SHU POWDERS

CORPORATE SUSTAINABILITY REPORT

2021



Contents

Introduction

3

Shu Powders produces various fine Cobalt powders for the global hard metals, diamond tools and battery industries. Shu Powders' manufacturing site is located at Cato Ridge, near Durban, South Africa, since 2008.

This is Shu Powders' seventh Corporate Sustainability Report (CSR) in South Africa. This report highlights our corporate sustainability performance in consecutive years since 2015. Our reporting focuses on the health and safety, environmental, and social responsibilities critical to our key stakeholders including shareholders, customers, employees, local communities, governments and suppliers.

We are a reputable manufacturer - committed to continual improvement in safety, health and environmental performance. This is non-negotiable in our drive towards Zero Harm.

- We believe that all injuries and environmental incidents are preventable;
- The safety of our employees, visitors and contractors is a non-negotiable value;
- We are committed to the protection of the environment, including the prevention of pollution, and
- Leaders at all levels in the organization are role models in the management of safety and environmental matters.

Shu Powders affirms the central importance of sustainability for communities, in the present and the future, for the integrity of human beings, culture, society, economic wellbeing, environmental responsibility and the way of life of the people.

In October 2016, Jingmen GEM Co Ltd. from Hubei China became the leading shareholder in Shu Powders Ltd. GEM was founded in 2001 and is the first stock listed recycling company in China employing over 5000 people in 16 circular economy industrial parks. The Jingmen plant is a certified national education centre for circular economy and open to the public. GEM's philosophy is "Limited Resources, Unlimited Recycling". GEM actively advocates "Urban Mining".

In April 2021, Shu Powders and its shareholder and distributor Specialty Metals Resources (SMR) entered into a long terms recycling agreement with the hard metal recycling company H.C. Starck (Masan group) in Germany. Under this agreement SMR converts the Cobalt intermediate from HCST's hard metal recycling process and returns Cobalt powder from Shu Powders. By edition of this CSR 2021, already eighteen hard metal producers have used this recycling service globally.

The Coronavirus pandemic reached South Africa in Feb 2020, resulting in a country wide lockdown end of March. Shu Powders resumed operations under a special permit and with skeleton staff mid April. The company established a special risk assessment and emergency plan. Nine Cardinal Rules have been set out to prevent the company from infections, among them are social distancing, wearing of masks, ventilation and sanitizing. Furthermore, Shu Powders organized vaccination campaigns in 2021, where employees were transported by the company to the vaccination centre after their shifts. This led to a vaccination rate of 98% by end of 2021.

Executive Summary

4

Shu Powders maintains an integrated management system for safety, health, environment and quality (SHEQ) based on ISO 9001:2015 for Quality, ISO 14001:2015 for Environment, and ISO 45001:2018 for Occupational Health and Safety. Apart from the international standards, Shu Powders is a five-star company according to the NOSA star grading system in South Africa.

In pursuit of its vision for a dust-free work environment, Shu Powders has commissioned a state-of-the-art Pneumatic Powder Conveying system. This is a closed-loop system designed to eliminate all manual handling and exposure of Cobalt during its processing along the value chain.

Shu Powders Ltd has been sourcing Cobalt raw materials through its related companies GEM Co. and SMR Ltd. GEM Co is sourcing from Glencore's Katanga operation in the DRC and from Cobalt scraps. GEM is a world leader in Cobalt recycling. In Dec 2020, GEM Co. Ltd and Glencore extended their long-term strategic cobalt partnership. Under the terms of the agreement, Glencore will provide around 150,000 tonnes of cobalt contained in hydroxide for GEM between 2020 and 2029. Glencore and GEM are committing each other to annual audits under OECD-aligned standards, specifically, the Cobalt Refiner Supply Chain Due Diligence Standard developed by the Responsible Minerals Initiative (RMI), Responsible Cobalt Initiative (RCI) and Chinese Chamber of Commerce of Metals, Minerals & Chemicals Importers & Exporters (CCCMC). This shared commitment will help to demonstrate strong responsible sourcing practices and transparency across multiple points along the supply chain.

Highlights	Previous priorities
▪ Success in the three HSE Corporate objectives, which are: ○ Zero exceedances in Cobalt in Blood and in Urine, ○ Zero Lost Time Injuries, and ○ Zero environmental incidents. ▪ Installing the Pneumatic Powder Transfer System but commissioning with 4 mths delay. ▪ Carbon footprint essentially related to electricity consumption as SA state owned power generation is from coal. ○ Moving to green energy by procuring solar panels which will occupy most of Shu's roof space. ○ Drafting concept using of thermal energy in furnace off-gas.	• Maintaining Zero exceedances in Cobalt in Blood and in Urine. • Zero Lost Time Injuries. Zero environmental incidents. • Commissioning of pneumatic powder transfer. • Establishing Carbon footprint. • Developing plans for renewable energy sources. • Treatment of Co containing wash water.
Lowlights	**Priorities for 2022**
• The recycling of Cobalt-containing waste-water was postponed and is now being integrated into the sustainability roadmap under circularity. • Commissioning of the pneumatic powder transfer system with delay.	• Maintaining Zero exceedances in Cobalt in Blood and in Urine. • Zero Lost Time Injuries. Zero environmental incidents. • Installation of the solar system leading, reducing carbon footprint by 20%. • Usage of thermal energy in furnace off-gas, reducing carbon footprint by another 10%. • Developing roadmap with PwC to reach 90% circularity and 50% carbon footprint reduction by 2030.

Key Performance Indicators (KPI)

Health & Safety

Environmental

Social

5

Description	Targets / Limits		2021 Actual	2020 Actual	2019 Actual	2018 Actual	2017 Actual	5 Year Trend
Bio monitoring (No. of Co in blood non-conformances)	0		0	0	1	1	2	
Dust monitoring between work stations (mg/m^3)	<0.1*		0.001	0.001	0.001	0.001	0.006	
Dust monitoring at work stations (mg/m^3)	<10*		0.01	0.01	0.01	0.01	0.01	
Dust fall out – general ($mg/m^2/day$)	<1200*		N/A[1]	N/A[1]	13	13	15	
Dust fall out - Cobalt ($mg/m^2/mth$)	<2		N/A[1]	N/A[1]	0.13	0.13	0.08	
Lost time incidents (No.)	0		0	0	1	1	0	
Noise (dB)	<85*		78	78	78	78	N/A	
Water consumption (l/kg Co)	≦20		19	22	15	16	9	
Electricity consumption (kWh/kgCo)	≦7		8.7	7.4	8.3	8.7	8.5	
Fuel consumption (ml/kg Co)	≦5		9.2	17.5	7.3	1.0	4.4	
Hazardous waste (g/kg Co)	≦30		31	39	16	19	25	
Environmental incidents & complaints (No.)	0 0		0 0	0 0	0 0	0 0	0 0	
Employment permanent (%) Employment temporary (%)	≧90 ≦10		64 36	93 7	100 0	100 0	92 0	
Training (hrs per employee)	+/-20		18	20	16	20	28	
Contribution to community (% of EBITDA)	≧0.4		0.2	0.24	0.5	0.5	0.45	

