

## TSM Performance by Company

### Glencore



Glencore is one of the world's largest global diversified natural resource companies and a major producer and marketer of more than 90 commodities. The company's operations comprise more than 150 mining and metallurgical sites, oil production assets and agricultural facilities.

Glencore's Canadian operations are guided by the *TSM* initiative and have participated since 2004. The following Glencore facilities have implemented *TSM*:

- Glencore Copper:
  - Horne Smelter, Rouyn-Noranda, Quebec
  - Canadian Copper Refinery (CCR), East Montreal, Quebec
- Glencore Nickel:
  - Sudbury Integrated Nickel Operations (INO), Sudbury, Ontario
  - Raglan Mine, Nunavik region, Quebec
- Glencore Zinc:
  - Brunswick Smelter, Bathurst, New Brunswick
  - Kidd Operations, Timmins, Ontario
  - CEZinc Refinery, Valleyfield, Quebec
  - Matagami Mine, Matagami, Quebec (joined in 2017)

Sustainability lies at the foundation of Glencore's business strategy and activities. Sustainability requires meaningful engagement with communities of interest (COI). At the same time, it requires maintaining the highest regard for environmental stewardship, social responsibility, corporate governance and transparent reporting, while delivering superior shareholder returns.

### 2016 TSM RESULTS

All of Glencore's facilities underwent external verification this year for its 2016 performance, with the exception of CEZinc and Matagami. Since the beginning of 2017, CEZinc has been going through an ongoing labour dispute, which prevented the facility from conducting its external verification. The results for CEZinc that follow are based on the facility's 2015 self-assessment. The facility will undergo external verification in 2018. Matagami is still in the phase-in period for TSM and will be reporting self-assessed and externally verified results in future TSM Progress Reports.

### ABORIGINAL AND COMMUNITY OUTREACH

All of Glencore's facilities have achieved at least a Level A performance in all of the indicators under the *TSM Aboriginal and Community Outreach Protocol*. Notably, Horne Smelter, Raglan Mine, Kidd Operations and Brunswick Smelter achieved a Level AAA performance for all four of the protocol's indicators. Glencore's performance in the area of community outreach was highlighted in 2016, when the company was presented with the TSM Community Engagement Excellence Award for Kidd Operations' Community Partnerships Initiative. This year, Raglan Mine was selected as a finalist for the 2017 TSM Community Engagement Excellence Award for the Tamatumani program, a skills development initiative that has contributed to the training and hiring of hundreds of Nunavimmiut.

### CRISIS MANAGEMENT AND COMMUNICATIONS PLANNING

Glencore reports corporate performance in this area for Glencore Copper, Glencore Nickel and Glencore Zinc, as well as facility-level performance for each of its participating facilities. Glencore's corporate results for the *TSM Crisis Management and Communications Planning Protocol* are strong with a few areas where improvement is needed. Glencore Copper corporate met all of the requirements for Indicator 1 of the protocol, but did not meet the requirements for Indicators 2 or 3. Glencore Nickel corporate met all of the requirements for Indicators 1 and 3, but did not meet all of the requirements for Indicator 2. Glencore Zinc corporate met all of the requirements for Indicators 1 and 2, but did not meet all of the requirements for Indicator 3. Glencore's facilities met all of the criteria for the protocol's three indicators.

### SAFETY AND HEALTH

In the area of safety and health, the company's results remain strong. All of Glencore's facilities achieved at least a Level A performance for all five of the *TSM Safety and Health Protocol's* indicators.

### TAILINGS MANAGEMENT

Glencore's results in this area remain strong with each participating facility achieving at least a Level A performance. Notably, the Horne Smelter, Raglan Mine and Kidd Operations achieved a Level AAA performance for all five indicators of the *TSM Tailings Management Protocol*. Glencore is working to ensure that the criteria of this revised protocol are integrated within the company.

