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CPO



Expectations



Basic Expectations

Safety

Productivity & Cost

Innovation

Compliance

Extended Expectations

Belong to the most sustainable supplier ecosystem in the metals and mining industry

Supplier selection & requirements



Our Priorities

Safety
Productivity
Cost
Innovation
Compliance

Our Supplier Requirements

- Safety
- Productivity
- Performance
- Quality
- Compliance

Qualifiers

- Cost leadership
- Operational Excellence
- Sustainability leadership
- Innovation
- Support multiple sites

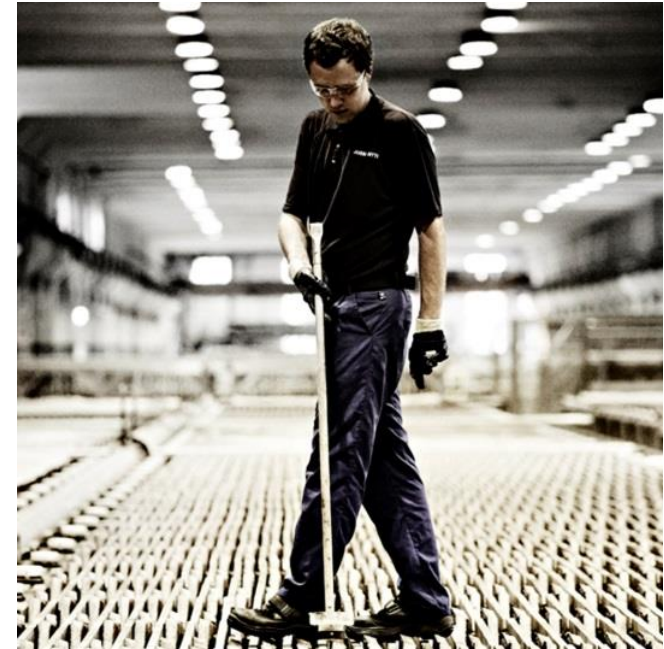
**Selection
differentiators**

We will always aim for a fair and healthy competition

Be Safe



Everyone leaves our sites unharmed, with maintained health
Every day!

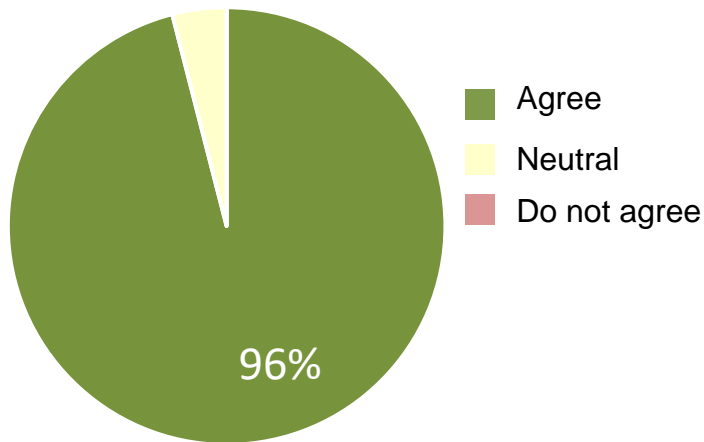


Results from the Supplier Survey



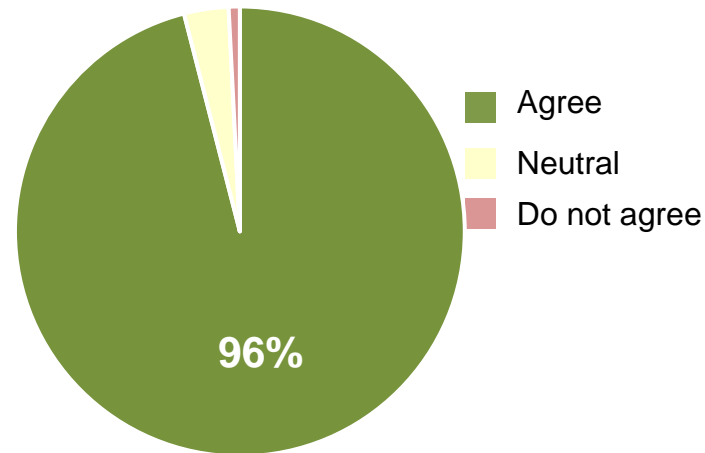
Supplier view of Boliden

Boliden is a safety-conscious company



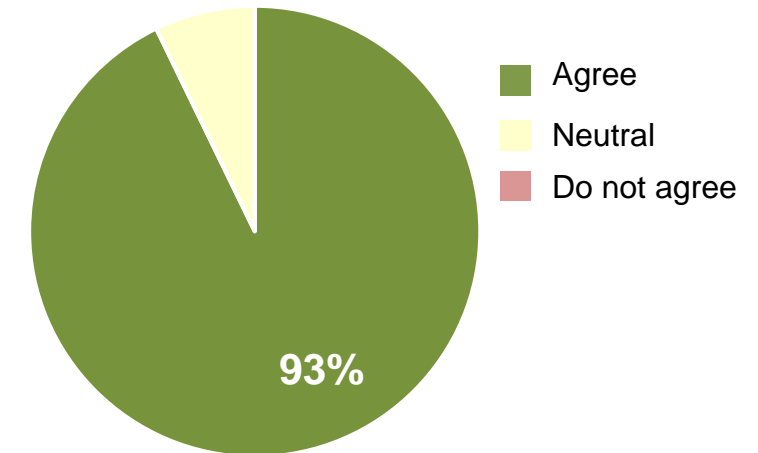
Supplier view of Boliden

Boliden has strict requirements regarding supplier safety



Supplier companies

We (i.e. the supplier) are among the best in our industry in terms of safety



What could possibly go wrong...

A contractor slipped while climbing down from an excavator and the ring on one finger got tangled in one of the anti-slipping spikes of the step causing a deep flesh wound on the finger

A contractor was exposed to gas from blasting. The worker started to feel ill and visited the hospital. The personal measuring equipment for CO and NO did not alarm.