(*) -referring to legal limits (1) – on hold during COVID pandemic

Covid-19

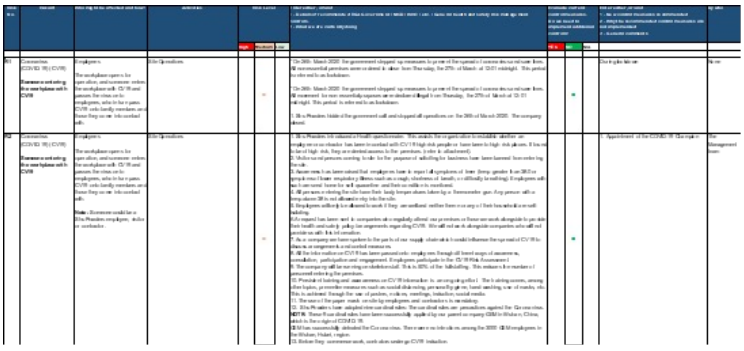
6

Systems in Place

The National Institute for Communicable Diseases of South Africa reported the first Covid-19 suspected case on 5 March 2020. From then onwards, the lives of people has never been the same. Shu Powders established a Covid-19 Policy statement with the aim of effectively managing the risk posed by the Covid-19 pandemic. The Policy set the framework for a comprehensive Covid-19 approach which included the following:

- Covid-19 Risk Assessment
- Covid-19 Information monitoring and communication
- Communication, Consultation, and Participation of relevant stakeholders
- Covid-19 Emergency Response
- Covid-19 Training and Awareness
- Covid-19 Responsibilities and Appointments for the implementation of the Covid-19 Policy
- Legal Compliance.

Covid-19 Risk Assessment



A snapshot of the Covid-19 Risk Register

In consultation with all relevant affected parties, and with the participation of employees and their representatives, a Covid-19 Risk Assessment was completed, and control measures were put in place.

Covid-19

7

Cardinal Rules

Shu Powders adopted the nine Cardinal Rules developed by the parent company GEM in China. GEM successfully implemented these rules and had no Covid case in their factory in Huang, despite the first that this was the origin and epicentre of the virus.

The Nine Cardinal Rules are as follows:

- What to do when entering the workplace
- Disinfection & ventilation
- Wearing of masks
- Not attending crowded events
- Avoiding eating in groups
- Washing hands every time
- Reasonably arranging meetings
- Cooperation, and
- Cohesion.

Covid-19

8

Training and Awareness

A dedicated responsibility was appointed for the purpose of training and raising awareness on employees, visitors and contractors. The training covered aspects such as the preventive measures to infections (Covid-19 Cardinal rules), and what to do when one suspects he/she is Covid-19 infected. There was no recorded on site infection.

Employees trained on an open space

Employees watching a Cardinal Rules Presentation

In August of 2020, Shu Powders was audited by the Department of Labor and Employment on the Covid-19 arrangements in place. The audit was a great success, and the Department was impressed.

Furthermore, Shu Powders organized vaccination campaigns in 2021, where employees were transported by the company to the vaccination centre after their shifts. This led to a vaccination rate of 98%.

Health and Safety

9

Risk Assessments & Employee Participation

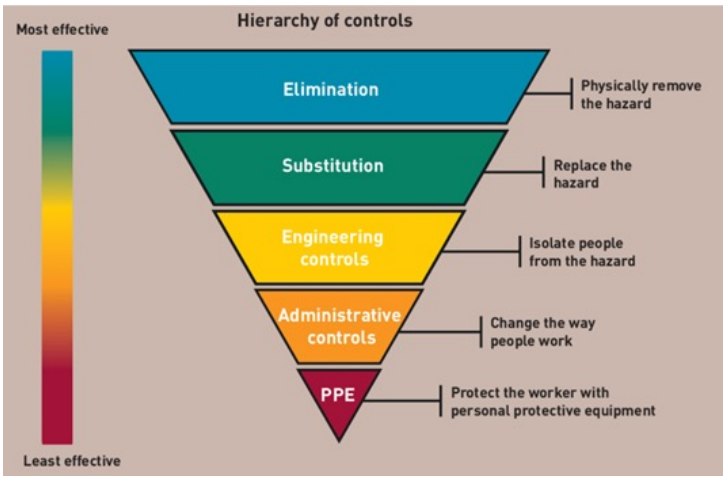
Shu Powders has obligations under the Occupational Health and Safety Act 85 of 1993 (OHS Act) as well as the General Administrative Regulations 2003 (GAR) to manage risks to health and safety so far as is reasonably practicable.

Our risk management approach involves identification and assessment of risks followed by elimination of risks in the first instance or where this is not practicable, minimizing those risks so far as reasonably practicable.

Our risk management approach is important for three main reasons:

- So that the Shu Powders' duty of care to its workers, customers, contractors, visitors and others that work can be met, as part of the legislative health and safety requirements.
- Out of concern for the health and safety of workers, contractors, visitors and others at Shu Powders.
- It makes good business sense and is cost effective.

*Workers are an integral part of risk assessments, they are involved in the hazard identification, risk assessment and risk control processes. This is supported by an established process of communication, consultation, and participation. Health and Safety Representatives exist in their respective work areas and they form a HSE committee which meets at least once every quarter, and wherever is necessary.



When considering Risk Control measures, the Hierarchy of Controls methodology is always adopted in order to ensure an effective process.

Workplace hazard identification, assessment and control is an on-going process. And is undertaken at various times, including:

- If it has not been done before.
- When a hazard has been identified.
- When a change to the workplace may introduce or change a hazard. Such as when changes occur to the work equipment, practices, procedures or environment.
- As part of responding to a workplace incident, even where an injury has not occurred.
- Where new information about a risk becomes available or concerns about a risk are raised by workers.
- At regularly scheduled times appropriate to the workplace.

Health and Safety

10

Bio-Monitoring

Bio-Monitoring of chemical exposure in the workplace is of critical importance in the assessment of health risks and forms an integral part of the company overall occupational health strategy. We consider biological monitoring as an important tool in the prevention of occupational diseases related to those exposed to chemicals on a regular basis. A complete medical programme is in place consisting of Pre-employment, Annual, and Exit medicals for all employees – whether contract or permanent. All the medicals consist of the following examinations:

- Physical examination
- Eye Test
- Audiometric Testing
- Chest X-ray
- Lung Function
- Cobalt in Urine and Blood samples

No employee had his Cobalt in Blood exceeding the recommended levels of 25mg/L since year 2019. This is a great achievement since Cobalt dust is one of the company's top three hazards thus reducing dust emissions is a priority.

In the event that an employee got an exceedance of Cobalt in Urine or Blood, the employee is removed from exposure for minimum of two weeks and a thorough Root Cause Analysis comprising of the Occupational medical practitioner, the area's Health and Safety Representative and the area's Manager. The Root Cause Analysis is followed by a review of current control measures, safe work procedures, and a refresher training on proper PPE use and hygiene.

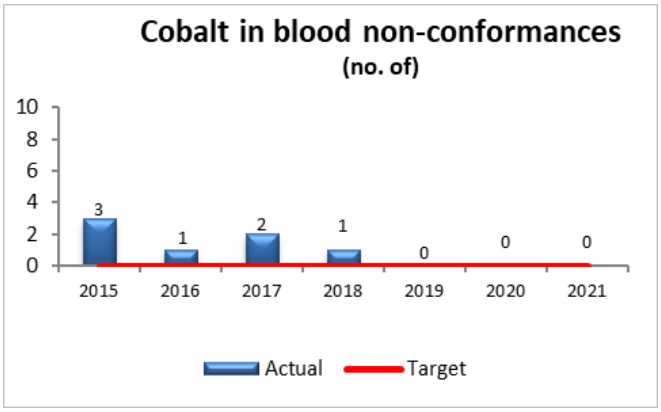


Fig 1. Cobalt in blood non-conformances: The year 2021 is the 3rd consecutive year with no exceedances in Cobalt in Blood.

