



ERA

Sustainable Development Report



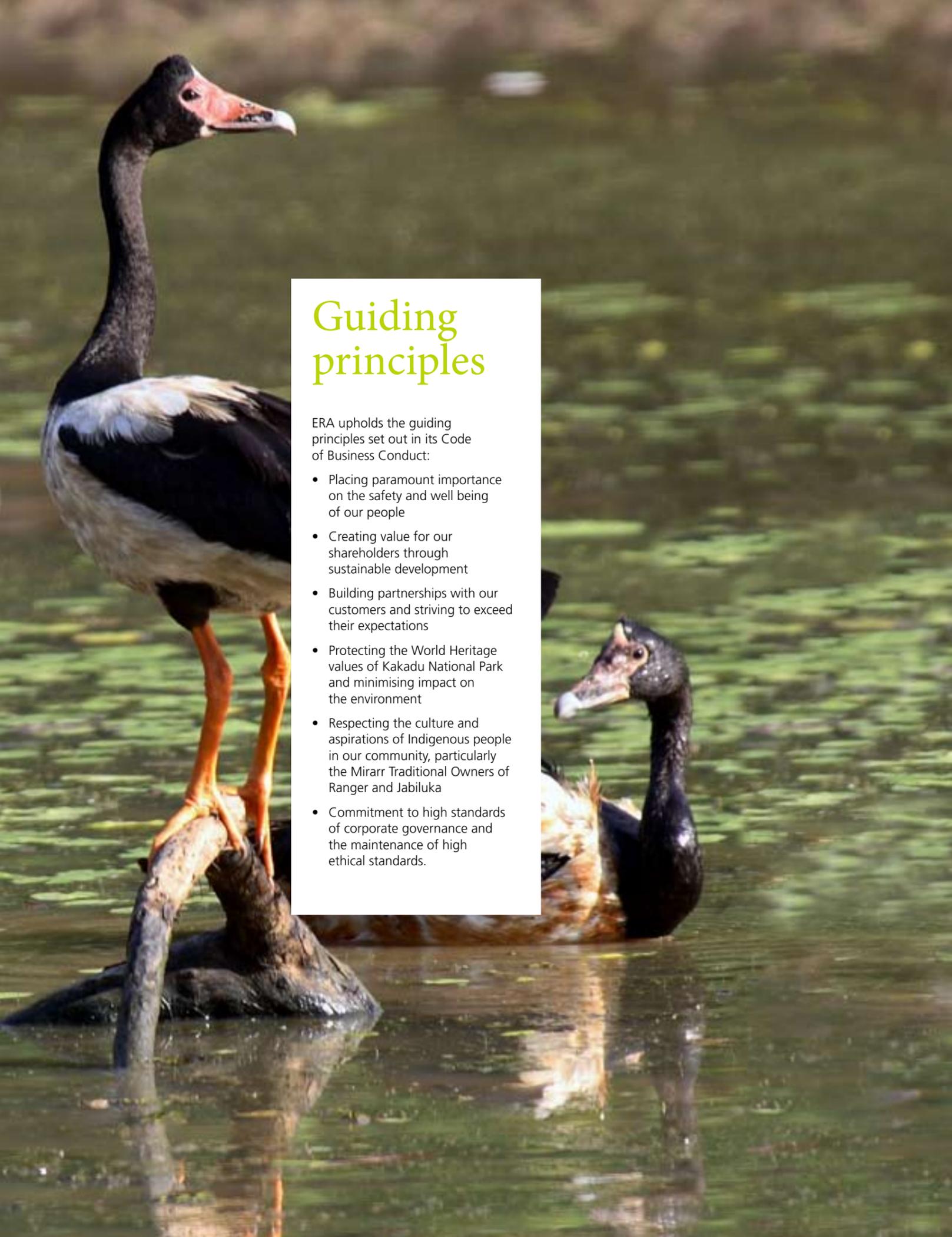
2008

ERA exports



Fast facts

- During 2008 ERA completed several major construction projects, including the laterite plant and radiometric sorter, without a single recordable injury.
- The ERA Ranger mine is one of the largest in the world, and provides 11 per cent of the world's supply of uranium.
- Sixteen per cent of world electricity is generated from nuclear power, using uranium as the fuel.
- World Nuclear Association figures show an estimated 440 commercial nuclear power reactors operating in 30 countries, with a capacity of 372 thousand megawatts of electricity.
- Based on a total life cycle approach - every tonne of uranium oxide used in electricity production (in place of coal) avoids 40 thousand tonnes of carbon dioxide equivalent generation.
- ERA produces uranium with an energy content equivalent to around 80 per cent of Australia's electricity consumption, and avoids greenhouse gas emissions estimated at 220 million tonnes per year.
- In 2008, ERA recorded its highest ever number of Indigenous employees. At year's end, the number of Indigenous employees was 95, 46 per cent up from last year's figure of 65 and double that of 2006.
- ERA has been in operation for almost 30 years, during which time operational activities have not had any detrimental effect on the environment surrounding the Ranger Project Area, according to the Commonwealth Government.
- During 2008 more than 3,500 people – mostly Australian and overseas tourists – went on a tour of the Ranger mine.
- In 2008 ERA contributed \$240 million to the Northern Territory economy, an increase of almost 100 per cent over 2007 (\$123 million).
- ERA's contribution to the Northern Territory in 2008 included \$60.5 million on wages, \$151.7 million on suppliers and contractors, and returned \$24.9 million in royalties.
- Production performance for 2008 of 5,339 tonnes of uranium was in line with 2007 production of 5,412 tonnes, and was the third highest on record.
- ERA has 519 employees.
- ERA was awarded the 2008 Australian Exporter of the Year (Mining and Resources Category) and 2008 Northern Territory Exporter of the Year (Overall) awards.
- In 2008 the Keep Australia Beautiful Council declared the Jabiru recycling scheme as the "Best Waste Reduction Scheme" in the Northern Territory, and named Jabiru as the "Best Large Town" in the Top End Tidy Town Awards.



Guiding principles

ERA upholds the guiding principles set out in its Code of Business Conduct:

- Placing paramount importance on the safety and well being of our people
- Creating value for our shareholders through sustainable development
- Building partnerships with our customers and striving to exceed their expectations
- Protecting the World Heritage values of Kakadu National Park and minimising impact on the environment
- Respecting the culture and aspirations of Indigenous people in our community, particularly the Mirarr Traditional Owners of Ranger and Jabiluka
- Commitment to high standards of corporate governance and the maintenance of high ethical standards.

Company profile

Energy Resources of Australia Ltd (ERA) acknowledges the Mirarr Traditional Owners on whose land the company's operations take place. ERA's commitment to sustainable development is part of our responsibility to manage and protect these lands.

ERA is one of the largest uranium producers in the world. ERA's Ranger mine, located 260 kilometres east of Darwin in Australia's Northern Territory, produces 11 per cent of the world's supply of uranium.

ERA's product - uranium oxide - is only used for generation of electricity in civilian nuclear power plants. Sale of ERA uranium is governed by strict international and Australian Government safeguards, and is only available to countries that have signed the Nuclear Non-Proliferation Treaty.

Our customers include power generation companies in North America, Asia and Europe.

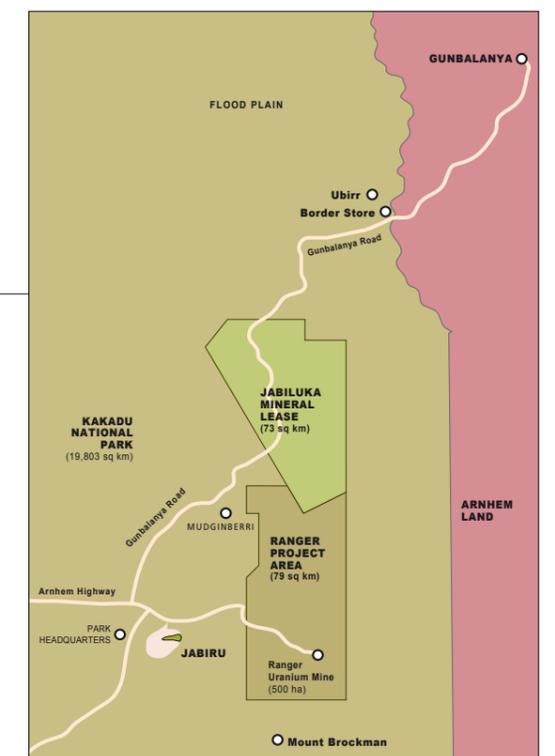
ERA employs over 500 people, including people from local Indigenous communities, and makes a significant contribution to the local and national economy. The 848 hectare Ranger mine site occupies less than 11 per cent of the 79 square kilometre Ranger Project Area, most of which is undisturbed.

