



A new word for water



**TCTA's Environmental Strategy  
2020 -2023**

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## ACRONYMS AND ABBREVIATIONS

DBSA	Development Bank of Southern Africa
DWS	Department of Water and Sanitation
E&SS	Environmental and Social Sustainability
ESMS	Environmental and Social Management System
ECOs	Environmental Control Officers
EXCO	Executive Committee
GRI	Global Reporting Initiative
HCSE	Human Capital Social and Ethics
IFC	International Finance Corporation
ISO	International Standards Organisation
PFMA	Public Finance Management Act
PMID	Project Management and Implementation Division
SHE	Safety Health and Environment
SHEQ	Safety Health Environment and Quality
TCTA	Trans-Caledon Tunnel Authority

## DEFINITIONS

**Aspects:** The ways in which the activities interact with the receiving environment(s), resulting in positive and / or negative changes.

**Governance** refer to structures and processes that are designed to ensure accountability, transparency, responsiveness, rule of law, stability, equity and inclusiveness, empowerment, and broad-based participation.

**Impacts:** Changes that are the result of the way in which activities have been undertaken in a receiving environment. Impacts of a single activity can be both negative and positive in relation to different components of the environment. Direct impacts are the result of an immediate activity but the knock-on effect of an activity results in secondary impacts / changes.

**Sustainability:** a concept that is composed of three pillars: economic, environmental and social also known as prosperity, planet and people, that focuses on meeting the needs of the present generation without compromising the ability of future generations to meet their needs.

**Short term:** The period within three years of the date of strategy approval.

**Medium term:** The period from three to five years of strategy approval

**Long term:** The period in excess of five years from strategy approval

## 1. INTRODUCTION

The TCTA Environmental Strategy (the Strategy) has been developed with strong support from the Board and Executive Committee (EXCO) for the establishment of an organisation-wide approach to environmental and social sustainability performance in support of the achievement of TCTA's strategic goals. The strategy provides a roadmap for the improvement of the organisation's approach to the planning, management, monitoring and reporting of environmental and social sustainability (E&SS) matters across all facets of TCTA operations.

The strategy development has been informed by the discussions and outcomes of the 2019 Environmental Management System (EMS) Management review and the EMS Benchmarking <sup>1</sup> process that drew on the EMS development and implementation experience from the Department of Water and Sanitation (DWS), Rand Water, Eskom and the Development Bank of Southern Africa (DBSA). Further to the benchmarking and management review the strategy research and development drew together insights from *inter alia*, the following:

- High-level environmental maturity assessment;
- Scoping of intra-organisational environmental and social interactions and dependencies;
- An Environment SWOT analysis (Appendix C);
- Review of relevant legal, regulatory and Lender requirements;
- Internal inter- and intra-divisional consultations;
- External stakeholder consultations;
- Observations of Environmental and Social Sustainability (E&SS) related activities and risk management efforts.

The International Standards Organisation (ISO) 14001 Environmental Management Standard has been used as a basis for the content of the Strategy as it has guided the development of the existing Trans-Caledon Tunnel Authority's (TCTA) Environmental Management System (EMS).

In line with TCTA's responsible corporate citizenship commitment, the target audience of the strategy is both internal and external stakeholders including *inter alia* DWS, project

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<sup>1</sup> EMS Benchmarking process undertaken by TCTA in 2019 and reported to Exco and the Board in January 2020.

financiers and TCTA's service providers. A summary of the strategy and its key components are presented in Appendix A.

## 2. CONTEXT

### 2.1. Organisation

TCTA is a state-owned entity charged with financing and implementing bulk raw water infrastructure projects. TCTA is an agency DWS which is responsible for amongst others the country's water resources in respect of usage, equitable allocation and distribution. TCTA assists the government in its pursuit of water security for South Africa and in realising its constitutional obligation of ensuring universal access to this essential resource for all citizens.

### 2.2. Needs and expectations

**Internationally**, competition for dwindling resources, manifesting consequences of pollution, climate change and persistent poverty are driving the mainstreaming of sustainability considerations into all facets of business practice. Explosive growth in environmental consciousness has led to global pressure from civil society being echoed by Lenders and other influential organisations. Pressure is growing to be able to assure responsible investment and limit the social and environmental consequences and costs of doing business. As such, environmental and social sustainability considerations are a global feature of responsible business risk management and governance.

In the **South African context**, Section 24 of the Constitution establishes the right to an environment that is not harmful. In practice competing social, economic and environmental demands are taxing the state, economy, infrastructure and individuals. In this context, TCTA must demonstrate its value proposition and ability to improve the sustainability of infrastructure developments in support of effective water resource management.

**TCTA's responsibility** to exercise sound governance of E&SS matters is driven by the organisation's commitments to both internal and external stakeholders. Such commitments include: responsiveness to the government's sustainability agenda, DWS requirements, world class environmental legislation, stringent Lender conditions, and international good practice in terms of the Sustainable Development Goals (SDG), King IV Corporate Governance Standard and the demand for meaningful integrated and sustainability reporting (Global Reporting Initiative (GRI)).

### 2.3. Strategy Value

There are many benefits to the establishment of systematic approach to the management of E&SS aspects. The ability to enhance E&SS performance and realise the TCTA Environmental Objectives are directly supported by the establishment of a systematic approach to the management of E&SS aspects. Other benefits include *inter alia*:

- The generation of reliable records and accurate reporting that contribute to transparency and accountability;
- Establishment of TCTA norms and standards to ensure best practice and implementation experience are internalised and institutionalised.
- Verification of performance against compliance obligations, objectives, targets and standards;
- Improved assurance of compliance to legal and Lender obligations including loan covenants.
- Development of better environmental, social and governance risk management mechanisms.
- The strengthening of stakeholder confidence and relationships, with focus on DWS and Lenders.
- Monitoring and evaluation of operations in a manner that reveals risks and opportunities.
- Performance based identification of areas of learning and paths to improvement
- Future integration with a variety of other management systems including those related to quality, financial and health and safety.
- Improved institutional memory and continuity.
- Growth of an environmentally and socially responsible culture within TCTA.

