



DALRYMPLE BAY  
COAL TERMINAL  
SUSTAINABILITY  
IN ACTION

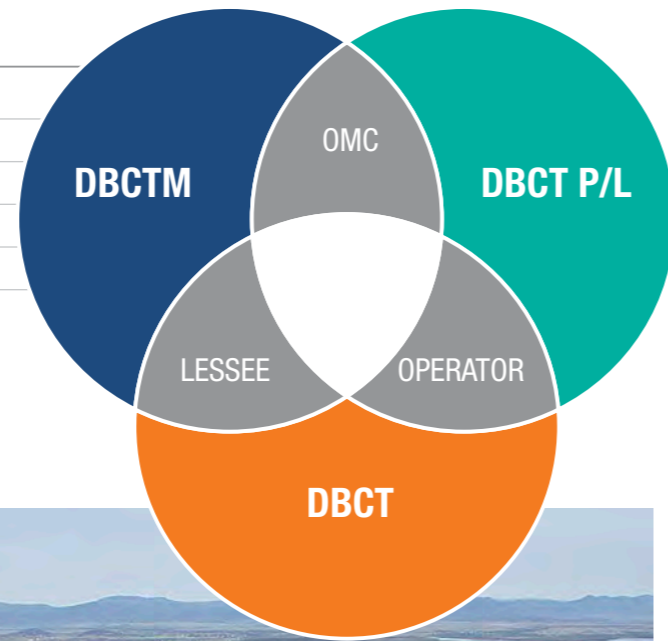
DBCT MANAGEMENT



DALRYMPLE BAY  
COAL TERMINAL  
PTY LTD

# SUSTAINABILITY: OUR JOURNEY

Dalrymple Bay Coal Terminal (DBCT) plays a pivotal role in the coal supply chain, handling predominantly metallurgical coal for steel making, and a small proportion of thermal coal, from Australia's Central Queensland Bowen Basin mines to the rest of the world.



Our purpose is to safely and efficiently transport coal from trains, through the terminal and onto shipping vessels. Sustainability considerations are at the forefront of decisions we make as we set about our daily business. We are committed to addressing actual and potential negative impacts to the environment, our people, and local communities, not only through a comprehensive suite of governance mechanisms and monitoring programs but in how we behave every day.

The location of terminal infrastructure offshore within the Great Barrier Reef World Heritage Area carries with it a responsibility to ensure our operations continue to have no detrimental impact on this sensitive ecosystem.

Our current sustainable development objectives ensure the terminal remains viable and contributes lasting benefits to society through the consideration of environmental, social and economic aspects of our business.

We recognise the increasing necessity for all companies to be transparent and accountable in the way business is conducted, and to contribute to a more sustainable planet.

In response to this, **DBCT Management Pty Limited** (DBCTM, terminal lessee/manager) and **Dalrymple Bay Coal Terminal Pty Ltd** (DBCT P/L, terminal operator), collectively DBCT, together are planning for the future in formalising a joint long-term 'Sustainability Strategy' for the terminal.

The Strategy will build on sustainability activities that have evolved over the terminal's proud 36-year history and will use the United Nations Sustainable Development Goals (SDG) platform to help test and shape strategy commitments and actions.

During 2019, DBCT's Sustainability Strategy will be developed through a series of focused activities including a materiality assessment, and engagement with key stakeholders to develop specific actions, goals and targets. We will report publicly on our progress and sustainability performance on a periodic basis.



A message from  
**ANTHONY TIMBRELL**  
Chief Executive Officer  
DBCT Management Pty Limited



A message from  
**STEVE RAE**  
Chief Executive Officer  
Dalrymple Bay Coal Terminal Pty Ltd



Sustainability is of critical importance to our business and we recognise that DBCTM and DBCT P/L together have an important role to play in contributing to a more sustainable supply chain. Our aim is to deliver an overall positive net social benefit to the local region while working tirelessly to minimise our impact on the environment and local communities.