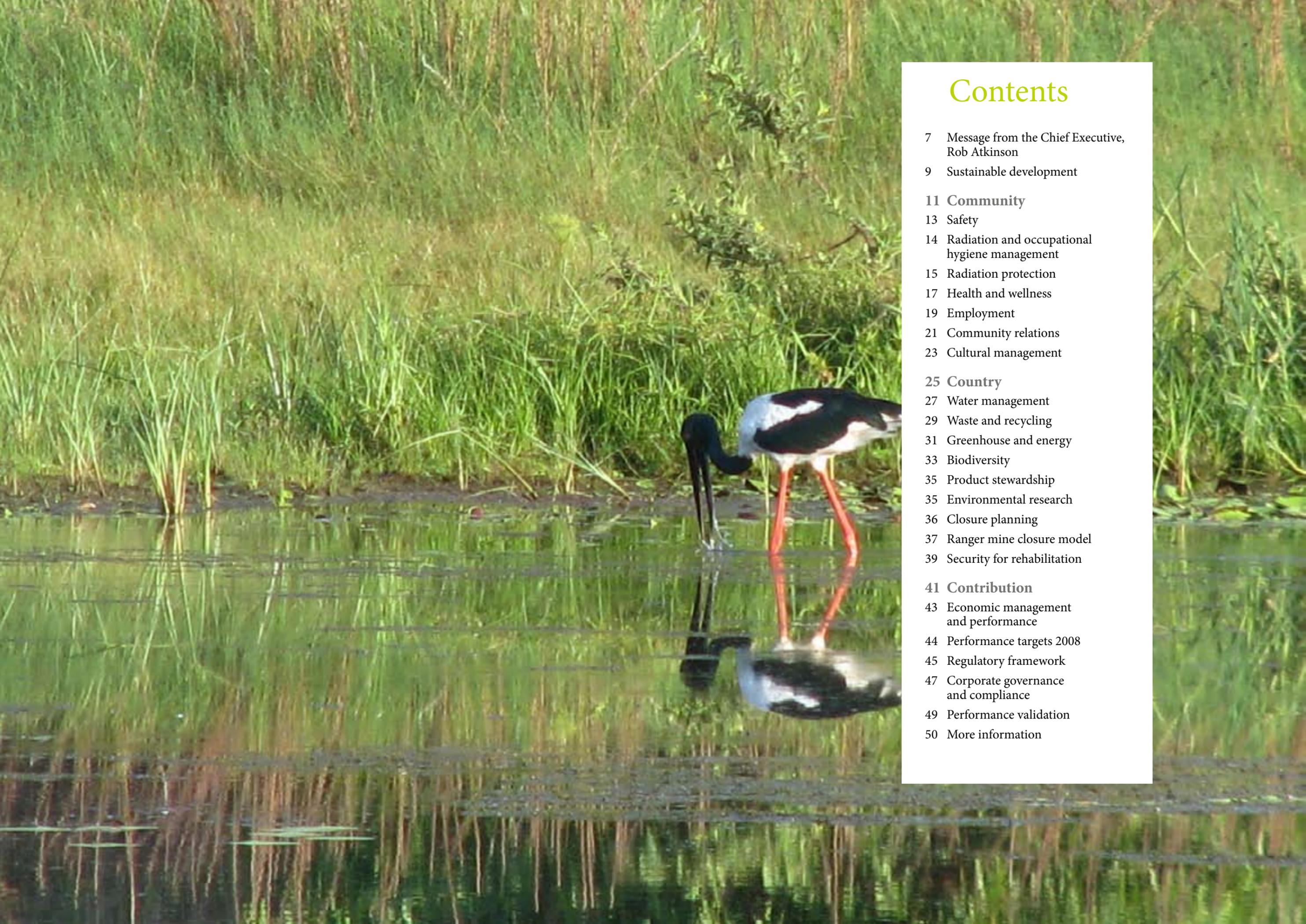
ERA also holds title to the Jabiluka Mineral Lease directly north of the Ranger Project Area. The Jabiluka Mineral Lease is under long term care and maintenance and will not be developed by ERA without the consent of the Mirarr Traditional Owners.

The Ranger Project Area and Jabiluka Mineral Lease have been progressively surrounded by, but remain separate from, the Kakadu National Park.

One of ERA's guiding principles is that the natural and cultural values of the surrounding world heritage listed Kakadu National Park must continue to be protected. The Commonwealth Office of the Supervising Scientist, which monitors uranium mining activities in the Northern Territory, has confirmed there has been no detriment to the environment surrounding the Ranger Project Area and Jabiluka Mineral Lease since mining began 29 years ago.

ERA is an Australian publicly listed company, with its shares traded on the Australian Securities Exchange. Its major shareholder is the Rio Tinto Group, which holds 68.4 per cent of ERA's shares.





Contents

- 7 Message from the Chief Executive, Rob Atkinson
- 9 Sustainable development
- 11 Community**
- 13 Safety
- 14 Radiation and occupational hygiene management
- 15 Radiation protection
- 17 Health and wellness
- 19 Employment
- 21 Community relations
- 23 Cultural management
- 25 Country**
- 27 Water management
- 29 Waste and recycling
- 31 Greenhouse and energy
- 33 Biodiversity
- 35 Product stewardship
- 35 Environmental research
- 36 Closure planning
- 37 Ranger mine closure model
- 39 Security for rehabilitation
- 41 Contribution**
- 43 Economic management and performance
- 44 Performance targets 2008
- 45 Regulatory framework
- 47 Corporate governance and compliance
- 49 Performance validation
- 50 More information

Message from the Chief Executive, Rob Atkinson

The purpose of this report is to provide our employees, community members, and other interested parties with an overview of our sustainable development activities in 2008, and plans and commitments for 2009.



We achieved national recognition for business performance, winning the Northern Territory Chief Ministers' Exporter of the Year Award ...

Rob Atkinson
Chief Executive

2008 has been both challenging and rewarding. During a period of significant expansion, we maintained our safety performance with all injuries being reported at 1.01 reportable injuries per 200,000 hours worked, and several major projects completed without a single recordable injury.

During 2008 we saw the continued success of our Indigenous employment programmes, with Aboriginal employment at ERA exceeding 2007 levels by 46 per cent – by the end of the year almost one in five ERA employees were Indigenous.

We continued to protect the environment surrounding the Ranger Project Area and the Jabiluka Mineral Lease, as confirmed by the extensive monitoring and research programmes of the Commonwealth Government's Office of the Supervising Scientist.

Nuclear energy makes a significant contribution to the avoidance of greenhouse gas generation. ERA produces uranium with an energy content equivalent to around 80 per cent of Australia's electricity consumption, and avoids greenhouse gas emissions estimated at 220 million tonnes per year.

Our research and investigation of mine rehabilitation techniques moved off the desktop and into action with the commencement of a large scale trial landform. This project provides opportunity to demonstrate ERA's expertise and optimise rehabilitation and revegetation under real conditions using local materials and plant species.

We work with the Mirarr Traditional Owners, continuing cultural awareness training for new employees and contractors, expanding traditional burning programmes to protect biodiversity, and developing new management plans for identifying and preserving cultural heritage values.

We achieved national recognition for business performance, winning the Northern Territory Chief Ministers' Exporter of the Year Award, before going on to win the national mining and industry category at the Australian Export Awards.

Investment in new infrastructure – a laterite plant, a radiometric sorter, and expansion of water treatment capacity, will allow us in 2009 to optimise our processing operations, and reuse waste.

We are also aware that we have room for improvement – in relation to our goal of zero workplace injuries, everyone must think and act safely at all times.

Looking ahead to 2009, we value your input, and look forward to hearing from you about how ERA is performing and whether you found the information in this report useful. Contact details for feedback or to obtain more information are found on the last page.

Rob Atkinson
Chief Executive

*Previous pages: Jabiru (Jabiru asiaticus).
Opposite: Sunset over Kakadu escarpment country.*



Sustainable development

Businesses that take environmental and social sustainability seriously maximise long term benefit to shareholders. Management that drives superior safety and environmental performance also increase output and reduced operating costs.

In 1987 the United Nations World Commission on Environment and Development produced the report "Our Common Future" (the Brundtland Report), which reinforced the concept of sustainable development. The report defined sustainable development as "development that meets the needs of the present without compromising the ability of future generations to meet their own needs."

The principles of sustainable development allow for growth, and take into account the interdependent and mutually reinforcing pillars of economic development, social development, and cultural and environmental protection.

In this report we refer to these three pillars of sustainable development as:

Community
social development and cultural protection,

Country
environmental protection, and

Contribution
economic development.

ERA understands that sustainable development is fundamental to the way that socially responsible mining companies conduct their business.