Health and Safety

Dust Monitoring

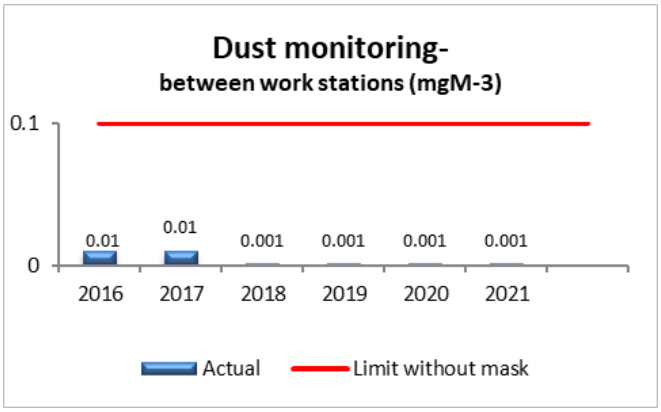


Fig 2: Dust Monitoring between Work Stations: Now that the Pneumatic Powder transfer is operational, we expect more than 80% reduction in dust. The goal is to reach a point where employees can work with the paper mask instead of a full face mask. This will be accomplished once also the the blender discharge is connected with the pneumatic conveying system.

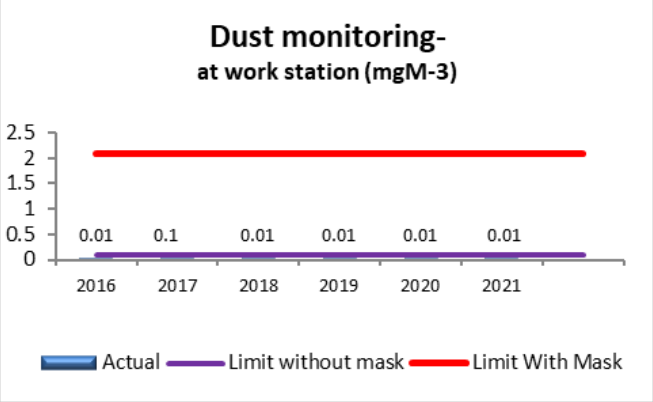


Fig 3: Dust Monitoring at Work Stations: The pneumatic Powder Transfer eliminates three main work areas where there was manual handling and exposure to dust by employees, i.e. crusher discharge, jet mill loading and discharge and blender loading. Besides the reduction of dust, reduction of work areas of manual handling is a great success in eliminating employee exposure.

Health and Safety

Lost Time Incidents

Shu Powders is committed to the health and safety of its employees, visitors and contractors, this includes the protection of the environment and the prevention of pollution, and the protection of property against damage. The target for SHEQ incidences is Zero. This commitment is demonstrated by various ways among them, leading by example, formal training given to employees; awareness through tool box talks, posters, the safety day. For every incident which occurs, a Root Cause Analysis is carried out to find a lasting solution to the incident.

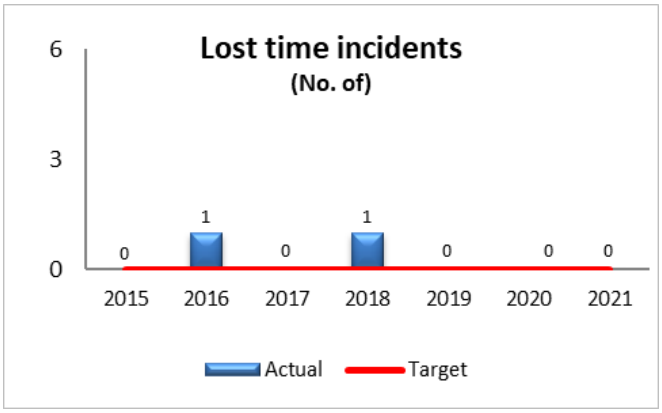


Fig 4, LTI: The year 2021 is the third consecutive year without an LTI. This is a great accomplishment since it is evidence that the Integrated Management System (IMS) in place is delivering what it is supposed to.

Lost Time Incidents since 2018:

The last incident was in 2018, in June, when an employee fell from height in the course loading a blender. He was taken to hospital and booked off sick. With automated blender loading this risk is eliminated.

Health and Safety – NOSA Performance

Lost Time Incidents

In addition to the ISO 45001 system that forms part of the Integrated Management System, Shu Powders also implements the NOSA CMB 253N Standard of Health and Safety. South Africa is the origin of this standard and it is spreading across the globe as one of the flagships in H&S. Performance is a function of the Effort Score and the DFR (Disabling Frequency Rate) and is given a rating on a Five–Star scale. The Five-Star is the highest ranking, and an organization that achieves consistently the Five-Star is elevated to the NOSCAR – which is the highest grade an organization can achieve.

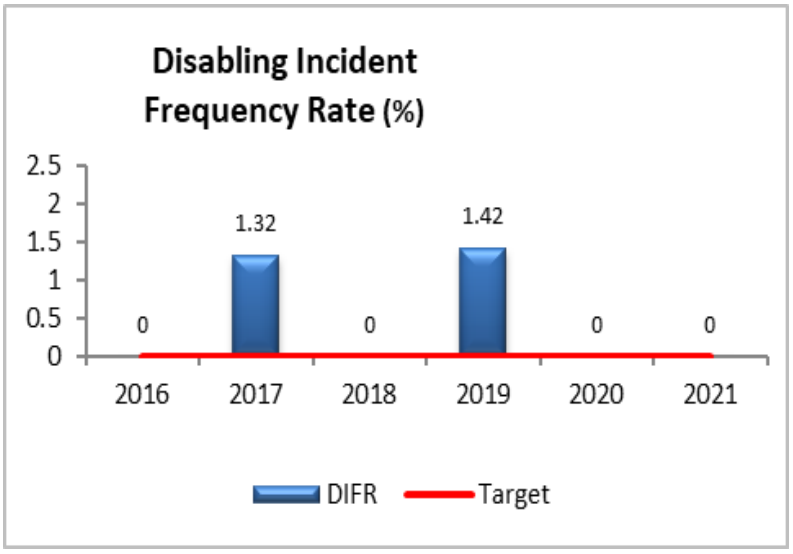


Fig 5. The Disabling Frequency Rate is decreasing over the years.

We pride ourselves with our current Five-Star grading – having had Zero lost time Injuries in 2020 and 2021.

Health and Safety – NOSA Performance

Effort Score

In addition to the DIFR, the NOSA system have got an additional performance indicator. This is the Effort Score and is a function of the following HSE pillars:

- Commitment & HSE Management Policy.
- Planning of the NOSA HSE Management System.
- Implementation & Operation of the HSE Management System.
- NOSA HSE Management System Evaluation & Corrective Action.
- HSE System Review.

Fig 6, The graph above shows consistently improving Effort Score Over the Years. An Effort Score of ≥ 95 with a Zero DIFR will achieve a Platinum Star, which is the highest NOSA grade and ur next goal.

Environmental

Water consumption

The importance of saving water cannot be over emphasised, South Africa faces significant water challenges due to the combination of its rapidly growing population and increasingly unreliable rainfall patterns due to climate change. The water problem is further exacerbated by the fact that South Africa is a relatively dry country, with an average annual rainfall of about 464mm (compared to a world average of about 860mm).

