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# **ABOUT US**

#### **NINE DECADES OF EXPERIENCE**

At Downer EDI Mining (Downer Mining), we have been successfully delivering contract mining and civil earthmoving services to an impressive list of global clients for 90 years. We are now one of Australia's leading mining contractors, with annual turnover of around \$2 billion.

As at end of June 2011, we employed 4,278 people (of whom 20% were contractors) in Australia, New Zealand, Papua New Guinea, South America and South Africa, and had work-in-hand of around \$7.5 billion.

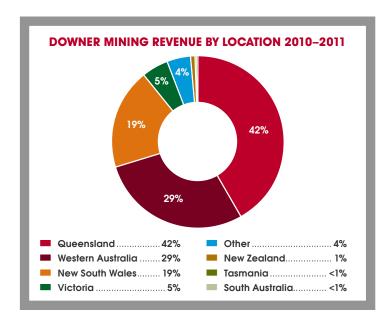
Our business is structured into four operating divisions:

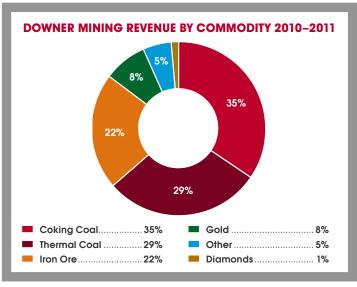
- Open-Cut Mining;
- Underground Mining and Exploration Drilling;
- Blasting Services (through wholly owned subsidiary Downer Blasting Services); and
- Tyre Management (through wholly owned subsidiary Otraco International).

We support our coal and metalliferous mining clients at all stages of the mining lifecycle, with a wide range of services including:

- Open-cut mining;
- Underground mining;
- Drill and blast services, including explosives manufacture and supply;
- Exploration drilling;
- Crushing;
- Tyre management;
- Mobile plant maintenance;
- Mine planning and design;
- Construction of mine-related infrastructure;
- Rehabilitation;
- Low-emissions mining solutions; and
- Indigenous training and development.

As a division of Downer EDI Limited (Downer Group) – an ASX- and NZX-listed company – we can also offer our clients the broad capabilities that this geographically diverse, multi-disciplined engineering, construction and resource services business has to offer.





Cover Photo: Bernard Berringal is an operator at Christmas Creek iron ore mine.



# CEO'S MESSAGE

The past year has seen unprecedented growth in our business. We secured over \$6 billion of work, met all our financial targets to achieve turnover approaching \$2 billion, and directly employed over 1,000 new people.

First and foremost, however, we accomplished the above without losing our focus on Zero Harm. We met our key safety targets for Safety Behavioural Observations (SBOs)<sup>1</sup>, Hazard Reporting, Lost Time Injury Frequency Rate (LTIFR)<sup>2</sup> (down from 1.2 to 1.0) and Total Recordable Incident Frequency Rate (TRIFR)<sup>3</sup> (which decreased from 10.6 to 8.9). We also maintained our strong environmental performance, receiving no fines, prosecutions or infringements.

It was very pleasing to have been formally recognised twice this year for our sustainability performance. We were the winner of the Queensland Premier's Corporate ClimateSmart Sustainability Award and a finalist in the "Leading in Sustainability – Setting the Standard for Large Organisations" category of the 2010 Banksia Environmental Awards.

Through numerous initiatives across the business, we have continued to reduce our greenhouse gas (GHG) emissions, further improving our environmental performance and preparing us well to address any carbon reduction scheme legislation implications.

In the health area, we have expanded our health and well-being strategies, and enhanced our participation in the numerous health initiatives run throughout the year. We have also

continued to put pioneering health research into practice through our ongoing partnership with Queensland University of Technology.

With regards to diversity, we gave a commitment at the beginning of the year to increase our Indigenous recruitment. Our annual target of 40 new recruits was well and truly exceeded, with 81 Indigenous people starting work with us in the past 12 months.

All of our divisions contributed to the year's success:

- In the west we celebrated the award of our biggest contract to date – and one of the largest mining services contracts of its type in Australia – our six-year, \$3 billion contract at Fortescue Metals Group's Christmas Creek project;
- In Queensland we were awarded two five-year contracts, jointly valued at approximately \$2 billion, with BMA Coal at Goonyella Riverside and Norwich Park;
- In New South Wales we signed a new five-year, \$900 million contract with Idemitsu Australia Resources Pty Ltd for the continued provision of mining services at Boggabri;
- Blasting Services experienced 25% growth on the back of expansion at existing contracts across the country;

- Our Underground division secured an extension to its contract at Cracow and new business in Papua New Guinea; and
- Otraco also won new business overseas in South Africa and South America.

We have entered 2011–2012 with work-inhand of approximately \$7.5 billion. The new work won – largely from new and existing blue chip clients – has provided a solid platform for the growth of our company over the years to come and demonstrates a high level of satisfaction with the services we are providing.

