



# **Environmental Management System**

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**Revision 0**

**COMPANY DETAILS**

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## INTRODUCTION

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CBAC is committed to environmental best practice in projects, operations, and administration. Through a process of continual improvement, CBAC will develop and maintain efficient and effective environmental practices, and will comply with relevant national and international environmental legislation. This Environmental Management System (EMS) has been developed in accordance with *ISO14001 Environmental Management Systems — Requirements with guidance for use*. CBAC's EMS commits the company to minimise its ecological footprint by:

1. Incorporating environmental management considerations into core business and management practices;
2. Considering environmental impacts of all procurement, and ensuring that, wherever possible, options chosen include recyclable products, minimum packaging, and minimum toxic chemicals;
3. Creating a culture where sustainable environmental management is considered an integral element of all company activities;
4. Providing information to personnel as to the recycling system, and to maximising energy efficiency;
5. Regularly monitoring environmental performance; and
6. Reviewing this EMS every 2 years to ensure relevance, and delivery of desired outcomes.

The EMS is applicable to all activities associated with the company's projects, operations, and geographical sites. The following environmental issues are covered:

1. Noise Management
2. Waste Management
3. Resource Management
4. Incident Management
5. Transportation and Storage of Dangerous Goods
6. Air and Water Quality Management
7. Hazardous Chemicals
8. Visual and Aesthetic Management

## PURPOSE

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To provide a systematic approach for meeting obligations, responsibilities, and regulatory and statutory requirements for projects, operations, and activities. This EMS applies to CBAC personnel, contractors, sub-contractors, and suppliers.

Such a systematic approach to environmental management provides the Board of Directors with information to build success over the long term, and create options for contributing to sustainable development by:

1. Protecting the environment by preventing or mitigating adverse environmental impacts.
2. Mitigating the potential adverse effect of environmental conditions on the company.
3. Assisting the company in the fulfilment of compliance obligations.
4. Enhancing environmental performance.
5. Controlling or influencing the way the company's products and services are designed, manufactured, distributed, consumed & disposed by using a lifecycle perspective that prevents environmental impacts being unintentionally shifted elsewhere in the lifecycle.
6. Achieving financial & operational benefits that can result from implementing environmentally sound alternatives to strengthen the company's market position.
7. Communicating environmental information to relevant stakeholders.

## POLICY STATEMENT

CBAC is committed to the protection of the environment in relation to the company's operations, activities, projects, and geographical sites. The commitments in this policy will be achieved by implementing control and management documentation as guidelines to all associated environmental management plans and procedures.

The environmental aspects and impacts table below includes, but is not limited to, a detailed breakdown of identified processes, activities, and products that have potential adverse impacts on the environment. The aspects have been determined in accordance with ISO14001, Section 6.1.2 (*Environmental Aspects*). The significance of each identified impact has been quantified and represented as a ranking, in accordance with the tables in Appendix 1.

Activity	Aspect	Impact	Risk Impact
Projects & Operations	Chemicals/hazardous materials	Soil Contamination	E
	Plastic Waste	Solid waste to landfill Recyclable	E
	Water run-off	Soil erosion	E
	Contaminated waste water	Soil Contamination	H
	Excess material from site	Solid waste to landfill	M
	Oil/fuel losses from vehicles and equipment	Soil Contamination	M
	Paper/Cardboard/Packing Waste	Solid waste to landfill Recyclable	L
Admin & Office	Waste Paper	Solid waste to landfill Recyclable	M
	Inefficient use of energy	Pollution	M
	Toner Cartridge Replacement	Solid waste to landfill	L

## OBJECTIVES AND TARGETS

The primary objectives and targets of this EMS begins with a clear commitment to the protection of the environment. Objectives and targets have been defined in accordance with ISO14001, Section 6.2.1 (*Environmental Objectives*). They shall be reviewed annually by the Board of Directors. The review will ensure the adequacy and relevance of objectives, and the achievement of targets.

CBAC shall meet, or exceed, all legal and regulatory requirements for environmental management and protection, and where these are lacking or insufficient to protect the environment, apply best practice standards that shall ensure the environment is protected.

CBAC shall maintain an awareness of the responsibility of the company and its personnel/contractors to ensure protection of the environment.

CBAC shall regularly review the company's operations to identify and assess the environmental impact associated with those operations, and implement and maintain management systems, programs, and procedures to ensure the environment is protected.