In relation to ERA's operations, sustainable development means sharing the benefits of mining during operations and leaving a positive legacy at the end of mining, by sharing the benefits during operations, helping to build strong, healthy communities, and rehabilitating the land to its next intended use.

This involves:

- ensuring that no one comes to any harm while working for ERA
- minimising the impact of ERA's operations at Ranger so that the land can be productively used after mining
- contributing to regional biodiversity through research and effective management programmes
- consulting and engaging with local communities and stakeholders in a transparent, inclusive and appropriate manner
- maximising our contribution to the local region and Northern Territory.

ERA continues to make significant progress towards its goal of zero harm to our team members and our strength in environmental leadership continues to be verified by independent monitoring and audit.

The company also makes a significant financial and social contribution to the economies and communities of Jabiru, the Northern Territory and Australia.

This report describes how ERA has applied sustainable development in day to day operations in all parts of its business in 2008 – in Community, in Country, and in Contribution.

Opposite: Estuarine Crocodile (*Crocodylus porosus*).

Community

ERA is an integral part of the local community, from Darwin, to Jabiru. Traditional Owners and Indigenous communities, employees and their families, contractors, service providers, Jabiru businesses and even the tourists and visitors who take a tour of the mine, the ERA community comprises everyone who is associated with our operations. We recognise that our community responsibilities include health and safety, training, employment, employee relations, community relations and cultural heritage management. This section summarises our performance in these areas, and includes information about key community support and employment programmes.



Safety

One of ERA's core values is that we place paramount importance on the safety, health and well being of our people, whether they are employees, contractors, or local residents. By working together, we believe that all injuries, incidents and occupational illnesses can be prevented and everyone shall go home safe and healthy each day. No work is so important that employees or contractors should endanger their health or safety to do it. Our goal is to ensure that no one comes to any harm while working for ERA.

Maintained safety performance

The company maintained its safety performance recording an all injury rate of 1.01 reportable injuries per 200,000 hours worked (2007: 1.00). This was achieved during a period when there was a significant increase in the number of construction projects and associated contractors present on site. A number of major projects were completed without a single recordable injury, such as the tailings dam wall lift project, which achieved 100,000 hours without a recordable injury.

Retained certification

The company retained its certification to Australian Standard AS4801 for its safety and health management systems, and remains strongly committed to achieving its goal of zero injuries.

Risk assessment

Semi-quantitative risk assessments (SQRA) conducted in 2007 were advanced in 2008 to meet a goal of reducing assessed risk levels by 10 per cent. Our team achieved a significant 13.9 per cent reduction for the targeted risk scenarios. An example of a risk scenario is vehicle accidents driving between Darwin and Jabiru. To reduce this risk, in 2008 we installed video conferencing facilities at Darwin and Ranger, effectively eliminating the risk of travel for some meetings. We also substituted vehicle traffic and an increased in flights to reduce road use and reduce fatigue risk for people travelling from interstate.

Emergency response planning

During 2008 ERA's Emergency Response Team simulated a haul truck and light vehicle collision to test ERA's Emergency Response Plan and Disaster Management Response. Independent assessors highlighted the team's rapid and effective response. In December 2008 the Emergency Response Team conducted a full scale disaster management and emergency response exercise involving the Northern Territory Fire and Rescue Service and Parks Australia North, and gained positive feedback from independent assessors.

Mines Rescue Competition

Commitment to high safety and training standards were reflected in the award winning performance of ERA's Emergency Rescue Team at the 2008 NT Mines Rescue Competition in Darwin. In addition to Best Overall Team, ERA took first place in First Aid, Team Safety, and Road Accident Rescue, came second place in Hazmat and Fire, and third in Vertical Rescue.

Environment, Safety and Health achievement notices

ERA strongly encourages employees and contractors to think and work safely at all times. In order to recognise achievement in this area ERA uses Environment Safety and Health (ESH) achievement notices. Anyone who sees an opportunity to improve a work process or activity, or make improvements to equipment or machinery, is encouraged to put forward their ideas for action. During 2008 there were 170 safety improvement suggestions put forward. ESH achievements are promoted, and the "ESH Achievement Logies" celebrate ESH champions and the best ESH improvements.

Previous pages: The Jabiru community swimming pool is a 50m Olympic size pool. Opposite: Alicia Williams seeks advice from Physiotherapist Kim Crawford.

Radiation protection

ERA's radiation management system was audited in 2008. The radiation management system forms part of ERA's safety and health management system certified to Australian Standard 4801: Occupational Health and Safety Management Systems.

The radiation exposure pathways at ERA's operations are comprehensively measured and reported throughout the year. The results of this monitoring are compared to limits recommended by the International Commission on Radiological Protection (ICRP).

There are over 301 designated employees at the Ranger operation and they received a mean radiation dose of 1.3 mSv during 2008. Workers at the mine site who are not working in areas of high exposure (non designated employees) are subject to the same dose limits as designated workers and in 2008 the maximum dose was 0.6 mSv.

Designated workers are those employees and contractors who have the potential to exceed 5 mSv per year from occupational exposure to radiation.

The mean annual radiation exposure levels of designated and non-designated ERA employees during 2008 were well below the limits set by the ICRP. These limits are 100 millisieverts (mSv) over five years (average of 20 mSv per year) or a maximum of 50 mSv in any one year.

The exposure of Jabiru residents and surrounding communities is also monitored and the contribution from the mine was assessed as 0.0 mSv in 2008. The natural background in the area is 2-3 mSv. A radiation practice must not expose members of the public to more than 1 mSv per year above natural background under ICRP recommendations.

The United Nations scientific committee on the effects of atomic radiation reports (2000 report to the UN General Assembly) that the: "worldwide annual exposures to natural radiation sources would generally be expected to be in the range 1 to 10 mSv, with 2.4 mSv being the present estimate of the central value".

Radiation and occupational hygiene management

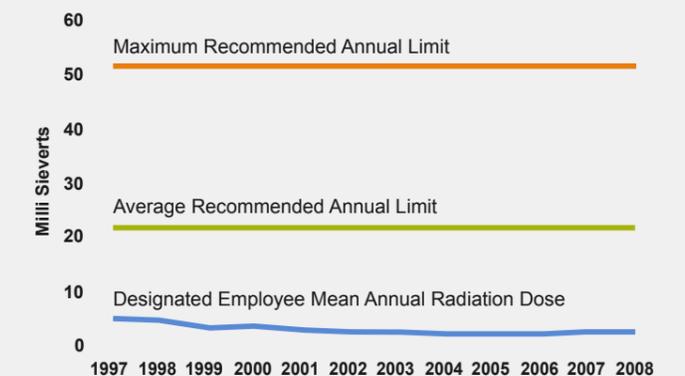
In 2008 ERA created a new radiation and hygiene management team, combining existing radiation management expertise with a new occupational hygiene role.

Occupational hygiene monitoring was extended to build a database of workplace health risks and to

identify priority areas for reducing risk to workers. During 2008 ERA purchased new equipment to analyse body and hand arm vibration on workers as well as equipment which can determine the optimal hearing protection for individual workers.



Designated employee mean annual radiation dose



Opposite: All truck loads of material from Ranger Pit 3 are measured for ore grade prior to placement on stockpiles.

Health and wellness

To work safely and deliver full potential workers need to be in good health. ERA recognises that it has a responsibility to support its workforce with information, tools and support programmes to maximise workers' ability to deal with the challenging and uncomfortable climatic conditions experienced in northern Australia. In addition, ERA assists employees with activities and services which encourage increased fitness, such as a healthy diet, regular exercise, routine medical examinations, and specialist health services.

Case study

Stretching with the heavies

"Stretching with the heavies" is an example of ERA's site wide manual handling health and safety programme. The programme is managed by staff from each department and aims to raise awareness of manual handling and soft tissue injuries. Staff from the heavy machinery workshop begin each morning shift with stretching exercises to increase flexibility and reduce risk of strains and other soft tissue injury. Exercise also improves circulation, can help increase a positive attitude and team spirit, and increases awareness of personal safety responsibilities.

Routine medicals and specialist health services

Routine medical check ups ensure that the health effects of work activities are identified, assessed, monitored and controlled. Aggregated data collected from medical examinations enables appropriate evidence based management decisions relating to control measures.

Onsite physiotherapist

During 2008 ERA continued to provide specialist health services on site, with twice weekly visits by a physiotherapist. This allowed workers to access physiotherapy when necessary without having to travel to Darwin. This service has allowed early intervention for musculoskeletal injuries, reduced the need for time off, and improved workplace health and productivity.