All these great results have only come about due to the dedication and hard work of each and every one of our employees, and I would like to thank them all for the commitment and enthusiasm with which they have risen to the challenges of the past year.

**David Overall**Chief Executive Officer



SBOs engage employees in creating a safe workplace, as supervisors: observe their team members conducting tasks; identify positive behaviours, as well as unsafe acts, conditions and work practices; discuss with them corrective actions to be taken; and gain their commitment to address any issues.

<sup>2</sup>A Lost Time Injury (LTI) is an injury that results in a minimum one shift's absence. The LTIFR is the number of LTIs per million hours worked.

<sup>3</sup>TRIFR is the number of fatal injuries + lost time injuries + medically treated injuries per million hours worked.

# MAP OF OPERATIONS





# HEALTH & SAFETY



LTIFR
(AT 30 JUNE 2011)



Originally joining us as a participant in our Graduate Program, Dayne Somers led Commodore's highly successful team as Project Manager in 2010–2011.

## OVERRIDING COMMITMENT TO ZERO HARM

At Downer Mining, we are committed to a goal of Zero Harm, based on a belief that all injuries, occupational illnesses and diseases are preventable. Care for our people is paramount and an integral part of the way we do business.

#### Systematic approach

We are committed to providing a hazard-free workplace in which our employees can perform their tasks safely and efficiently. We recognise the key role that our people play in identifying hazards, and suggesting improvements and innovations in their workplaces. Therefore our Health and Safety (H&S) Management System has been designed to promote employee engagement in hazard identification and solution development. It forms part of our Integrated Management System (IMS) – our primary tool for managing risk – which incorporates our Health, Safety and Environment (HSE) and quality management policies, standards and procedures.

Our IMS has been certified by third-party accredited certification body Bureau Veritas to the following standards:

- AS/NZS 4801:2001, Occupational health and safety management systems;
- BS OHSAS 18001:2007
   Occupational health and safety management systems;
- ISO 14001:2004 for environmental management systems; and
- ISO 9001:2008 for quality management systems.

It also complies with the following international and national management system standards/codes:

- National Occupational Safety Association (NOSA) South Africa;
- National Safety Council of Australia (NSCA) 5 Star; and
- Enduring Value The Australian Minerals Industry Framework for Sustainable Development.

To ensure our compliance with the IMS, we have a thorough internal audit regime to verify the level of implementation of the system across our sites. Bureau Veritas also conducts annual surveillance audits.

Our H&S Management System is used to address hazard control and accident prevention, and to ensure that our people are trained and involved. We believe that H&S is a shared responsibility. While the system is developed and monitored by trained professionals, all employees are accountable for following the procedures and work practices in the system, and participating in improving the workplace.

#### Record safety performance

Our continued focus on personal safety and hazard awareness ensured that we again achieved record performance, reducing our LTIFR by 24% and our TRIFR by 16% to 1.0 and 8.9 respectively. During 2011–2012, we are aiming to reduce our TRIFR by a further 22% to 6.9.

Our lead indicators are aimed at quantifying metrics that continuously

#### COMMODORE CELEBRATES TEN LTI-FREE YEARS

In June, our team at Commodore open-cut coal mine celebrated its tenth year of operation – ten years without a single lost time injury!

This is particularly significant because, since 2003, we have provided a total mine service at Commodore, whereby we are not only responsible for providing our services, but also for operating and managing the mine and associated activities for the site as well.

Not only does the Commodore team excel in its safety performance, it is also exemplary in its ability to tap into the local workforce. Of the 83 people working on the project, over half live in the nearby towns of Millmerran and Pittsworth.

Main Photo: Diesel fitter, Adam Kirton, does a Take 5 Personal Pre-task Risk Assessment at Boggabri coal mine.

#### TRIALLING NEW TECHNOLOGY TO DETERMINE MUSCULOSKELETAL RISK FACTORS

Our Enhancing Workforce Health Program recognises the need for new and innovative evidence-based solutions to reduce the risk of illness and injury in the workforce. For example, work on the issue of musculoskeletal injury is studied from a range of biological and psycho-social perspectives. Non-invasive sensor technology is being trialled to provide information on physical exposure to risk factors for musculoskeletal problems. Diagnostic biomarkers are also being developed to evaluate the effects of work exposures on the development of chronic musculoskeletal disorders.

This, and other health information resulting from the Enhancing Workplace Health Program, is being used to advise, develop and evaluate current H&S systems, and make recommendations for modification where necessary. Such recommendations are evidence-based and are made in consultation with the workforce at all levels.