### BIODIVERSITY CONSERVATION MANAGEMENT

Results in this area are strong with a few areas identified for improvement. Both the CCR Refinery and the Horne Smelter are working to improve performance in this protocol to achieve a Level A for all three indicators. CEZinc and Kidd Operations achieved at least a Level A performance for this protocol, and Raglan, Sudbury Integrated Nickel Operations and Brunswick Smelter achieved a Level AAA performance.

### ENERGY USE AND GHG EMISSIONS MANAGEMENT

All of Glencore's facilities achieved at least a Level A for the *TSM Energy Use and GHG Emissions Management Protocol*, with the exception of the Horne Smelter, Sudbury Integrated Nickel Operations and CEZinc, which achieved a Level B for Indicator 3. To achieve a Level A, a facility must demonstrate that it has met its energy use and GHG emissions performance targets in the reporting year. In 2017, these facilities will focus on ensuring set targets are achieved. Glencore's commitment to reducing its carbon footprint was celebrated last year when the Raglan Mine was presented with the 2016 TSM Environmental Excellence Award for its 120-metre high wind turbine and storage facility.

 For more information, please visit [www.glencore.com](http://www.glencore.com).





Externally  
Verified Results

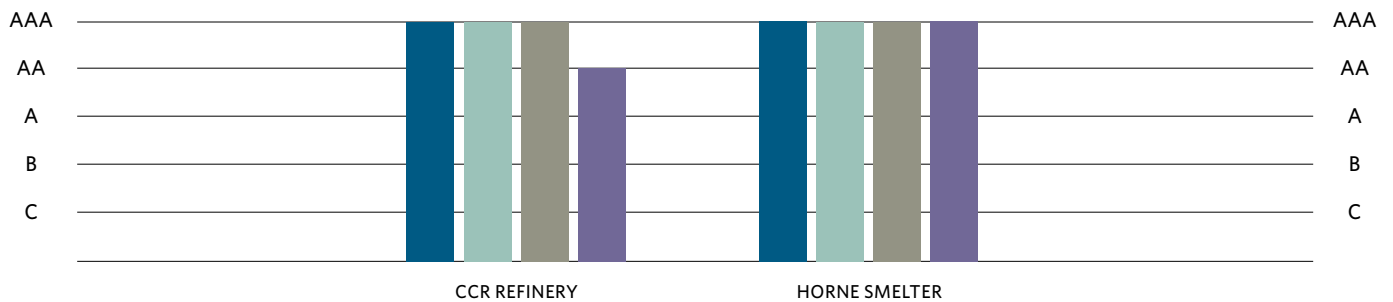
2016 TSM Results  
Glencore Copper

Crisis Management and Communications Planning Assessment

FACILITY	PREPAREDNESS	REVIEW	TRAINING
GLENCORE COPPER	✓	✗	✓
CCR REFINERY	✓	✓	✓
HORNE SMELTER	✓	✓	✓

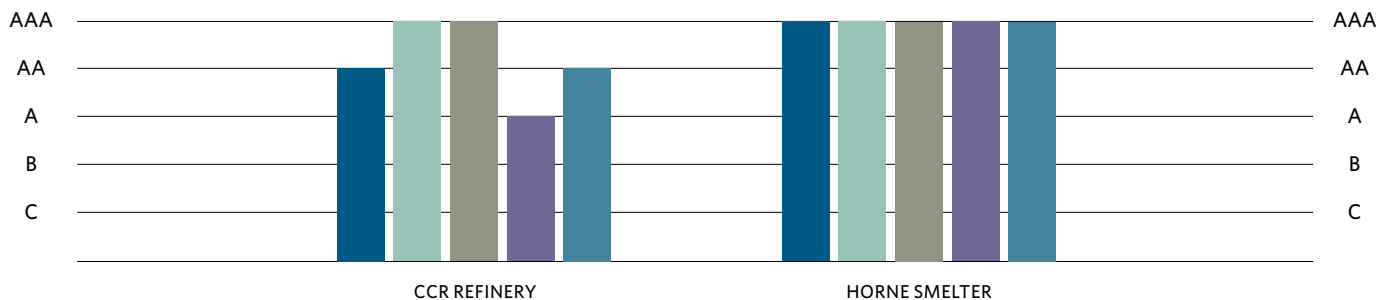
Aboriginal and Community Outreach Assessment