Build Up Blues

Every year extremely hot and humid conditions "build up" during the onset of the wet season. ERA's Build Up Blues safety campaign helps employees manage these difficult working conditions safely by learning about heat stress and dehydration. Heat stress can cause headaches, confusion, irritability, muscle cramps and nausea. These physical effects in turn can distract people, increasing the possibility of mistakes and accidents. Campaign activities included sending letters to employees' homes, heat stress awareness sessions, urine screening, inclusion of hydration tests as part of drug screening, and use of Build Up Blues screen savers on work computers.

Achieve Health

Achieve Health is the Rio Tinto Wellness programme that involves workers participating in a health risk assessment with a health professional on site, access to web based tools and resources, and a range of health programmes and coaching. Achieve Health was launched in Darwin in December 2008, and is being rolled out to all departments.

Opposite: Leigh Butler, Diesel Fitter participating in pre-shift stretching exercises.

Employment

ERA recognises that success in the recruitment, training and retention of employees is critical for the future strength of the company. It has a range of programmes to ensure this success. These programmes include ERA's role in supporting Jabiru's sustainability and health as a community, consulting with employees through detailed surveys to identify ways to work together more effectively, and promotion of the company to the local community and wider industry. ERA is committed to increasing the diversity of its workforce by increasing opportunities for Indigenous employment and the employment of women.

Indigenous employment

In 2008, ERA recorded its highest ever number of Indigenous employees. At year's end, the number of Indigenous employees was 95, 46 per cent up from last year's figure of 65 and double that of 2006. Indigenous Australians are employed across the company, both at Ranger and in Darwin, and in a variety of roles from trainee to manager. Indigenous employees now make up 18 per cent of ERA's workforce. Compared with the top 100 ASX listed companies, ERA has proportionally one of the highest rates of Indigenous employment. The company is well on the way towards achieving its goal of 20 per cent of the work force being of Aboriginal descent by the end of 2009.

ERA uses traineeships, a job sharing programme, apprenticeships, work experience training, school based trainees and a careers expo to raise awareness about the employment opportunities within ERA.

In 2008 ERA's most successful Indigenous trainee programme – the haul truck trainee operator programme – achieved a 100 per cent completion rate. Twelve trainees completed the programme and were offered permanent positions driving mine haul trucks. At the end of 2008 ERA had eight school based apprentices, three trade apprentices, and eight trainees.

Graduate Development

ERA and Rio Tinto's Graduate Development Programme develops the skill and experience of high performing university graduates. In 2008 six graduates took part in the two to three year programme. The programme expands ERA's pool of future business leaders through a series of professional development programmes and activities.

Vacation students

The ERA Vacation Student Programme provides university students opportunity to undertake paid practical work experience. During the 2008/2009 summer break ERA hosted nine vacation students across a range of disciplines throughout different areas of the mine. This programme enables ERA to build early relationships with students who may later take on a graduate or permanent role within the business.

Careers expo

ERA apprentices set up a "mini trade show" to show Arnhem Land school students what their work at ERA involved at the November 2008 Careers Expo in Jabiru, organised by West Arnhem Shire. More than 40 year 8 to year 12 students from Jabiru Area School, Waruwi School (Goulburn Island), Mamaruni School, (Minjilang, Croker Island) and Maningrida Community School visited the Jabiru Training Centre to see what local organisations had on offer after finishing school.

Recognising long service

ERA recognised the contribution of long serving employees in 2008 with two events; recognition of 10 to 14 years of service, and recognition of employees reaching 15 years. ERA's longest serving employee has worked for the company for 27 years.

Gunbalanya employment

In 2008 one of the strategies put in place to specifically promote local Indigenous employment was to engage with the nearby Gunbalanya community. This has resulted in a team of nine trainees working in processing operations since July 2008 with the goal of taking up permanent employment. A unique aspect of the trial is the way in which the Gunbalanya teams organise themselves into two crews in a week on, week off roster.

Employer of Choice for Women

ERA continued to promote and provide opportunities for women to enter its workforce. Currently, 20 per cent of the company's employees are women, occupying roles ranging from truck drivers, to health and safety specialists, plant operators, managers and board members. In 2008 ERA was designated an "Employer of Choice for Women" by the Commonwealth Government for the fourth consecutive year. ERA is one of only a few companies in the Australian mining industry to be recognised in this way.

Opposite: James Van Der Helm, Environmental Scientist and Rob McGill from Sustaining Capital discuss ERA's new Darwin offices.



Community relations

Building strong community relations is an essential element of ERA's activities. A partnership approach backed by a comprehensive community relations programme strengthened ties between ERA and the local community during 2008.

Sponsorships and partnerships

In 2008, ERA contributed more than \$250,000 in partnerships and donations, including Kakadu National Park Climate Change Symposium, Birds Australia – Kakadu Birding Routes, 2008 NT Indigenous Music Awards, NT Mines Rescue Competition, AFLNT and Netball NT, and the George Chaloupka Fellowship, which promotes research into traditional rock art.

Structured workplace learning

ERA continued to assist and sponsor a range of community programmes and events. In collaboration with West Arnhem Shire and Jabiru Area School, the company provides school based apprenticeships for Jabiru youth through the Structured Workplace Learning Programme.

Gunbang Action Group

ERA also supported programmes and groups that encourage local people to adopt a healthier lifestyle, such as Kidney Health Week, Youth Health Week, and the Gunbang Action Group, which is developing a Regional Alcohol Plan (RAP).

\$100,000 to Kakadu Health Service

ERA's contribution of \$100,000 to Kakadu Health Service in 2008 will support employment of an additional doctor. The new doctor was successfully recruited in late 2008.

Festivals

ERA helped re-introduce a Jabiru Chamber of Commerce and supported key regional events - the Annual Mahbilil Festival in Jabiru, which attracted over 500 people, and the equally successful Stone Country Festival held in Gunbalanya, Arnhem Land.

ERA open day

In September, ERA's open day gave Jabiru residents and visitors a closer view of its operations and a greater understanding of ERA's significance as a major supplier of uranium to the world market. The event attracted over 400 people.

Resource centre and child care

ERA provided \$60,000 towards the construction of the Mudginberri Resource Centre, which was completed and opened in 2008, and \$70,000 towards the expansion and refurbishment of the Jabiru Childcare Centre.

Mine tours

To increase awareness of how ERA manages issues relating to mining uranium in an area surrounded by Kakadu National Park, members of the public are welcome to take part in organised tours of the Ranger mine. During 2008 more than 3,500 people – mostly Australian and overseas tourists – went on the Ranger mine public tour. The tours operate each year during the dry season. By arrangement, ERA also conducts private tours for stakeholders, such as Government officials, Traditional Owners, industry groups, and community organisations.

2009 calendar

Jabiru Area School students helped create ERA's Sustainable Development calendar for 2009, using themes of biodiversity, community, culture, health and wellbeing, natural resources and my future for creative inspiration. ERA employees, community members and Parks Australia North employees spoke to students about these themes, and the students then created artworks. Thirteen finalists were selected from 190 drawings to create the 2009 ERA calendar.

Opposite: A quartz spear point used for hunting small game, found during an archaeological survey of the Ranger Project Area.

Case study

Awakening awareness with cross cultural training

An innovative approach to cross cultural awareness training helps new ERA employees and contractors understand the cultural, environmental and historical values of the Kakadu region and the Mirarr Traditional Owners.

The programme is the result of a partnership between ERA, the Gundjeihmi Aboriginal Corporation representing the Mirarr Traditional Owners, and Jajirdi Consultants.

Jajirdi Consultants is run by husband and wife team Bess and David Price, and the Cross Cultural Awareness Course provides an important starting point for developing respect and understanding of local issues and behaviours.

Bess and David set up Jajirdi Consultants 12 years ago to have more control over opportunities to help Indigenous communities deal with the impacts of mining and cultural change.

Providing cross cultural awareness courses and translation services to Government agencies and mining companies help to bridge the gap when ignorance or lack of knowledge about local cultural values causes pain to Indigenous people.

"We have achieved a lot in the last 12 years because we have been able to do things in consultation with Aboriginal people, and I think the ERA course is a very good example of that," David said.

"We only do this work in consultation with Traditional Owners, and we do it the way they want. When we got the job with ERA we were very pleasantly surprised, because ERA agreed to that immediately."

David said having respect for Traditional Owners means having respect for their land and their culture, and the course provides a starting point for developing that.

Cultural management

ERA recognises the importance of a respectful and open relationship with the Mirarr Traditional Owners, and other Indigenous communities. Building the relationship with the Mirarr involves land management programmes including cultural heritage surveys, weed management, and caring for country through traditional burning.

