

PRACTICAL SUSTAINABILITY: TOOLS FOR MINE SITE MANAGERS

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PRACTICAL SUSTAINABILITY?

AN OPPORTUNITY FOR YOU :

TO MAKE **CURRENT** (MINING) ACTIVITIES MORE **COMPATIBLE**

WITH THE CONCEPT OF SUSTAINABLE DEVELOPMENT,

IN A **PRACTICAL** WAY



CONTENTS

- **Context**
- **Strategies: Overview of Tools**
- **Purpose and Benefits**
- **Examples of Tools**
- **Conclusion**



CONTEXT

CURRENT OR EXISTING SCENARIO:

- Context of heightened information requirements and regulatory disclosure
- Limited resources, capacity and skills
- Expectations arising from Paternalistic Public Consultation
- Management of the Management System
- Challenge for small mining companies to enter the arena
- More about 'sustainable' than 'development' – not much to sustain, if not much has been developed



BACKGROUND

Company reports rated in terms of :

- Context and coverage (2 criteria)
- Leadership and direction (3 criteria)
- Policies, organisation and management systems (9 criteria)
- Stakeholder relations (2 criteria)
- Environmental performance (10 criteria)
- Economic performance (7 criteria)
- Social performance (8 criteria)

(adapted from MMSD, Final Report, Ch 12;pg303)

- Triple bottom line?
- Not all criteria are readily quantified or regulated
- But are fundamental elements of implementing Sustainable Development



OVERVIEW OF TOOLS

- Mine (site) managers face challenges with meeting the requirements of the company, the mining charter and the reporting frameworks, such as GRI
- As such, the tools were grouped in to **4 categories**, according to the challenges presented by:
 - MANAGING THE **MANAGEMENT SYSTEM**
 - IMPROVING THE **SKILLS MIX** IN IMPLEMENTING SUSTAINABLE DEVELOPMENT
 - IMPLEMENTING A **STAKEHOLDER ENGAGEMENT** PROGRAMME
 - THE ROLE AND USE OF **REPORTING**, AS A TOOL IN IMPLEMENTING SUSTAINABLE DEVELOPMENT



RATIONALE FOR TOOLS

- The **Management System** supports and drives the implementation of sustainable development as well as the sustainability of the business
- The **Skills Mix and Stakeholder Engagement** were addressed as key enablers for implementing delivery with respect to the Management System
- **Reporting** is the outcome of the implementation of all of the above

CONSIDERATIONS:

- Do we have adequate **resources** to implement our vision and deliver on our goals?
- How do we improve **capacity and skills** for optimal performance?
- Do we have a mutually beneficial partnership with our **stakeholders**?
- How do we capture and **present data**?



EXAMPLES OF TOOLS

MANAGEMENT SYSTEM	SKILLS MIX	STAKEHOLDER ENGAGEMENT	REPORTING
SIGMA Guidelines	Skills Audit	Social Plan	GRI Framework
Visible (Felt) Leadership Programme	Sustainable Development Support Facility	Stakeholder Perception Survey Community Forums	SIGMA as complementing GRI

PURPOSE AND BENEFITS

Management System:

- A voluntary initiative designed to improve performance
- By eco-efficiency, minimising waste and proactive consultation (conflict prevention and resolution), there are savings in resources and finance
- Strongly supported by regulators

Stakeholder Engagement:

- Social Plan is required by the Minerals Resources Development Act (2002)
- Provision for Community Empowerment in Mining Charter
- Builds Trust and Partnerships

Reporting:

- Enables companies to address Triple Bottom Line of Performance
- Supports benchmarking and assessment of sustainability



FROM VISION TO PLANNING & DELIVERY:



- VISION, VALUES, OPERATING PRINCIPLES
- SUSTAINABILITY PLAN
- SITE HISTORY
- BIOPHYSICAL CHARACTERISTICS & SURROUNDING
- SITE ZONE CHARACTERISTICS & SURROUNDING
- SOCIO-ECONOMIC CHARACTERISTICS & IMPACTS
- RISKS & OPPORTUNITIES
- LEGAL, INSTITUTIONAL, ADMINISTRATIVE FRAMEWORKS

MANAGEMENT SYSTEM: SIGMA GUIDELINES

- **WHAT IT IS**

- Sustainability Integrated Guidelines for Management
- Guideline and Management Framework
- Companies set own targets and objectives
- Easily incorporated into other reporting initiatives, including GRI.

- **PURPOSE:**

- Provides companies with a clear, practical, integrated framework in order to take action for sustainable development.
- Allows companies to build on what they have and be flexible in their approach to sustainable development.