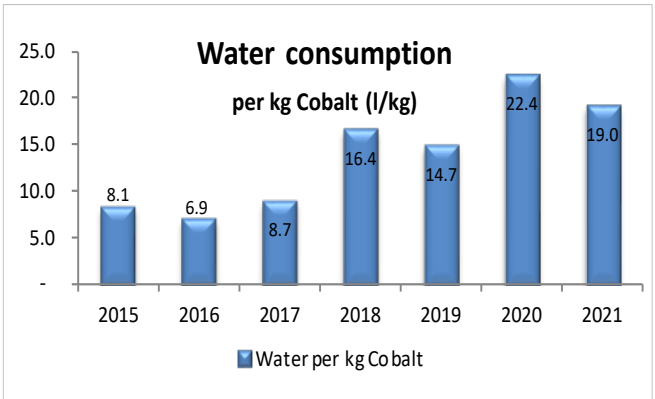


Fig 7, Water consumption:

- Water consumption has slightly decreased. This is due to preventive maintenance which saw the installation of a leak detection software, this assists in detecting leaks without delay, even those below the surface.
- The jump from 2017 to 2018 is related to a change in distribution of municipal water. Shu Powders is getting charged for consumption that was wrongly covered by the municipality before.

Electricity consumption

The year 2016 recorded the lowest electricity consumption per kg cobalt produced since 2013. This is attributed mainly to SHU9 - a Lean project aimed at exploiting the '*opportunity to reduce conversion costs by reducing energy cost & consumption through improved process control, better demand management, power factor correction*'.

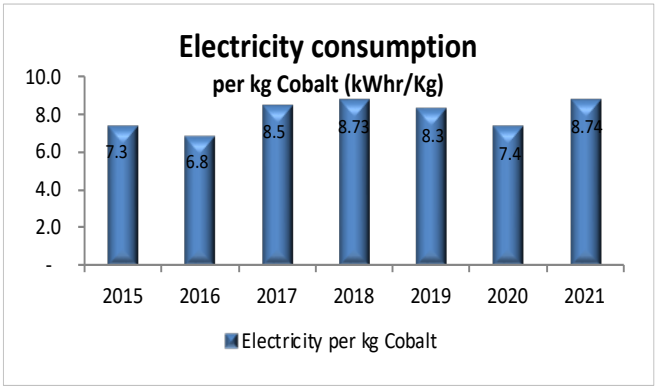


Fig 8, Electricity consumption: Electricity usage has increased slightly. This is largely due to low production in H1 (partially caused by Durban riots).

- The company has embarked on a solar power project whereby 80% of the site's roof space will be covered with solar panels.
- In addition, Shu drafted a concept recovering the furnace stack heat to dry and decompose the CoCO3 feed material.
- Shu has also started to replace its electric hot water geysers with solar water heaters. See under Outlook.

Environmental

Fuel consumption

Diesel fuel is used as an alternative energy source to power a stand-by generator due to persistent load shading on the national electricity grid.

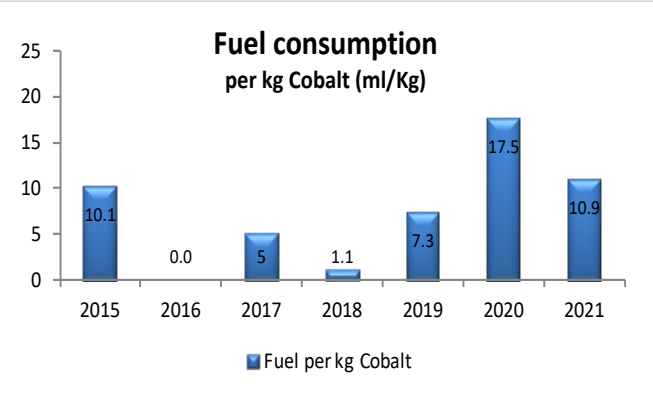
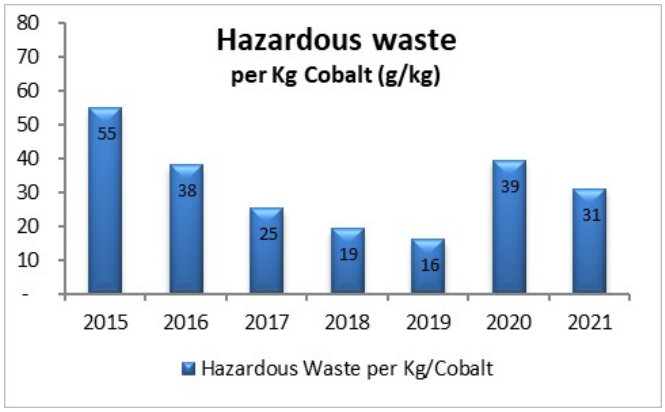


Fig 9, Fuel consumption: Fuel consumption has decreased, this is due to reduced loadshedding. Load shedding is increasing in beginning of 2022.
The installation of solar panels will help to reduce dependency of diesel.

Waste Managemet

Separation-at-source is the heart of recycling. Shu Powders has done just that in an effort to improve recycling and avoid waste to the landfill.



Pict 10. Hazardous waste: Hazardous waste quantities have decreased. This is due to continuous recycling of raw material pallets and big bags.
The cleaning of the raw material pallets and big bags was reduced during COVID times 2020 and 2021 as plant was operating with skeleton staff only.

Environmental

Incidents and Complaints

Shu Powders has an obligation to ensure that we comply to all legal requirements and satisfy expectations – from both the authorities and other interested parties. Our environmentally friendly operations have seen us being in undisturbed co-existence with communities around us, neighbours, the authorities and employees, registering zero complaints since 2016.

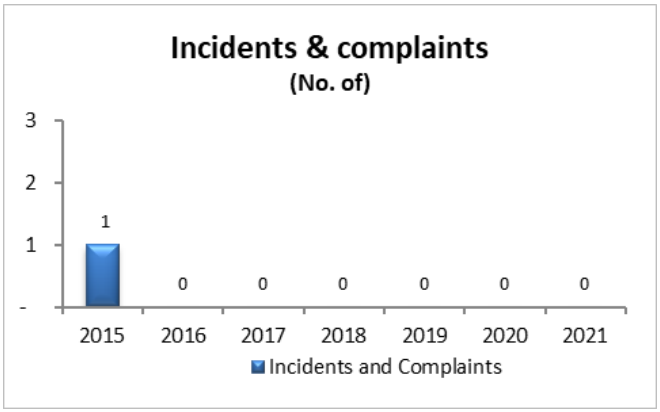


Fig 11, Incidents and complaints: The overall trend is positive as there was no complaint since 2016.

Incidents:

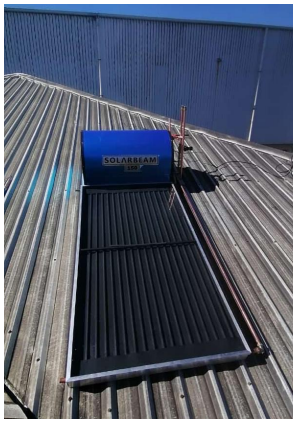
- Years 2016 – 2021: there were no environmental incidents or complaints
- 2015 - June, a valve on the ammonia surge tank was mistakenly open leading to the release of some ammonia vapour.
- 2014 - no environmental incidents.
- 2013 – December, the lab conservancy tank was full and as a result the drains were filling up. 5000 Litres of the contents were pumped into a bulk plastic tank. The liquid effluent was eventually collected by an accredited waste removal company.

Corrective and Preventative Action Reports were raised for each incident.