As the long-term lessee of one of the world's largest coal terminal operations, we have a responsibility to set an example globally to mitigate environmental impacts from our operations. This includes protecting the sensitive Great Barrier Reef World Heritage Area in which the terminal operates.

Our progress on sustainability is well on its way and is demonstrated by significant investments in water storage, and dust monitoring and mitigation projects, however there is more work to do.

In 2019, we will establish a sustainability baseline and formalise a Sustainability Strategy. Our focus is to establish a clear set of sustainability commitments underpinned by a detailed action plan while formally communicating our activities and sustainability performance through public reporting.

We look forward to sharing our journey.



Sustainability underpins our daily business operations at Dalrymple Bay Coal Terminal Pty Ltd (DBCT P/L). We believe sustainability is about maintaining best business practices, doing what we say we will do, and contributing to lasting benefits for everyone.

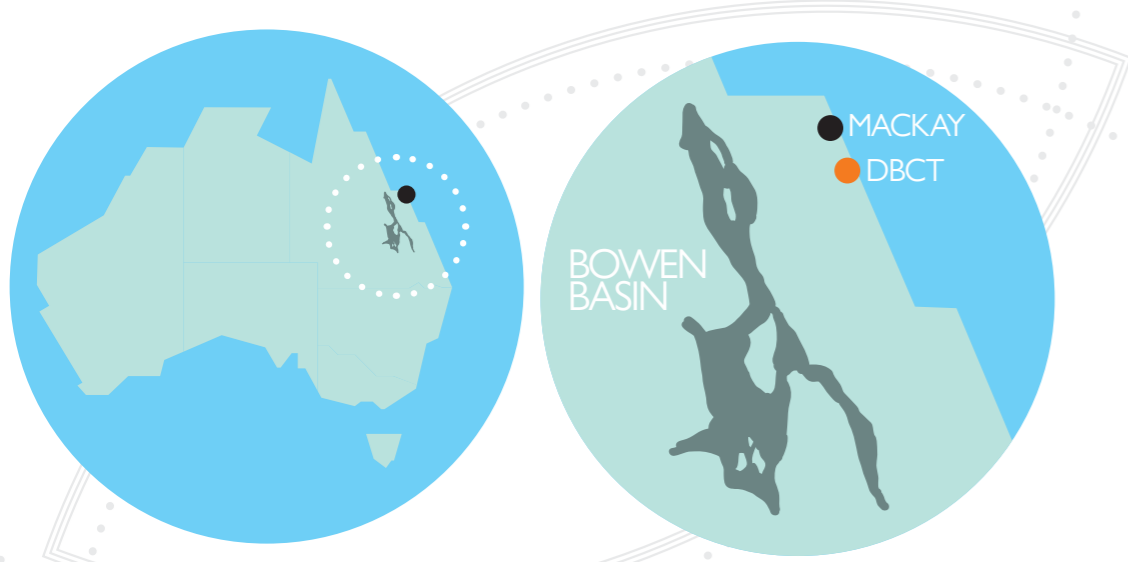
We are dedicated to achieving operational excellence by continuously exploring sustainable improvements to ensure we reliably deliver the standard of service our customers and stakeholders expect.

We strive to meet our environmental obligations as well as stakeholder and community expectations at the terminal. We aim to minimise potential impacts to the surrounding environment and local communities through sustainable processes and strategies.

Our ongoing commitment to valuing our environment is demonstrated through the terminal's robust environmental management system, certified to ISO 14001, environmental initiatives, partnerships with local environmental organisations, and Community Working Group.

The health, safety and wellbeing of our people and the surrounding communities is paramount, and is demonstrated by our programs and daily actions.

We work hard at DBCT P/L, and, together with DBCTM, we are committed to proactively achieving long-term sustainable environmental, governance, operational and community-focused outcomes, to benefit future generations.



## ABOUT DBCT

DBCT is the world's third largest coal export terminal. Servicing approximately 20 coal producers within the Central Bowen Basin, the terminal is a critical component in the coal export supply chain. Having commenced operations in 1983, the facility is located 38 kilometres south of Mackay, Queensland, at the Port of Hay Point.