### 2.4. Strategic Alignment and Outlook

As captured in the revised **TCTA Vision and Mission**, Sustainability is a significant consideration in the organisations strategic and operational objectives. This Strategy is designed to support the achievement of the organisation's strategic goals. The environmental management system promotes high standards of governance and

sustainable business practice, whilst encouraging innovative, engaged personnel to become leaders in the advancement and integration of their respective areas of specialisation. The environmental objectives align strongly with the recently revised TCTA strategic goals as depicted Figure 1.

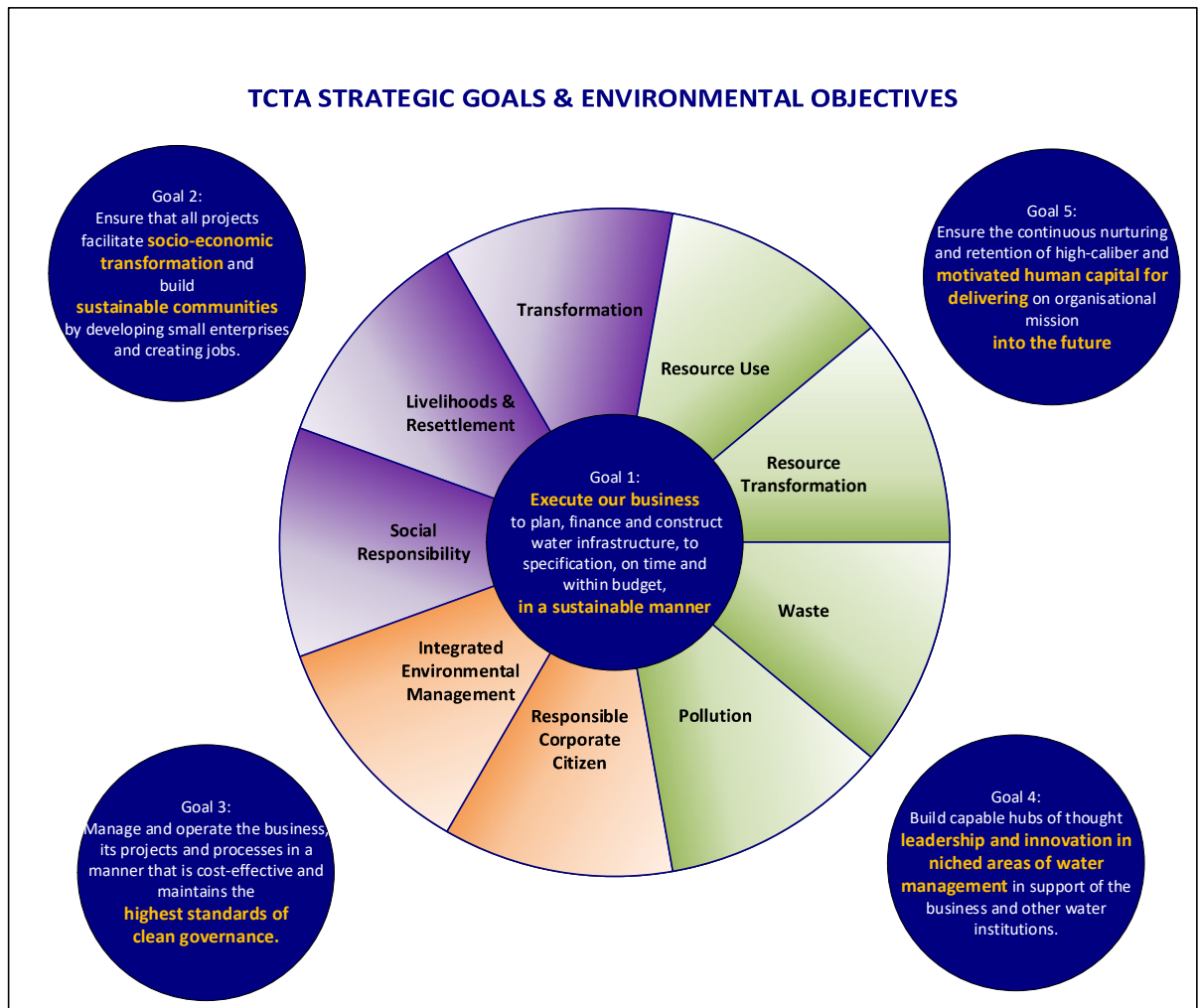


Figure 1 Alignment of TCTA Strategic Goals and Environmental Objectives

The establishment of a cross-cutting **Environmental and Social Management System (ESMS)** is recommended. The renaming of EMS to ESMS will more accurately reflect the scope of the environmental function and facilitate TCTA's response to environmental and social sustainability and governance risks and opportunities. The use of the term ESMS will further improve alignment with the integrated focus of Lenders and the DWS management system structure as identified in the EMS benchmarking report.

As TCTA's environmental maturity advances there is much scope for the organisation to contribute to improved water security, more effective integration of engineered and



ecological infrastructure and improved social and economic development. At this early stage of its environmental and social maturity it is essential that the organisation focus on the establishment of a sound foundation on which to build.

Short term priorities include the following:

- Development and institutionalisation of an E&S governance model
- Supporting bids for competitive funding options
- assure performance against existing loan covenants and compliance obligations
- Testing the effectiveness of the EMS planning procedure on new projects
- Documenting the EMS implementation procedures
- Undertaking annual EMS management reviews
- Involvement in the project planning phase where possible to proactively mitigate project implementation risks,
- Limitation of exposure to environmental and social challenges
- Definition of TCTA's direct environmental impact footprint.

Meeting these deliverables will require the review and improved co-ordination of a range of the organisation's business processes. These include inter alia, how risks are considered and accounted for, how key areas of activity are managed, and how resources are deployed and engaged. The establishment of a comprehensive ESMS will improve the co-ordination and systematic management of the social and environmental facets of the organisation's activities, thereby supporting the realisation of TCTA's strategic objectives.