IHBI's Tony Parker fits a sensor to Commodore's HSE&T Coordinator Ben Karma as part of the musculoskeletal study.

improve our leadership culture. We once again met our targets for the number of recorded hazards identified per employee, as well as the number of SBOs conducted by supervisors. We failed to meet our target for the close-out of safety actions by due date; however, this was a stretch target from the previous year's indicator of safety actions closed out 'within 28 days of due date'. These safety actions are developed through hazard identification, audit or incident mitigation measures, and are critical to preventing occurrence or recurrence of an incident.

We are pleased to report that we did not incur any safety-related fines or prosecutions during the financial year.

#### **H&S** leadership

Effective leadership is key to improving our H&S performance. We therefore ensure that our line managers are

fully equipped with the skills they require to safely lead their teams.

We run an HSE Leadership for Supervisors course approximately every two weeks, designed for those who supervise work teams as a significant part of their job. Attendees include project managers, engineers, superintendents, supervisors and HSE coordinators. The course teaches participants how to:

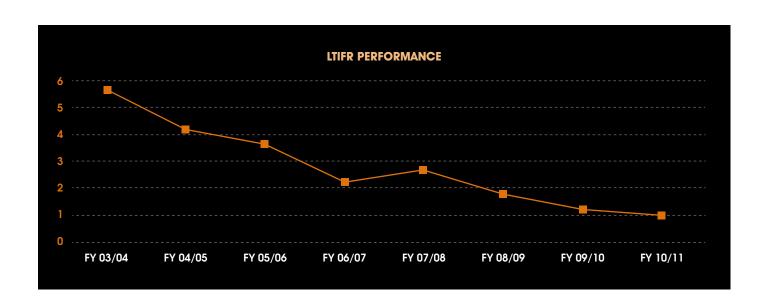
- Conduct inspections; identify, analyse, assess, address and monitor risks; recommend treatments; and contribute to implementation of treatments;
- Participate in the preparation, testing and documentation of safe working instructions;
- Investigate incidents; and
- Communicate effectively.

Disappointingly, we again failed to meet our target for the percentage of line managers completing this course, largely due to the volume of new people we have recruited during the year. It does, however, remain a mandatory requirement.

#### From evidence to practice

The changing demographics of the mining workforce and the growing demand for skilled workers increases the importance of sustaining a healthy workforce now and for the future. Although health is strongly related to safety, the two areas are not well integrated and the relationship is often poorly understood. As such, there is an important need to raise the profile of health within the H&S domain.

Since 2008, through our four-year Enhancing Workforce Health Program in collaboration with the Institute of Health







Murray Parker and a team mate lay a sling onto the Safe Mine Sling Holder.

& Biomedical Innovation at Queensland University of Technology, we have been developing a holistic, whole-of-company approach to identifying key factors that impact on the health of the workforce, as well as opportunities for improvement of health surveillance systems and interventions.

A review of our H&S climate in 2010 led to each of our projects implementing strategies for progressive improvement. In addition, we have developed surveys to provide information on heat stress, musculoskeletal injury, general health status and work ability, and our health and safety culture. For example, objective data obtained on heat stress has enabled us to establish new best-practice hydration procedures.

Importantly, the program recognises and values the input of our employees,

and regular consultation at all levels of the workforce has been critical to the program's success.

Also key to the success of the program have been efforts to raise individuals' awareness of their current health status. For example, during the year, our team at Wambo open-cut coal mine in New South Wales introduced a new One Life Health Program. The program aims to determine the health of our workforce, and provides information and tools to reduce the risks of lifestyle-related diseases and their impact on work performance.

Following personal health assessments, health programs are created to meet the individual needs of our Wambo employees. They then receive ongoing coaching and support from a range of experienced health professionals to help them achieve their goals.

# INCIDENT LEADS TO INNOVATION

Commodore employee Murray Parker was part of a recovery team using a bulldozer and sling to recover a bogged truck. He was holding the sling around the tyne of the bulldozer to make sure that it didn't slip out of place. Unfortunately, as the bulldozer moved off to take up the slack in the sling, Murray's finger was caught between the sling and the bulldozer's ripper box.

This incident led to Murray inventing the "Safe Mine Sling Holder"; a simple device designed to be placed on the tyne of a bulldozer that is very easy and safe to use.

Once the sling holder has been positioned on the tyne and the sling has been supported on the sling holder, there is no need for anyone to hold the sling in place. Employees can stand a safe distance away, and so the likelihood of injury is greatly reduced.

The Safe Mine Sling Holder has been extensively tested at Commodore Mine and, since its introduction, there have been no finger pinch injuries as a result of this operation, and wear and tear on slings has been substantially reduced.



PEOPLE & COMMUNITY



NEW INDIGENOUS RECRUITS (AT 30 JUNE 2011)



General Manager of Otraco Radomiro Tomić in Chile, Pedro Pacheco Iriarte (back right), presents the Association of Parents of Children with Cerebral Palsy with Otraco's winnings from the HSE Awards.