The Central Bowen Basin is home to some of the highest quality coal deposits in the world. More than 80% of the coal handled by DBCT is high quality metallurgical coal used exclusively in the production of steel. Typical coal shipped through DBCT has low levels of sulphur, ash and other trace elements. Thermal coal exported through DBCT is also typically low in moisture with a higher energy content than thermal coal produced in other regions, making it more efficient in the production of electricity.

### KEY FACTS

TRANSPORTATION OF METALLURGICAL COAL ~ 80%

METALLURGICAL COAL IS A KEY COMPONENT IN THE MANUFACTURE OF STEEL

TRANSPORTATION OF THERMAL COAL ~ 20%

THERMAL COAL IS USED IN THE PRODUCTION OF ELECTRICITY

### CAPACITY

MILLION TONNES PER ANNUM (MTPA) 85

### EXPORTS

TOTAL GLOBAL SEABORNE COAL EXPORTS ~ 5%

WORLD METALLURGICAL SEABORNE COAL EXPORTS ~ 18%

QUEENSLAND COAL EXPORTS > 30%

### ECONOMY

DIRECT ANNUAL CONTRIBUTION TO QUEENSLAND ECONOMY > \$250 MILLION

### INFRASTRUCTURE

INVESTED IN TERMINAL INFRASTRUCTURE SINCE 2005 > \$1.7 BILLION

### PEOPLE

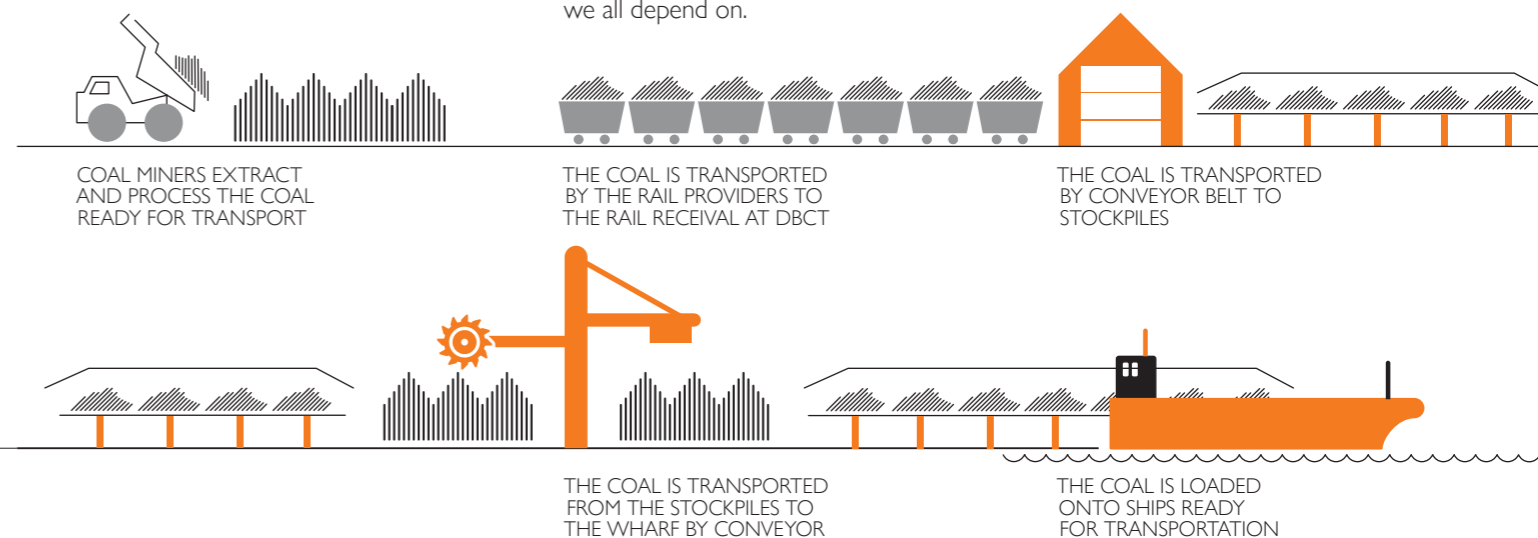
EMPLOYEES ~ 400

CONTRACTORS ON SITE DURING MAJOR WORKS 300 – 700

## DBCT... JUST ONE LINK IN THE CHAIN

DBCT is one of the critical components of the coal supply chain, transporting metallurgical coal used in the production of steel. Steel is essential to the construction and manufacturing industries, which are responsible for creating the infrastructure and everyday products we all depend on.