## 2.5. Management System Scope

The Environmental Policy recognises that TCTA's operations result in impacts of varying significance on the receiving environments and their inhabitants. The ESMS is designed to ensure and assure sound governance and good practice in the identification, management, and limitation of risk and negative outcomes whilst supporting TCTA's efforts to have a (lasting) positive effect on the people and places that are affected by our operations.

The ESMS structure reflects the key requirements for the realisation of the two management objectives in the Environmental Policy, namely Responsible Corporate

Citizenship and Integrated Environmental Management (Figure 2 and Figure4). In so doing it provides a framework for the management of all social and environmental sustainability aspects. This is addressed in more detail in Section 4.3 and is depicted in Figure 3, Figure 4, and in Appendix B.

As provided for in the Environmental Policy the organisational management system is designed to have two operational spheres, namely the Project ESMS and Corporate ESMS.

The scope of the Projects ESMS is currently limited to project implementation matters within the Project Management and Implementation Division (PMID) domain. The Environmental team within this division is well established and experienced and has been used to develop policies, some procedures and to try and establish and grow the Corporate ESMS. To this end an organisational environmental awareness programme has been implemented and the office consumption of key resources has been monitored. In investigating the strategy for the expansion of the ESMS to cater effectively for all facets of business, the need for a revision of the current model has been identified. It is recommended that the two operational spheres of the ESMS be retained, with some amendments.

All elements of the business that contribute towards the financing, construction and operations and maintenance of infrastructure will be incorporated into the Projects ESMS. This will enable better tracking of project environmental commitments from the early pre-implementation phase through the infrastructure development process to the conclusion of life of loan reporting.

The analysis of the internal ESMS stakeholders showed that all TCTA's divisions contribute in varying degrees to programmes that fall within the domain of the Corporate ESMS. An interdisciplinary consultation process and workshop, as provided for in the Strategy Implementation Plan, will enable the establishment of the Corporate ESMS boundaries and refinement of the contributing activities and programmes.

Contributions from both operational spheres of the ESMS are drawn together to enable the overall performance monitoring, evaluation and management of TCTA's Organisational E&SS performance.

## 2.6. ISO 14001 Alignment

The strategy aligns with the requirements and continual improvement model of the ISO 14001 Environmental Management Standard as depicted in (Appendix D) These facets include: leadership commitment, planning, implementation and operational support, performance measurement and evaluation, management review and continual improvement

## 3. LEADERSHIP

Leadership Commitment is evidenced through the TCTA Environmental Policy that recognises the interdependence of people and their surroundings by accounting for both environmental and social sustainability factors. The adoption of the following Environmental Goal Statement is recommended to demonstrate leadership commitment to ESMS.

*“Environmental and social sustainability aspects, risk and opportunities are appropriately addressed and accounted for through the lifecycle of all TCTA operations.”*

### 3.1. E&SS Policy Framework

TCTA has an overarching and broadly stated Sustainability Policy and an Environmental Policy that formalises the organisation’s E&SS objectives. These are supported by subject-specific policy documents that address compensation of affected parties and matters related to involuntary resettlement and livelihood restoration. The Social Management Policy is currently undergoing internal review prior to being submitted for approval during the third quarter of the 2020-2021 financial year.

The potential for the integration of policy matters related to health, safety, and quality with those of E&SS has been investigated. It was determined that integration will not be done at this stage. This Strategy focuses on a higher level of cross functional collaboration towards improved organisational maturity (on environmental, health and safety aspects), which are prerequisite for this level of policy integration, in the medium term.

### 3.2. Organisational Roles and Responsibilities

The organisational roles and responsibilities for ESMS are outlined in the Environmental Policy as follows:

**The TCTA Accounting Authority/Board** is responsible for the establishment of an ESMS for the management of all direct and indirect environmental impacts associated with TCTA projects and activities in line with the requirements of King IV. The Accounting Authority/Board will approve the structure and function of the ESMS and will demonstrate support for the implementation of the management system.

The annual management review outcomes and recommendations to the Board will be considered and adopted as deemed appropriate in support of the organisation's objectives and deliverables.

**Executive Committee:** An annual Executive Committee (EXCO) management review of ESMS will be conducted to identify and make recommendation on areas for improvement. EXCO are to include environmental commitments and adapt the Strategy to determine the efficacy and to make recommendations for improvement including the setting of additional, and revision of existing organisational objectives, indicators and targets.

**Executive Managers** -: Executive Managers will be responsible for the development, implementation, administration and review of the ESMS relevant to their divisional functions and jurisdiction. By way of example:

- **Executive Manager PMID** is responsible for the implementation of the Projects' ESMS and will support its growth, implementation and improvement.
- **Executive Manager Project Finance and Treasury** is responsible for the implementation of the Projects' ESMS elements related to E&SS facets of project finance and treasury.
- **The Chief Strategy Officer** will ensure that matters of environmental sustainability, communication and stakeholder engagement are incorporated into TCTA strategies and plans for implementation.
- **The EWSS Executive Manager** is responsible for the implementation of the Corporate ESMS and will support its development, implementation and improvement.

**The TCTA Head of Environment** is responsible for the development and maintenance of the ESMS and the effective implementation of the associated processes of integration, monitoring, review, reporting and others as may be required to give effect to the system.

**TCTA Employees:** In line with the provision of the National Environmental Management Act (Act 107 of 1998) that all persons have a “Duty of Care”, each TCTA Employee is required to contribute to the realisation of the TCTA environmental objectives.

## **4. PLANNING**

### **4.1. Risks and Opportunities**

The existing TCTA Risk Management Framework makes provision for the assessment of environmental and social risks. The 2019-2020 ESMS Management review identified the need to enhance the risk classification/ rating matrix suitability to deepen understanding of E&SS risk factors and the potential implications of these for the business and its leadership. Areas of significant exposure or opportunity are to be identified, prioritised and addressed in proportion to their impact potential.

In the short-term the review of the existing TCTA Risk Management Policy and Framework includes the revision of TCTA’s risk appetite. The organisations risk appetite related to matters of E&SS will be clearly defined and captured in the revised risk matrix.