Cross cultural awareness courses

The Gundjeihmi Aboriginal Corporation (representing the Mirarr Traditional Owners) continues to work with Jajirdi Consultants to provide cross cultural awareness courses to all new employees and contractors. These courses provide an understanding and appreciation of the culture and values of the Traditional Owners. In 2008 a total of 176 employees and contractors attended these courses. To support the cross cultural awareness course, separate inductions were also held at Kakadu National Park headquarters, giving employees an understanding of the significant requirements associated with working and living near a World Heritage listed National Park.

Archaeological surveys

During 2008, nine archaeological surveys were conducted over parts of the Ranger Project Area, identifying a number of sites that are significant.

Cultural heritage management plan

ERA and the Gundjeihmi Aboriginal Corporation are discussing a process for moving from an interim protocol to a more comprehensive cultural heritage management plan. The new plan, which will be finalised in 2009, incorporates a broader range of cultural and heritage components relating to the historical and contemporary history of Traditional Owners, both local and regional.

Cultural heritage management elements

ERA also implemented new cultural heritage management elements to align with Rio Tinto's Cultural Heritage Management Protocol standards. These elements include progressive development of an ERA Cultural Heritage Policy, site specific cultural heritage operational procedures, a cultural heritage Geographic Information System, strengthened land disturbance procedures, and specific role responsibilities for cultural heritage clearances.

Bird watching

The fifth annual Rio Tinto Bird Watch Event organised by ERA at the Ranger project area near Jabiru in November 2008 was a great success with 35 keen "twitchers" spotting over 70 species of birds including six species not spotted before.

The end of the dry season is an excellent time for spotting wading and grazing birds which flock to the few remaining water holes. Participants of all ages joined bird experts from the Darwin Field Naturalists and Birds Australia for dusk and dawn bird watching sessions.

Bird survey locations included Coonjimba Billabong, Georgetown Billabong, and Retention Pond One, all of which form part of the Ranger water management system. Retention Pond One is one of the largest of a complex system of water bodies designed by ERA to retain and improve the quality of water leaving the site.

Opposite: Freshwater Mussels (Vesunio angasi) cooked on an open fire are an important part of a traditional diet for local Aboriginal people.

Country

“During the year there were no reported incidents that resulted in any environmental impact off the immediate minesite. The extensive monitoring and research programmes of the Supervising Scientist Division confirm that the environment has remained protected through the period.”

Supervising Scientist Annual Report 2007–2008

ERA recognises the responsibility that comes with operating on Mirarr land. Protection of the natural and cultural values of the unique region in which the company operates is one of ERA's core values. ERA's Ranger Project Area and Jabiluka Mineral Lease are surrounded by but separate to the unique World Heritage listed Kakadu National Park. In addition, the Ranger Project Area and Jabiluka Mineral Lease are located on Aboriginal land, which encompasses contemporary and historical sites of cultural significance representing more than 40,000 years of continuous occupation by Aboriginal people. ERA has developed programmes and systems designed to identify areas of risk to the environment, so that we can manage our activities to minimise or eliminate those risks, and implement controls to protect the environment. In 2008, ERA maintained international certification (ISO14001) of its environmental management system and was recognised, by independent auditors, for leading practice in water management, biodiversity action planning, and a product stewardship approach extending beyond our operational boundaries. This section summarises our performance in minimising impact to country.

Water management

Water management is integral to the success of ERA's operations. Water is used for a range of operational activities. All water is managed by quality. Water is tested before release from site. Water treatment takes a range of forms; active treatment in specially designed water treatment plants, biological filters, settling and polishing systems, irrigation in forested areas, and evaporation. ERA maintains a comprehensive water management system to direct, treat and release water. After the 2007 floods, rainfall in 2008 was slightly above average, allowing ERA to consolidate and optimise water management initiatives from the previous year.

Case study

A real time water monitoring system at major release points around the Ranger mine site has improved ERA's ability to effectively manage water. Key water flow and quality data recorded in the field are sent by radio transmission to a database and an internal website.

In conjunction with a predictive mass loading model, these real time data are used to predict water quality in the downstream environment from minesite releases.

The new systems have improved water management at Ranger and demonstrate application of improved technologies and ERA's culture of continual improvement in environment protection.

New water treatment plant

During 2008 ERA spent \$16.5 million to more than double the pond water treatment capacity. The plant treats water that comes into contact with the stockpiled mineralised rock on site, increasing our ability to safely manage water. A further \$11.5 million was committed to enable treatment of process water. Work is expected to be completed in 2009.

Corridor Creek land application

Construction of the Corridor Creek land application area was completed in 2008, increasing irrigation capacity by 74 per cent and adding up to 12.2 megalitres per day in seasonal water treatment. Land application involves irrigating selected areas to enhance evapotranspiration to retain metals in the surface horizon of the soil.

Effective treatment systems

During 2008 an estimated 700 megalitres of water were treated via water treatment plants and approximately 480 megalitres via land application. ERA's expanded water treatment systems were so effective that water treatment ceased mid year to reserve sufficient water for recycling in processing operations.

2008 initiatives carried out

Following the 2007 floods, ERA installed new piping systems to increase flexibility in directing water to appropriate treatment and completed erosion control works in critical catchments in Corridor Creek. A real time environmental monitoring system where data is sent directly from monitoring sites to databases and an intranet website was also established. Modifications to the catchments of Pit 3 and Pit 1 diverted waters away from these facilities.

Sand remediation

Identification of sand deposits in the northern edge of the Shell 50 extension to Pit 3, next to the mine access road embankment, required works to prevent surface erosion and possible slumping in wet conditions. The sand remediation project was completed in 2008 and involved construction of two 30 degree slopes, lined with geotextile fabric and covered with rock. The project allows clean surface and groundwater to be diverted away from Pit 3.

Waste and recycling

Minimising waste in all business processes is an important part of sustainable development. In 2008 ERA implemented a range of programmes to manage increasing waste volumes associated with a significant expansion of operations. We also shared our expertise and resources with the West Arnhem Shire Council in a major recycling initiative.

Case study

Jabiru recycling

When Works Manager Ian Lindsay came to Jabiru to work for the West Arnhem Shire Council, he immediately saw great opportunities for a town recycling programme.

Having previously managed private sector waste management and recycling businesses, as well as setting up recycling services for the Esperance Shire in Western Australia, Ian saw opportunity to reduce waste to landfill, clean up litter around town, and make money into the bargain.

With financial and project support from ERA, Ian worked to set up a town recycling programme, comprising collection points, and crushing and baling equipment at the Ranger mine.

The Jabiru recycling scheme's first year of operation resulted in more than 15 tonnes of cardboard and one tonne of aluminium being processed for the West Arnhem Shire, reducing pressure on Jabiru's limited land fill area, and providing funds to enable the West Arnhem Shire to develop their own dedicated recycling facilities.

"We couldn't have done it without ERA's help," Ian said. "Now there's far less cans and paper lying around town, which is great, because we're in the middle of Kakadu National Park."

In 2008 the Keep Australia Beautiful Council declared the Jabiru recycling scheme as the "Best Waste Reduction Scheme" in the Northern Territory, and named Jabiru as the "Best Large Town" in the Top End Tidy Town Awards.

Landfill waste generated

Landfill waste volumes at the site increased by 49.7 per cent, due to significant expansion of the Ranger operations. Increased activity and workforce numbers were associated with the Ranger Pit 3 extension, the tailings dam wall lift, construction of the trial landfill, laterite plant and radiometric sorter.

Per capita waste measurement

In anticipation of the waste management effects of this expansion phase, ERA moved to measurement of waste per capita in place of total landfill waste to drive performance improvement. Using average monthly workforce numbers the amount of waste generated per person in 2008 was 659 kilograms. This compares with 535 kilograms in 2007, representing a 23 per cent increase in landfill waste per capita.

Improved waste oil treatment capacity

ERA initiated a major campaign of waste oil treatment in 2008. Some waste oil streams on site are contaminated with ore bearing rock materials and cannot be removed from site. ERA manages these wastes at its purpose built high temperature incineration facility. During 2008 ERA treated an estimated 106 tonnes of waste. In 2009 ERA will continue upgrades to this facility to enable all weather operation, improve tracking of waste oil sources, and prevent contamination.

Recycling programme

ERA and the West Arnhem Shire Council joined forces in 2008 to bring a recycling programme to the community of Jabiru. ERA processed more than 15 tonnes of cardboard and one tonne of aluminium for the West Arnhem Shire. This reduced waste to landfill and raised funds for the West Arnhem Shire to establish its own dedicated facility. Supporting local Government to build their own capacity to deliver these services to the community is a key aspect of the sustainability of this project.

Opposite: Adrian Garnarradj displaying compacted aluminium cans ready to be transported to a recycling facility.