- **IMPLEMENTATION :**

- Uses the 5 Capitals Approach to Sustainable Development
 - Human Capital, Social Capital, Manufactured Capital, Financial Capital and Natural Capital
- Adaptable across a wide range of companies and industries.
- SIGMA toolkit includes “how to” GRI, Marketing and Sustainability, Environmental Accounting, Performance Review...
- No drastic transformation of the present management system required.
- **4 Phases: from Leadership & Vision to Monitor, Review & Report**



COMPONENTS OF SIGMA

SIGMA 4 MANAGEMENT PHASES	COMPONENTS
LEADERSHIP & VISION	LV1 BUSINESS CASE LV2 VISION, MISSION, OPERATING PRINCIPLES LV3 TRAINING & COMMUNICATION LV4 CULTURE CHANGE
PLANNING	P1 PERFORMANCE REVIEW P2 LEGAL, REGULATORY MANAGEMENT P3 ACTIONS, IMPACTS, OUTCOMES
DELIVERY	D1 CHANGE MANAGEMENT D2 MANAGEMENT PROGRAMMES D3 INTERNAL CONTROLS & EXTERNAL INFLUENCE
MONITOR, REVIEW & REPORT	MRR1 MONITORING, MEASUREMENT, AUDITING, FEED BACK MRR2 TACTICAL & STRATEGIC REVIEW MRR3 REPORTING PROGRESS MRR4 ASSURANCE OF REPORTING



SIGMA SUSTAINABILITY TOOLKIT

- AA1000S ASSURANCE MODULE;
- BUSINESS CASE TOOL;
- COMPATIBILITY TOOL;
- ENVIRONMENTAL ACCOUNTING TOOL;
- GLOBAL REPORTING INITIATIVE REPORTING TOOL;
- MARKETING AND SUSTAINABILITY TOOL;
- SIGMA PERFORMANCE REVIEW TOOL;
- RISK AND OPPORTUNITY GUIDE;

- SIGMA GUIDELINES AND STANDARDS FOR SUSTAINABLE DEVELOPMENT;
- SIGMA GUIDE TO STAKEHOLDER ENGAGEMENT;
- SIGMA GUIDE TO SUSTAINABILITY ISSUES;
- SIGMA SUSTAINABILITY ACCOUNTING GUIDE;
- SIGMA SUSTAINABILITY SCORECARD.



guidelines

- [Introduction](#)
- [How to use](#)
- [Foreword](#)
- [Executive summary](#)
- [SIGMA Principles](#)
- [Management Framework](#)
- [Introducing the tables](#)
- [Four key phases](#)
- [Leadership & vision](#)
- [Planning](#)
- [Delivery](#)
- [Monitor, review & report](#)
- [Monitoring & feedback](#)
- [Tactical review](#)
- [Reporting progress](#)
- [Assurance of reporting](#)
- [Views on the Guidelines](#)

■ *monitor, review report - monitoring, measurement, audit & feedback*

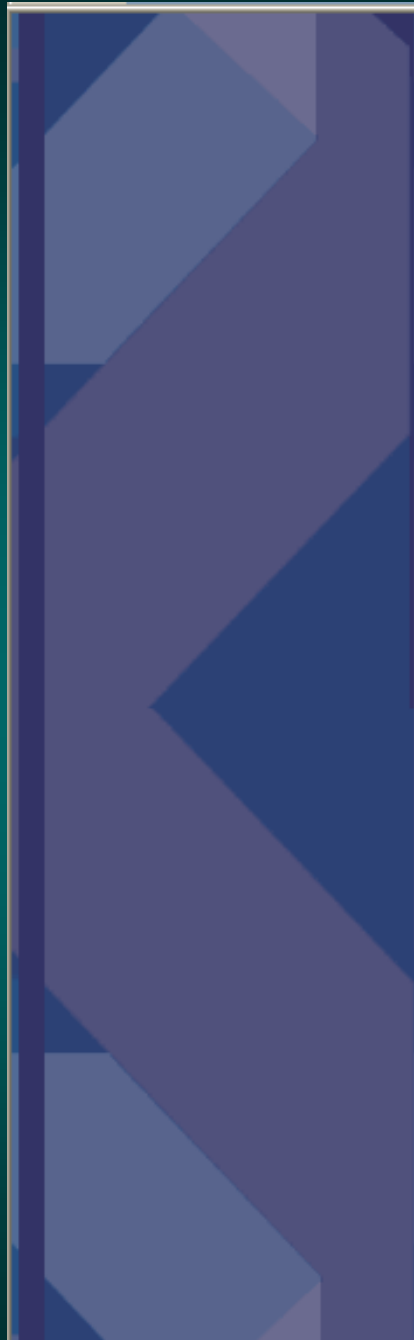
MONITOR, REVIEW REPORT - monitoring, measurement, auditing and feedback - MRR1



Key Questions	'Are our strategic and tactical plans and management programmes delivering our vision for sustainable development?' 'Are we doing what we say we do?'
Alignment with principles	Organisations should ensure that: <ul style="list-style-type: none"> • Their performance reflects the significant sustainability actions, impacts and outcomes identified during the implementation process and helps the organisation progress towards its stated vision, mission, and operating principles.
When	When Throughout the implementation programme and then at agreed timeframes according to the nature and potential severity of the sustainability impact or outcome.
Who	Project Champions, Board Members and Senior Management Team, Implementation Team, Independent Audit Team.