. This will inform TCTA’s response to the growing call from Lenders and governance experts, for the demonstration of the integrated management of environmental, social and governance risks.

### **4.2. Objectives and Targets**

TCTA’s environmental approach is designed to ensure that responsible corporate citizenship and integrated environmental management principles support the realisation of social and environmental sustainability objectives. The TCTA’s Environmental Objectives are detailed in the Objectives and Targets Procedure and are depicted in Figure 2.

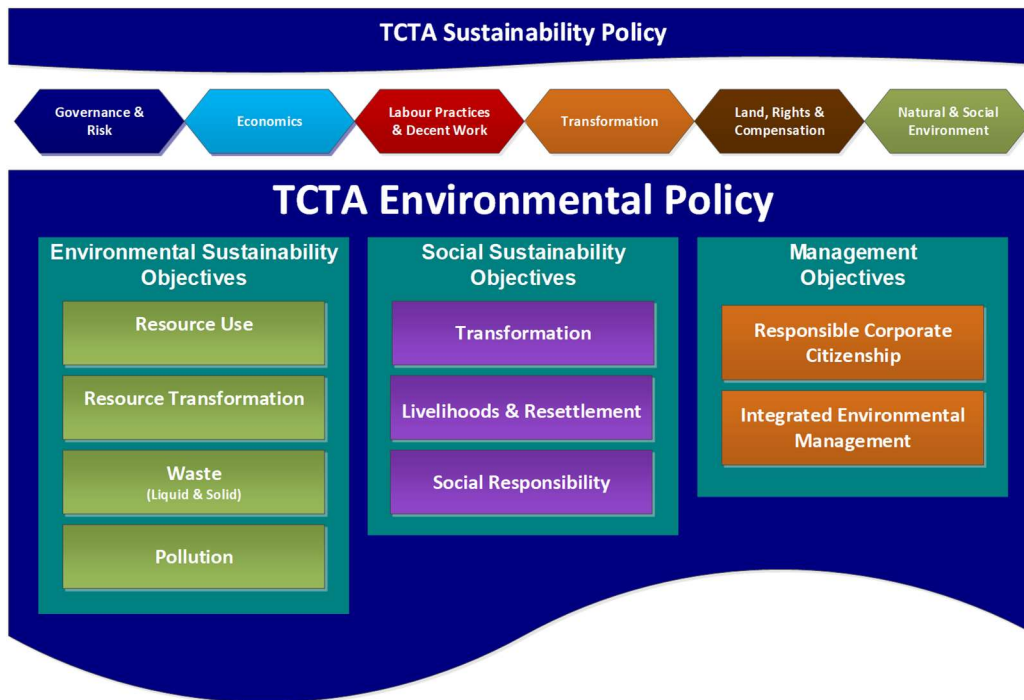


Figure 2 Environmental objectives as presented in the TCTA Environmental Policy

### 4.3. Environmental Aspects

The ability of TCTA to limit the negative impacts of its operations on the environment, and people depends entirely on the way in which the organisation and its representatives conduct their activities. The fundamental principle of environmental management, as practiced by TCTA to date, is as follows:

The way in which activities are conducted within the environment will dictate the nature of impacts that are caused. To prevent, limit, or mitigate impacts one must manage activities. Interactions between activities and facets of the environment are referred to as aspects. This is depicted in Figure 3 The TCTA Master Aspects Register defines typical aspect classes, which cater for the way in which TCTA and its service providers interact with the receiving environment. Customised aspect registers will be developed for the new projects (MCWAP2A, BRVAS and Umkomaas) and for the operation of the TCTA corporate facilities.