Outlook

Shu Powders is investing in solar power to replace 20% of its power requirements with renewable energies. Majority of plant roofs will be covered with solar panels. In addition, electric hot water geysers are being replaced by solar powered hot water.

Solar panels covering most of Shu Powder roof space to generate electricity.



Hot water geysers being replaced by solar.

Social

Employment

The year 2021 experienced decreased employment. This was due to retrenchment as a result of economic slow down due to COVID-19 pandemic and further automation and digitalisation in the factory.

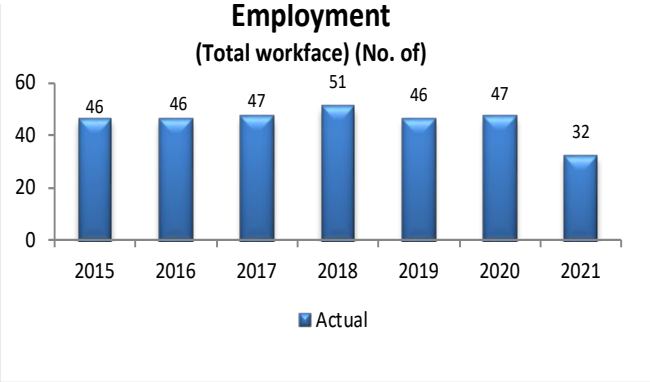


Fig 12, Total workforce: Workforce reduced as 15 employees were retrenched in a CCMA moderated process. (Commission for Conciliation, Mediation and Arbitration (CCMA) was established in terms of the Labour Relations Act, 1995.)

Fig 12a, Employment full time: New employees are hired om fixed term contracts.

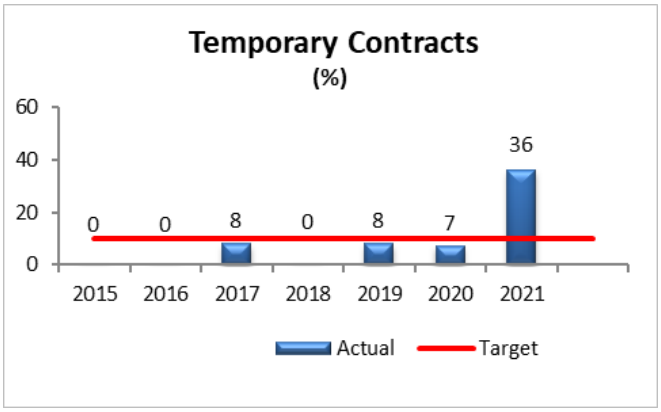


Fig 12b, Employment contract: New personnel was hired following an industrial action in Feb 2021.

Social

Training

Shu Powders maintains a robust training and development program that ensures that employees have a consistent experience and background knowledge. Shu Powders is enjoying these benefits out of training;

- Improved employee performance
- Improved employee satisfaction and morale
- Addressing of weaknesses
- Increased productivity and adherence to quality standards
- Increased innovation in new strategies and products
- Reduced employee turnover
- Enhanced company reputation and profile

Apart from HSE compliance training, Shu Powders has changed its approach to more strategic, long term courses, which empowers employees with higher skills. This empowers employees, giving them more control over their jobs, especially machine operators. This addresses such issues as breakdowns, and call outs.

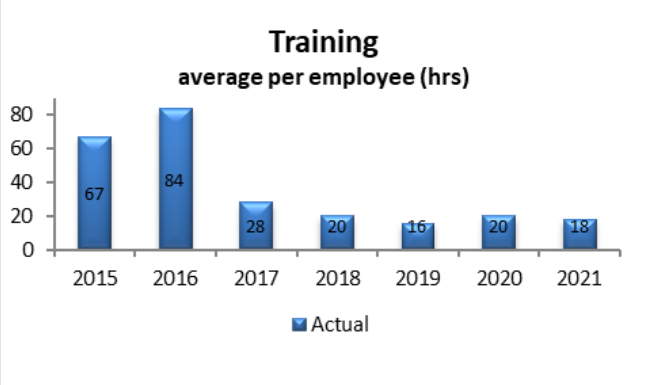


Fig 13, Training: There is a substantial decrease in training hours due to focus on strategic training - this involves enrolling selected employees to tertiary institutions of learning in order to acquire higher skills.

Social

Contribution to the local community

Despite the Covid-19 pandemic negatively affecting Shu Powders due to disruption in international and local supply chains, Shu has managed to contribute to the community.
Unfortunately, it was impossible to arrange social events such as Mandela Day due to the COVID-19 social distance restrictions. See previous activities and events in earlier CSR reports.

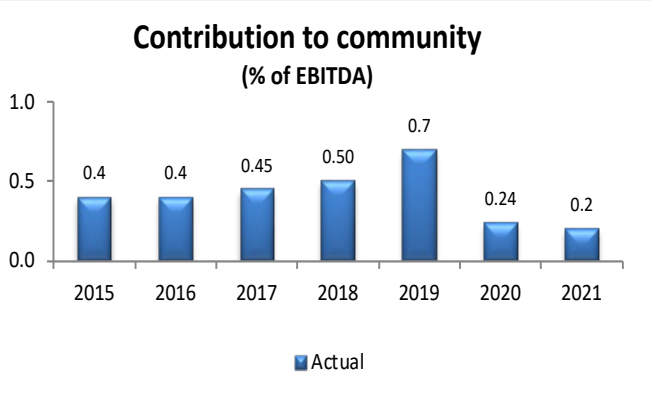


Fig 14, Contribution to the community : Shu's contribution to the community as a share of earnings remained stable in spite of difficult economic circumstances.

Shu Powders attended the traditional wedding of the local chief – Inkosi Mlaba. Shu also sponsors social events in this community.

Fig 15a, Groom: Inkosi Mlaba with Shu Powders MD

Fig 15b, Bride

Raw Material Sourcing

DR Congo issues

On January 19, 2016, Amnesty International published a report titled "This is What We Die For", outlining allegations against companies directly involved in the trade of cobalt sourced from artisanal mining as well as against some of the world's largest technology firms down the supply chain. [Ref 4] In the report Amnesty documents human rights abuses in DRC's artisanal cobalt mining sector such as child labour and hazardous and unhealthy working conditions (Fig 16).
In November 2018, Amnesty International published a follow-up report: "Time to Recharge" – Corporate action and inaction to tackle abuses in the cobalt supply chain. Many downstream companies have been slow or resistant to adopt clear policies for due diligence in their cobalt supply chains.

Fig 16a, Amnesty International Report: A video clip is available under http://youtu.be/7x4ASxHIrE

Fig16b, Amnesty International Follow Up Report: Some corporations have taken action since 2016 but many others have not.

Note:

- On March 29, 2016, the London Metal Bulletin published articles stating that China's refineries imported almost a quarter of million tonnes of cobalt concentrate from the DRC in 2015, according to China import statistics. [Ref 5]
- These concentrates have been produced in dangerous conditions or by children in artisanal mines in the DRC.
- Six companies from China have been identified to import at total of over 224 750 MT of cobalt concentrate in 2016.
- Among these six companies is the cobalt powder producer **Nanjing Hanrui**. [Ref 5]
- Note that the company GEM was the only larger Chinese Cobalt refinery not listed in above article [Ref 5].

Raw Material Sourcing

DR Congo issues

Throughout the cobalt supply chain an increasing number of companies have started to focus on responsible sourcing and supply chain due diligence. The battery supply chain in particular has been faced with growing pressure directed at its responsible sourcing practices, not just from NGOs like Amnesty International but also from the media, regulatory and legislative bodies and consumer organizations. Efforts by the cobalt industry to create a more responsible supply chain have resulted in progress on several fronts during.