- COMMUNITY OF INTEREST (COI) IDENTIFICATION
- EFFECTIVE COI ENGAGEMENT AND DIALOGUE
- COI RESPONSE MECHANISM
- REPORTING



Safety and Health Assessment

- COMMITMENTS AND ACCOUNTABILITY
- PLANNING AND IMPLEMENTATION
- TRAINING, BEHAVIOUR AND CULTURE
- MONITORING AND REPORTING
- PERFORMANCE



## Tailings Management Assessment

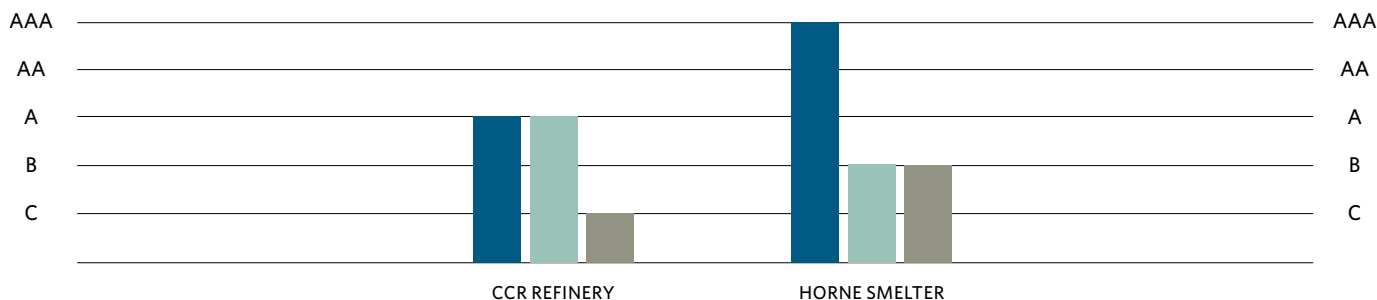
Externally  
Verified Results

- TAILINGS MANAGEMENT POLICY AND COMMITMENT
- TAILINGS MANAGEMENT SYSTEM
- ASSIGNED ACCOUNTABILITY AND RESPONSIBILITY FOR TAILINGS MANAGEMENT
- ANNUAL TAILINGS MANAGEMENT REVIEW
- OPERATION, MAINTENANCE AND SURVEILLANCE (OMS) MANUAL



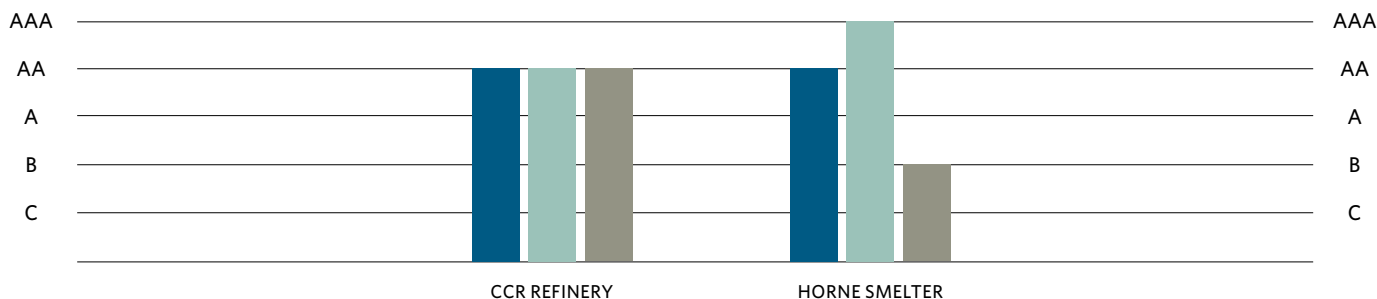
## Biodiversity Conservation Management Assessment