Greenhouse and energy

ERA produces uranium oxide used to generate power in low emission nuclear technology. To produce uranium oxide, we consume energy in our operations. Our mining and processing operations use diesel for transportation, to power mobile machinery, and to generate electricity for the mine and the town of Jabiru. These activities produce greenhouse gas emissions. We are working to reduce the amount of greenhouse gas emitted for every tonne of uranium oxide produced. The amount of electricity which could be generated by ERA's production of uranium oxide in 2008 was equivalent to 80 per cent of Australia's total electricity usage, and would avoid 220 million tonnes of carbon dioxide emissions compared with coal-based power.

Greenhouse gas emissions

The measured 2008 total energy consumption for the operation was 1.457 petajoules, an increase of 0.234 petajoules over 2007. Total emissions were in the order of 155,000 tonnes of carbon dioxide equivalent, an increase in greenhouse gas emissions of approximately 72,000 tonnes from 2007. The increase in energy consumption and associated emissions is due to increased activity on site. The Ranger Pit 3 extension increased material movement by more than 100 per cent compared with 2007. Additional heavy equipment for the tailings storage facility wall raise and the construction of a trial landform also contributed to this increase.

Three year climate change programme

In 2008 ERA made good progress on its three year climate change work programme. The work programme is made up of over a dozen specific areas including increasing awareness of nuclear power as a low carbon emitting technology (in 2008 ERA hosted over 3,500 visitors to its operations), engaging with stakeholders on climate change and its effects on Kakadu National Park (ERA co-sponsored the 2008 Kakadu National Park Climate Change Symposium with the Commonwealth Department of Climate Change), integrated new legislative requirements into management systems (an energy efficiency review was conducted - see following), and benchmarking ERA's greenhouse gas performance against other uranium mines (see Product Stewardship on page 34).

Energy efficiency review

In August energy efficiency experts assisted ERA teams to review and select 36 energy efficiency improvement opportunities, representing potential energy savings of over 0.3 petajoules. These opportunities will be further evaluated under the Energy Efficiency Opportunities Act.

Fleet improvements

As part of ERA's Pit 3 extension, new heavy mobile equipment (trucks, excavators, and graders) were purchased and contributed to the overall efficiency of mining by replacing old equipment, and enabling an increase in the scale of operations. Planning for new fuel efficiency measures began during 2008, including a new fuel tracking system to monitor the fuel efficiency of heavy mobile equipment. Purchase of a road roller in 2008 improved haul road condition, reducing wear and tear on roads and machinery.

Opposite: In 2008 ERA undertook construction to increase the height of its tailings dam embankment.

Biodiversity

Biodiversity describes the variety of plants and animals in an area. The Ranger Project Area and the Jabiluka Mineral Lease cover 15,200 hectares of land surrounded by Kakadu National Park. The park is listed twice on the World Heritage register for natural values and is internationally acclaimed as a biodiversity “hot spot”. The park also contains protected areas covered by the Ramsar Convention on Wetlands of International Importance. ERA recognises the importance of protecting ecosystems by minimising the impacts of weeds. Accordingly biodiversity is a significant aspect of our business which requires management.

Case study

Biodiversity – weed management – Jabiru Weedy Timebombs

A unique collaborative project called Jabiru Weedy Timebombs aims to completely eradicate targeted exotic weed species from the Jabiru township before they can spread to Kakadu National Park.

Weedy Timebombs partners include ERA, Gundjeihmi Aboriginal Corporation, Parks Australia North, West Arnhem Shire, and the Environmental Research Institute of the Supervising Scientist.

Parks Australia North restricts plant species that may be grown in town to those that are native to Kakadu. However, over time exotic plants that are regarded as weeds in Kakadu have been imported.

The problem has become critical as some of the weeds are beginning to spread from the town area into the surrounding Kakadu National Park.

During the 2008 dry season Jabiru properties were inspected and the locations of weeds mapped. An experienced weed management team removed weeds from 39 households, and land occupiers were supplied with vouchers for free replacement native plants, redeemable at the Jabiru based native plant nursery, Kakadu Native Plant Supplies.



Biodiversity action planning

During 2008 ERA began biodiversity action planning, building on extensive biodiversity research carried out in previous years. In the first phase of this work, Rio Tinto and conservation partners Earthwatch Institute helped ERA to analyse its performance against a standard assessment criteria and begin identifying key regional biodiversity values.

Weed mapping

In 2008, ERA significantly increased its mapping of weeds on the Ranger Project Area and Jabiluka Mineral Lease, with 765 hectares of land included in the programme which had not been mapped previously. This large increase in area mapped provided accurate, comprehensive information about weed location and species, and will assist planning and resource allocation for more effective weed control activities. The mapping in 2008 identified 168 hectares of land affected by weeds (66 hectares in 2007 and 39 hectares in 2006). Three new weed species were identified in the newly mapped areas, bringing the total to 39.

Weed management

ERA's weed management programme tackles a wide range of weeds, such as Mission Grass, Annual Pennisetum, and Rattlepod. During 2008 the weed management programme confirmed the success of wide scale scalping techniques used in 2007, where areas of topsoil highly affected by weeds and weed seeds were removed. The weed scalping trial proved extremely effective and plans are in place to scalp a larger area in 2009.

Targeted use of herbicide was expanded in 2008 due to new equipment increasing access to weed affected areas. The National Heritage Trust funded Jabiru Weedy Timebombs project proved highly successful in tackling invasive weed species found in Jabiru and at risk of escaping to the wider Kakadu National Park.

Traditional burning

In 2007 ERA started a traditional burning programme to improve fire management on landscapes of significant biodiversity value through application of traditional ecological knowledge. As ERA's relationship with Mirarr Traditional Owners continues to develop, this programme has flourished. In 2008 the number of Mirarr people taking part in the traditional burning programme doubled, and involved men's and women's burning groups.

Opposite: Brolga (Grus rubicundus).

Case study

Listening to trees

ERA researchers are listening very closely to the trees - a comprehensive study of four typical local woodlands in an area similar to what the Ranger post mining landform will look like began in August 2008.

Using sap flow measurement techniques, the study provides continuous and simultaneous water use measurements of 32 upper canopy trees, as well as monitoring soil moisture down to six metres, shallow groundwater levels and weather conditions.

The results will provide critical information about natural woodlands in terms of water requirements, root extraction depth and adaptation and response to environmental hazards, such as bush fires.

The research will provide valuable information to support revegetation and geomorphic change studies on the trial landform, and assist planning for the Ranger post mining landform.

Product stewardship-

Understanding the impacts of our product through its life cycle

Based on a total life cycle approach - every tonne of uranium oxide used in electricity production (in place of coal) avoids 40,000 tonnes of carbon dioxide equivalent generation.

Product stewardship is a management approach which takes into account the environmental impacts and costs across the whole life cycle of a product.

In 2008 ERA completed a life cycle assessment to International Standard ISO14040 for its product - uranium oxide - from 'cradle' to 'converter'. ERA became the first Rio Tinto operation to undertake such an assessment which extended outside of the operations gate.

This product life cycle assessment was recognised by independent auditors certified by JAS-ANZ (Joint Accreditation System of Australia and New Zealand) as leading practice.

All waste streams, including emissions and energy flows relating to the manufacture and distribution of our product were assessed - from exploration and mining, to energy used in manufacturing and transporting chemicals, up to delivery to the converter.

These data were used to create an Environmental Product Declaration for our product, in accordance with ISO 14025, and will be used to finalise a Product Stewardship Plan in 2009.

Environmental research

Specialist in-house environmental consulting and research in ERA is undertaken by Earth Water Life Sciences (EWLS). This wholly owned ERA business provides project work and strategic environmental and closure planning advice for ERA and external clients.

EWLS represents ERA on the Alligator Rivers Region Technical Committee (ARRTC) which oversees research being undertaken to protect and restore the environment in the Alligator Rivers Region from any effects of uranium mining. The ARRTC reports directly to the Commonwealth Minister for the Environment and Heritage.

Environmental research and investigations play an integral role in supporting all ERA activities. During 2008 scientific and technical data were provided in support of major ERA projects, including expansion of water treatment capabilities, construction of a trial rehabilitation landform, raising the wall of the tailings dam, and reducing risks to operations caused by extreme rain.

As an example, one of the many key studies undertaken in 2008 was the Tailings Dam Seepage Project, which assessed seepage pathways from the tailings dam and the feasibility of seepage recovery. The study involved borehole drilling, an eight month seepage recovery trial, and assessment of groundwater monitoring, borehole and geophysics data. The results of the seepage recovery trial indicate that seepage from the tailings dam is much less than previous estimates based on computer modelling. Results also indicate recovery of seepage is possible using conventional bore pumps.

Other research and field investigations into water management and stockpile management assisted ERA to demonstrate continued environmental protection to regulators. In addition EWLS updated rehabilitation plans for Ranger and Jabiluka, worked with Mirarr Traditional Owners on weed management and traditional burning, assisted with optimisation of Ranger site water management, and assessed the rehabilitation of land application (irrigation) areas.