Objective	Target	Indicator
Meet or exceed statutory & regulatory requirements	Zero non-compliance's from statutory or regulatory authorities	Number of non-compliance's received from statutory or regulatory authorities
Ensure environmental awareness is maintained for all personnel & contractors	100% induction of all CBAC personnel & contractors	Number of personnel & contractors not inducted
Regular review of CBAC EMS	Ensure systems, processes & procedures are adequate for protection of environment	Number of non-compliance's identified or reported by CBAC personnel and contractors

## ENVIRONMENTAL IMPACT MANAGEMENT

CBAC EMS provides the action, schedules, resources, and responsibilities required to achieve stated short and long term objectives and policy conformance. BOD will oversee and review all processes and procedures, and outcomes, on an annual basis.

Objective	Target	Person Responsible
Noise Management	Recognise & understand sources of noise associated with projects Develop & implement processes to effectively monitor & control adverse impacts of noise on workers & local communities	Project manager
Waste Management	Recognise & understand sources of waste associated with projects & administration Develop & implement waste management processes to minimise waste generation Develop & implement processes that encourage the principles of waste avoidance, re-use & recycling	Director, F&A Project manager
Resource Management	Develop & implement processes to encourage resource efficiency Adopt the principles of best available technology without entailing excessive cost	Director, F&A Project manager
Incident Management	Establish risk assessment & control measures to avoid or minimise environmental incidents Develop & implement response & recovery processes to provide prompt corrective action that minimises adverse impact on environment & local communities	Director, P&O Project manager
Complaints Management	Develop & implement processes to ensure all environmental-related complaints are assessed & resolved in a timely manner	Director, P&O Project Manager
Transportation & Storage of Dangerous Goods	Develop & implement procedures for transport & storage of dangerous goods in accordance with legislative and regulatory requirements	Director, P&O Project Manager
Use of Hazardous Chemicals	Develop & implement processes to avoid inappropriate handling of harmful chemicals	Director, P&O Project Manager

Objective	Target	Person Responsible
Visual & Aesthetic Management	Develop & implement processes for prompt management of waste that may cause adverse aesthetic & visual impacts to local communities	Director, P&O Project Manager

## IMPLEMENTATION AND OPERATION

### Structure and Responsibility

CBAC Board of Directors take responsibility for the effective design of the EMS. Project managers ensure the EMS is operationalised on projects, while the Director, Finance & Administration takes responsibility for compliance within the CBAC office.

### Training

CBAC shall ensure the training needs of the company's personnel whose work may create a significant impact upon the environment are effectively managed. CBAC will ensure that contractors and sub-contractors provide effective inductions to site-based personnel.

### Communication

CBAC is committed to reporting and communicating environmental information about our environmental performance on projects. A number of processes have been developed to capture and report environmental activities. These include:

1. Complaints Management
2. Environmental Incident Reporting
3. CBAC Environmental Induction Training
4. CBAC Continuous Improvement Process.

### Emergency Response & Recovery Management

CBAC emergency response and recovery processes consider the following situations:

1. Spillage of toxic or environmentally harmful substances
2. Uncontrolled discharges to water and land

All environmental incidents shall be categorised into three levels:

#### Level 1 Incident

Incident involving or affecting CBAC operations, activities, or projects that is classified as an emergency, requiring a sustained response, by emergency services organisations.

#### Level 2 Incident

Incident involving or affecting CBAC operations, activities, or projects, which has resulted in, or has the potential to result in, one or more of the following:

1. Health or safety of persons being affected;
2. Significant damage to property or infrastructure;
3. Significant environmental impact; or
4. External resources and control required on site, sustained coordinated response required.

#### Level 3 Incident

Incident where minor injury, disruption, damage, or environmental impact to has occurred.

These incidents will not require a sustained response from other organisations, or outside resources, and will be managed and investigated by the Project Manager.

## MEASUREMENT AND EVALUATION

### Monitoring and Measurement

In accordance with ISO14001, Section 9 (*Performance Evaluation*), CBAC shall develop and implement appropriate procedures and processes for the routine monitoring of environmental performance, and to ensure environmental impacts are being measured and objectives and targets are being achieved.

### Corrective and Preventative Action

Corrective and preventative actions shall be managed in accordance with *CBAC Quality Assurance Management System, Corrective and Preventative Action*.