A contractor suffered chemical burn on the face during unloading of caustic soda

A contractor who was hit in the face while working to control pressurized water causing a broken jaw and stitches

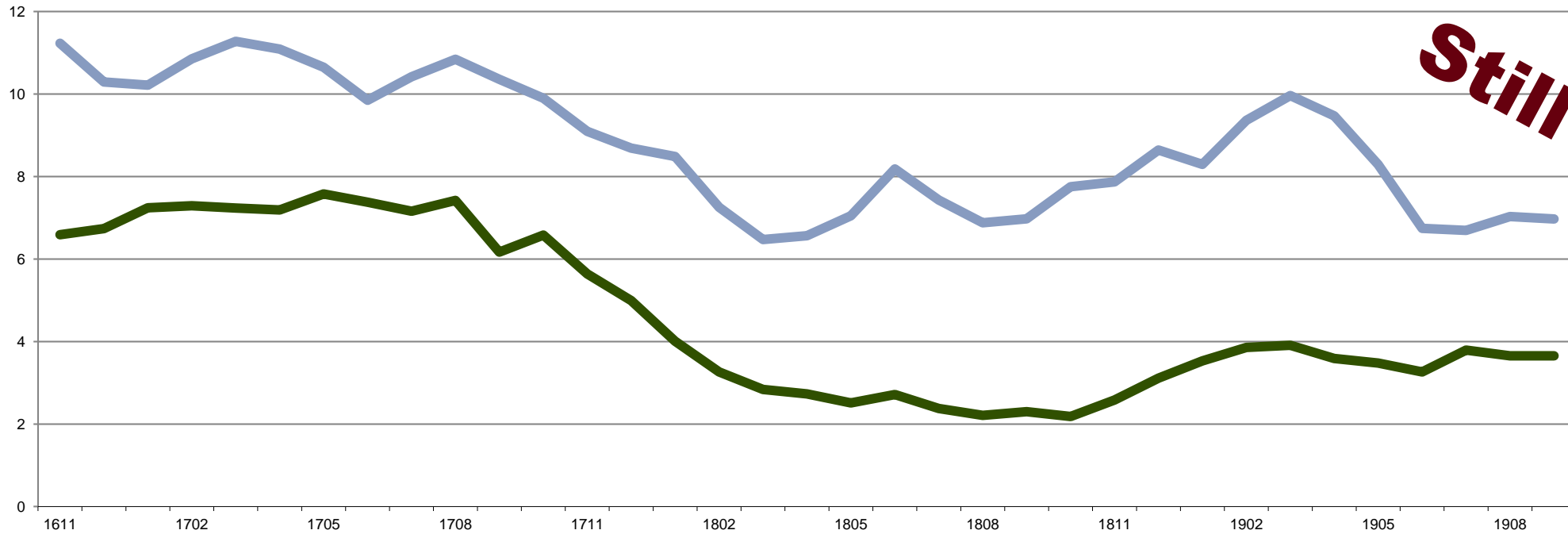
A contractor suffered burns on the feet during cleaning of a heat exchange boiler funnels

A contractor was clamped between the rock-face and a charging truck suffering serious injuries

Supplier Safety Performance



LTI frequency on employees and contractors, R12



Still Not OK

— LTI Frequency, Employees

— LTI Frequency, Contractors

Boliden Supplier Safety Log

Supplier	LTI (R36)	LTIF (R12)	LATEST INCI.D.	RC3	Comment
	5	9	2018-11	2	Adesco staff led by Boliden. Action plan defined. Continuous
	4	0	2019-08	2	
	4	0	2019-09	2	
	4	25	2018-12	4	
n)	4	0	2018-10	1	
	3	7	2019-07	1	
vara)	3	0	2019-02	0	
	3	0	2018-11	1	
	3	0	2018-04	0	
	3	4,4	2018-09	1	
	2	0	2017-07	0	
	2	12,2	2018-09	0	
	2	0	2018-05	0	
	2	0	2017-07	0	
	2	0	2018-06	1	
	2	11,5	2019-06	0	
	2	52	2018-10	1	
	2	0	2017-08	0	
	2	0	2017-05	0	
	2		2018-10		
	2	0	2018-06	0	
	2	0	2018-07	0	
	2	28	2019-03	0	
	0	0	2019-04	3	
	0	0	2019-01	2	

When on the list:

1. Improvement program mandatory for Boliden assignment
2. Create Monthly LTIF reporting for all Boliden assignments

Boliden Supplier Safety Scorecard



Supplier: [Redacted]

Total (Rolling 36 month)

No of LTI	4
No of IVA	10
No of Alt Work	0
No of Near Miss	0

Per Quarter and Risk Class (24 month)

Q	RC1	RC2	RC3	N/A	
2017 q3	0	0	0	0	✓
2017 q4	0	0	0	1	✗
2018 q1	0	1	1	0	✗
2018 q2	0	2	0	0	✗
2018 q3	1	3	0	0	✗
2018 q4	0	2	0	0	✗
2019 q1	0	0	0	0	✓
2019 q2	0	0	0	0	✓
Total	1	8	1	1	

