

DELIVERING SUSTAINABLE VALUE

ENVIRONMENTAL INNOVATION



Winner



2011 Premier's ClimateSmart Sustainability Awards

As efficient specialist operators of mines, contract miners have an important part to play in the future sustainable development of the Australian mining industry. Consequently, at Downer EDI Mining our environmental strategy is progressive and responsive, with a strong focus on:

- Delivering significant emissions reductions for our clients' mining operations; and
- Preparing them to address any future carbon reduction scheme legislation implications.

Our industry-leading performance is founded on our program of low-emissions mining solutions, which has proven to deliver a step change in energy costs and carbon risks. Benefits of this program include:

- Lower carbon exposure, reduced risk, lower energy costs and diminished carbon tax liability;
- Reputational advantages to employees, community and government;
- Enhanced sustainability values via a lower emissions profile; and
- Rigorous compliance with governance processes.

LOW-EMISSIONS MINING SOLUTIONS

Downer Energy and Emissions Measure (DEEM™)

Our unique DEEM™ tool enables us to quantify, compare and improve our operational fuel, GHG emissions and energy performance. Besides its utility in setting targets and tracking performance against GHG and energy indicators, the DEEM™ also informs project business improvement decisions. It does this by quantifying and comparing the fuel, GHG emissions and energy efficiencies associated with: different mining

methods; mine planning and design changes; haul road changes; changing equipment operator behaviour; mining plant selection; and fuel types.

At our operations at Commodore open-cut coal mine in Queensland, the DEEM™ has demonstrated a 30% reduction in GHG emissions and an 18% improvement in energy intensity over five years, as a result of the introduction of a range of improvements.

Renewable fuels

Biodiesel is a renewable fuel with a significant greenhouse gas (GHG) emission reduction potential of approximately 20%. Through extensive research and development, we are able to provide clients with a commercial, competitive and practical alternative to using 100% mineral diesel in their fleet. We began trialling B20 biodiesel in 2007, and now use it in our light- and heavy-vehicle fleets at Commodore and at Boggabri open-cut coal mine in New South Wales, resulting in annual GHG emissions of over 10,500 tonnes CO₂-e.

We are now the largest consumer of renewable fuels in the Australian mining industry.

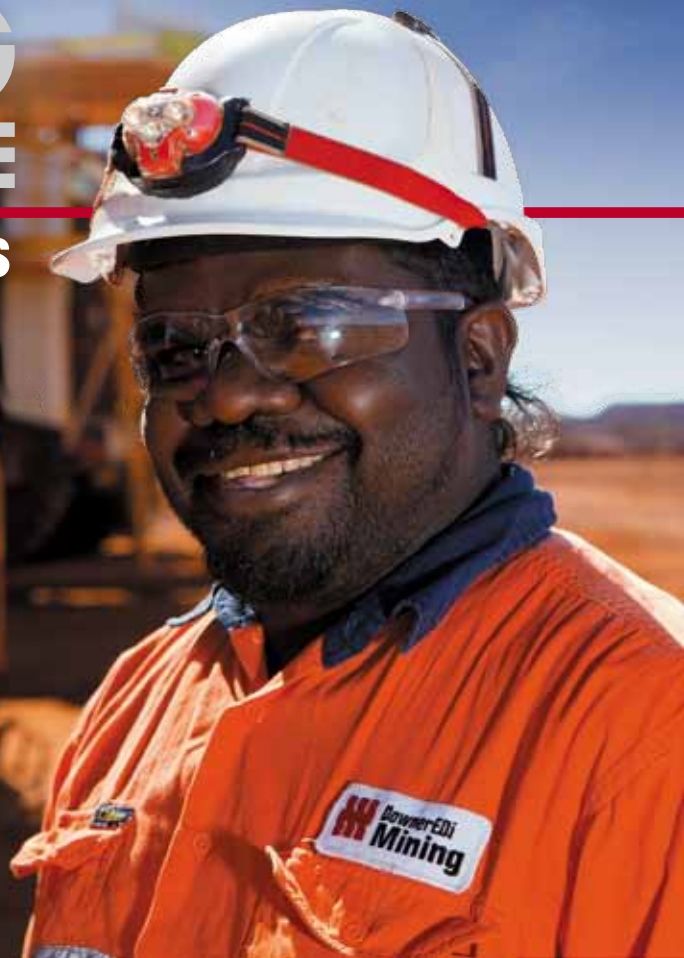
Fugitive methane emissions assessment

Fugitive methane emissions account for a significant component of coal mine GHG emissions, and it is widely known that the NGER Determination's generic fugitive methane emission factors can result in these being seriously overestimated.

Following our successful pilot site-specific assessment at Commodore, we are now able to provide (with key industry partners) the services necessary to develop a mine site-specific fugitive methane emission factor. Our methodology uses Australian and international sampling and analytical standards, and we have complied with the Department of Climate Change's ACARP requirements.

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PROACTIVE INDIGENOUS AFFAIRS



Indigenous Affairs is a vital part of the mining industry and, as our clients increasingly seek to enhance workforce diversity, we are continuously enhancing our capabilities in this regard.

Our successful Indigenous recruitment strategy is underpinned by the strong community relationships and partnerships we form with community organisations throughout Australia, as well as our ability to create innovative Indigenous recruitment and training solutions.

CULTURALLY-APPROPRIATE METHODOLOGY

To assist in attracting Indigenous employees to our business, we have developed culturally-appropriate recruitment and training methodologies, which include the following components:

- Local community consultation;
- Community information sessions attended by both Indigenous Affairs staff and representatives from site; and
- Assessment workshops run on site for selected individuals, incorporating experiential learning, literacy and numeracy exercises.

In the 12 months from 30 September 2010, we recruited 101 Indigenous employees and have run five assessment workshops on sites across the country: two in Western Australia, two in New South Wales and one in Queensland.

In July 2011, we went to Rockhampton, Queensland to recruit local Indigenous people for Norwich Park open-cut coal mine. Over 120 people attended the information session in Rockhampton, and we hired 15 candidates from the on-site assessment workshop. In October 2011, we repeated the process at Boggabri open-cut coal mine in New South Wales, which resulted in the recruitment of six Indigenous employees. This takes our total to 12 Indigenous employees hired at Boggabri through the Workshop Assessment Program since the start of 2011.

REAL JOBS

A unique feature of our Indigenous development methodology is a strong focus on mainstreaming people into “real jobs”. Underpinned by structured training and supported by line management, our Indigenous recruits are part of the line structure from commencement.

Paraburdoo iron ore mine

At Paraburdoo we run a three-month Indigenous training program, where trainees complete a Certificate II in Surface Extraction after theoretical and practical training in mechanical haul trucks. Once the trainees complete their certificate, they operate the truck solo on three two-week rotations, before being offered the opportunity to join the client’s operational workforce.

Christmas Creek iron ore mine

Christmas Creek was the recipient of the majority of our Indigenous recruits in the 2010–2011 financial year and now an impressive 68 Indigenous employees work at the mine, making 12% of Christmas Creek’s workforce Indigenous. Thirty of these recruits have been employed directly from Fitzroy Crossing, making us the largest private employer in the Fitzroy Crossing community.

GENUINE COMMERCIAL PARTNERSHIPS

Our sound community relationships developed through our recruitment initiatives are further strengthened by contributing to local businesses, and using local suppliers and subcontractors. We have long-term, robust partnerships with some of the largest and most enduring Indigenous mining contractors, including Carey Mining, CDE Civil, Ngarda and Yamatji Mining & Civil.