Fig 17, Initiatives ensure materials are mined and sourced in accordance with the due diligence guidance on human rights as set forth by the OECD (Organization for Economic Co-Operation and Development)

Name	Year	Scope	Participants
RMI - Responsible Materials Initiative	2008	Founded by members of the Responsible Business Alliance and the Global e-Sustainability Initiative, the RMI has become one of the most utilized and respected resource for companies addressing responsible mineral sourcing issues in their supply chains. The RMI offers companies an independent minerals assurance process to identify verified smelters and refiners that have systems in place to responsibly source minerals according to approved global standards.	Over 300 members, including numerous technology, auto and mining companies such as Amazon, Boeing, BASF, Dell, Ford, HP, Huawei, IBM, Samsung, Toshiba. RCI - Responsible Cobalt
RCI - Responsible Cobalt Initiative	2016	Initiated by the China Chamber of Commerce of Metals, Minerals and Chemicals Importers and Exporters (CCCMC), with support from the OECD. Members undertake collective action in addressing social and environmental risks in the cobalt supply chain while developing due diligence tools for risk assessment and supplier management for cobalt smelters and refiners.	Over 30 members, including Apple, HP, Huawei, Samsung, Volvo, Daimler, BMW, Huayou and GEM. CIRAF - Cobalt Industry
CIRAF - Responsible Assessment Framework	2017	Introduced by the Cobalt Institute (CI), CIRAF seeks to identify material issues and risks within the cobalt sector for CI members and their customers. It is a good practice based framework that provides guidance to its members on the assessment and reporting of core issues pertaining to environmental stewardship, health and safety and human rights.	Numerous members of the Cobalt Institute, including Glencore, Umicore, Freeport Cobalt, Shu Powders
RSBN - Responsible Sourcing Blockchain Network	2019	Formed by Huayou Cobalt, Ford Motors, LG Chem, IBM and RCS Global. The consortium ran a successful pilot project which, using the IBM Blockchain Platform, traced and validated ethically sourced cobalt to demonstrate the responsible production and processing of cobalt in the mine to battery supply chain. Members are now actively applying the RSBN solution to its supply chains.	Huayou Cobalt, Ford Motors, LG Chem, IBM, Fiat Chrysler, Glencore, Volvo Cars.
CFDI - Cobalt for Development Initiative	2019	The CFDI is a cross-industry scheme that promotes sustainable cobalt mining in the DRC. The initiative is to establish a framework through which it can work with the ASM sector to procure metal while contributing to regional development by initiating training schemes and by engaging with local authorities.	VW, BMW, BASF, Samsuing, Google and others.

Raw Material Sourcing

DR Congo issues

RMI has become the standard for Cobalt powder producers. GEM (Shu Powders) and its competitors Umicore and Freeport are listed as "conformant cobalt refiners". http://www.responsiblemineralsinitiative.org/responsible-minerals-assurance-process/smelter-refiner-lists/cobalt-refiners-list/conformant-cobalt-refiners/?

Efforts by the cobalt industry to create a more responsible supply chain have resulted in progress on several fronts during 2020.

Name	Year	Scope	Participants
FCA - Fair Cobalt Alliance	2020	The alliance was launched as action platform for organizations along the supply chain who can engage and play a role in the transition to a fair production system. It seeks to transform small-scale mining in the DRC by supporting communities and improving overall mining conditions. It will seek to connect cobalt from ASM operations to the supply chains of global manufacturers.	Glencore, Huayou, Tesla, Fairphone, Sono Motors, Signify and others.
IRMA Initiative for Responsible Mining Assurance	2020	Together with Alliance for Responsible Mining (ARM), IRMA developed the "Standard for Responsible Mining" as a framework for raw material supply chains. The framework uses four key elements to assess a project: business integrity, planning for positive legacies, social responsibility and environmental responsibility.	BMW, Daimler, Microsoft, Anglo American, Arcelor Mittal and nume miners and technology companies.
Fund for Prevention of Child Labor in DRC Mining Communities	2020	In collaboration with the Global Battery Alliance, Unicef is raising US $21 million from industry stakeholders to fund a series of initiatives aimed at addressing the root cause of child labor in the DRC's copper belt region.	Organized by Unicef in collaboration with the Global Battery Alliance.

Raw Material Sourcing

Shu Powders' Raw Material Sources - Mines

Shu is sourcing Cobalt raw materials through its related companies GEM Co. and SMR Ltd:
GEM Co. Ltd and Glencore extend their long-term strategic cobalt partnership (press release, Dec 3, 2020)
Under the terms of the agreement, Glencore will provide around 150,000 tonnes of cobalt contained in hydroxide for GEM between 2020 and 2029. Glencore and GEM are committing each other to annual audits under OECD-aligned standards, specifically, the Cobalt Refiner Supply Chain Due Diligence Standard developed by the Responsible Minerals Initiative (RMI), Responsible Cobalt Initiative (RCI) and Chinese Chamber of Commerce of Metals, Minerals & Chemicals Importers & Exporters (CCCMC). Glencore repeatedly stated not to use artisanal mined Cobalt due to the link between child labor and artisanal small-scale mining (ASM). However, Glencore support the development of responsible ASM, working in partnership with others, such as the Fair Cobalt Alliance (FCA). https://www.glencore.com/sustainability

Fig 18a, Mutanda, Katanga: The facilities in the DRC are owned and operated by Glencore.

Fig 18b, Mutanda, Katanga are the largest Cobalt mines in the DRC and worldwide.

Fig 18c, CSR: Glencore issues a sustainability report every year, which is available on-line. For compliance see pages 10, 46f, 62. Glencore does not source from artisanal and small-scale mining (ASM).

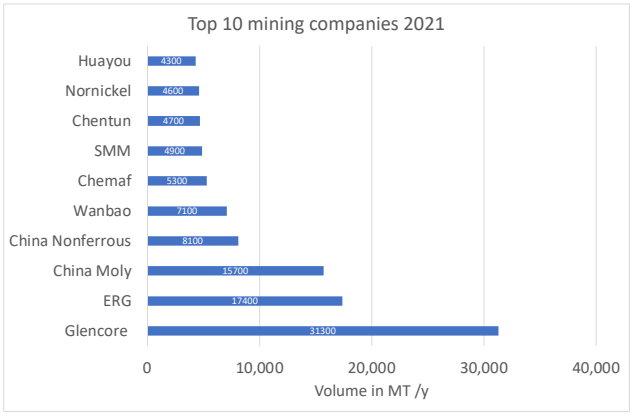


Fig 18d, Glencore produced an estimated 31300 MT of cobalt at its DRC (Katanga), Australia and Canada mines. Meanwhile, the company has re-opened its Mutanda mine and forecasted to increase their output to 45000 MT in 2022.

Raw Material Sourcing

Shu Powders' Raw Material Sources – Recycling GEM

GEM stands for "Green" "Eco" "Manufacturing" and originated from a green dream:

- On December 28, 2001, Professor Xu Kaihua founded GEM in Shenzhen.
- In 2003, the industrial concept of "limited resources and unlimited circulation" was put forward for the first time.
- On January 22, 2010, A shares were listed in Shenzhen Stock Exchange (stock code: 002340). The first stock of "urban mines," renewable resources industry and electronic waste recycling industry.
- GEM owns total share capital of 3.816 billion shares, net assets of 4.8 billion yuan, vast reproduction value of more than 12 billion yuan, employees of more than 5,000 people in 17 industrial parks.