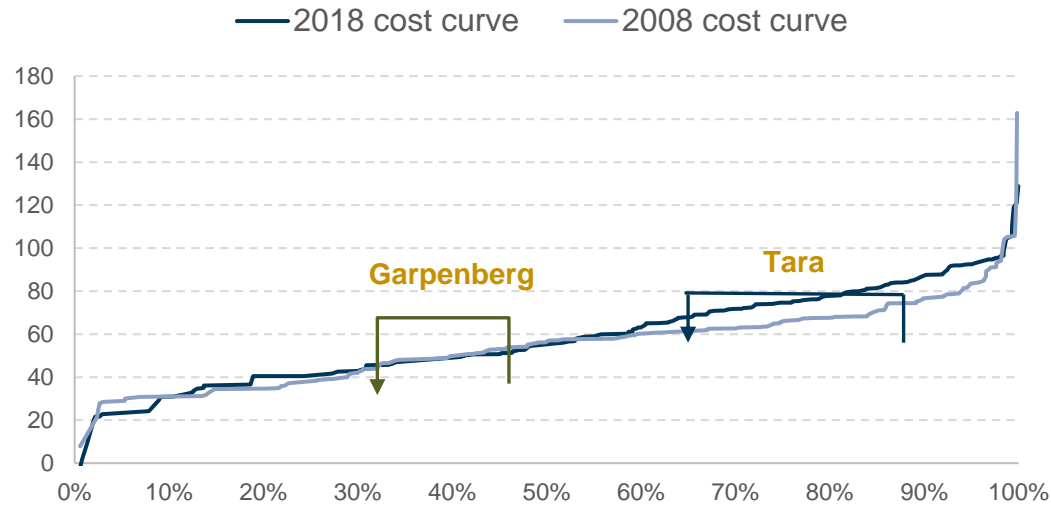
Latest incidents

Month	Class	Type	Site	Description
2019 sep	RC2	IWA	Kylylahti	The operator was about to unload the blocked rods on the car with a cordless drill. One end of the rod was on the car and the other was in the hand. The other end slipped off the car and the bar hit the hand. It caused pain and swelling. The operator was able to work until the end of the shift.
2018 okt	RC2	IWA	Atik	En lastbil som var lastad körde från sandmagasinet emot YIT's arbetsområde. Av okänd anledning körde personen avvägen på fel sida.
2018 okt	RC2	LTI	Atik	When a contractor was descending from an excavator, his feet slipped even though three-point grip was applied. The contractor could not hang on despite holding on with both hands. This resulted in that the contractor fell to the ground, injuring the shoulder.
2018 sep	RC2	IWA	Atik	En av våra dumper förare var på väg till AB etableringen för att tanka adblue. Vårans dumperförare höll ut så nära vägräcket som hen bara kunde. Vid rivning slog speglarna i varandra och rutan exploderade. Händelsen var mellan nya sligvägen och infarten till BOX AO. Längs med HS-magasinet. Fordonet som kom körmades vet vi inte vem det var för föraren stannade inte.
2018 sep	RC2	IWA	Atik	Efter tipning med sandbil när bilen ska köra iväg så välter lastbilen på sidan. Lastbilen stod rakt och stabilt när mottagaren sa att han fick tippa av den, stod ett par meter ifrån kanten. Kanten gav ej vika.

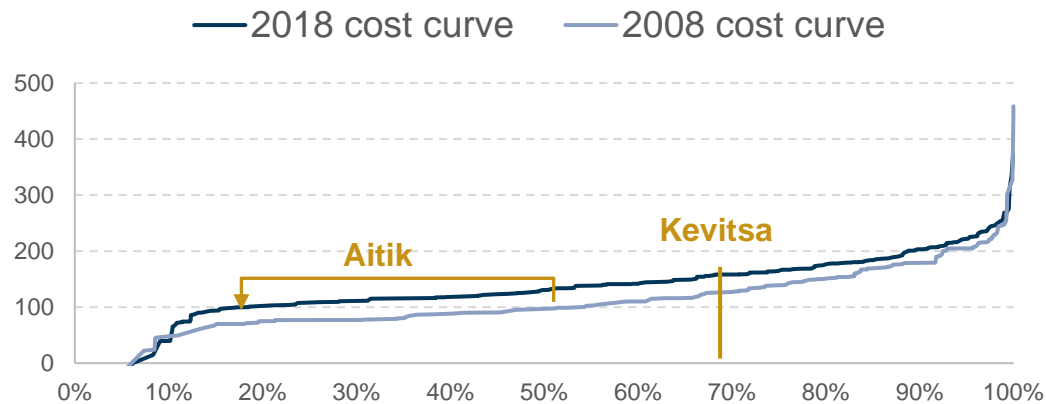
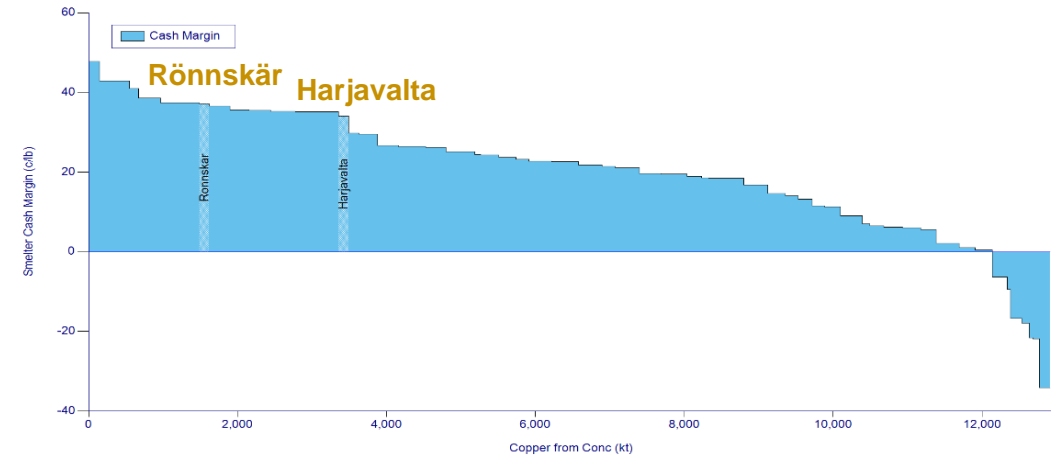
A robust operation over business cycles



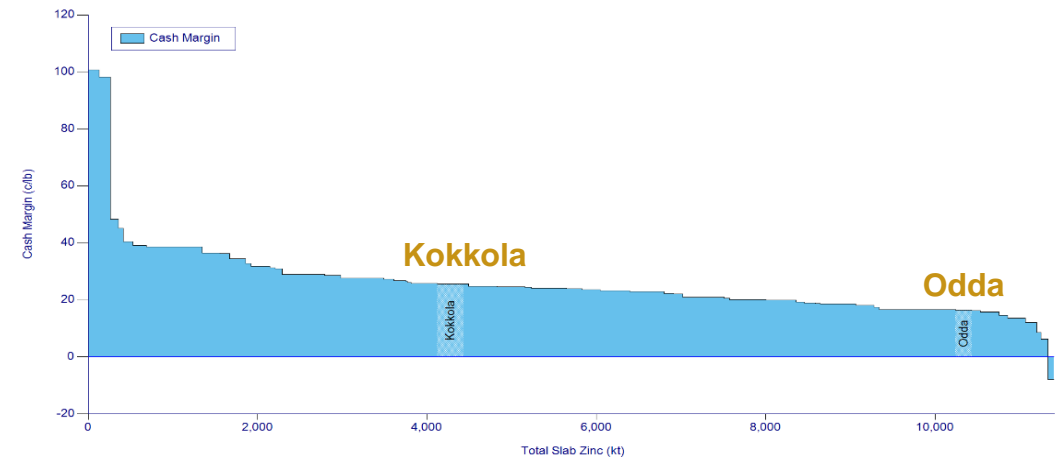
Cash cost position - Only the most competitive will make it