Opposite: Paul Davey and Rikki Davison, EWLS Environmental Scientists conduct groundwater monitoring.

Closure planning

Working with the Traditional Owners, stakeholders, and the community, closure at Ranger will see the land where the mine once stood sustain a healthy environment such that it could be incorporated, and share the values, of Kakadu National Park. Closure is a process in which the Mirarr and the broader community can engage with ERA to shape a new Jabiru with a sustainable economy, strong culture and a healthy people who are able to actively participate in determining their own future.

ERA Mine Closure Statement

Ongoing environmental research supports closure planning, and results are incorporated into the ERA Ranger closure model to ensure our plans are up to date, reflect the current mine plan, and meet requirements of the Ranger Authorisation.

As well as incorporating company strategies, the closure model also aims to address stakeholder comments and expectations and is used as a basis for stakeholder engagement.

In 2008, ERA established a closure criteria working group, which is a sub-committee of the Minesite Technical Committee. Aspects that arise during the discussions of the group and are agreed will be incorporated into the closure model.

Ranger mine closure model

ERA's mine closure model documents the strategies and actions to close Ranger at the end of its mine life in a way that satisfies legal obligations and expectations of Traditional Owners, regulators, the broader community and other stakeholders.

ERA also develops an annual plan of rehabilitation for the Ranger project area, which is part of an agreed annual mechanism to calculate and update rehabilitation costs in the event of an unexpected mine closure.

As the end of Ranger's productive life approaches, the two strategies converge. Each year the ERA Ranger closure model is reviewed and updated, involving consultation with regulators and stakeholders, including Traditional Owners.

The updated closure model is reviewed by the Minesite Technical Committee before integration with the company's long term operational financial plan.

Security for rehabilitation

ERA is required to provide financial security to ensure that the country can be remediated in the event the company or its operations are closed in an unexpected manner. At December 31 2008 security of A\$149 million was held by the Commonwealth Government in respect of the Ranger Project Area, and \$1 million held as security for the Jabiluka Mineral Lease.

Case study

Mine closure model - trial landform

Construction of a large scale trial landform at the Ranger mine was completed in 2008. The trial landform will provide valuable experience about the best ways to design, build, shape and rehabilitate mine landforms ahead of scheduled mine closure.

In line with the Ranger mine closure model, excavated pits will be filled with tailings and uneconomic low grade ore, covered with ordinary (or primary) rocks and weathered rocks/soils shaped to mimic natural landforms. These areas will be revegetated with local native ground cover, understory and canopy plants.

The trial landform provides ERA with essential, hands on experience with a range of rehabilitation techniques using local materials and plants. It also provides information necessary for final landform design methodologies, and local data on re-establishment rates of ecosystems in the wet-dry tropics.

Adopting a range of different approaches within the trial landform allows ERA to select and refine rehabilitation techniques best suited to local conditions. It also allows us to demonstrate to Traditional Owners, regulators, other stakeholders and the broader community that ERA has the knowledge and skills to rehabilitate the mine.

Covering approximately eight hectares, the trial landform is divided into three equal areas to assess the performance of various combinations of primary rock and weathered materials, the benefits of tubestock versus direct seeding.

Studies of similar, undisturbed sites identified the mix of plant species to be used and seeds were sourced from trees and other plants within a 50 km radius of the site.

Monitoring of the trial landform performance will include flora, fauna, runoff and seepage water quality, erosion rates, weather parameters and moisture levels within the growth media.

*Previous pages: Dawn at South Alligator.
Opposite: Trial landform. ERA has constructed a site to carry out revegetation trials using seedlings of local native trees.*

Contribution

ERA's operations generate a significant range of financial benefits and opportunities for local communities, the Northern Territory and the wider Australian economy. Benefits include wages, skills training and career development opportunities for employees, use of local contractors and service providers, royalty payments under Indigenous agreements, royalty payments to Government, and contributions and support for the Jabiru town and surrounding communities. We also continually look for ways to improve our business. This section summarises our performance in these areas in 2008.

Economic management and performance

Case study

Heap leached trial

During 2008 ERA commenced a pre-feasibility study into the development of a heap leach facility to recover 15 thousand to 20 thousand tonnes of uranium oxide from existing low grade stockpiles and in situ ores. The study is expected to be completed in 2009.

Heap leaching involves crushing ore of similar grade to a uniform size, approximately 20 millimetres, and placing it in low, flat piles on specially designed waterproof polyurethane membranes.

The piles are then trickle filtered with an acid solution, which slowly percolates through the rock pile and is collected and recovered at the base. The uranium bearing liquid is transported to the main processing plant where uranium is extracted and acid recovered for reuse.

Once the uranium has been recovered, the spent rocks and wastes are removed and placed in tailings storage facilities.

Heap leaching has a range of benefits when compared with conventional mining processes:

- Uses less energy
- Produces less waste
- Makes efficient use of low grade ore that otherwise would be uneconomical to process
- Eliminates the need to crush ore to fine powder, significantly reducing dust.

Production

Production performance for 2008 of 5,339 tonnes of uranium was in line with 2007 production of 5,412 tonnes, and was the third highest on record. Sales of 5,272 tonnes for 2008 were also in line with 2007 (5,324 tonnes). Sales revenue was higher at \$437 million (2007: \$357 million) and the average realised price increased to US\$32.53 per pound (2007: US\$25.06). This comes as a result of the robust long term market for uranium, despite some reduction in spot prices.

Economic contribution to the Northern Territory

In 2008 ERA contributed \$240 million to the Northern Territory economy, an increase of almost 100 per cent over 2007 (\$123 million). In 2008 ERA spent \$60.5 million on wages, \$151.7 million on suppliers and contractors, and returned \$24.9 million in royalties.

Ranger expansion project

ERA's Ranger expansion project aims to sustain production levels beyond the current operating plans by processing stockpiled resources previously regarded as uneconomic to treat, and low grade in situ resources. The Ranger expansion project is designed to recover 15 thousand to 20 thousand tonnes of uranium oxide from a new heap leach facility with a treatment capacity of 10 million tonnes of low grade ore per year. Following stakeholder consultations in 2008, ERA commenced the statutory approval process in 2009. A parallel study to evaluate the potential underground development of the Ranger 3 Deeps exploration target is also expected to proceed in

2009. ERA had previously considered a further expansion of the operating pit targeting 8,000 tonnes of contained uranium oxide but now prefers to explore an underground development option. Completion of studies into Ranger 3 Deeps will provide more information about the optimal development option.

Improving ore grades

During 2008 ERA commissioned a new \$44 million laterite processing plant and a \$19 million state of the art radiometric sorting plant. The new infrastructure will improve the efficiency of processing operations, reduce waste, and maximise economic return from low grade ore. The radiometric sorting plant will upgrade 350 thousand tonnes of low grade ore per year expected to yield around 1,100 tonnes of primary uranium oxide. The laterite plant will increase production by 400 tonnes of primary uranium oxide per year, over a six to seven year period, and make economic use of material that would otherwise be regarded as waste.

Tailings storage wall lift

The storage capacity of the existing tailings facility is being increased by raising the dam wall by three metres at a cost of \$29 million. The first stage of the lift (two metres) was largely completed in December 2008 with the remaining one metre lift scheduled to be completed by June 2009. A new \$17 million tailings delivery system was also constructed. From December 2008, tailings were being pumped to the tailings storage facility, allowing Pit 1 to be closed and progressively rehabilitated. The Pit 1 closure plan should be submitted to stakeholders for review in 2009.

Exploration

During 2008 ERA continued extensive exploration efforts on the Ranger Project Area with exploration and evaluation expenditure increasing to \$15.6 million, up from \$14.1 million in 2007. In November, the company identified a significant exploration target in the Ranger 3 Deeps area, potentially containing a total of 34 thousand tonnes of contained uranium oxide. This area and other near mine targets will form the focus of exploration during 2009. As a result of further work at the Ranger 3 Deeps area, drilling of stockpiles, and lowering the pit cut off grade, the proven, probable and inferred resources increased from 51 thousand tonnes of contained uranium oxide to 115 thousand tonnes.

First sale to China

Australia's first shipment of uranium oxide destined for a Chinese power utility customer was supplied by ERA in October 2008. The opening of a new market in China is a significant milestone for ERA and for Australia's export industry. ERA has been providing uranium oxide to customers in North America, Europe, and Asia for almost 30 years.

Awards

In December 2008 ERA was announced as the winner of the national Minerals and Energy Award at the prestigious 2008 Australian Export Awards. The 2008 Australian Export Awards, co-presented by Austrade and the Australian Chamber of Commerce and Industry, recognise outstanding achievements in international business. The national award follows ERA's success at the Northern Territory Chief Minister's Export and Industry Awards, where ERA won the overall NT Exporter of the Year award, as well as the Minerals and Energy Award.