#### A YEAR OF GROWTH

During 2010–2011, our demand for employees increased substantially with the need to resource the Christmas Creek project and ramp-ups at Goonyella Riverside and Norwich Park. Despite tough competition in the market place, we employed 1,343 new people to increase our workforce to 4,278 (including contractors) by 30 June 2011.

Our strong, inclusive and empowering culture has contributed to our appeal as an employer. By recognising and accommodating our employees' differences, we hope to continue to attract more talented and skilled people, retain experienced employees and better manage our employees' well-being issues.

#### **Unlocking potential**

We are very focused on unlocking the potential of our people, and provide employees and contractors with access to learning and development opportunities through the Downer Learning Academy.

Introduced during 2010–2011, the Academy provides an integrated platform for managing learning and development records, enabling the business to demonstrate fulfilment of regulatory and organisational compliance obligations required in the mining industry. The Academy also supports course administration functions, enrolments, cost tracking, and access to training records and development plans for employees and supervisors, as well as providing an e-learning platform for the delivery of online learning solutions.

Our leadership training strategy targets leadership development at three broad levels: current and aspiring supervisors; managers; and senior managers. Internal courses for current and aspiring supervisors include Coaching Skills, Conflict Resolution and the Foundations of Leadership. During 2011–2012, we will be launching our "Supervisor to Leader" program, which consolidates these individual packages into one, with the addition of a new workshop – HR for Supervisors. This new program will complement our Management Program and the Downer Leadership Development Program, both of which are aimed at managers and senior managers.

This suite of leadership programs provides developmental opportunities at all stages of an employee's career.

#### **Attractive benefits**

We recognise that a superior employee benefits package is key to attracting high-calibre employees, and ensuring that they stay and grow with us. As well as offering competitive remuneration packages, we also offer salary sacrifice options, novated leasing, salary continuance insurance, impressive relocation packages, and a default super fund with administration and death premium costs covered by the company.

Our strong relationships with suppliers also allow our employees to benefit from a range of discounts and deals with companies such as Qantas, Microsoft, Dell, Hertz, Origin Energy and ANZ.

In 2011–2012, we will be introducing paid parental leave as an important

# OTRACO'S WINNING PARTNERSHIP APPROACH TO COMMUNITY RELATIONS

Active community engagement is nothing new for Otraco's team at Escondida copper mine. The team has been volunteering with the Association of Parents of Children with Cerebral Palsy since 2010, and earlier this year donated its \$5,000 prize for winning the Best Health and Safety Innovation in the 2009–2010 HSE Awards to this not-forprofit organisation.

Prior to this, the Escondida team had a four-year relationship with Hogar Orione, an aged care and children's mental health facility. Here they made an invaluable impact on the organisation by donating some of their salary to the centre, as well as working collaboratively to build a gate, concrete area, kitchen and big wall around the centre for security.

Main Photo: Vacation students, Andrea Dale and Aaron Drake, are studying engineering at university.

#### CREATING CAREERS IN THE FITZROY CROSSING COMMUNITY

In May 2011, several very important people converged on the small Kimberley community of Fitzroy Crossing for a very important occasion.

Billionaire businessman, James Packer, Fortescue Metals Group (Fortescue) Chief Executive, Andrew Forrest, and Federal Minister for Indigenous Employment, Mark Arbib, joined our CEO, David Overall, to celebrate the graduation of 24 members of the Fitzroy Crossing community who had successfully completed their Certificate III in Civil Construction and were starting on-the-job-training to join us as production operators at Christmas Creek Mine.

The offsite training was delivered through a partnership between ourselves, Fortescue, the Men's Shed, the Australian Children's Trust, the Department of Education, Employment and Workplace Relations and Kimberley TAFE.

In addition to these 24 recruits, we also directly employed a further three local Indigenous people during the year. These 27 jobs for the people of Fitzroy Crossing will bring over \$2 million back into the local economy.



Pictured at the graduation ceremony are (from left): Russell Topliss, James Packer, David Overall, Andrew Forrest and Roderick Andrews with wife and children.

step in helping our employees to better manage the balance between their professional and personal aspirations. The new arrangements will be effective for qualifying employees from 1 July 2011.

Throughout the year we continued our "Bring a Friend" employee referral program, which rewards our people for referring candidates for open vacancies in roles where skills are scarce. The "Bring a Friend" program is made up of two reward streams: a cash payment and a holiday draw. Over the past year, 14 candidates were referred, of whom 10 were employed, saving the company an estimated \$90,000 in recruitment costs. This is similar to last year (when 12 candidates were referred and 11 hired) and reflects the skills scarcity that the resources sector is experiencing.

#### Our pipeline of talent

We draw on a pipeline of talent to support our growing business, through the development of trainees, apprentices and graduates, as well as through an innovative approach to Indigenous development.