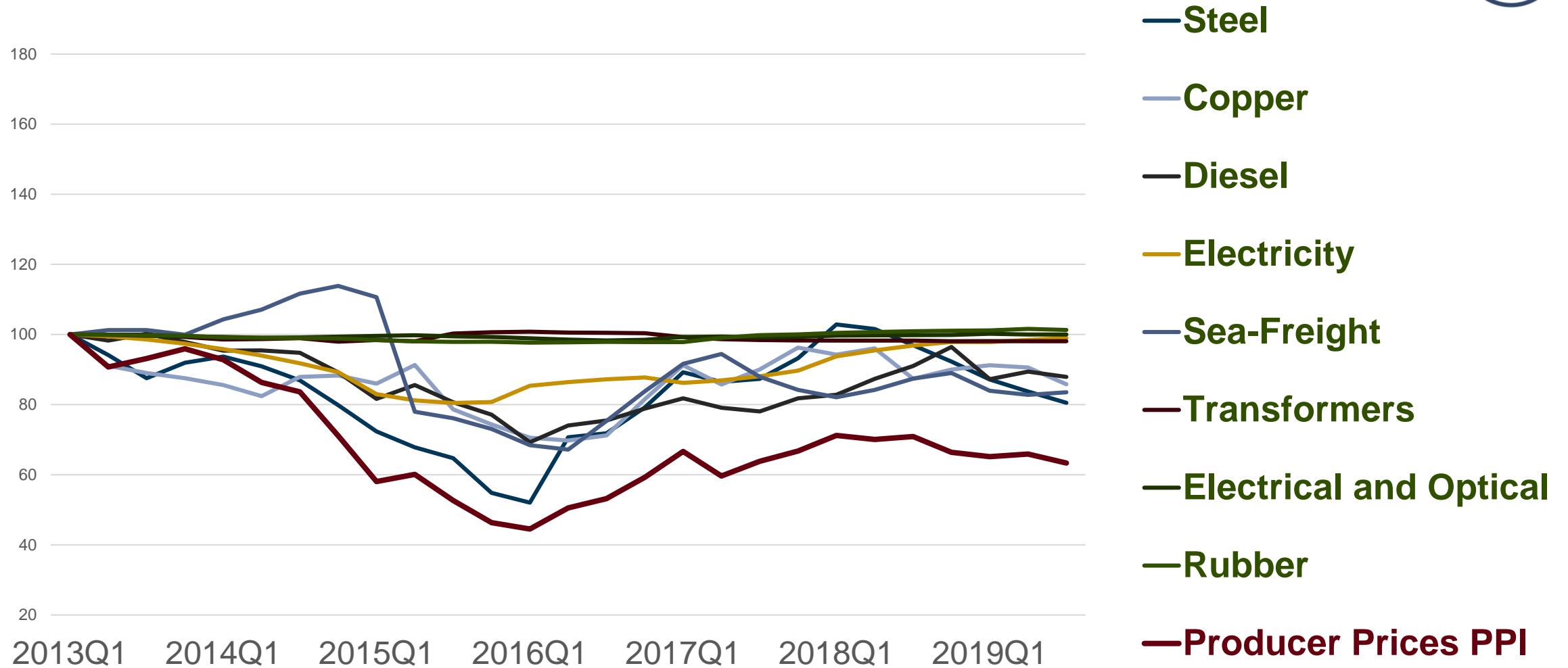
2019 Copper Smelter, Normal, Smelter Cash Margin Grouped By Smelter and Ranked By Cash Margin



2019 Zinc Smelter, Normal, Cash Margin Grouped By Smelter and Ranked By Cash Margin



Market development – Flat cost development since 2013!



Source: IHS Markit

Productivity is increasing



Increased labour productivity 5,0 %
.....
Since 2013 for Average Companies

Source: Eurostat: Labour productivity per hour worked,

Conclusion – Cost and Productivity



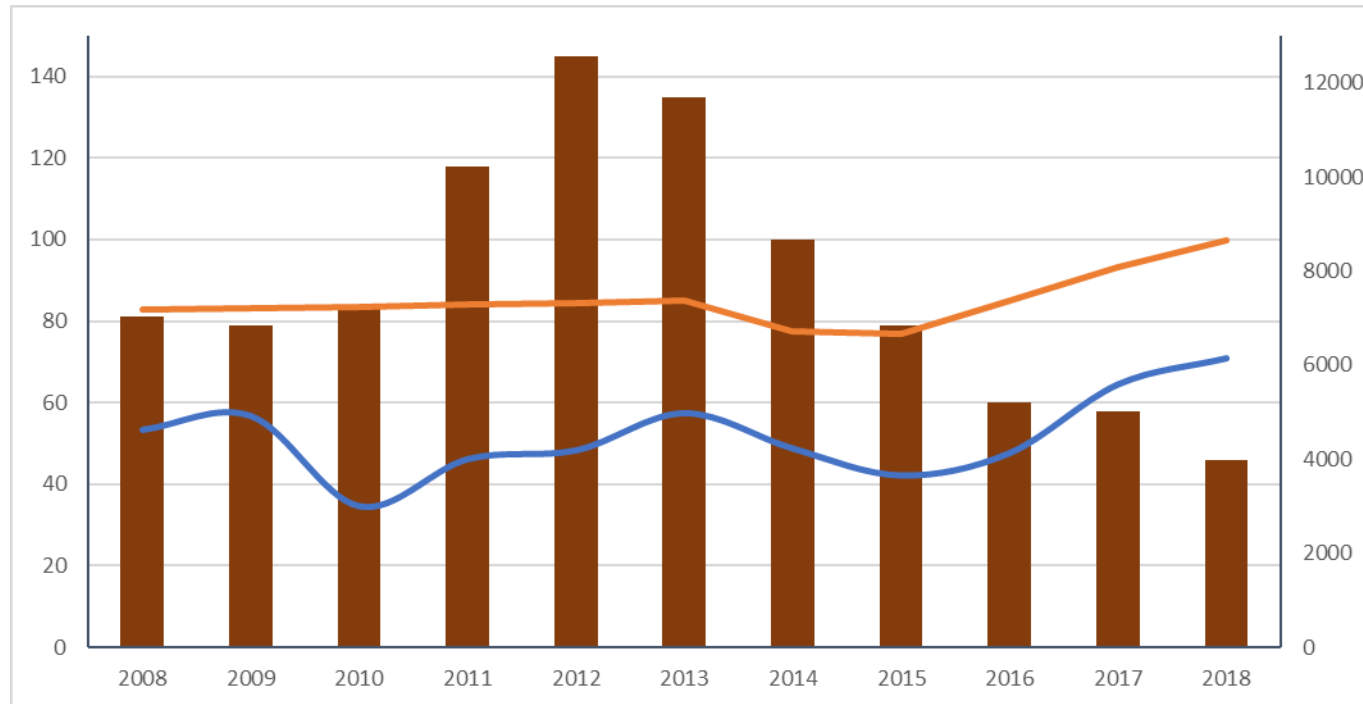
EXTERNAL COST	A flat cost development on products and services index since 2013
PRODUCTIVITY	General productivity improvement index in the range of 5 %
PRICES TO BOLIDEN	A general price increase push on products, spare parts, services and equipment every year
CONCLUSION	<ul style="list-style-type: none">a) You are worse than index on your external costsb) You are worse than index on your internal productivityc) You have significantly improved your own profit margin
RESULT	A non competitive offering leading to a non competitive customer (Cash Cost Curve)