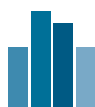
- CORPORATE BIODIVERSITY CONSERVATION POLICY, ACCOUNTABILITY AND COMMUNICATIONS
- FACILITY-LEVEL BIODIVERSITY CONSERVATION PLANNING AND IMPLEMENTATION
- BIODIVERSITY CONSERVATION REPORTING



## Energy Use and GHG Emissions Management Assessment

- ENERGY USE AND GHG EMISSIONS MANAGEMENT SYSTEMS
- ENERGY USE AND GHG EMISSIONS REPORTING SYSTEMS
- ENERGY AND GHG EMISSIONS PERFORMANCE TARGETS





Externally  
Verified Results

2016 TSM Results

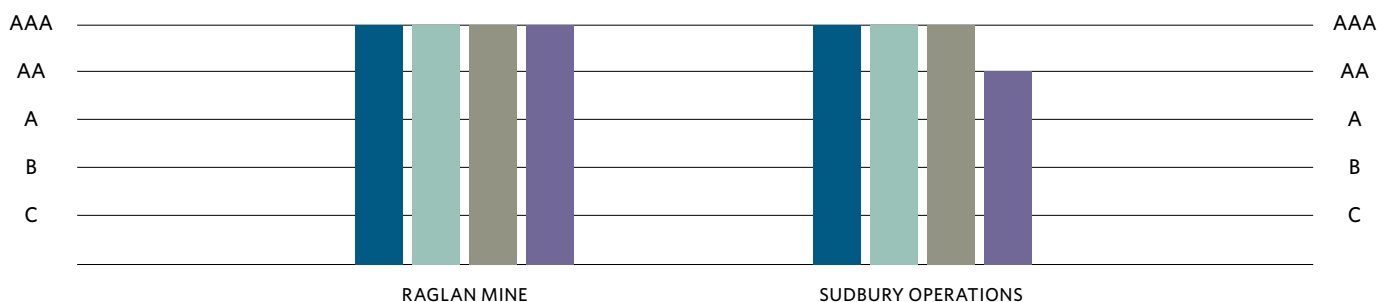
Glencore Nickel

Crisis Management and Communications Planning Assessment

FACILITY	PREPAREDNESS	REVIEW	TRAINING
GLENCORE NICKEL	✓	✗	✓
RAGLAN MINE	✓	✓	✓
SUDBURY OPERATIONS	✓	✓	✓

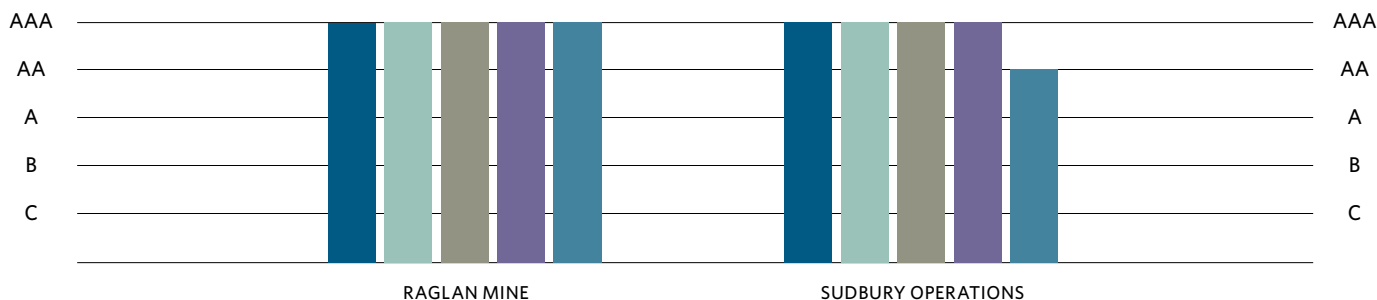
Aboriginal and Community Outreach Assessment