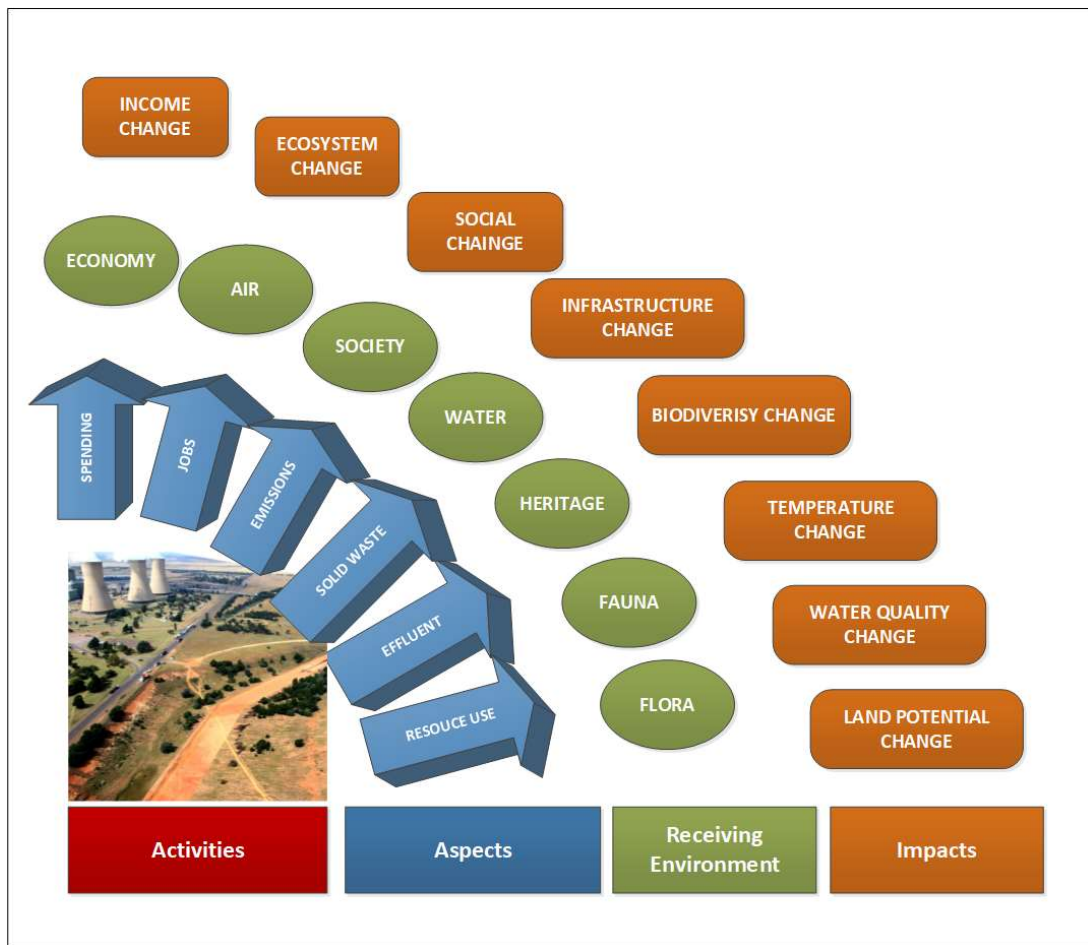


Figure 3: Environmental Management, Linking Activities and Aspects

The management of TCTA’s environmental aspects, is conducted within the framework of the ESMS as presented in Figure 4. Detailed key performance areas of social and environmental sustainability aspects management are shown in the expanded framework in Appendix B.

The two management objectives, namely Responsible Corporate Citizenship and Integrated Environmental Management, incorporate the main elements of the ESMS in line with the requirements of the ISO 14001 standard. Responsible Corporate Citizenship address matters related to resourcing, document and records management, operational and quality control, compliance, performance management, emergency preparedness, reporting and the management review. Integrated Environmental Management caters for systems elements that address matters related to training and awareness building, integration and communication, data management, risk identification and management, learning and improvement, but most of all the effective management of TCTA’s significant aspects. The ESMS components are depicted in the orange and the E&SS aspect classes are shown in green and purple (Figure 4).



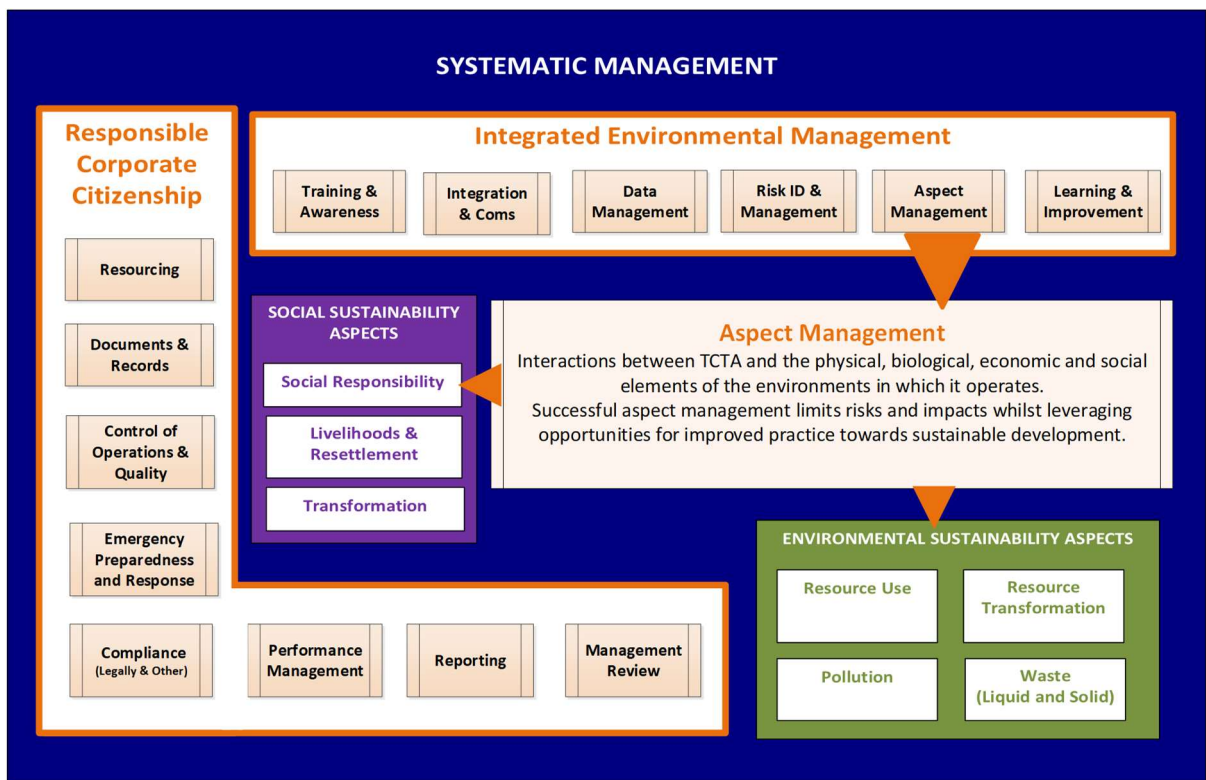


Figure 4 ESMS Framework based on the Management Objectives in the Environmental Policy

#### 4.4. Resources and Competencies

The Project environmental domain within PMID has the requisite competencies, for ESMS implementation on projects. Resourcing to increase the capacity of the social management function to proactively manage the social management risks identified in the strategic risk register will be implemented in line with TCTA’s resourcing procedures.

Within the Corporate ESMS sphere, the establishment of champions to drive key programmes and agendas is important. Training will be conducted to develop common organisational understanding on the respective division’s contribution to the organisation’s environmental performance.

The Environmental Manager EMS&Q, within PMID is responsible for the TCTA ESMS conceptualisation, development, implementation, monitoring, support, environmental quality assurance and management reporting. As the ESMS expansion takes place it may be necessary to mobilise a second resource to assist with the operational control of the various elements of the Project ESMS.



As the Corporate ESMS unfolds, the capacity of existing resources will inform whether a Corporate ESMS officer position will be required to support the successful implementation and monitoring of the Operational Environmental Management Programme. The recommendations of the 2019 Management review will be accounted for.