Sustainable relations



Boliden is an exceptionally stable customer over the business cycles - We expect our suppliers to engage on the upcoming projects in all phases of the business cycle

EXPENDITURE LEVEL



Source: Goldman Sachs, Global investment research ; Boliden Annual report 2006-2019



Compliance to Business partner code of conduct



Anti Corruption



Environment



Human Rights

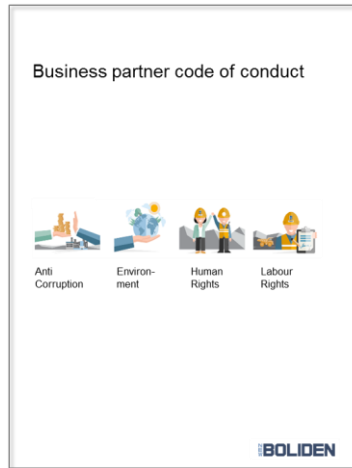


Labour Rights

Boliden CR Evaluation framework

Responsible Sourcing

CR evaluation integrated into the sourcing process



- Business Partner code of conduct

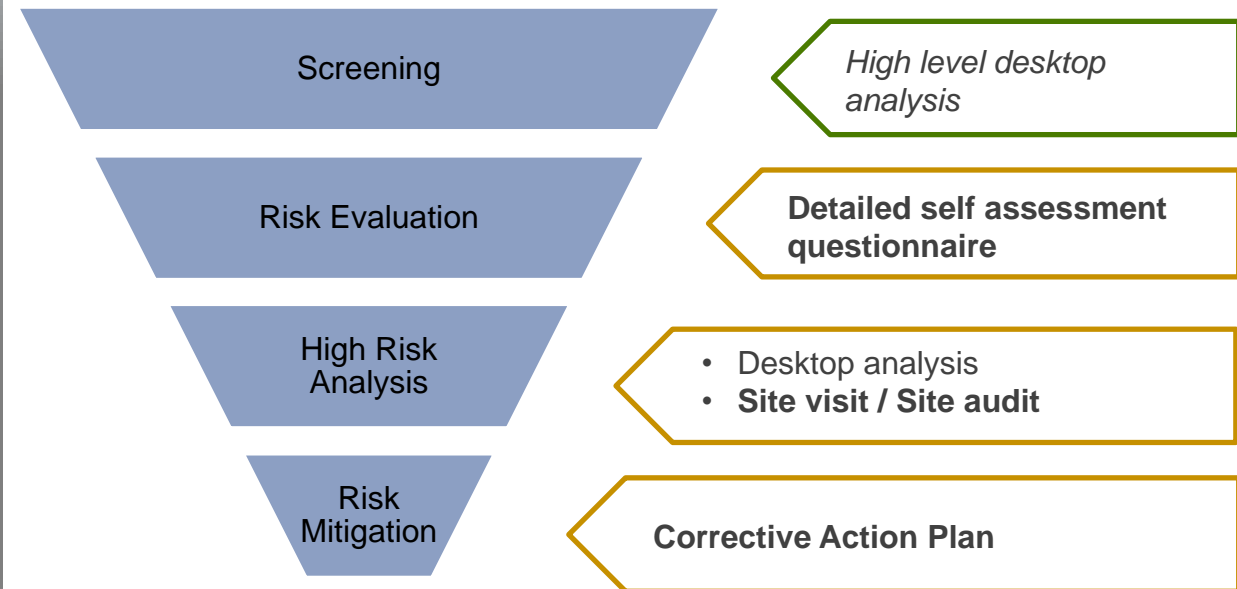
SCANMARKET



- Self Assessment Questionnaire
- Category/Product Specific CR Demands
- Sanction Controls

