

Safety, environment & society



Heritage image: Banksia Speciosa.

Future image: Logan Water Alliance Environment team members Kelly Griffin (L) formerly from Cardno, and Tanya Reedman (R) from PB marking trees on site for the Greenwood Lakes Reserve Rehabilitation Project on the Logan Water Alliance. The Alliance is responsible for planning, designing, constructing and commissioning new and improved water, wastewater and recycled water infrastructure throughout the Logan district, Queensland, Australia.



Without concerted action to conserve the earth's resources, we of this generation will be blamed by the generations to come for squandering the most precious of nature's gifts. ”

~ William Barclay Parsons, 1929

Our approach

As consultants, we continue to work to mitigate the social and environmental impact of the projects in which we work, and the services we provide to our clients. We are constantly aware of the need to provide safe working conditions for our people, clients, subcontractors and others who are involved with our projects.

Our sustainability principles — integration, adaptation and innovation — are designed to be applied to all our projects, to complement our management systems and provide the best possible outcomes.

Occupational health and safety

PB recognises that the people we employ are our greatest asset, and that occupational health and safety (OHS) is integral to delivering our corporate values. We are committed to:

- providing a safe and healthy workplace, free of occupational injury and illness, for employees and others who might be affected by our operations
- complying with all legal and regulatory obligations with respect to OHS and workplace rehabilitation
- working with clients to optimise OHS considerations in planning, design and project management
- improving and enhancing OHS performance by establishing and monitoring objectives and targets.

Programs

PB has implemented various programs that help employees and their families manage the risks associated with many significant health and safety issues — for example:

- as part of PB's partnership with Balfour Beatty, we have committed ourselves to achieving zero harm by 2012
- all PB employees receive OHS induction and ongoing training on health and safety topics. To make this employee training even more effective, all PB managers are trained in OHS leadership
- our Employee Assistance Program, a confidential telephone counselling service, is available at all times to all PB employees and their immediate family members to help manage stress and the risk of mental illness
- regular skin checks are carried out for site based staff to proactively manage the risk of skin cancer
- a wellbeing program is in place that encourages employees to combine a sustainable work-life balance with healthy eating and exercise
- bicycle user groups have been established in each office to support and encourage cycling as a means of transport.

OHS reporting

In the 2010 financial year, our OHS statistics included directly employed contractors.

Most lag indicators show a slightly negative trend based on the 2009 figures. However, from an overall perspective, 2010's performance appears as a flattening-off from many years of significant improvement.

Based on lead indicators, we demonstrated a 65% increase in hazard and near-miss reporting frequency from the previous year. This information helps us understand where our potential vulnerabilities are, and therefore guides the steps we need to take to decrease actual incidents.

PB's hazard and near-miss reporting frequency (per million hours worked) has continued to increase — from 52 in 2007 to 150 in 2010.

Involving our people

Health and safety committees are an important part of our OHS consultation process. In 2010, we estimate that 3.5% of our people represented their colleagues in regular OHS committee meetings. This estimate is conservative as it does not include all personnel on project-based OHS committees.

Our Zero Harm Journey Plan documents how we are forming focus groups from employees across the business to focus on six of our most pressing hazards. These hazards are driving, ground penetration, manual handling, international travel, remote area assignments and workplace stress.

On a day-to-day basis, all employees are encouraged to actively participate in our OHS system — for example, by presenting safety moments and stories at team meetings, attending ongoing safety training, and reviewing risk registers and action plans.

Environmental management

PB's interactions with, and responsibility to, the environment are integrated into the policies and procedures that form part of our environmental management system (EMS), which is certified to ISO 14001. Each year we establish and review our objectives and targets with the aim of continually reducing our impact on the environment. In addition, we develop action plans and have a collection of standard work practices to guide our behaviours that are in line with PB's policy commitments.

Occupational health incidents

	WA	SA	VIC	NSW	QLD	NZ	2010 total	2009 total
Fatalities	0	0	0	0	0	0	0	0
Lost-time injuries (LTI)	1	0	1	3	0	0	5	3
Lost-time injury frequency rate (LTIFR)	3.9	0	1.5	2.1	0	0	1.16	0.7
Total recordable injury frequency	15.7	8	1.5	5.6	0.8	0	3.9	3.28
Occupational diseases	0	0	0	0	0	0	0	0



Kim Sammut
Acting Safety, Health and Environment
Manager, Australia-Pacific

What does sustainability mean for me?