#### **4.5. Awareness and Communication**

The EMS is to facilitate the incorporation of environmental and social sustainability elements into the organisational culture improvement plan towards TCTA having an environmentally responsible culture (low resource use, environmentally aware staff and wide application of continual improvement). A well-managed E&SS training and awareness programme is an essential tool for the growth of the skill base and for the shaping of employee perceptions and behaviours. Where specific skills needs are identified these will be incorporated into employee personal development plans. The existing awareness programme is to be maintained. The inclusion of ESMS content into staff inductions, engagements and service provider briefings have been identified as opportunities that are to be pursued.

#### **4.6. Document and Records Management**

The collection and management of data is an area for improvement. Key success factors include the stability of the TCTA ICT system and the improved availability, accessibility and reliability of information and data sources from across the business.

ESMS document and records management will align with relevant TCTA requirements, the Records Management Policy and will support and compliment TCTA improvement efforts. Requirements of ISO 14001 will be applied where organisational requirements are not yet available.

### **5. OPERATIONAL SYSTEMS ELEMENTS**

#### **5.1. Operational planning and control**

Operational control is central to ensuring that actions are taken to deliver the required outcomes effectively and efficiently, without incurring undue risk or liability. TCTA's commitment to limiting impacts on people and the environment requires that mechanisms are developed to make sure that the consequences of actions undertaken by the business or on its behalf are acceptable and appropriate.

Tools required to ensure control will differ depending on the degree to which TCTA is directly involved in activities. On the Project ESMS, the TCTA practice of actively aligning contractual obligations and Environmental Management Programme (EMPr) provisions and Environmental Authorisations (EA) conditions for effective control over infrastructure development risk will be continued.

The need for improved operational control over the E&SS aspects of office-based activities was noted during the 2019-2020 EMS Management Review. The scoping phase of the Corporate ESMS development, to be undertaken in year one of the strategy implementation, will identify and prioritise significant aspects using the Aspect Significance Procedure. Areas requiring improved control and the necessary mechanisms will be collaboratively developed, applied and reviewed.

In many areas of the business with high impact potential, TCTA is reliant on contractual provisions to facilitate mitigation and management of E&SS aspects and impacts. Whether controls are direct or indirect, physical measures or document-based, their design and the way in which they are executed must be evaluated, monitored and improved to ensure achievement of the desired result.

## **5.2. Performance Evaluation and Reporting**

An environmental and social sustainability reporting framework is required to ensure alignment of contributing indicators from across all ESMS programmes. A TCTA integrated environmental and social sustainability reporting framework (guided by the DWS Integrated Environmental Management Series 1.8 and international best practice e.g. GRI) is to account for the information requirements and interests of all ESMS stakeholders. Inputs will be sourced from data gathered from each sphere of the ESMS that will be combined to show the overall organisational performance and progress.

Progress and performance against the environmental and social aspects is addressed in various management reports including the Social and Ethics Reports to the Board and in the Integrated Annual Report. The application of the ESMS and the suitability of its elements will be closely monitored, managed and evaluated and will be included on the agenda of the annual ESMS Management Review.

### **5.3. Compliance Management and Auditing**

The ESMS compliance management elements are intended to align with and complement the existing TCTA compliance management function. Priority areas include the identification of areas where the availability and accessibility of evidence or assurance required improvement. All obligations are to be compiled into an overarching ESMS Compliance Management Framework that will be used to support existing internal audit functions and to provide tools for self-verification and improvement without waiting for audits or inspections.

Legal and regulatory compliance monitoring activities are to be supplemented with additional observations and investigations into areas of risk where there is evidence of misalignment or gaps. The verification of ESMS-related Lender conditions is a TCTA priority. The ESMS is to support the establishment of control mechanisms to ensure that environmental, social and governance obligations are met, measured and reported against for the full life of project loans.

Projects are required to implement compliance vetting by independent parties, such as Environmental Control Officers or Independent Auditors. The existing practice is of a reasonable standard, but there is scope for improvement, specifically with regards to developing standards and making better use of the audit and inspection findings to improve practice.

### **5.4. Management Review**

The inaugural TCTA EMS Management Review took place in June 2019. It served to improve ESMS awareness and gather Management's insights towards the development of the Strategy and scoping of the inter-organisational benchmarking process.

An annual ESMS Management Review will consider the stability, adequacy and effectiveness of the ESMS. Management will consider the needs and expectations of interested parties, significant aspects, risk, resource requirements, communications, aspect-specific performance and opportunities for improvement.

### **5.5. Continual Improvement**

The SWOT analysis results, presented in Appendix C highlighted the wealth and diversity of internal experience as a strength. This supports the identified opportunity to improve practice and stimulate innovation both internally and externally.

The ISO14001 Standard provides a robust framework for the continual improvement of management systems and their outcomes. TCTA has adopted the Standard's cyclic/interactive approach to planning, implementation, evaluation and improvement as depicted in Appendix D.

The interrogation and investigation of performance (poor to exceptional), practice, incidents and trends enables the development of understanding. The lessons from internal monitoring and evaluation will be reviewed considering industry developments and trends, to generate meaningful insights. Such insights are to inform decisions and be incorporated into the revision of TCTA's policies, objectives, strategies, standards, procedures, processes and controls.

To identify areas for development and improvement, an ESMS gap analysis is to be conducted in the 2021-2022 financial year. The results will be used to revise and focus the management system development and implementation planning towards achieving readiness for ISO certification in the medium-term. This is an important step towards embedding / mainstreaming of environmental and social sustainability into the core of TCTA's culture and decision-making over the longer term.

## **6. STRATEGY ENABLERS**

Factors crucial to the successful implementation of this strategy include effective generation and maintenance of support and buy-in across the business. Board and EXCO, have expressed significant support for the advancement of TCTA's E&SS agenda to date, and their continued support is relied upon. Other critical success factors include:

- Timely investment of human and financial capital,
- Interdisciplinary collaboration, coordination and integration
- Defined and allocated roles, responsibilities and accountabilities,
- Clear and consistent information sharing and consultation,
- Monitoring and management of implementation progress and performance.