Business Partner evaluation

Evaluation and follow up of Business Partners



Boliden Procurement

Group Managed Categories
Logistics, IS/IT, IM&S



Mines Categories



Smelters Categories



Total Spend 1,5B EUR

Bulk

**Fixed
Equipment**

**Mobile
Equipment**

**Tools &
Consumabl.**

Logistics

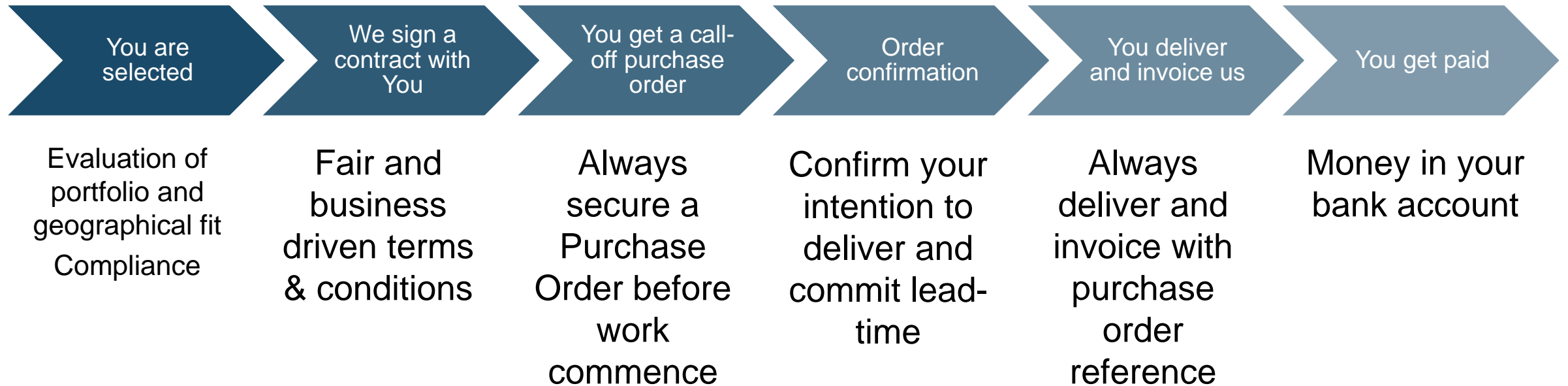
Services

**Indirect
Material &
Services**

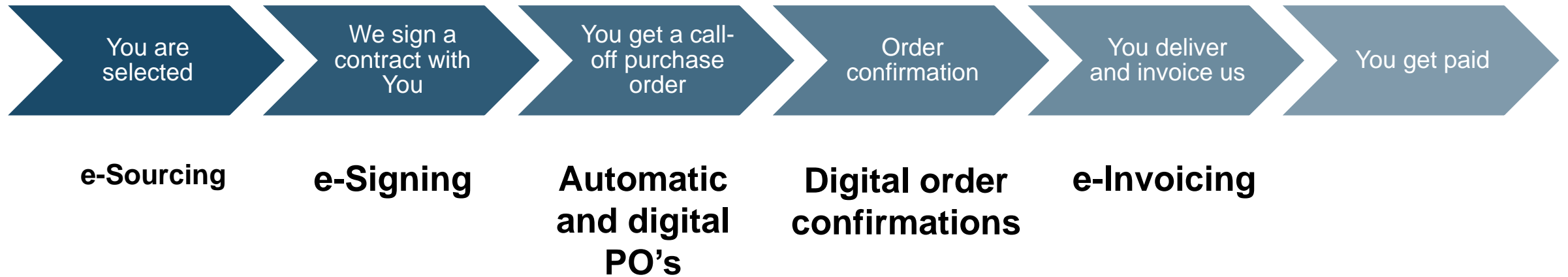
IT and Telco

Electrical

Our common process



The e-enabled process



- Going towards EDI deployment for all steps
- Our ERP/integration hub is the master, we can't adopt to all your web shops and digital channels

Consignment stocks

Consignment is one method to free up capital and labor, today's multiple agreement structures and set-ups leads to inefficiencies and therefore less consignment businesses

Areas to be discontinued:

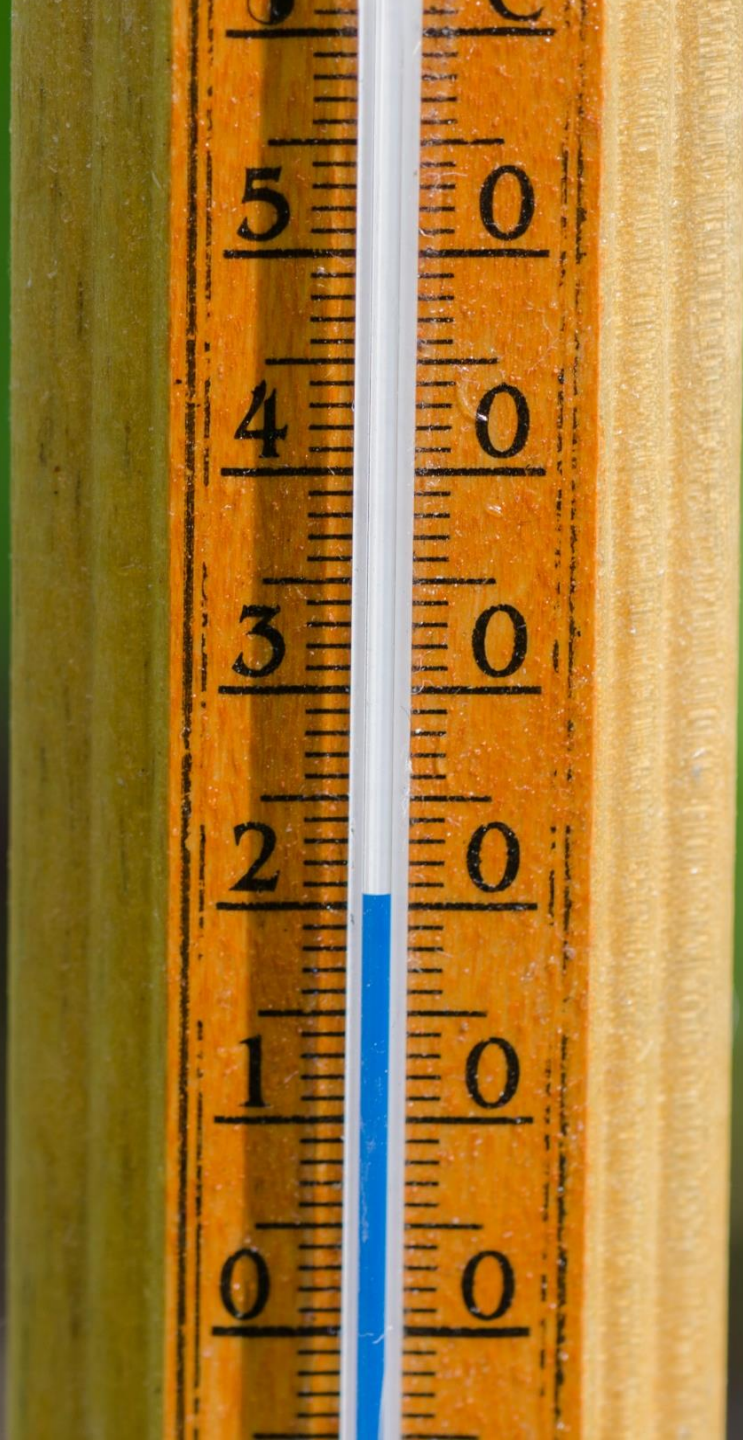
- Transfer of risk and invoicing at intake
- Stock levels and stock out risks on Boliden
- Obsolescence risk solely on Boliden
- Multiple site specific agreements with same supplier



In the room today....