DBCT's stakeholders include the mines that extract coal, the rail providers that transport coal to the terminal, shipping agencies, steel mills, and ultimately, the consumers of steel and steel products.



## THE COAL IS EXPORTED FROM DBCT ALL OVER THE WORLD



AUTOMOTIVE



CONSTRUCTION



BRIDGES



RAILWAYS

FACTORIES AROUND THE WORLD USE STEEL TO PRODUCE A WIDE RANGE OF ESSENTIAL PRODUCTS



AIRCRAFT



SHIPPING



WIND TURBINES



APPLIANCES

## SUSTAINABILITY IN ACTION: WORKER SAFETY

DBCT is committed to providing a safe and healthy work environment for all workers. The safety of our people and surrounding communities is a key priority. The terminal's health and safety policies guide our compliance with applicable laws, DBCT standards, contractual and other requirements as a minimum foundation of performance.

Everyone at the terminal has a role to play in working together to effectively identify and eliminate unsafe conditions and activities from the workplace and promote a healthier and safer workforce.

Certified to the ISO 45001 Occupational Health and Safety Management Systems standard, the terminal operator uses a risk-based approach, and an audit program ensures critical controls are verified for effectiveness.

DBCT has a number of overarching safety programs and frameworks, including an in-depth Occupational Health and Hygiene Management Program and Material Risk program. The terminal operator's Safety Observer Program is designed to improve safety performance by creating a positive safety culture within each work team to move the organisation to a culture of interdependency.

DBCT actively promotes a healthier workforce through identification and management of occupational hygiene risks. The implementation of the Occupational Health and Hygiene Management Program provides an educational and strategic approach to managing exposure to hygiene risks including noise and respirable dust. The program provides for testing at regular intervals for those personnel at risk of exposure.

Contractors engaged to undertake major capital works are appointed as Principal Contractors. They are subject to rigorous pre-qualification checks including reviews of their safety systems and safety management, with ongoing compliance checks throughout construction.

### CASE STUDY: Mobile Swing Stage Gantry reduces exposure to safety hazards

The terminal has 1,706 marine piles that support jetty and berth structures in a predominately open offshore location. The original protective treatment on a large number of piles was reaching the end of its effective life and required increasing maintenance to ensure structural integrity. The areas in the tidal zone are difficult to access and poses a risk to the safety of the personnel undertaking the work.

DBCTM, together with John Holland designed a 'Mobile Swing-stage Gantry' with the objective of improving safety and reducing the costs associated with the pile maintenance.

The gantry eliminated the need for high risk drop/suspended scaffolds and significantly reduced the time associated with personnel working so close to the water and around tides.

The pile maintenance solution involved wrapping of the piles with a protective tape wrap system, rather than the traditional abrasive blasting and painting. This solution results in lower maintenance requirements over the long-term and further reduces the risk to personnel when executing the task.

Electrical and fabrication services for the gantry were provided by local businesses and the gantry was short-listed at the 2017 National Safety Awards of Excellence.



## SUSTAINABILITY IN ACTION: EMPLOYEE WELLBEING

The terminal's success is due to the commitment of all workers. We strive for a culture based on integrity, courage, accountability, respect, excellence and initiative, with safety as a foundational value. The terminal's reliability is achieved through the actions and quality of our people.

DBCT recognises that diversity brings opportunities through valuing and including different perspectives and tackling the barriers inhibiting inclusion.

The terminal operator has developed and implemented a Domestic and Family Violence Guideline, which provides the business with a blueprint to ensure employees have a supportive work environment if they are experiencing difficult situations in their personal lives.