## **7. Strategy Implementation**

Strategy implementation challenges have been considered and a range of risk limiting mechanisms have been incorporated into the implementation planning. These include inter alia the:

- Alignment of the ESMS development with other organisational change processes,
- Incorporation of ESMS elements into divisional balanced score cards as applicable to their core functions.
- Alignment of ESMS deliverables with employee job scopes and performance contracting.
- Design of ESMS implementation records to serve as evidence of employee performance against contracted deliverables
- establishment of a working group to foster collaboration, integration and the identification of areas requiring support;
- Documentation of implementation requirements in an Operational Environmental Management Plan with clearly defined programmes, roles, responsibilities, monitoring mechanisms, performance deliverables and measurable targets.

A log frame style strategy Implementation framework is being populated to detail how the strategy goal, outcomes, and implementation outputs will be monitored, measured and assessed. This will guide the development of detailed implementation planning.

An indicative breakdown of the timing of key activities follows and is included in the strategy summary as shown in Appendix A.

**Initial strategy implementation (Y1):**

- Communication of the approved strategy.
- Further consultations with implementation partners towards establishing an EMS implementation working group.
- Scoping of the Corporate EMS OEMP and identification, planning and testing of key programmes, including a facilities waste management programme.
- The working group, with support from the executive managers and HR representatives are to identify resourcing requirements and changes to align key programmes or tasks with existing resources. (Determination of resourcing capacity and needs (financial and personnel))
- Develop a proposed TCTA ESMS Governance model
- Management review of scope and development progress.
- Establishment of the TCTA carbon footprint calculator and determination of a baseline footprint of the TCTA corporate facilities operations.
- Documentation and approval of EMS implementation frameworks and procedures
- Application of the EMS planning procedures on new projects in line with their implementation progress

**Intermediate strategy implementation (Y2):**

- Finalisation and implementation of the TCTA Operational Environmental Management Programme.
- Coordinated implementation and management of Environmental and Social Management programmes
- Monitoring, evaluation and reporting of progress and performance over time
- Training and skills development
- ISO 14001 Gap identification and closure planning
- Annual calculation and update of the TCTA Carbon footprint.
- Management review and improvement planning

**Late strategy implementation (Y3):**

- Improvement action planning to close ISO 14001 gaps as identified
- Training and skills development

- Ongoing implementation of the TCTA Operational Environmental Management Programme and the Projects EMS elements.
- Monitoring, evaluation and reporting of progress and performance over time
- Management review, improvement planning and development and approval of the next phase of the strategy.

A detailed implementation plan and schedule are to be finalised in consultation with the key role players on approval of the Strategy.

## **8. CONCLUSION**

TCTA's traditional model for environmental governance is designed at project scale and is supported by a continual improvement model with a broader focus, but it is centered around the implementation of infrastructure construction projects. Sound governance and practice at project level can no longer be regarded as enough.

The integrated ESMS, championed by the organisation's executive management, is to demonstrate that social and environmental governance is reflected throughout the organisation's operations as a true measure of TCTA's commitment to responsible practice, compliance, sustainable development and effective corporate governance as envisioned in the King IV report.

The institutionalisation of a comprehensive ESMS will improve the co-ordination and systematic management of the social and environmental facets of the organisation's activities, thereby supporting the realisation of TCTA's strategic objectives.

The implementation of this Strategy will support the overall TCTA culture and climate improvement interventions, improve monitoring and assurance of compliance to legal, regulatory and other social and environmental requirements inclusive of loan covenants towards ISO14001 certification.

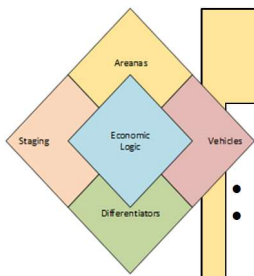
**APPROVED BY THE TCTA BOARD ON 30 JULY 2020**



**Gerald Dumas**

**Chairperson of the TCTA Board**

## Appendix A: Overview of the Five Major Elements of TCTA's Environmental Strategy



### Arenas

**Ares of activity and their prioritisation**

- The TCTA EMS is to cater for all areas of the business
- Projects EMS is to incorporate areas of
  - a) indirect control over actions for the construction, operations and maintenance of infrastructure and
  - b) actions associated with the sourcing and servicing of project finance.
- Corporate EMS is to draw together the originations activities related to physical operations, resourcing, communication, governance, assurance, risk limitation, strategic development and management of information and knowledge.
- Geographically the Projects Environment is focuses on the area of, and matter relating directly to a project receiving environment within defined boundaries in any province within SA and Lesotho.
- The corporate EMS elements are centered around the TCTA office in Centurion South Africa but the organizations strategic significance at a National and regional level area acknowledged.
- Sectors of significance include inter alia:
  - Infrastructure Development
  - Water Sector
  - Financial sector
  - Environmental & Social Sustainability

### Vehicles

**How we will get there**

- Internal development focused within two distinctive spheres of operation.
- Establishment on internal coordination
- Binding service providers and suppliers to TCTA's standards through their contractual obligations
- Adoption and application of a standard suite of TCTA social and environmental aspects with customised but compatible indicators and targets.
- Building internal competency through id on internal talent
- Optimised resourcing approaches and use of service providers for key functionalities
- Establishment and use of an internal collaboration forum (working group)
- Generation of evidenced based management, monitoring and reporting that is supported by a reliable ICT system in future.

### Economic Logic

**Returns that will be obtained**

- Cost of mistakes and risk limitation can be reduced.
- Establishment of TCTA operational efficiencies to achieve cost effective best practice
- Assurance of performance that supports Lender / - Financiers agendas as a mean of leveraging more cost effective project finance

### Staging

**Rate or speed of change and sequencing of initiatives**

**Initial strategy implementation (Y1):**

- Analysis of EMS spheres (aspects significance, existing state and change required to meet desired state or level)
- Determination of resourcing capacity and needs (financial and personnel)
- Identification and planning and testing of key programmes to drive required change
- Management review of scope and development progress.