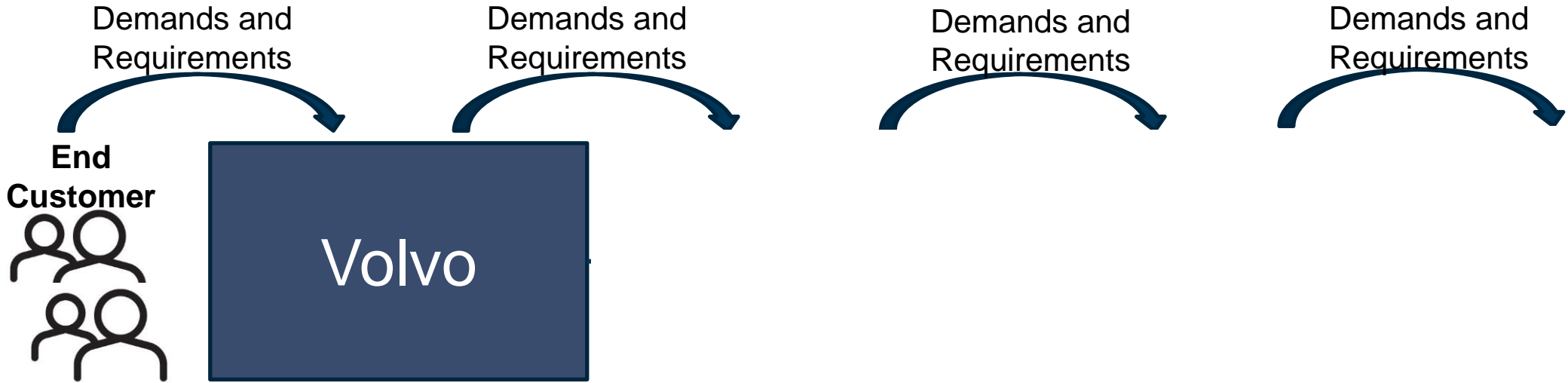
**The Most
Sustainable
Metal Producer**



Sustainable Business



- Energy efficiency
- Electrification
- CO² –reduction
- Safety
- Health
- Reduce waste
- Reduce emissions
- Local community support



Your Companies

Total impact

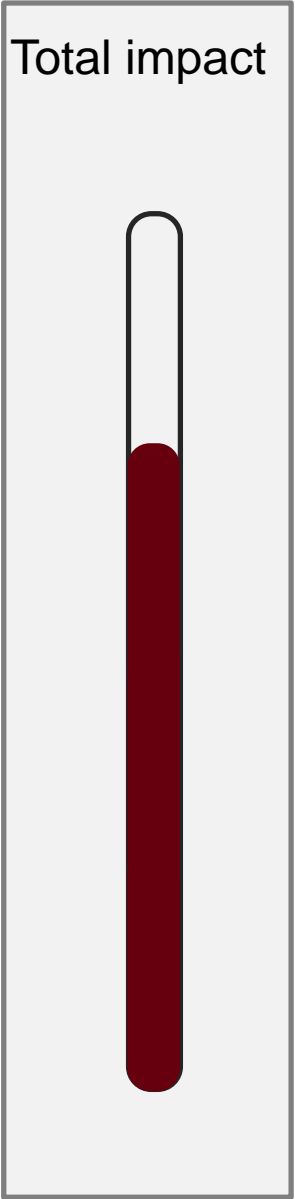
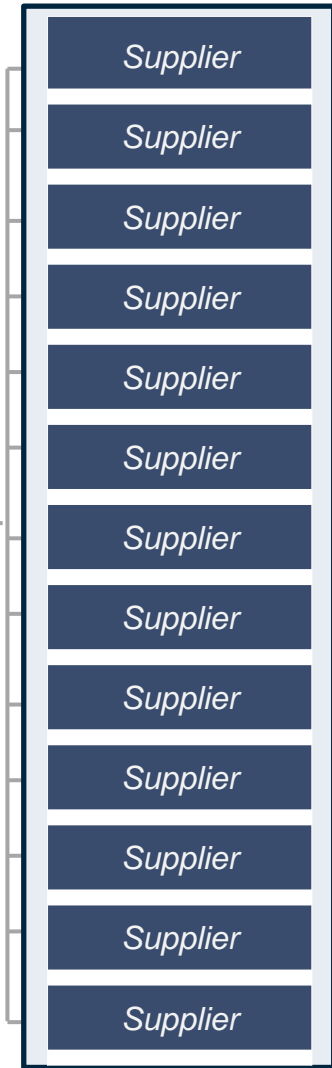


Your Companies

Your Suppliers

Your Suppliers, Suppliers

Total impact

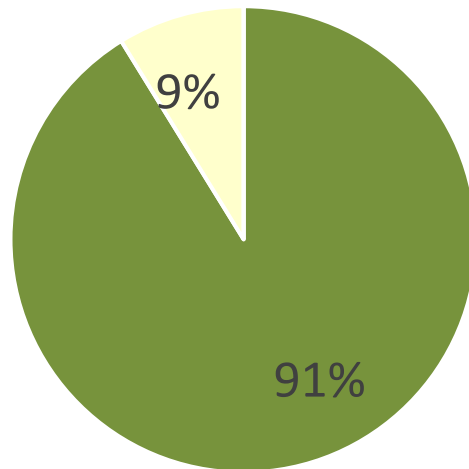


Supplier capabilities

-Results from the Supplier survey

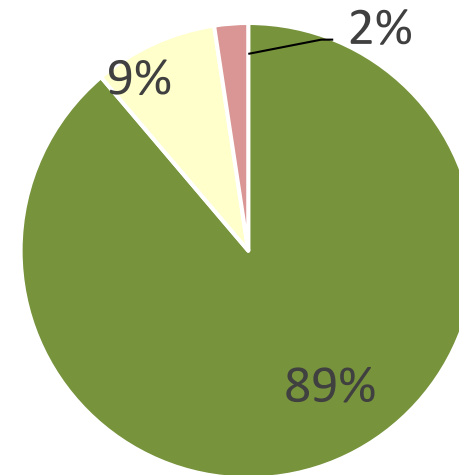


My company has the capability to help Boliden improve the environmental impact even further