Collecting and evaluating objective evidence

Key activities	<ul style="list-style-type: none"> • Collecting and evaluating objective evidence: <ul style="list-style-type: none"> - Opening meeting(s) with relevant personnel and key stakeholders - Reviewing documentation and records - Reviewing observable practice - Monitoring of key performance indicators - Undertaking root cause analysis to determine reasons for unsatisfactory performance or deviations from organisational vision, adopted operating principles, strategies, tactical plans and objectives and targets - Assessing new opportunities for performance improvements - Communicating and reporting non-conformities/compliances and agreeing a timeframe for appropriate actions to be undertaken
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Suggested resources	<ul style="list-style-type: none"> • AA1000 Assurance Standard • ISO 19011 - Guidelines for quality and/or environmental management systems auditing • FEE Discussion Paper: Providing Assurance on Sustainability Reports (April 2002) www.fee.be
Outcomes & outputs	<p> Review papers, including:</p> <ul style="list-style-type: none"> • Evaluation of effectiveness of document control • Tangible evidence that processes are being followed and are delivering performance improvement • Root cause analysis • Records of interviews and stakeholder perception audits - including findings and prompts for stakeholder engagement process • Completed surveys and questionnaires • Monitoring records of key performance indicators <p>Records and learning from previous incidents, accidents, events, failures of internal control and complaints or compliments</p>
Consulting with stakeholders on performance and future challenges	
Key activities	<ul style="list-style-type: none"> • Undertaking interviews and surveys • Capturing stakeholder perception
Suggested resources	<ul style="list-style-type: none"> • SIGMA Stakeholder Engagement tool
Outcomes & outputs	<ul style="list-style-type: none"> • Stakeholder views
Audit/assurance team	
Key activities	<ul style="list-style-type: none"> • Selecting and training internal audit/assurance team, including team leader, ensuring competency and impartiality of team members
Suggested resources	<ul style="list-style-type: none"> • AA1000 Assurance Standard • ISO 19011 - Guidelines for quality and/or environmental management systems auditing
Outcomes &	<p> Audit/assurance team competence and selection criteria, including</p>

IMPROVING SKILLS: SKILLS AUDIT

WHAT IT IS:

Identifies skills, competence and knowledge held by existing staff

Identifies gaps between skills requirements and the actual skills held

PURPOSE:

Adjust the skill mix to increase the ratio of people with the 'triple bottom line' aspects of sustainable development

To enable environmental and social managers and co-ordinators to become familiar with the business case

In addition to technical skills, staff require skills in business planning, management, health & safety, sustainable environmental management and social engagement

IMPLEMENTATION (METHODOLOGY):

- First determine what outcome is required i.e. integration of skills or awareness of 'the business case'
- Include this aspect as part of the performance review and interview staff members about this aspect.
- Hire an external advisor/specialist to function as a source of advice or to train staff.
- Use surveys to find out what supervisors perceive are the skills, knowledge or weaknesses of staff.
- Organize a programme to invest in employee further education and training
- Sustainable Development Support Facility



SUSTAINABLE DEVELOPMENT SUPPORT FACILITY

- **What It Is**

- A facility, consisting of sustainable development practitioners as well as relevant authority representatives, who will be able to provide ongoing assistance (and consultation) to mine managers (and staff) in implementing sustainable development
- Draws on experience from best practice in the mining sector
- Offers services (to facilitate sustainable development) not offered at the mining company

- **Purpose**

- The need for this facility has emerged from interviews, at which mine managers have indicated that there is confusion over the ever changing, plethora of legislation and regulatory requirements. Apart from such requirements, the methodology associated with reporting is also not clearly understood.
- The support facility serves to provide interpretation of legislation (as well as the application thereof), and to address queries on sustainable development issues.



VISIBLE FELT LEADERSHIP PROGRAMME

EG. DU PONT

• **WHAT IT IS:**

- A programme of Interactive Behavioural Audits in the workplace, which is modelled on a practice by Du Pont Safety Resources.
- Based on a training programme called Safety Management Audit Training (SMAT) which trains managers to conduct safety observation audits. This applies to other initiatives such as Sustainable Development and Health.

• **PURPOSE:**

- To create a culture of awareness, stewardship and responsibility, employees would benefit by being exposed to the example set by management.
- This visible presence, will serve to improve awareness toward safety, environment, health and community as well as respect for environment.
- Based on a proactive approach to prevent accidents and injuries.