We employ graduates from a variety of disciplines and with a diverse range of skills. As at 30 June 2011, there were 24 people participating in the Graduate Program (consistent with 2009-2010), in the disciplines of mining, civil and mechanical engineering, surveying, H&S, environment, commerce, human resources and public relations. Participants in our Graduate Program can look forward to a wide variety of placements at our project sites across Australia and New Zealand, and at our head or regional offices. They can also depend on detailed personalised development plans, and support, coaching and mentoring from senior colleagues.

We also offer mining engineering scholarships, and are currently supporting two students from the University of Queensland and one from the University of Western Australia.

Tradespeople are essential to the inhouse maintenance support and asset management capabilities that we provide to our clients. Our apprenticeship program assists in ensuring that we can maintain this level of service in the long term. During 2010–2011, we directly employed 36 apprentices nationally in the diesel fitting and electrical trades (up from 30 in 2009–2010).

In addition, we have seven trainees in surface mining and business.

We also have strategies in place to train unskilled people for roles as operators. Our state-of-the-art operatortraining simulators enable us to train operators in the use of a range of heavy equipment. The simulators provide a safe environment in which operators can experience virtual scenarios without the risk of personal injury or damage to equipment. With several different types of training and assessment options, including emergency response scenarios, correct machine operation and productivity, the simulators provide comprehensive training programs to operators irrespective of skill level.

#### **Diversity and inclusiveness**

Our recruitment and selection procedure actively promotes diversity in the workplace, with annual targets set for the recruitment of new Indigenous employees and to increase the representation of women in operational roles. Disappointingly, we did not achieve our target for the percentage of female employees, which decreased slightly from 12.5% in 2009–2010 to 12.0% in 2010–2011. The recently established Downer Diversity Committee, comprising



We were joined by representatives from co-supporters BMA Coal and truck tray manufacturer Duratray International to celebrate the commissioning of a pink haul truck at Norwich Park in support of the National Breast Cancer Foundation.



senior managers from across the Group, will provide Group-wide strategies to attract more women into our business.

Our Indigenous employment strategy, however, once again delivered a strong result. Our target for 2010–2011 was to hire and train 40 individuals across sites all over Australia. We exceeded this target, with 81 Indigenous employees recruited. In 2011–2012, we plan to capitalise on our success of the past year and increase our target to 70. Although this is a marked increase from our previous target, we are confident that we can achieve this based on last year's result. We will be conducting assessment workshops at various sites around the country to identify suitable new recruits.

To assist in attracting Indigenous employees to our business, we have developed specialist 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.

Our success in Indigenous recruitment is underpinned by strong community relationships and partnerships with community organisations. These relationships are further strengthened through contributing to local businesses,

and using local suppliers and subcontractors. We have long-term, robust partnering arrangements with some of the largest and most enduring Indigenous mining contractors, including Carey Mining, CDE Civil, Ngarda and Yamatji Mining & Civil.

#### **Community support**

In addition to providing local employment opportunities, we are committed to making a positive contribution to the communities in which we operate through sponsorships and donations, either financial or in-kind. A key component of our community support program is our HSE Awards. Each of the winners of the five categories is given \$5,000 to donate to the community cause of their choice.

Since 2006, we have been the Platinum sponsor of the annual Gong Ride – a 90-kilometre charity cycle ride from Sydney to Wollongong – to raise funds for MS Australia. Now joined by riders from other divisions of Downer, in 2010 our 132-strong team raised over \$137,000, claiming the honour of top fundraiser out of 865 teams. This brings the grand total we have raised in our five years of participation to just over \$422,000.

We also encourage our employees to participate in charity events, such as fun runs and cycle rides, by paying their entry fees.

In addition, every year we provide a scholarship through not-for-profit intercultural exchange organisation, AFS Australia, to the son or daughter of one of our employees, to study abroad and experience life from a new perspective.

# NICOLE'S DREAM COMES TRUE AT PARABURDOO

Nicole Clinch was born, and has lived all her life, in Carnarvon.
From a very young age she wanted to drive a truck. Her father is a truck driver, and there has been a truck parked on the front lawn for many years. A single mother, Nicole had tried for over five years to find employment in the mining industry and to make a better life for her three children, now aged 18, 17 and 14.

The opportunity finally came when we were recruiting in Carnarvon for our training program at Paraburdoo. Nicole came, with many others, looking for an opportunity in an administration role, assuming that this was the only way in. However, our team believed she should be given the opportunity to go with her heart and signed her up for the program.

Nicole started with us in May, first completing her Certificate II in Surface Extraction and then progressing to Haul Pack trucks. She is now a fully fledged operator on a pit crew.

Nicole says: "It's been awesome. Scary at first, but I have made new friends and have settled in well. The children have accepted this lifestyle and are pretty proud of Mum. It's great to see more Aboriginal women in mining. Thanks to the team at Downer Mining for believing in me and for giving me this opportunity to make a positive change in my life."



Nicole is now a qualified operator.