■ Agree ■ Neutral ■ Do not agree

I understand Boliden's sustainability demands and requirements and know how we as a supplier can contribute



■ Agree ■ Neutral ■ Do not agree

Belong to the most sustainable supplier ecosystem in the metals and mining industry



To be the most sustainable metal producer...

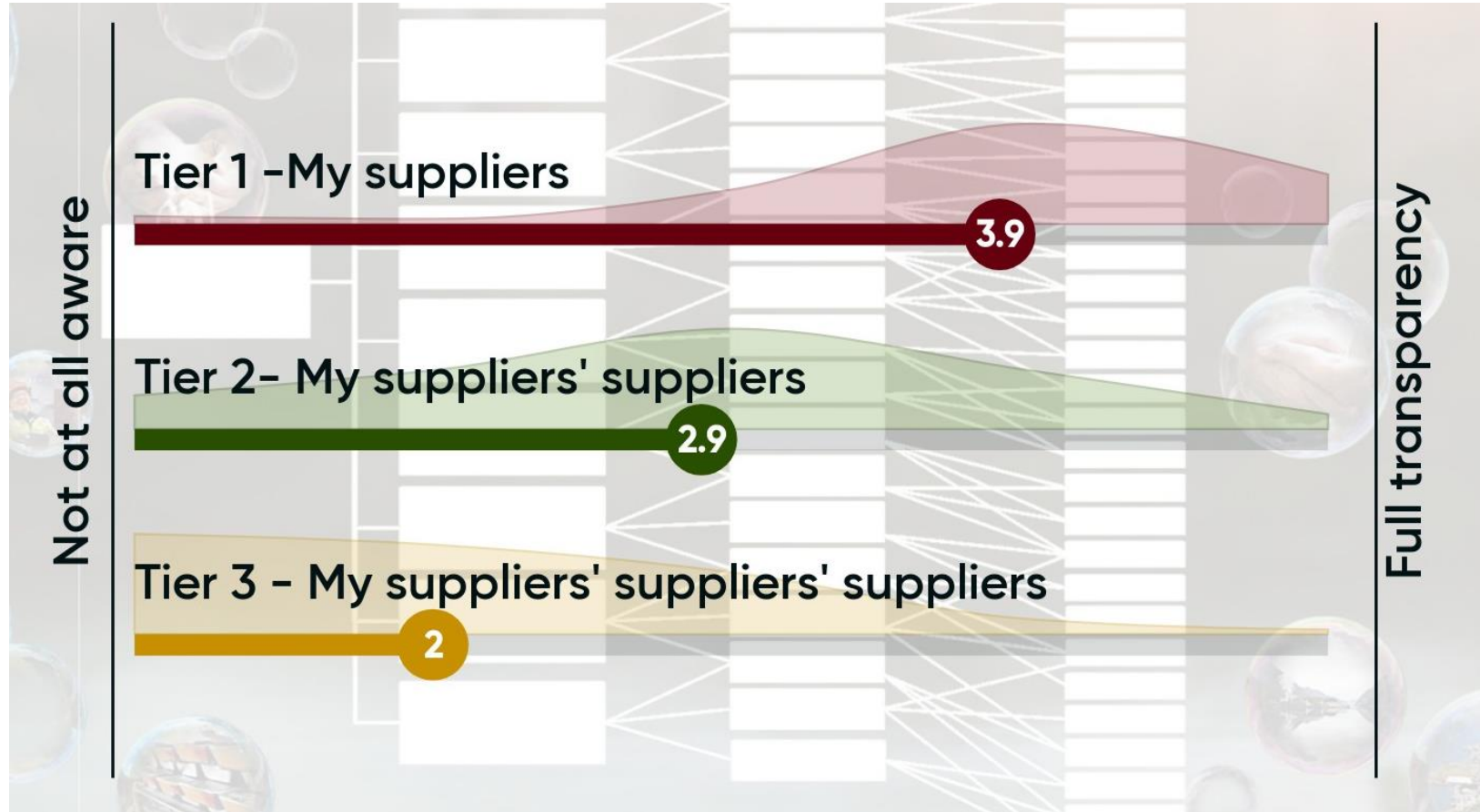


...we need to have the most sustainable supplier ecosystem

Mentimeter Poll - Supply chain insight



Please state your company's level of insight of your suppliers sustainability performance?



Sustainability expectations

- Code of Conduct
 - Anti Corruption
 - Environment
 - Human Rights
 - Labor Rights
- Be sober
- Be safe

Comply with Code of Conduct
and safety regulations

Sustainability expectations

- Sign the code of conduct
- Answer our self assessment questionnaires
- Report all safety incidents
- Report CO2 emissions

Support our reporting needs

Comply with Code of Conduct
and safety regulations

Sustainability expectations

Continuous improvement

Support our reporting needs

Comply with Code of Conduct
and safety regulations

- Continuously improve Your own sustainability performance

Sustainability expectations

Build a sustainable supply chain

Continuous improvement

Support our reporting needs

Comply with Code of Conduct and safety regulations

- Your customer demands drives your supplier demands
- Establish a code of conduct and Conduct supplier evaluations
- Develop your suppliers
- Secure your reporting needs down supply chain

Sustainability expectations



- Allocate R&D resources towards sustainability challenges and help us create the most sustainable eco system
 - Energy efficiency
 - Electrification
 - CO2 –Reduction
 - Automation
 - Etc
- Influence Us to become better

Summary



Basic Expectations

Safety
Productivity & Cost
Innovation
Compliance

Extended Expectations

**Belong to the most sustainable
supplier ecosystem in the
metals and mining industry**