- COMMUNITY OF INTEREST (COI) IDENTIFICATION
- EFFECTIVE COI ENGAGEMENT AND DIALOGUE
- COI RESPONSE MECHANISM
- REPORTING



Safety and Health Assessment

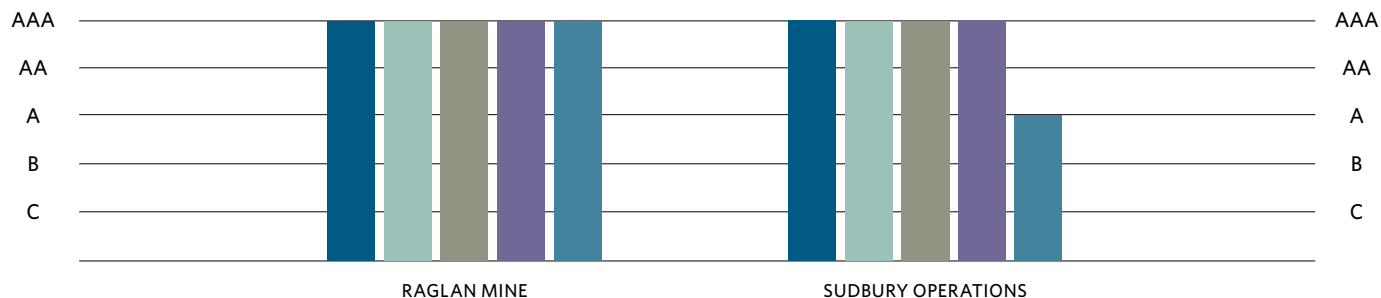
- COMMITMENTS AND ACCOUNTABILITY
- PLANNING AND IMPLEMENTATION
- TRAINING, BEHAVIOUR AND CULTURE
- MONITORING AND REPORTING
- PERFORMANCE



## Tailings Management Assessment

Externally  
Verified Results

- TAILINGS MANAGEMENT POLICY AND COMMITMENT
- ANNUAL TAILINGS MANAGEMENT REVIEW
- TAILINGS MANAGEMENT SYSTEM
- OPERATION, MAINTENANCE AND SURVEILLANCE (OMS) MANUAL
- ASSIGNED ACCOUNTABILITY AND RESPONSIBILITY FOR TAILINGS MANAGEMENT



## Biodiversity Conservation Management Assessment

- CORPORATE BIODIVERSITY CONSERVATION POLICY, ACCOUNTABILITY AND COMMUNICATIONS
- FACILITY-LEVEL BIODIVERSITY CONSERVATION PLANNING AND IMPLEMENTATION
- BIODIVERSITY CONSERVATION REPORTING



## Energy Use and GHG Emissions Management Assessment

- ENERGY USE AND GHG EMISSIONS MANAGEMENT SYSTEMS
- ENERGY USE AND GHG EMISSIONS REPORTING SYSTEMS
- ENERGY AND GHG EMISSIONS PERFORMANCE TARGETS