In addition to Santa Claus and the Tooth Fairy, I stopped believing in common sense years ago. My work in PB's Safety, Health and Environment team unfortunately reaffirms to me that this notion cannot be relied on to protect our people or the environment from harm.

I believe that the concept of common sense and sustainability go hand in hand. In its purest form, sustainability represents a desire to balance economic, social and environmental wants and needs, and as more people genuinely embrace sustainability, the standard of common sense will improve. As an outcome, better decisions will be made and better results will occur.

Sound decision making also forms an integral part of safety, health and environmental management. When people proactively consider the potential impacts of their decisions, positive outcomes are more likely to happen. Embedding good leadership, and applying a consistent approach from PB's Safety, Health and Environment team, a risk-based decision-making and positive-behaviour culture can become second nature.

History has shown that decisions based purely on economic factors have injured people, damaged the environment and exploited communities for the benefit of few. Slowly but surely, organisations around the world are learning from past mistakes and putting into practice the principles of sustainability for the benefit of all.

I am proud to work for a company which strives to be a leader in sustainability and I am fortunate that I can provide an ongoing contribution to the important work which our team provides to PB.

We have a choice in everything we do, so it may as well benefit many and harm few.

Awareness raising

To complement our EMS, each PB office has a working group named the Green Team. Members are enthusiastic employees who champion environmental awareness events throughout the year, and who implement initiatives that help us to achieve our green objectives and targets.

In 2010, our Green Teams inaugurated PB's Fly-free Week, to coincide with PB's Environment Week in June. The teams encouraged their colleagues to remain in their home regional office and actively participate in activities which aimed to increase awareness of travel as a major contributor to greenhouse gases (GHG), such as:

- reviewing an online calculation of their ecological footprint
- attending Friday drinks with local organic food producers
- attending guest speakers and information presentations.

Fly-free Week

With climate change no longer an abstract concept but a reality, decisive action is needed. During 2010, PB made an ongoing commitment to corporate sustainability by launching 'Fly-free Week' and declaring an entire week to be free of air travel.

Fly-free Week is part of PB's commitment to reducing GHG emissions by 20% during 2010. The first air-travel-free week was declared between 31 May and 4 June 2010. During this time, all work-related air-travel was to be either stopped or rescheduled, effectively grounding 2,500 staff across A-P. PB had previously identified that air travel accounted for nearly 70% of the company's carbon footprint. The aim of Fly-free Week was to directly reduce the environmental impact of this business practice, as well as raise awareness of the issue.

PB alleviated the need for staff travel by providing them with access to at least one, if not several, video conference units, as well as WebEx software and desktop-sharing facilities.

There have been a number of positive outcomes from the Fly-free Week initiative, including 160,000 fewer air miles travelled and 36 tonnes less of associated carbon dioxide. In addition, a financial saving of \$50,000 was added to PB's bottom line, as well as 400 employee hours that would have otherwise been consumed while travelling. While these are some tangible benefits, the Fly-free Week initiative has challenged employees to change their attitudes and, most importantly, their behaviour with respect to embracing sustainable alternatives to air travel.

Some may suggest that any flying avoided during the Fly-free Week could instead be done in the weeks leading up to, or the weeks following, this designated week. However, results drawn by PB showed that the overall flight activity for the overall period was noticeably reduced.

The second Fly-free Week was held between 29 November and 3 December. This week recorded a very similar result to the previous one.

In addition to the environmental advantages, reduced air travel also has many social benefits. For example, cutting down on travel time promotes more efficient work-life balance.

PB's policy of purchasing carbon offsets for all flights taken meant that air-travel-free weeks had a financial benefit for the organisation. It also signals a revolutionary change in business leadership and behaviour, with all of the organisation's senior leadership supporting the initiative.

Resource management

PB's resource management Standard Work Practice (SWP) specifies the way materials and consumables are to be managed in PB's offices and site locations. Implementing this SWP enables us to achieve our environmental policy objectives, conserve resources and reduce waste generation.

Unless it is impractical, all PB employees are responsible for:

- minimising the quantity of waste disposed to landfill
- minimising consumption of all materials, including paper
- minimising the acceptance of product and equipment packaging
- maximising recycling of paper and all other recyclables.

Of the materials PB consumes, the most significant by quantity is paper. In an effort to reduce our reliance on paper products we have changed our systems so that:

- all printers default to double-sided printing
- clients' reports are sent electronically; hard copies of reports are only sent on request
- project files are filed electronically
- online systems are being continually developed.