**IMPROVEMENT IN GHG EMISSIONS** INTENSITY (AT 30 JUNE 2011)



manufacturing facility.

#### **COMPLIANCE AND RISK MANAGEMENT**

Environmental sustainability is fundamental to our current and future business success, and a key element of our licence to operate. Our environmental governance programs are based on an externally certified ISO 14001 Environmental Management System (EMS). Consistent with ISO 14001, the EMS has the following five foundation elements, which are incorporated in our environmental governance and risk-based performance standards and programs:

- Compliance management;
- Risk management;
- Incident management;
- Continuous improvement; and
- Performance reporting.

Every project has an Aspects and Impacts Register and an Environmental Management Plan (EMP), which are audited against internal and external standards. The specific environmental needs of our clients and other stakeholders are integrated into our planning and operational processes through these project EMPs. They contain annual company-wide Key Performance Indicators (KPIs), which are included in the scorecard at the back of this report. We are continually improving our business practices, and this year's scorecard includes a new KPI: water recycling at our blasting emulsionmanufacturing facilities.

#### Compliance management

Despite the challenges presented by the Queensland and New South Wales floods this year, we maintained our exemplary environmental compliance record, with no fines, prosecutions or infringements. During 2010-2011, Mt Thorley emulsionmanufacturing plant in New South Wales and Commodore Mine in Queensland reported non-compliances for waterauality discharges caused by extreme weather events. There was no material environmental harm from either incident, and we have worked with the respective State Government regulators and other stakeholders to ensure positive measures are being progressively and transparently implemented to prevent recurrence. Measures implemented include water balance modelling, planning and management, and water recycling at Mt Thorley, together with improved pumping capacity and additional infrastructure.

#### **Risk management**

We continuously seek to reduce our risks and improve our systems. Our Compliance Register Program ensures that all projects check their compliance obligations on a monthly basis. The program identifies compliance obligations, determines actions to demonstrate compliance, and ensures the routine, systematic checking of compliance status. We expanded the program during the year to include our blasting emulsionmanufacturing facilities.

#### MT THORLEY RECYCLES **RUN-OFF WATER**

In late 2010, our Blasting Services' Mt Thorley emulsionmanufacturing plant in the Hunter Valley experienced a number of continuous heavy rainfall events. Considerable effort was made to prevent potentially contaminated run-off water from the facility entering nearby natural waterways.

Facilitated by OPSIM™ modelling software, Blasting Services has since implemented a run-off water capture and treatment system. The captured water is treated and used in the manufacture of blasting emulsion.

This innovation has the potential to reduce the reliance on town-supplied water by in excess of 1.6 million litres every year; enough water to supply one average home for almost 10 years.

Main Photo: Environment graduate, Nathaniel Constable, at Christmas Creek iron ore mine.

<sup>1</sup>OPSIM™ is a general-purpose operational simulation model for water resources systems that has been specifically tailored for mining/industrial applications.

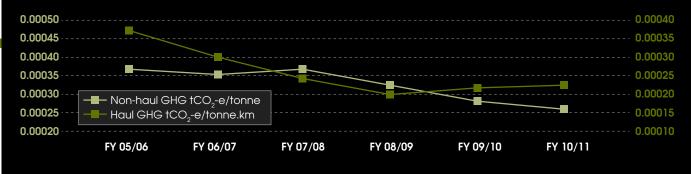
#### UNIQUE MEASURING TOOL PROMOTES EFFICIENCIES

Our unique Downer Energy and Emissions Measure (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 Commodore operations alone, the DEEM has demonstrated a 32% reduction in GHG emissions and a 17% improvement in energy intensity over five years through implementing a range of improvements. The inclusion of our case study 'Key Performance Indicators for Mine Fleet Applications' in the Australian Government's publication on the analysis of diesel use in mining operations highlights the value and utility of the DEEM both to our business and to the broader mining industry. This can be viewed at http://www.ret.gov.au/energy/Documents/energyefficiencyopps/res-material/Analysis-of-Diesel-Use.pdf





# Incident management, performance reporting and continuous improvement

Our near miss and minor incident reporting continued to improve, with the Minor Environmental Incident Frequency Rate (EIFR) increasing from 26 in 2009–2010 to 34 in 2010–2011. This increase demonstrates that our environmental awareness programs are working, with our people becoming increasingly familiar with what constitutes an environmental risk or hazard. The EIFR also enables us to track and rectify minor issues before they become significant.

A key tool in raising awareness is our two-day Downer Environmental and Sustainability Awareness (DESA) training course, which has been custom-designed for our supervisory and professional staff. Building on the success of DESA, in 2010–2011 we developed a company-specific Certificate IV Environmental Training course, with the inaugural course held at Commodore Mine. This provides additional competencies for key professionals with environmental management responsibilities.