Previous pages: Laterite Plant Thickener Tank.
Opposite: Heap Leaching Pilot Plant.

Performance targets 2008

- Target met or significant progress against target
- Considerable improvement
- ✗ Target not met

Health

Target	Result	Comment
Action plans developed from high and critical risk ergonomic assessments are incorporated into ESH Improvement Plans.	■	Actions have been developed for all high and critical risk activities determined in 2007 ergonomic risk workshop and are being tracked in the company's reporting system.
Implement ERA Wellness Programme in line with the Rio Tinto global wellness strategy and specific ERA needs.	■	Achieve Health launched in ERA Darwin office in December 2008, and launched at Ranger mine site in February 2009. On site nurse trained in biometrics and health assessments.

Safety

Target	Result	Comment
Implement key action items identified from the semi-quantitative risk assessment (SQRA) and incorporate actions into Environment Safety and Health Improvement Plans.	■	ERA implemented a number of key action items and was therefore able to achieve a 13.9 per cent reduction in risk against its target to reduce risk by 10 per cent.
Achieve a 20 per cent reduction in Lost Time Injury Frequency Rate (LTIFR) and a 20 per cent reduction in All Injury Frequency Rate (AIFR) from the end of 2007.	✗	ERA maintained safety performance during 2008, during a period of significant increase in activity and workforce numbers on the Ranger mine site associated with a series of major expansion projects. However, the goal of a 20 per cent reduction in LTIFR and AIFR was not achieved.

Radiation

Target	Result	Comment
100 per cent implementation of radiation management systems – statutory monitoring and reporting for 2008.	■	Statutory monitoring and reporting completed.
Implement new radiation monitoring programme approved by stakeholders.	□	Radiation monitoring programme developed but yet to be approved by stakeholders.

Environment

Target	Result	Comment
Implement the ERA three year climate change work programme for energy / greenhouse gas reduction.	■	Good progress against most work programme action plans. On track to successfully complete the three year programme.
Implement catchment reduction projects for Pit 1 and Pit 3.	□	Pit 3 catchment works completed. Some Pit 1 catchment works completed; and others deferred.
Design and construct a trial landform.	■	Landform designed. Construction completed early 2009.
First process water treated in third quarter 2008.	□	Upgrade works in progress. Pond Water treatment upgrade requirement affected process water timeline. Process water treatment scheduled for 2009.
Fully align ERA's Health Safety and Environment System with Rio Tinto's new management system requirements.	■	Audit in February 2008 confirmed good alignment, and certification to ISO14001 and AS4801 were also maintained (see Corporate Governance and Compliance section for more information).
No measured increase in target weeds at each land application area for 2008 compared with 2007.	□	There was a measured increase in weed species in 2007. The return to a normal wet season in 2008 shortened the available time to tackle weeds during the growing season.

Regulatory framework

Performance objectives 2009

Community

- Increase engagement with local indigenous community.
- Continue the journey towards the goal of zero injuries.
- Strengthen employee engagement through strong positive and felt leadership.
- Continue to expand Indigenous employment and training.
- Establish initiatives with secondary schools to promote careers at ERA to Northern Territory Indigenous students.
- Formalise engagement with the tourism industry around issues of common interest.
- Finalise the cultural heritage management plan.
- Develop the employment aspects of the AFLNT partnership.

Country

- Ensure that ERA's operations do not adversely impact on the surrounding environment.
- Commence treatment of process water.
- Submit Pit 1 closure plan to stakeholders for review.
- Gain stakeholder feedback on new radiation monitoring programme.
- Identify key regional biodiversity values.
- Expand weed management programme.
- Complete Pit 1 catchment reduction projects.
- Complete oil waste management facility.
- Advance the ERA three year climate change work programme for energy/ greenhouse gas reduction.
- Finalise ERA product stewardship plan.
- Continue to monitor trial landform performance.

Contribution

- Continue drive for operational excellence so that operations continue at record production levels.
- Update study on regional economic impacts from Ranger mine.

ERA's operations are strictly regulated and monitored reflecting their location adjacent to the World Heritage listed Kakadu National Park and on Aboriginal land. The Commonwealth and Northern Territory Governments have regulatory functions, powers and duties in relation to the operations. The following groups play significant roles in the regulatory framework as well as acting in advisory, consultative and technical capacities.

- The Ranger and Jabiluka Minesite Technical Committees (MTC) are the key forums for approvals on environmental matters relating to Ranger and Jabiluka, respectively. The MTCs were established under a set of working arrangements agreed between the Commonwealth and Northern Territory Governments. Both committees are chaired by the Department of Regional Development, Primary Industry, Fisheries and Resources and include representatives from ERA, the Northern Land Council and the Commonwealth Government's Office of the Supervising Scientist (OSS). The Gundjeihmi Aboriginal Corporation also participates in this forum.
- The Alligator Rivers Region Advisory Committee (ARRAC) provides a formal forum for consultation on matters relating to the effects of uranium mining on the environment in the region. Committee members include representatives of the Northern Territory Government, the Commonwealth Government, the Northern Land Council, Aboriginal associations, mining companies (including ERA), West Arnhem Shire, the Northern Territory Environment Centre and such other members who may be appointed by the Commonwealth Minister for the Environment. <http://www.environment.gov.au/ssd/communication/committees/arrac/index.html>
- The Alligator Rivers Region Technical Committee (ARRTC) oversees the nature and extent of research being undertaken to protect and restore the environment in the Alligator Rivers Region from any effects of uranium mining. It reports directly to the Commonwealth Minister for the Environment. <http://www.environment.gov.au/ssd/communication/committees/arrtc/index.html>

Corporate governance and compliance

ERA's governance and compliance systems are a vital part of the management framework that ensures sustainable development practices are built into work processes and systems. More detail about ERA's corporate governance processes and standards can be found at:

http://www.energyres.com.au/investors/corporate_governance

ERA's safety and health management systems are certified to AS4801 Occupational Health and Safety Management Systems. Our safety and health policy can be found at:

http://www.energyres.com.au/sustainability/safety_and_health

ERA complies with Commonwealth and Northern Territory environmental legislation as well as site specific environmental licences, permits and statutory authorisations. ERA's environmental management system is ISO14001 certified. Our environment policy can be found at:

<http://www.energyres.com.au/sustainability/environment>

ERA is required to report any incident that is a divergence from strict compliance with its statutory authorisations, even if the incident has no detrimental environmental or other impacts, to a wide range of regulators and stakeholders. ERA maximises the transparency of its activities by reporting all environmental and radiation incidents, no matter how small, from the smallest spill inside our containments to poor housekeeping practices.

ERA's Code of Business Conduct requires employees and directors to maintain high standards of ethical behaviour, and can be found at:

http://www.energyres.com.au/investors/corporate_overview/profile



Opposite: Frill Neck Lizard (*Chlamydosaurus kingii*).

Performance validation

In addition to Rio Tinto audits and requirements, ERA's operations also undergo extensive inspection, audit and review by Government, non-government organisations, industry experts and other independent auditors. In 2008 ERA participated in more than 18 audits and inspections and a further 22 planned meetings during which ERA's stakeholders reviewed and provided feedback on our performance.

Government agencies independently monitor surface and ground water at ERA's operations using water quality sampling and in situ creek testing. In situ creek testing involves monitoring sample populations of the most sensitive fish, snails and other species within the creek to ensure that water quality is not affecting their normal behaviours and life cycle.

Based on this extensive array of monitoring, the Office of the Supervising Scientist confirmed in its 2007-2008 Annual Report that in the 12 months to June 30, 2008, there were no reported incidents that resulted in any environmental impact off the immediate mine site, and that the environment remained protected through the period.

Opposite: Coarse Ore Stockpile.

More information

Energy Resources of Australia Ltd

ABN 71 008 550 865

Level 10 TIO Centre 24 Mitchell Street
GPO Box 2394 Darwin NT 0801
Telephone: 08 8924 3500
Facsimile: 08 8924 3555

Earth Water Life Sciences (EWLS) Pty Ltd

Energy House Level 3
18-20 Cavenagh Street
GPO Box 518 Darwin NT 0801
Telephone: 08 8942 5700
Facsimile: 08 8942 5790

ERA - Ranger Mine

Locked Bag 1 Jabiru NT 0886
Telephone: 08 8938 1211
Facsimile: 08 8938 1203

Special thanks

Special thanks to Andreas Okas for
selected wildlife photography

Feedback

Further information can be obtained
and feedback to ERA provided at our
website www.energyres.com.au



ERA