### **Environmental Management Records**

All environmental management records generated shall be identified, collected, and stored in accordance with *CBAC Quality Assurance Management System, Control of Records*. Environmental records generated include (but are not limited to) the following;

1. Management review minutes and agendas
2. Internal and external audit reports
3. Non-conformance and corrective action reports
4. Training records
5. Procedures and instructions registers
6. Records of customer and members of the public complaints

### **Environmental Management System Audits**

CBAC maintains an internal audit process. All internal audits are managed in accordance with *CBAC Quality Assurance Management System, Internal Audits*. All audits shall be reported to the Board of Directors.

### **Management review**

The Board of Directors review the EMS annually to ensure its continuing suitability, adequacy, and effectiveness. The review shall include consideration of:

1. Status of actions from previous reviews;
2. Changes in:
  - a) External and internal issues that are relevant to EMS;
  - b) Needs and expectations of stakeholders, including compliance obligations;
  - c) Environmental aspects;
  - d) Risks and opportunities;
3. Extent to which environmental objectives have been achieved;
4. Information on the organization's environmental performance, including trends in:
  - a) Nonconformities and corrective actions;
  - b) Monitoring and measurement results;
  - c) Fulfilment of its compliance obligations;
  - d) Audit results;
5. Adequacy of resources;
6. Relevant communications from stakeholders, including complaints; and,
7. Opportunities for continual improvement.

The outputs of the management review include:

1. Conclusions on continuing suitability, adequacy, and effectiveness of EMS;
2. Decisions related to continual improvement opportunities;
3. Decisions related to any need for changes to EMS, including resources;
4. Actions, if needed, when environmental objectives have not been achieved;
5. Opportunities to improve integration of EMS with other business processes, if needed;
6. Any implications for the strategic direction of the company.



## OUR COMMITMENT TO UNITED NATIONS GLOBAL COMPACT (UNGC)

The UNGC is a UN initiative to encourage businesses worldwide to adopt sustainable and socially responsible policies, and to report on their implementation. The Compact, launched on 26 July 2000, consists of ten principles in the areas of human rights, labour, environment, and anti-corruption.

Three principles are directed at environmental stewardship:

Principle	Priority	Description	CBAC Strategy
7	H	Businesses should support a precautionary approach to environmental challenges	1. Conduct risk analysis & provide environmental impact management, in accordance with CBAC EMS
8	H	Businesses should undertake initiatives to promote greater environmental responsibility	1. Annual KPI targets 2. Mentoring of partners & contractors
9	H	Businesses should encourage the development and diffusion of environmentally friendly technologies	1. Provide products that are certified environmentally friendly by external bodies

## OUR COMMITMENT TO SUSTAINABLE DEVELOPMENT GOALS (SDGs)

On 25 September 2015, under the auspices of the UN, countries adopted a set of goals to end poverty, protect the planet, and ensure prosperity for all, as part of a new sustainable development agenda. Each goal has specific targets to be achieved by 2030. The UN noted: “for the goals to be reached, everyone needs to do their part: governments, the private sector, civil society and people like you” (<http://www.un.org/sustainabledevelopment/sustainable-development-goals/>).

As a private sector entity, CBAC has an obligation to commit to achieving the 17 SDGs (see Appendix 2). We anticipate a certain prioritisation of goals based on our ability to influence outcomes (**Low priority** = big issues, little influence on outcomes).

Goal	Priority	Description	CBAC Strategy
1	H	End poverty in all its forms everywhere	2. Provide products & services to promote employment opportunities
2	L	End hunger, achieve food security and improved nutrition, and promote sustainable agriculture	
3	H	Ensure healthy lives and promote well-being for all at all ages	2. Maintain a strong focus on OHS for CBAC & contractor personnel 3. Promote environmental stewardship
4	H	Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all	1. Provide opportunities for learning & personal growth to CBAC & contractor personnel
5	H	Achieve gender equality and empower all women and girls	1. Provide gender equal opportunities, in employment, empowerment & training 2. Maintain minimum 25% women on BOD
6	L	Ensure availability and sustainable management of water and sanitation for all	
7	L	Ensure access to affordable, reliable, sustainable and modern energy for all	
8	H	Promote sustained, inclusive, sustainable economic growth, full & productive employment & decent work for all	1. Provide products & services that help promote employment opportunities
9	H	Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation	1. Provide products & services for stronger, better & more cost effective infrastructure