#### Minimising our environmental impact

The sustainability of the Australian resources sector relies on efficient mine operations, including mine

planning, blasting, tyre management, and equipment selection and use. As efficient specialist operators of mines, contract mining service providers have an important role to play in the future sustainable development of the Australian mining industry.

As one of Australia's leading contract mining service providers, our environmental strategy is progressive and responsive, with a strong focus on continually improving our management systems and our performance. With heightened risks for GHG emissions and water during 2010–2011 and in the year ahead, we have significantly increased our focus in these areas.

#### **GHG** and energy

We are committed to being an active part of the solution to climate change by delivering significant emissions reductions for our clients' mining operations. Our industry-leading performance is founded on our suite of low-emissions mining solutions, including:

- Renewable fuels we are now the largest consumer of B20<sup>2</sup> biodiesel in the Australian mining industry;
- Open-cut fugitive methane emissions determination – we are pioneering site-specific emission factors;

- The Downer Energy and Emissions Measure (DEEM) – we have developed a unique GHG and energy performance measure for coal and hard rock mining operations; and
- Our energy-efficiency program

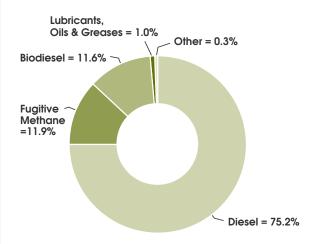
   we are implementing a range
   of technical, operational and
   behavioural improvements, including automating lighting plants and training operators in efficient plant operation.

We exceeded our emission and energy reduction targets for 2010–2011, and have set new targets for the coming year. With the proposed Clean Energy Plan and Carbon Tax released by the Australian Government, our clients and stakeholders are likely to increase their expectations, and we are well positioned to respond effectively. We will develop further low-emission mining solutions to meet this challenge.

#### Water

Water is a critical issue for the communities in which we operate. During the reporting year, we placed increased focus on water due to the extreme flooding that occurred across the east coast of Australia. While our operations were affected by the flooding, there was no material

# TOTAL GHG EMISSIONS (SCOPE 1, 2 AND 3) INCLUDING FUGITIVE METHANE EMISSIONS 2010–2011



#### NOTES:

**Scope 1 and 2** emissions are those resulting from activities over which we have operational control and that we are required to report under the National Greenhouse and Energy Reporting Legislation. In the 2010–2011 reporting period, our Scope 1 and 2 emissions were 78,094 tonnes of  $CO_{3}$ -e tonnes.

**Scope 3** emissions are those associated with our activities on sites that are under the operational control of our clients.

environmental harm caused. We have won praise for our response to return to normal operations while minimising environmental risks and impacts. Improving our water management is an ongoing part of our business, and, to help us in the future, we are implementing water balances using OPSIM<sup>TM</sup> at four of our operations.

We have an overall program to minimise water use. As part of this, our Blasting Services business developed and implemented a production-based water-reduction metric during the reporting period.

The primary use of water in our mining operations is for dust suppression, and so we have investigated ways of reducing this. We have partnered with Dust-A-Side Australia (DASA), which undertakes haul road dust suppression activities. DASA has completed a 14-kilometre stretch of haul road for Anglo Coal's CapCoal open-cut mine in Queensland. The Dust-A-Side dust suppression product significantly reduces water use, road maintenance and operational downtime caused by rain. It also provides considerable safety benefits and reduces dust emissions.

#### Rehabilitation

We have a strong track record of improving environmental values in the rehabilitation of mined land, through direct topsoil placement, and by minimising feral plants and animals. Our rehabilitation capabilities include revegetation using native endemic trees, shrubs and grasses to either create a native ecosystem, or to return the land to pre-mined pasture, in areas such as the Hunter Valley in New South Wales.

<sup>2</sup>B20 biodiesel comprises 20% biodiesel (tallow, cooking oil and junctia feedstocks) and 80% mineral diesel.



Chair of award sponsor SEQ Catchments' Robert Smith is pictured with our Group General Manager Sustainable Development Ross Browning and Executive General Manager HSE and HR Peter Newman.

## SMART APPROACH TO CLIMATE CHANGE RECOGNISED AT PREMIER'S AWARDS

In June 2011, we were selected from eleven entrants to win the Queensland Premier's Corporate ClimateSmart Sustainability Award, demonstrating that we are at the forefront of understanding and tackling minerals industry sustainability challenges and opportunities. The award also recognises the benefits that the company's environmental, social and financial programs and initiatives are delivering not only internally, but also to our clients, other stakeholders and the mining industry more broadly. Our environmental achievements include:

- Being the largest consumer of B20 biodiesel in Australia;
- Our innovation leadership in developing the DEEM for measuring, comparing and improving fuel efficiency;
- Energy efficiency and GHG emissions reductions within and between mine types and projects;
- Our pioneering work in calculating open-cut minesite-specific fugitive methane emissions; and
- Our approach to promoting collaboration and developing partnerships with universities, research organisations and government departments.