Externally  
Verified Results

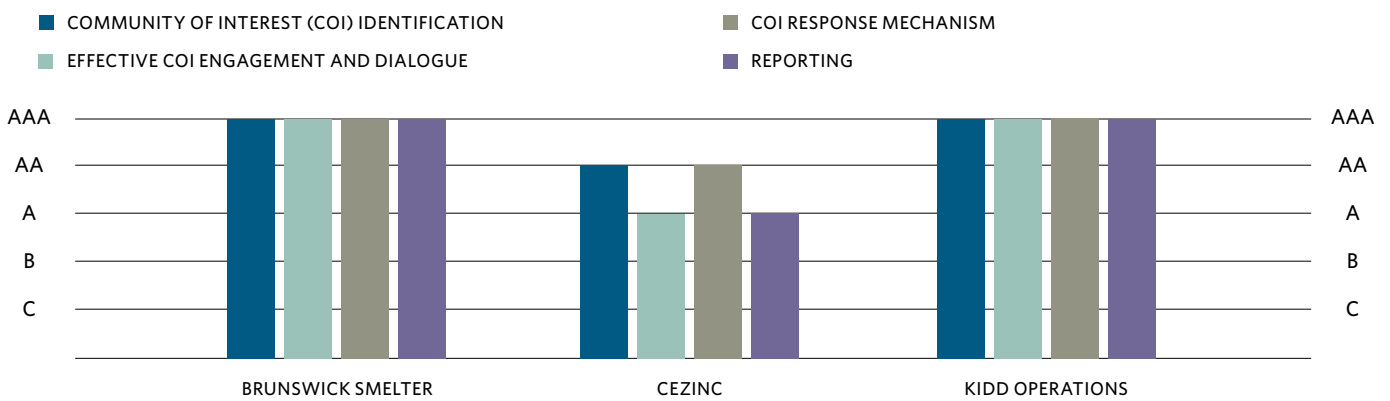
## 2016 TSM Results

### Glencore Zinc

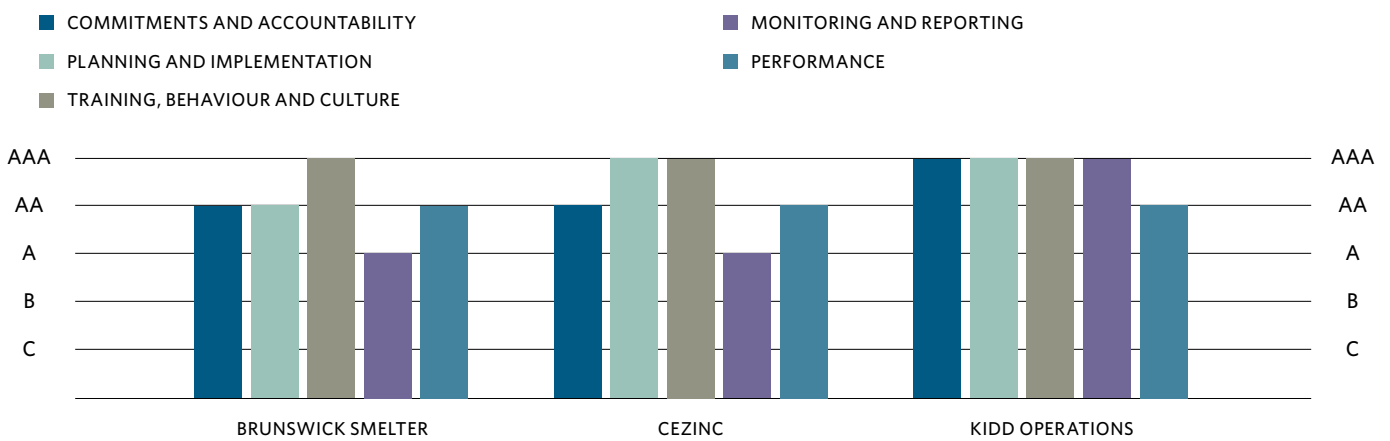
#### Crisis Management and Communications Planning Assessment