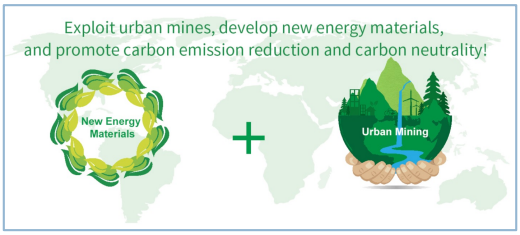


Fig 19a, GEM business model:
New Energy Materials + Urban Mining

Fig 19c, GEM Sustainability report (ESG)
A corporate sustainability report is issued every year, available on-line at www.gemchina.cn
GEM is listed as "conformant Cobalt refiner" by the Responsible Minerals Initiative. (next page)

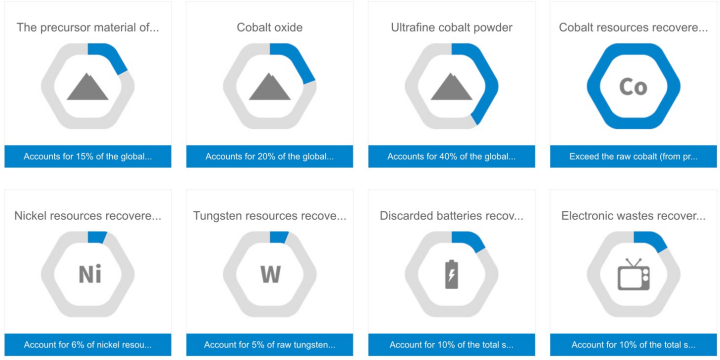


Fig 19b, GEM recycling share and market position

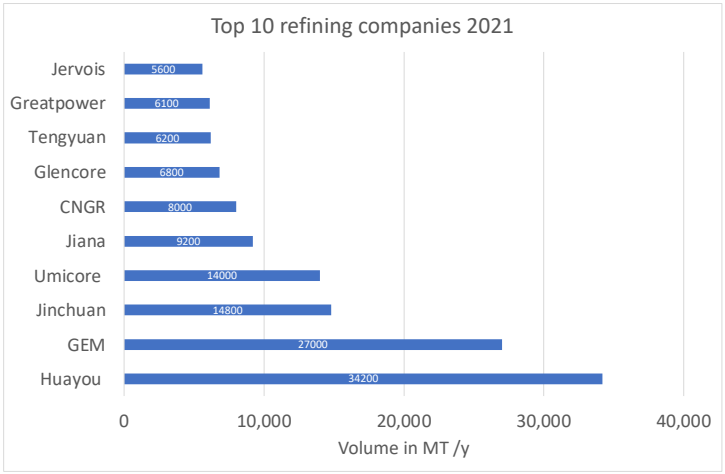


Fig 19d, GEM refined Cobalt volume was increased to 27000 MT in 2021 after longer lockdowns in 2020. GEM keeps its second position in the ranking of global Co refiners.

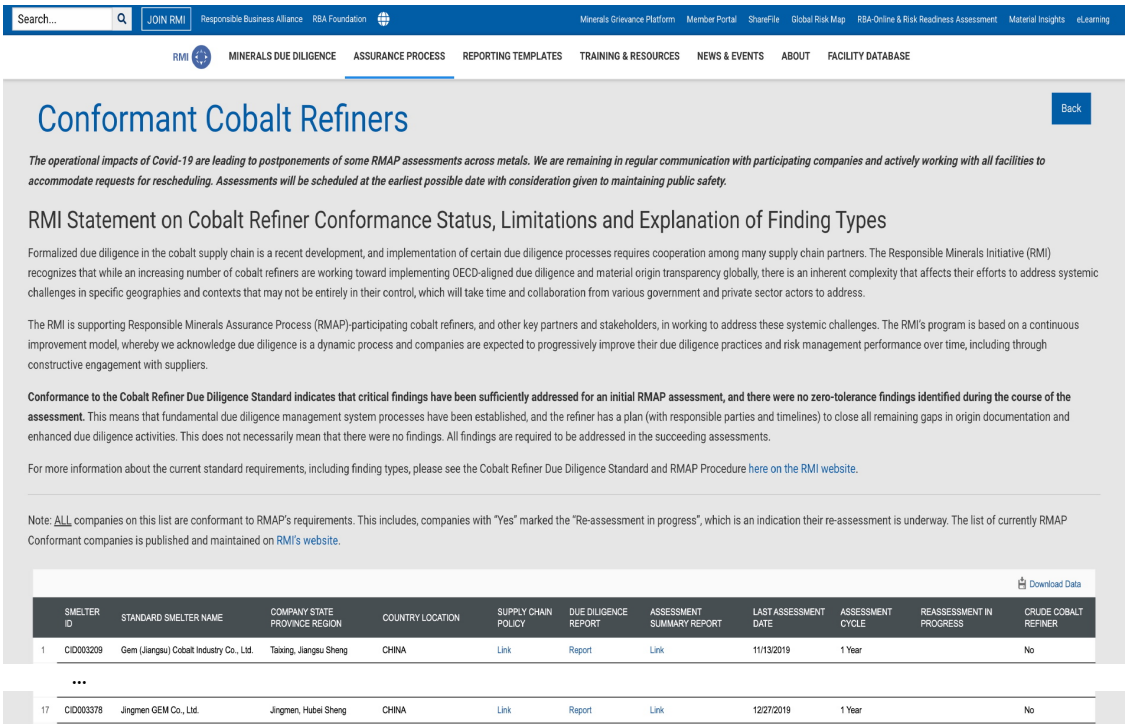
Raw Material Sourcing

Shu Powders' Raw Material Sources – Recycling H.C. Starck

In April 2021, Shu Powders and its shareholder and distributor Specialty Metals Resources (SMR) entered into a long terms recycling agreement with the famous hard metal recycling company H.C. Starck in Germany (Masan High-Tech Materials Group). Under this agreement SMR converts the Cobalt intermediate from HCST's hard metal recycling process and returns Cobalt powder from Shu Powders. By edition of this CSR 2021, already eighteen hard metal producers have used this global recycling service and received Shu's Cobalt powder in return.
Shu Powders is committed to expand its activity, to increase circularity, and to safe on natural resources. Meanwhile, Shu also engaged with Price Waterhouse Cooper to develop a roadmap towards 90% circularity and 50% Carbon footprint reduction by 2030.

Shu Powders' Raw Material Sources – Responsible Sourcing

GEM has both its Cobalt refineries, GEM Jiangsu and Jingmen GEM, listed as RMI conformant Cobalt refineries under the following link. See Jingmen GEM on line 17 and GEM Jiangsu line 1.
https://www.responsibleminerals initiative.org/responsible-minerals-assurance-process/smelter-refiner-lists/cobalt-refiners-list/conformant-cobalt-refiners/



Shu Powders did undergo an RMI compliance audit and has integrated the OECD standard into its Integrated Management System (IMS). Shu intends to get listed as conformant downstream Cobalt transformer in 2022.

Certifications

27

Shu Powders holds ISO 9001:2015, ISO 14001:2015, and ISO 45001:2007 international standards. On top of these we also hold Five Stars on the NOSA Integrated Five Star System, CMB253N Standard.

These Integrated Management Systems give guarantee and confidence to our customers, employees, suppliers, the community and all other stakeholders on the quality of the product, the preservation of their health and safety, care for the environment and sustainable business.