We were also a finalist for the second year in a row in the Industrial Eco-efficiency ClimateSmart Award category, for our eco-efficiency improvements at Commodore Mine.

Queensland Premier Anna Bligh said that: "Commodore Mine has significantly improved the accuracy and transparency of emissions reporting, both for itself and the broader industry".

#### INDEPENDENT VERIFICATION STATEMENT

# TO THE MANAGEMENT AND STAKEHOLDERS OF DOWNER EDI MINING:

Downer EDI Mining commissioned Net Balance Management Group Pty Ltd (Net Balance) to provide independent verification of the information presented within the Downer EDI Mining 2010-2011 Sustainable Development Scorecard (the 'scorecard') and Downer EDI Mining Sustainable Development Report (the 'report'). The scorecard and the report present a summary of Downer EDI Mining's sustainable development performance over the period 1 July 2010 to 30 June 2011. Downer EDI Mining was responsible for the preparation of the scorecard and the report. This verification statement represents Net Balance's independent opinion on the reliability of information presented within these documents. Net Balance's responsibility as an independent verification provider is to Downer EDI Mining's Management alone and in accordance with the terms of reference agreed with them. Other stakeholders should perform their own due diligence before taking any action as a result of this statement.

#### **Verification Objective**

The objective of the verification process is to provide Downer EDI Mining and its stakeholders with an independent opinion on the accuracy of the information presented within the scorecard and report. This was achieved by reviewing the accuracy and quality of disclosed sustainable development performance information and the underlying systems, processes, information and data used to support the sustainable development performance disclosures presented.

#### **Verification Level and Limitations**

The level of verification provided is moderate as defined by the methodology described in this verification statement. The verification process covered the whole scorecard and report and focussed on the systems and activities of Downer EDI Mining during the reporting period, with the following limitations:

- The scope of work did not involve verification of the accuracy of financial data
- Verification of National Greenhouse and Energy Reporting Act data was undertaken by another external consultant. This work was not replicated and therefore Net

- Balance's opinion in the area of energy and greenhouse data relies in part on the assurance opinion issued by the other party. Net Balance's verification of energy and greenhouse data only related to the translation of that data into the efficiency metrics reported.
- Evidence gathering was carried out at the corporate level of the organisation. Only the Brisbane office was visited as part of this verification engagement. Interviews were mostly conducted with indicator managers in person.

#### **Verification Methodology**

The verification process was undertaken between October and November 2011, and involved:

- a review of the scorecard and report for any significant anomalies, particularly in relation to significant claims as well as trends in data
- a review of Downer EDI Mining's key systems and processes used for managing and reporting sustainable development performance information
- verification of 36 data points and statements selected from the scorecard and report and examination of the systems and processes that support the disclosures
- a series of interviews with key personnel responsible for collating and preparing various components of the scorecard and report in order to substantiate the veracity of selected claims
- collecting and evaluating evidence to support the verification work undertaken.

#### **Independence and Credentials**

Net Balance was not responsible for preparation of any part of the scorecard. Net Balance confirms that we are not aware of any issue that could impair our objectivity in relation to this verification engagement. The verification engagement was carried out by a team of professionals with expertise in environmental, social and economic performance measurement, and led by a Lead Sustainability Assurance Practitioner (Lead CSAP) accredited by AccountAbility UK.

#### Reliability of Performance Information

Based on the verification procedures undertaken, the following represents Net Balance's opinion:



- The findings of the verification engagement provide confidence in the systems and processes used for managing and reporting sustainable development performance information.
- Data trails selected were generally identifiable and traceable, and personnel responsible were able to reliably demonstrate the origin(s) and interpretation of data.
- The sustainable development performance disclosures presented in the scorecard appropriately reflect environmental, social and economic performance achieved during the period.

Overall, it is Net Balance's opinion that the information presented within the scorecard and report is fair in all material respects. The scorecard and report were found to present a reliable account of Downer EDI Mining's sustainable development performance during the reporting period.

#### **Findings and Recommendations**

Based on the findings of the verification engagement, the following key recommendations are made:

- Where systems do not already exist, Downer EDI Mining should develop a documented process for collecting, recording and storing data that is reported on an annual basis. This would ensure consistent indicator measurement and reporting over time.
- Downer EDI Mining should regularly review the indicators that it reports to ensure that they are representative of the organisation's most significant issues and that they are current and effective in tracking the organisation's progress.
- Downer EDI Mining should consider implementing an internal review process to reduce the incidence of minor errors in transcription and aggregation processes.

On behalf of the verification team 24 November 2011 Melbourne, Australia

Thatchuerz

Terence Jeyaretnam, FIEAust
Director, Net Balance & Lead CSAP
(AccountAbility UK)





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#### **FEEDBACK**

How did we do? Please send your feedback on our sustainability performance and this report to sustainability.report@downeredimining.com.