10	L	Reduce inequality within and among countries	
11	H	Make cities and human settlements inclusive, safe, resilient & sustainable	1. Provide products & services for stronger, better & more cost effective infrastructure
12	H	Ensure sustainable consumption and production	1. Minimise waste in our products & services
13	H	Take urgent action to combat climate change and its impacts	1. Minimise energy use in our products & services
14	H	Conserve & sustainably use the oceans, seas & marine resources for sustainable development	1. Promote environmental stewardship 2. Ensure all products are environmentally friendly & certified
15	H	Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss	3. Promote environmental stewardship 4. Ensure all products are environmentally friendly & certified
16	H	Promote peaceful and inclusive societies, provide access to justice for all and build effective, accountable and inclusive institutions at all levels	1. Comply with CBAC Business Ethics & Social Accountability policies
17	H	Strengthen means of implementation & revitalize the global partnership for sustainable development	1. BOD responsibility for operational excellence in the way we help achieve SDGs

## OUR COMMITMENT TO SUSTAINABILITY ACCOUNTING STANDARDS

The Sustainability Accounting Standards Board (SASB) provides sustainability accounting standards for the disclosure of material aspect information for the benefit of stakeholders.

SASB Standards identify sustainability topics at an industry level, which may constitute material information, depending on a company's specific operating context. SASB Standards are intended to provide guidance to company management about aspect materiality, and associated performance communication.

For CBAC, the most salient SASB standard involves the **Engineering & Construction Services** industry, which provides design, consulting, contracting, construction, engineering, and other related services that support various building and infrastructure projects.

CBAC aims to comply with *SASB Engineering & Construction Services, Sustainability Accounting Standard IF0301* (March 2016). Accordingly, we will collate and communicate to stakeholders the following topical information (see IF0301, Table 1, pp.9-10):

- Environmental impacts of project development.
- Structural integrity & safety.
- Workforce health & safety.
- Climate impacts of business mix.
- Lifecycle impacts of buildings & infrastructure.
- Business ethics & bidding integrity.

The above topics are addressed in the CBAC *Environmental Management System* (this document), as well as the CBAC *Business Ethics Policy* (document no. C001600-1-003) and CBAC *Social Accountability Policy* (document no. C001600-1-004).

## Appendix 1: Environmental Aspects Risk Assessment

### RISK LOG KEY

Probability			
Rating		Description	Probability
<b>Almost Certain</b>	5	Is expected to occur during project	Risk has greater than 90% chance of occurring (probability of 0.90-1.0)
<b>Likely</b>	4	Will probably occur during project	Risk has 70% to 89% chance of occurring (probability of 0.70 – 0.89)
<b>Possible</b>	3	May occur during project	Risk has 30% to 69% chance of occurring (probability of 0.30 – 0.69)
<b>Unlikely</b>	2	Could occur during project	Risk has 10%-29% chance of occurring (probability of 0.10 – 0.29)
<b>Rare</b>	1	May occur in exceptional circumstances	Risk has <10% chance of occurring (probability of <0.10)

Risk Matrix & Risk Impact Scores									
<b>Probability</b>	5	<b>Almost Certain</b>	5	10	15	20	25	<b>Risk Ratings</b>	
	4	<b>Likely</b>	4	8	12	16	20		<b>Extreme</b>
	3	<b>Possible</b>	3	6	9	12	15		<b>High</b>
	2	<b>Unlikely</b>	2	4	6	8	10		<b>Medium</b>
	1	<b>Rare</b>	1	2	3	4	5		<b>Low</b>
			<b>Slight</b>	<b>Minor</b>	<b>Moderate</b>	<b>Major</b>	<b>Catastrophic</b>		
			1	2	3	4	5		
			<b>Impact</b>						

### Risk Rating Priority & Guidance

Extreme	>12	<ul style="list-style-type: none"> <li>• Extreme risks are unacceptable</li> <li>• High priority mitigation required</li> </ul>
High	7-12	<ul style="list-style-type: none"> <li>• High priority mitigation required</li> </ul>
Medium	3-6	<ul style="list-style-type: none"> <li>• Medium risks are acceptable</li> <li>• Monitor closely</li> </ul>
Low	<3	<ul style="list-style-type: none"> <li>• Low risks are acceptable</li> <li>• Periodic review and monitoring</li> </ul>

## Appendix 2: Sustainable Development Goals (SDGs)