During 2010, PB purchased 17,111 reams of paper, which equates to 9.6 reams of paper per person. This represents a 25% decrease in paper consumption from 2009.



Members of PB Green Team in Queensland:
(L-R) Helena Bednarova, Lisa Carter, Stephanie Loh, Ainslie Just.



Waste management

From industry best practice assumptions and information collected during waste audits, the total weight of waste disposed to domestic landfill in 2010 is as follows:

- mixed waste: 33.9 tonnes
- food: 29.2 tonnes
- paper: 32.8 tonnes.

Water management

As the majority of PB's offices are in shared tenancies, water is generally charged as part of an inclusive management fee. Consequently, we have no accurate way of determining PB's water consumption. However, by applying an estimation factor of four kilolitres (kL) per person (estimated with advice from the Australian Bureau of Statistics), our annual water consumption is estimated at 8,400 kL.

Although we are unable to recycle or reuse our office-based water discharge, we recycle and reuse water on clients' sites whenever possible. In fact, at a number of client sites, we provide sustainable design consulting services to clients to maximise water-harvesting and reuse.

Based on the office-related setting of our water use, we estimate that PB's total annual domestic water discharge is no greater than 6,000 kL.



Danielle O'Connor
Production Coordinator,
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What does sustainability mean for me?

The administration and facilities operations at PB play an important role in our overall delivery to our clients. The resources we use to get our job done range from the vehicles we drive to site, to the paper PB reports on for our clients. All of these elements reflect many of our own values, including energy sustainability and the use of recycled materials.

Incorporating PB's sustainability policies within my role is no exception. Sustainability is part of our culture and is embedded into our workplace. In my position, this means delivering outcomes in the most environmentally responsible, economical and productive way possible.

I can influence this culture by purchasing green products and buying locally supplied goods. Personally, I also support sustainability at PB by:

- utilising recyclable and reusable content
- minimising waste by using efficient production methods
- reusing some of my production materials wherever possible.

To ensure our contribution to the triple-bottom line is effective, it needs to be acknowledged that sustainability in the corporate world is a fluid philosophy, so our approach requires constant reassessment and adjustment.

Throughout the course of my day, there are numerous opportunities to contribute to this philosophy, and our sustainability policies. It's as easy as turning single-sided paper into note pads, or to donating old stationery stock to schools. I am very lucky that my role also provides a great arena to demonstrate how simple it can be to make a difference.

"Never doubt that a small group of thoughtful, committed individuals can change the world. Indeed it's the only thing that ever has."

~ Margaret Mead

Land management

PB's fieldwork procedures guide employees in managing environmental risks associated with field activities. While we do not own, lease or manage land in or adjacent to protected areas or areas of high biodiversity value outside protected areas, we often provide consulting services to clients who do.

Our activities have not had any significant negative impacts on areas of high biodiversity value. However, our consultancy services continue to yield significant positive results for our clients and project communities.

Management Plan for Restoration and Rehabilitation of an Urban Riparian Zone



Riparian vegetation plays an important role within urban environments, providing connectivity in cleared landscapes, and important habitat refuges. At Duck River, in the west of Sydney, a plan for riparian zone management was required to improve the ecological condition of the area. This plan also included best practice ecological management principles.

The area had suffered significant degradation due to factors including erosion and off-target herbicide impacts. As a result, the Duck River project required a carefully designed vegetation management regime to minimise further environmental impacts and risks of further adverse outcomes. The project site is also home to the grey-headed flying fox, a listed threatened species.

PB prepared the management plan in consultation with our client, government authorities and community groups which focused on land and biodiversity management and restoration.

Our role included:

- organising meetings with the client representatives and external stakeholders to discuss the condition of the site and approaches to restoration
- researching the existing environment of the site and surrounds to identify restoration constraints, risks and opportunities
- undertaking detailed site inspections and mapping the distribution of weeds, native vegetation, fauna habitat, erosion and opportunities for improvements to stormwater infrastructure
- developing clear and practical management recommendations, including prioritisation, monitoring requirements, adaptive management principles and indicative costing.

Integrated strategies were developed, recognising the interaction between adjacent land, stormwater management issues, public amenity, weed proliferation and habitat protection for native species. These strategies were developed considering the potential conflicts between objectives, such as the potential impact of weed removal on bank stability and fauna habitat, and the potential off-target impacts of herbicides on native vegetation and aquatic ecosystems.