The initiative won the 'Leading from the Front' award at the Resource Industry Network Chairman's Awards in 2017.

DBCT P/L is also a proud member of the Mackay Domestic Violence Task Force, providing input into strategies, contributing to lasting community change in the region.

An extensive health and wellbeing program is in place for employees, with a specific focus on the seven dimensions of health: emotional, physical, spiritual, intellectual, financial, environmental and social wellness.

DBCT P/L sponsors the 8km Mackay Marina Run. The company actively promotes employees and their immediate families' participation in the annual event.

The event raises funds for the Leukaemia Foundation which provides essential support services to Mackay residents travelling to Townsville and Brisbane for medical treatment.

# SUSTAINABILITY IN ACTION: ENVIRONMENT

DBCT is committed to operating sustainably, and valuing the environment and surrounding communities, to create lasting social, environmental, and economic benefits.

Operating within the Great Barrier Reef World Heritage Area offers unique challenges and opportunities to innovate. Everyone working at DBCT has the responsibility to ensure their activities achieve long-term, positive outcomes to benefit future generations.

The terminal operator's Environmental Management System is certified to world's best practice ISO 14001:2015, and is regularly audited by independent external auditors.

Robust monitoring systems are in place to report onsite dust, water and noise data and undertake vegetation management.

Our commitment to preserving the health of the unique operating environment is also demonstrated through active participation in the North Queensland Bulk Ports (NQBP) Marine Environmental Monitoring Program.

The terminal's industrial waste program has been in place for more than 15 years, and aims to address resource recovery. The employee led 'War on Waste' initiative also supports this program.

DBCT workers play an important part in helping to achieve the terminal's environmental objectives including identifying, developing and implementing site-wide environmental improvements.

The terminal operator organises quarterly beach clean-ups at local beaches, and is a partner in the Mackay-Whitsunday Healthy Rivers to Reef Partnership.



## AREAS OF FOCUS



### CASE STUDY: Water Quality Improvement Project

Between 2014 and 2016, DBCT undertook the Water Quality Improvement Project (WQIP). In 2016, the \$55 million WQIP project was nominated for the Queensland Premier's Sustainability Awards and received a Highly Commended award.

The objective of the project was to implement a range of initiatives that collectively would significantly reduce the likelihood of water quality exceedances from the DBCT Industrial Dam (ID).

Being the lowest point within the DBCT catchment, the ID collects all recycled operational water and high intensity stormwater run-off from the stockyard and out-loading conveyor systems.

With the Great Barrier Reef Marine Park in close proximity and some 70 ha of the finest high-grade coking coal stockpiles sitting within the DBCT stockyard, it was a challenge to maintain the water quality within allowable release limits during high intensity wet season rainfall events.

The multi-faceted project provided new infrastructure to increase the ID buffer capacity (to reduce overflows), an increase of 1000 ML of dam storage capacity within the terminal site (to store more water by raising the wall of the existing Quarry Dam and constructing a new Rail Loop Dam), and increased pump transfer rates between the dams.

The increase in recycled site water harvested within the dams now also provides more water for terminal dust suppression and operational activities.

Improved water quality has also been achieved through the implementation of new coal fines recovery infrastructure that allows for detention, settlement and recovery of the settled coal fines outside the historical wet season. In addition, a flocculant plant was constructed to encourage incoming coal fines to settle out quickly into the ID cells for later removal, thus improving the water quality in the event of a discharge the following wet season.

## SUSTAINABILITY IN ACTION: SUPPORTING OUR COMMUNITY



The terminal has been an integral part of the Mackay region for more than 35 years. We have a social responsibility to our surrounding communities, and a genuine desire to make a real and valued contribution to the economic and social development of the region.

Established more than 14 years ago, DBCT's Community Working Group provides an engagement forum between DBCT P/L, DBCTM and community representatives, to discuss operations on site.

Bi-monthly meetings are held to review social, environmental and economic issues in our surrounding communities.