Shu Powders is planning to get listed as conformant downstream Cobalt transformer by the Responsible Minerals Initiative (RMI) in 2022.

Certifications

CERTIFICATE

This is to certify that

Shu Powders Africa (Pty) Ltd

Has implemented and maintains an
Occupational Health and Safety Management System.

Scope:
Sales, Marketing and Production of Cobalt Powder.

Through an audit, documented in a report, it was verified that the Management System fulfils the requirements of the following standard:

BS OHSAS 18001 : 2007

Certificate registration no. 40601663 BSOH
Valid from 2018-05-28
Valid until 2021-03-11
Date of certification 2018-05-28

DQS GmbH

CERTIFICATE

This is to certify that

Shu Powders Africa (Pty) Ltd

Has implemented and maintains an **Environmental Management System.**

Scope:
Sales, Marketing and Production of Cobalt Powder.

Through an audit, documented in a report, it was verified that the Management System fulfils the requirements of the following standard:

ISO 14001 : 2015

Certificate registration no. 40601663 UM15
Valid from 2018-05-28
Valid until 2021-05-27
Date of certification 2018-05-28

DQS GmbH

CERTIFICATE

This is to certify that

Shu Powders Africa (Pty) Ltd

Has implemented and maintains a **Quality Management System.**

Scope:
Sales, Marketing and Production of Cobalt Powder.

Through an audit, documented in a report, it was verified that the Management System fulfils the requirements of the following standard:

ISO 9001 : 2015

Certificate registration no. 40601663 QM15
Valid from 2018-05-28
Valid until 2021-05-27
Date of certification 2018-05-28

DQS GmbH

NOSA

Grading Audit

SHU POWDERS AFRICA (PTY) LTD

NOSA INTEGRATED FIVE STAR SYSTEM

Certifications

Health, Safety and Environmental Policy

SHU POWDERS T: +27 31 782 1061 F: +27 31 782 1160 W: www.shupowders.com

Shu Powders Africa PTY. LTD
Logro Industrial Park No.40 Track 94040, Harrison Flats
Old Main Road, Cato Ridge, KwaZulu Natal 3680 South Africa
Postnet Suite 10015, Private Bag X7005, Hillcrest, 3650

Vat No: 4150833551 CK No 2007/000865/07

SAFETY, HEALTH AND ENVIRONMENTAL POLICY

Shu Powders Africa is a reputable manufacturer of cobalt, and is committed to continual improvement in safety, health and environmental performance. This is non-negotiable in our drive towards a ZERO Tolerance/ ZERO Harm culture.

- We believe that all injuries, all adverse health effects resulting from work activities, and environmental incidents are preventable;
- The safety of our employees, visitors and contractors is a non-negotiable value;
- We are committed to the protection of the environment, including the prevention of pollution.
- Leaders at all levels in the organization are role models in the management of safety, health and environmental matters and shall lead by example in all situations.
- At-risk behaviors are not acceptable and are addressed when observed; and
- Excellent safety, health and environmental performance are recognized as good business practices.

To achieve our goal we are committed to:

- Meeting all applicable compliance obligations;
- Operate in accordance with industry and customer codes of practice and voluntary requirements to which we subscribe, including group policies, agreements with regulators and communities, REACH, CI (the Cobalt Institute); SANS 1929:2011; the OECD Due Diligence Guidance for Responsible Supply Chains of Minerals from Conflict-Affected and High-Risk Areas, and NOSA CMB253N.
- Educate and train, motivate and support our staff and suppliers in the application of this policy and associated procedures;
- Reducing consumption and wastage of materials through recovery, rework and recycling where possible;
- Eliminating hazards and reducing OH&S risks;
- Continuously consult, seek and promote the participation of workers, and worker representatives.
- Continually improve our safety, health and environmental system and performance through monitoring, preventive action, education and training;
- Develop new business opportunities that provide a sustainable future;
- Create a framework for setting and reviewing objectives and targets as stated in this policy.

We therefore commit to being a socially responsible employer in the interests of the community, future generations, and all our other interested parties.

Signature: _____ **Date:** 21-06-2021

Managing Director

Policy-002 **Managing Director: Dr Michael Oehlers** Rev. 9

Certifications

Quality Policy

SHU POWDERS T: +27 31 782 1061 F: +27 31 782 1160 W: www.shupowders.com

Shu Powders Africa PTY. LTD
Logic Industrial Park, No.40 Track 84045, Harrison Flats
Old Main Road, Cato Ridge, KwaZulu Natal 3680 South Africa
Postnet Suite 10015, Private Bag X7005, Hillcrest, 3650

Vat No: 4100388021 CK No: 2007/000865/07

QUALITY POLICY

Shu Powders Africa is committed to establishing and maintaining ourselves as a quality manufacturer of cobalt. To achieve this goal, we are committed to:

1. satisfying our customers and other interested parties' requirements and expectations, including relevant customer codes of practice, in the quality of product and service,
2. seeking to understand and address the relevant external and internal issues.

We are committed to establish, maintain and continually improve on a Quality Management System (QMS) that conforms to the ISO 9001:2015 requirements.

As Managing Director, I undertake to ensure that our Quality Management System is thus directed towards achieving the following objectives:

- Only accepting orders and contracts within our managing capacity
- Planning all business activities and improving on the planned time allocations
- Employing and developing people who have the necessary skills and experience to improve our product and service
- Supporting and developing external providers of products and services who are committed to Quality Improvement
- Reacting to problems quickly and systematically and fostering a team approach to problem solving
- Aiming to deliver on time; recognising that deadlines are a crucial part of our business
- Ensuring that we address compliance obligations that pertain to our product.

The SHEQ Officer has been appointed as the Management Representative regarding all aspects of the ISO 9001:2015 Quality Management System.

Signature: _____ **Date:** 13-07-2021

Managing Director

Policy-003 **Managing Director: Dr Michael Oehlers** Rev. 10

Glossary

- **Biological monitoring:**

Is the measurement and assessment of workplace agents or their metabolites either in tissues, secreta, excreta, expired air or any combination of these to evaluate exposure and health risk compared to an appropriate reference. All the medicals consist of the following examinations:

- Audiometric Testing
- Eye Test
- Chest X-ray
- Lung Function
- Physical exam
- Cobalt vs Creatinine (urine testing)
- Cobalt in Blood

- **ASTM D1739-94:**

The standard test method for collection and measurement of dustfall (settleable particulate matter).

- **Lost time incident:**

Lost time injury is when an employee gets injured in the course of his employment and is unable for perform the regular duties for a complete shift. This is not just limited to one regular shift only, but it can extend up to all the shifts in which the employee is unable to perform the regular duties. So from the time of the initial injury until the time the employee is able to return to regular work duties. None of the LTI's caused interruption of production or business.

- **Risk Assessment:**

The evaluation of the risks of existing substances or conditions to man, including workers, and to the environment, in order to ensure better management of those risks.

Reference List

- [Ref 1] Concise International Chemical Assessment Document 69. Communication with Dr. Do Vale of CATOMED Clinique, in Cato Ridge, KZN, South Africa.
- [Ref 2] APEX study 2010, 2012, 2014, 2016
- [Ref 3] Dust detection device: SKC- Airchek sampler
- [Ref 4] Amnesty International Report, January 19,2016 www.amnesty.org/en/documents/afr62/3183/2016/en/
- [Ref 5] London Metal Bulletin Articles, March 29, 2016.