• **IMPLEMENTATION :**

- Mine managers will engage in conversation with employees at their workstations, and in so doing, they will identify the sustainability issues involving that individual.
- On a monthly basis (or on an agreed schedule), mine managers will visit work stations, where they will conduct inspections in order to determine the level of awareness with respect to sustainable development issues such as the wearing of personal protective equipment, as well as the reduction of waste and energy saving.
- The mine manager will confirm with the employee, what needs to be done to ensure continued improvement.
- Managers will be able to observe normal work activities, reinforce good work practices and correct, where necessary.



STAKEHOLDER ENGAGEMENT: IMPLEMENTING THE SOCIAL PLAN

- **CONCEPTUAL DESIGN**

- Evaluate Environmental and Social Opportunities and Risks
- Develop Baseline Socio-economic profile
- Align Social Plan with Integrated Development Plans (IDP) in terms of the Local Government Municipal Systems Act

- **OPPORTUNITIES:**

- Using local resources (labour, government and NGO services)
- Cost Saving from preventing conflict
- Form mutually beneficial partnerships, rather than paternalistic relationship

- **RISKS :**

- Potential mitigation measures for involuntary resettlement
- Potential likelihood of influx of squatters
- Potential media (or advocacy group) hostility
- Loss of the natural resources base of local population, ranging from fish to water to wood for fuel
- Downstream impacts from polluting water bodies
- Impacts on pre-existing communities
- Impacts on cultural sites



REPORTING : FINDINGS FROM INTERVIEWS

- TIME CONSUMING
- REQUIREMENTS NOT CLEARLY DEFINED
- SIMPLIFY IN ORDER TO PROVIDE ACCESS TO ALL USERS
- COLLATING AND CODING OF MULTISOURCES OF INFORMATION INTO A SINGLE COMPREHENSIVE DOCUMENT
- LARGE CORPORATIONS SUBSCRIBE TO MANY DIFFERENT REPORTING FRAMEWORKS AND PRESCRIBE FURTHER TASKS FROM MINE SITE MANAGERS
- DISCLOSURE OF PROPRIETARY INFORMATION
- ADVANTAGE OF LARGER CORPORATIONS IN TERMS OF TECHNICAL AND FINANCIAL CAPACITY



Applying the GRI using SIGMA

SIGMA Phase and sub-phase		Linkage
Leadership and Vision Phase		
LV.3	<u>Communication and training</u>	The GRI emphasis on the importance of stakeholder dialogue, complements this sub-phase which includes identifying and communicating with stakeholders
Planning Phase		
P.1	<u>Performance review</u>	GRI provides a framework for reporting on performance which is a useful input into the SIGMA Performance review. For example, SIGMA Project organisational partner, Vauxhall Motors, has used the GRI Guidelines in this regard. GRI provides a set of commonly agreed core indicators of organisational sustainability, along with potentially important additional indicators. GRI is also developing specific supplements for different industry sectors, and resource documents on specific topics of interest to GRI users e.g. HIV/AIDS
P.4	<u>Strategic planning</u>	By providing a set of performance indicators, the GRI Guidelines help organisations to identify the parameters of capital enhancement.
P.5	<u>Tactical planning</u>	GRI can help organisations to develop a series of performance indicators and measures.
Delivery Phase		
D.1	<u>Change management</u>	GRI highlights emerging consensus around key sustainability issues, across different cultures, regions and types of organisation
D.2	<u>Management programmes</u>	GRI reporting provides an integrated perspective that helps both individuals and the organisation as a whole to identify the key priorities (and gaps) and develop KPI's for these.

NO 'ONE SIZE FITS ALL'

SUGGESTED RESOURCES (AS INDICATED IN SIGMA GUIDELINES, GRI AND ICMM INITIATIVES):

- GRI REPORTING GUIDELINES (Reporting on Sustainability)
- GRI TECHNICAL PROTOCOL (Measurement Methods & Procedures)
- GRI SECTOR SUPPLEMENTS (Mining & Metals Supplement)

- GRI STAKEHOLDER ENGAGEMENT
- SIGMA STAKEHOLDER TOOL
- ICMM COMMUNITY TOOLKIT
- ICMM BIODIVERSITY TOOLKIT
- SIGMA SUSTAINABILITY TOOLS



CONCLUSION

- No 'One Size Fits all' formula
- With transformation (globally and locally) in the mining industry, there are added requirements, but the same resources
- Some useful tools are available to assist, without (excessive) constraints on cost, resources & time
- Use the guidelines offered to adapt existing system to be compatible with sustainability
- Utilise initiatives such as SIGMA, or adapt own Information Management System to capture and present data
- Implementing: Smaller companies are encouraged to 'start small' and improve in incremental steps or with each successive attempt
- 'Talk is cheap' – 'Discussion is valuable'