Terminal representatives are also members of the Community Reference Group established by North Queensland Bulk Ports (NQBP). The group provides a forum for community representatives and stakeholder groups to discuss issues relating to the operation, development and planning activities within the Port of Hay Point.

DBCT works closely with council representatives and residents to share updates on expansion plans and address community concerns.

Through a robust sponsorship program, the terminal operator contributes more than \$350,000 per year to the region for initiatives improving youth education, the arts, sports, health, environment, mental health, support of the homeless, economic and community development, and events. We focus on building meaningful partnerships to deliver positive outcomes across our region.

### IN FOCUS: Mackay-Whitsunday Healthy Rivers to Reef Partnership

The Mackay-Whitsunday Healthy Rivers to Reef Partnership is a collaboration between community, Traditional Owners, farmers and fishers, industry, science, tourism and government with the primary purpose of achieving an annual Mackay-Whitsunday regional waterway health and stewardship report card.

The report card uses the best independent science within its' regional monitoring programs to measure waterway health. DBCT P/L provides top tier financial support for the partnership, and also has independently provided ongoing funding (\$120,000 annually) for water quality monitoring in the local area.

As part of the International Year of the Reef (2018), DBCT P/L partnered with Mackay Regional Council to install 40 gross pollutant traps in the local area to reduce the amount of plastics, cigarette butts and street pollutants entering Mackay's coastal waterways and the Great Barrier Reef Marine Park.

## MANAGEMENT AND OPERATIONS STRUCTURE

**DBCT Management Pty Limited (DBCTM)** leases the terminal on a 99-year lease, comprising a 50-year lease with a 49-year option. Brookfield Asset Management (Brookfield), a global asset manager, is the majority shareholder in DBCTM. DBCTM is responsible for the strategic management of the terminal, including capital works and terminal expansion.

**Dalrymple Bay Coal Terminal Pty Ltd (DBCT P/L)** is responsible for the daily operation and maintenance of the terminal under an Operations and Maintenance Contract (OMC) with DBCTM. A majority of the terminal's customers are shareholders in DBCT P/L. This creates a strong alignment of interests and a strong incentive to ensure the facility continues to be efficiently and sustainably operated and maintained.

## SUSTAINABILITY IN ACTION: GOVERNANCE

Robust collective governance frameworks maintained by DBCTM and DBCT P/L, combined with the stringent risk management practices of both organisations, ensures the operation of the terminal meets world's best practice across a number of parameters critical to terminal operations.

As a subsidiary of the Brookfield Asset Management (Brookfield) group, DBCTM has adopted the vigorous governance practices developed by Brookfield for its portfolio of companies. The DBCTM board comprises a number of Brookfield executives, a co-investor representative, and one independent director.

The Brookfield Board Compliance Program ensures DBCTM must develop programs and policies, and regularly report to its board on particular areas of focus, including, but not limited to, enterprise risk management, health, safety and environment, anti-bribery and corruption, cybersecurity and code of conduct.

The expertise of Brookfield's internal audit services is utilised to perform reviews of DBCTM's systems and processes as well as to review key functions of the operator. DBCTM reports the findings of these reviews to the DBCTM board and to Brookfield.

Shareholders of DBCT P/L include a number of global diversified mining companies. Representatives of these companies make up DBCT P/L's board.

The terminal operator is guided by its Sustainability Management Standard and maintains effective commercial and governance processes, which are subject to rigorous internal and external audit.

Under the OMC with DBCTM, DBCT P/L must comply with (and where relevant maintain accreditation under) ISO 9001 Quality Assurance Management Systems, ISO 45001 Occupational Health and Safety Management Systems, ISO 14001 Environmental Management Systems and ISO 31000 Risk Management Guidelines.

An ISO 9001 certified management system is maintained by DBCT P/L through development of internal documents and systems, which are rigorously audited to ensure continual improvement of processes and a high standard of business performance.

DBCT meets the reporting obligations of the National Greenhouse and Energy Reporting (NGER) Act 2007 and the National Pollutant Inventory (NPI).



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