FACILITY	PREPAREDNESS	REVIEW	TRAINING
GLENCORE ZINC	✓	✓	✓
BRUNSWICK SMELTER	✓	✓	✓
CEZINC	✓	✓	✓
KIDD OPERATIONS	✓	✓	✓

#### Aboriginal and Community Outreach Assessment



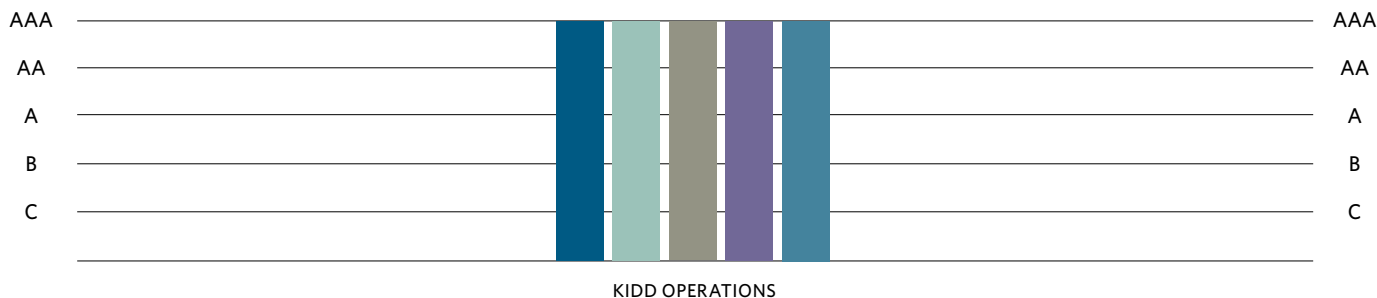
#### Safety and Health Assessment



## Tailings Management Assessment

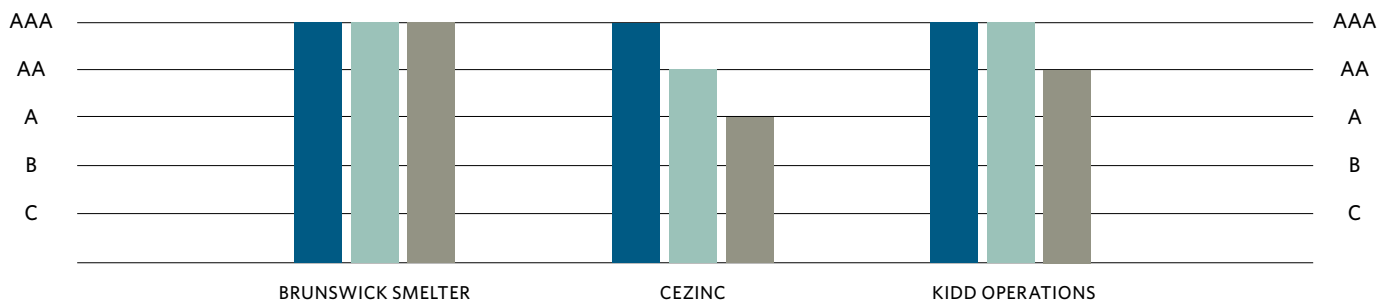
Externally  
Verified Results

- TAILINGS MANAGEMENT POLICY AND COMMITMENT
- TAILINGS MANAGEMENT SYSTEM
- ASSIGNED ACCOUNTABILITY AND RESPONSIBILITY FOR TAILINGS MANAGEMENT
- ANNUAL TAILINGS MANAGEMENT REVIEW
- OPERATION, MAINTENANCE AND SURVEILLANCE (OMS) MANUAL



## Biodiversity Conservation Management Assessment

- CORPORATE BIODIVERSITY CONSERVATION POLICY, ACCOUNTABILITY AND COMMUNICATIONS
- FACILITY-LEVEL BIODIVERSITY CONSERVATION PLANNING AND IMPLEMENTATION
- BIODIVERSITY CONSERVATION REPORTING



## Energy Use and GHG Emissions Management Assessment

- ENERGY USE AND GHG EMISSIONS MANAGEMENT SYSTEMS
- ENERGY USE AND GHG EMISSIONS REPORTING SYSTEMS
- ENERGY AND GHG EMISSIONS PERFORMANCE TARGETS

