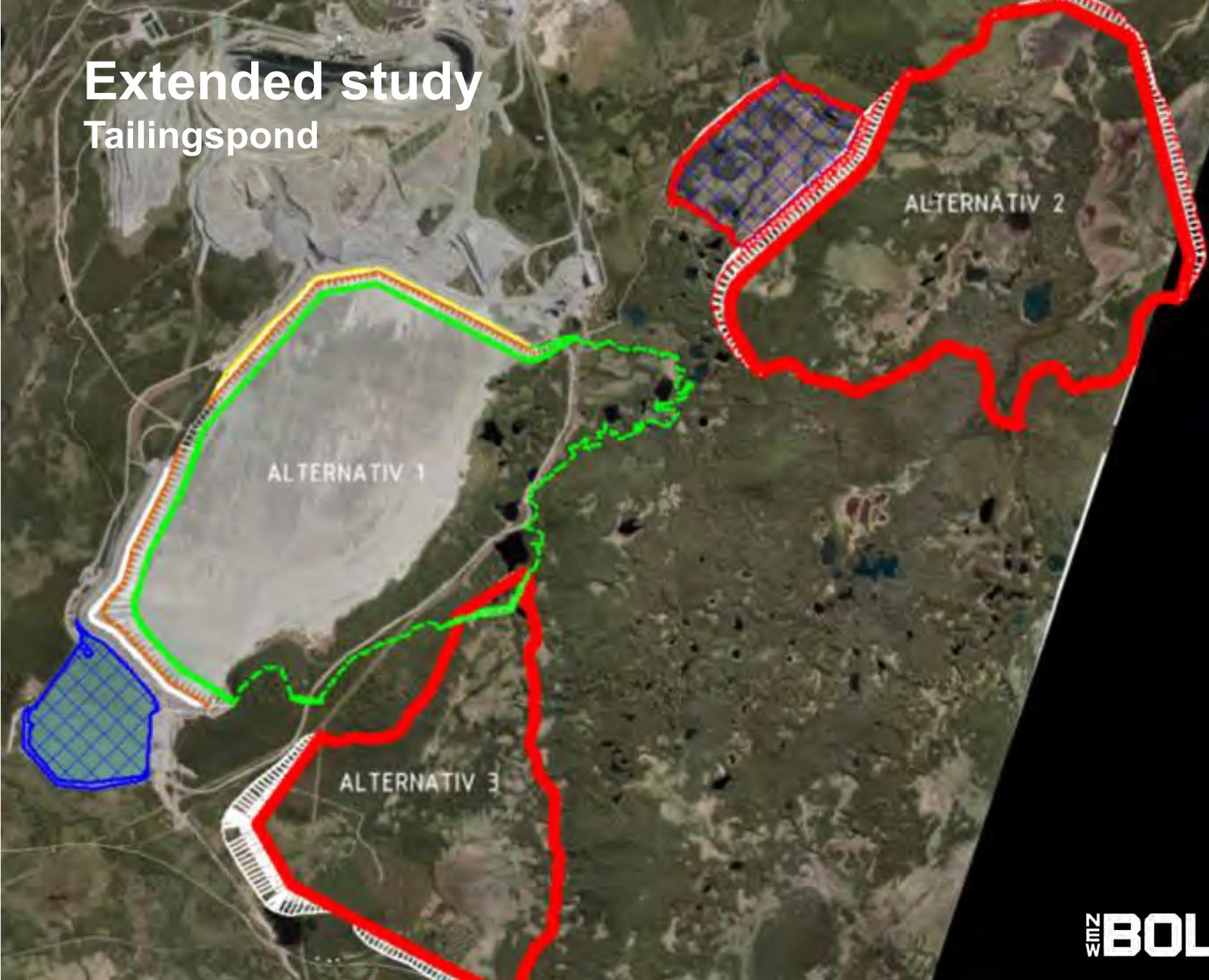


Aitik



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Extended study Tailingspond



Compiling a single giant size geological model



Resource Estimates:

- Aitik
- Aitik East
- Salmijärvi
- Liikavaara

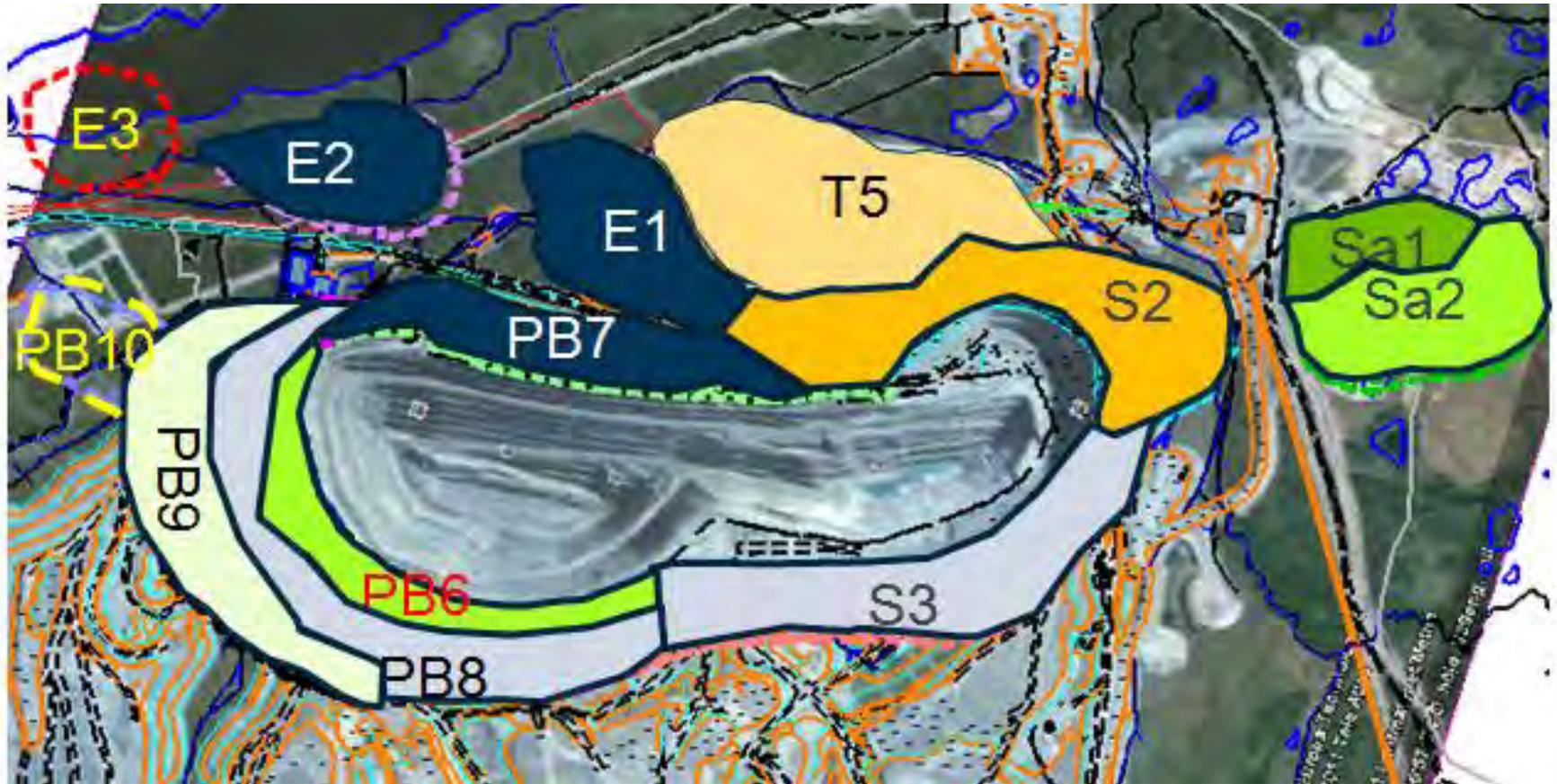
Conceptual Estimates:

- Aitik East pillar
- Office/T5 pillar
- Aitik field

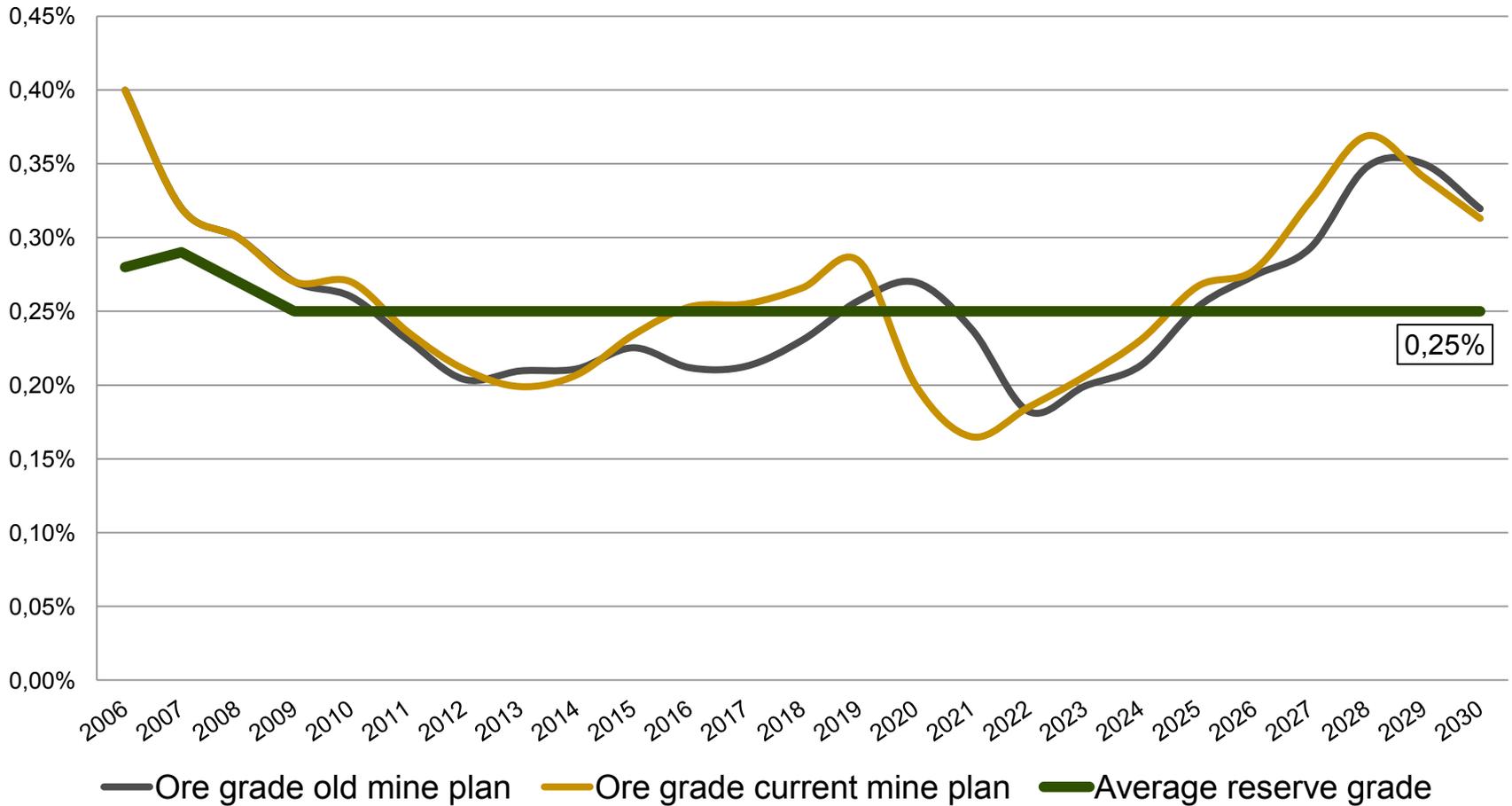


Tentative Pushback

Schedule for Aitik 45



Aitik head grades - 2012 mine plan, Aitik 36



To conclude

- Expansions
 - Aitik after 45 Mton
 - Laver
- Technology
- Exploration
- Environment
- Health & safety



Metals for modern life