**Intermediate strategy implementation (Y2):**

- Coordinated implementation and management of programmes.
- Monitoring, evaluation and reporting of progress and performance over time
- Training and skills development
- Gap identification and closure planning
- Management review and improvement planning

**Late strategy implementation (Y3):**

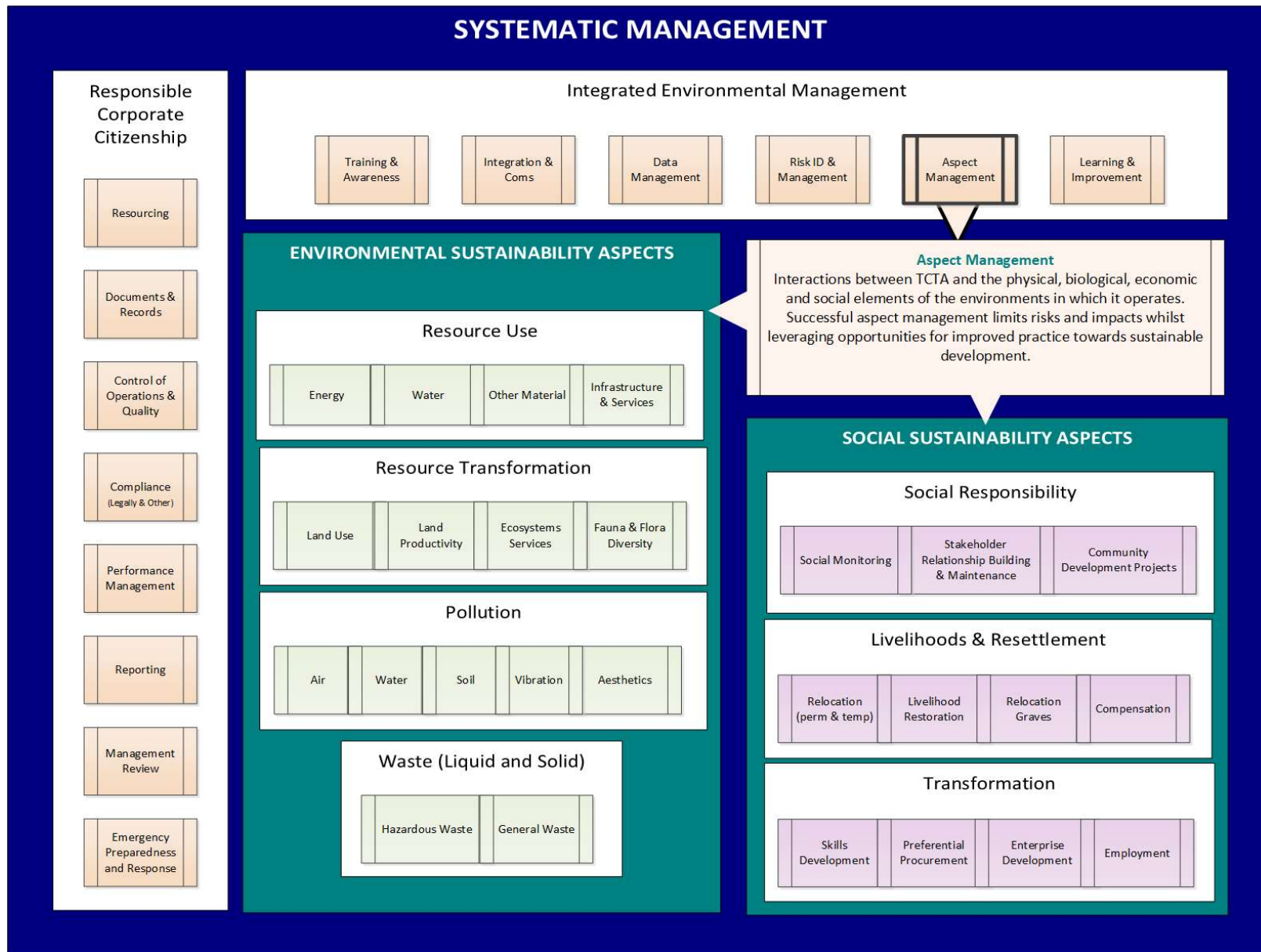
- Improvement action planning to close gaps
- Training and skills development
- Monitoring, evaluation and reporting of progress and performance over time
- Management review, improvement planning and development and approval of the next phase of the strategy.

### Differentiators

**How we win**

- Image as a responsible corporate citizen
- International best practice and compliance requirements are merged into a suite of integrated TCTA standards, practices and methodologies
- Establishment of TCTA as a responsible developer that can be relied on and trusted by all stakeholders





## Appendix C: Environmental SWOT Analysis

### Strengths

#### The Environmental Team:

- Experience, qualifications, commitment
- Professional interest
- Diversity of backgrounds

#### Relationships:

- Good internal and external relationship
- Stakeholders are a key element environmental performance

#### Model:

- Proven model for project environmental management
- Good levels of project experience

### Weaknesses

#### Systems & processes

- QMS need and buy-in (doc control, version, revision, chain of custody)
- Information access and flow (information sharing, accessibility quality and relevance of stored information)

#### Resourcing

- Absent staff pipeline and limited growth to potential

#### Approach

- Divergent application of approach
- Gap between policy and practice

#### Relationships

- internal silo mentality,
- external weak linkages with funders

#### Compliance

- low appreciation / understanding of implications
- absence of assurance or evidence,
- reliability of indicators

### Opportunities

#### Scope to grow TCTA offering

- Additional infrastructure projects
- Expand operation and maintenance work
- Advisory and co-ordination service

#### Intra and Inter-organisational learning and growth

- Model implementation lessons,
- environmental practice improvement

#### Better use of existing resources

#### Environmental Value Proposition

- management interest in improvement
- lender standards to reduce loan cost
- potential for innovation

### Threats

#### Relationships

- Org resistance to change
- External relationships and reputation
- Lender expectations

#### Compliance

- Knowledge about changes and their implication
- Impact of tolerance and non-compliance,
- Punitive blame culture
- Low internalization of compliance requirements

#### Business sustainability

- Quality and shortage of directives
- Systems and Processes
- Quality of procured service providers

#### Fragmented or misaligned strategies and programs

**Appendix D: Environmental and Social Sustainability Management System Scope**