The final management plan included detailed mapping of existing environmental conditions and management zones to complement the five-year program for the restoration of the site.



Energy management

PB's environment management system (EMS) guides the management of energy use in our offices and in our site offices. Our energy management SWP assists us to achieve our environmental policy objectives of protecting the environment, conserving natural resources, maximising the efficient use of energy, and achieving carbon neutrality.

Unless it is impractical, all PB employees are responsible for minimising energy use and the consumption of fossil fuels, and reducing the emission of air pollutants, including GHG.

During 2010, PB continued to implement initiatives to reduce its direct and indirect consumption of energy, as we have highlighted through PB's Fly-free Week. In addition we have reduced energy consumption through:

- ongoing awareness campaigns to effect behavioural change in relation to electricity usage (corporate support of Earth Hour)
- designing and implementing software to easily enable employees to put their computers in sleep mode while away from their desk.

As a result of the initiatives implemented to date, operational efficiencies and energy conservation has resulted in a 7% reduction in electricity consumption in 2010, compared with 2009.

Climate change

Climate change management

PB acknowledges the very real risks of climate change and the impacts that it might have on us, our clients, and the way we do business. Climate change is an indicator of humankind living unsustainably. We recognise that a meaningful response to climate change requires deep understanding of its causes and processes, and innovative and adaptive solutions.

Climate change policy

PB's climate change policy reflects our corporate commitment to immediately lead the way and influence others in a positive, effective response to climate change.

Emissions

PB's emissions profile assists us to understand our greatest emissions liability. We do not emit any ozone-depleting substances as part of our operations, nor do we emit any nitrogen oxide (NOx), sulphur dioxide (SO₂) or other significant air emissions, with the exception of carbon dioxide (CO₂).

The following amounts of carbon dioxide were emitted by PB's direct and indirect activities:

- Scope 1: 476 tonnes
- Scope 2: 2,125 tonnes
- Scope 3: 9,471 tonnes

Carbon emissions by source

- electricity: 40.6%
- road: 11.8%
- air: 46.4%
- waste: 1.2%.

As a result of the initiatives implemented to date, operational efficiencies and energy conservation have accounted for a 4% emission reduction, representing approximately 500 tonnes of carbon dioxide across our A-P operations. Initiatives include:

- making public transport tickets available in each office as an alternative to taxi vouchers
- ongoing awareness raising, including provision of alternatives or strategies to minimise GHG emissions

Energy consumption from our activities

Direct Scope 1		Indirect Scope 2 and Scope 3	
Vehicle diesel	105 kL	Building electricity	4,965,000 kWh
Vehicle petrol	65.2 kL	Vehicle LPG (taxi)	94 kL
Vehicle biodiesel	1.6 kL	Vehicle diesel (hire)	34.3 kL
Vehicle LPG	2.6 kL	Vehicle petrol (hire & personal)	264.9 kL
Building natural gas	600 GJ	Aviation fuel	17,056,281 miles

- regular office audits (or 'enviro-raids') to identify practices requiring improvement and to positively reinforce environmentally friendly habits, such as switching off electrical equipment when not in use.

Carbon-neutral Program

Although PB believes that emission reduction is the first line of action, we also recognise that zero emission output is not possible. Our solution is to voluntarily purchase enough offsets for our emissions, based on the GHG protocol, so that we are carbon-neutral. We engage independent greenhouse specialists to assess our activities and purchase offsets for all emissions.

In 2010, we added two more projects to our carbon offset portfolio.

Fuel switching and forest protection, Brazil

Within the Cerrado Forest in central Brazil, local businesses were generating large quantities of waste material such as sawdust, sugar cane, coconut husk and bamboo. This material was being littered throughout the forest and discarded in local landfills. The subsequent anaerobic decay of this material was polluting the atmosphere with the harmful GHG, methane.

This waste material is now being collected and used as renewable biofuel, which contributes to:

- stopping the previously released methane
- halting the clearing of over 750 ha of pristine native forest each year
- improving the amenity of the forest
- improving work conditions for local employees
- creating new job opportunities.

Farmers cooperative energy efficiency, India

This project involves the implementation of energy-efficient technologies in a fertiliser plant cooperatively owned by local farmers. The project now:

- uses previously wasted heat
- reduces fuel consumption
- reduces associated carbon dioxide and oxides of sulphur emissions
- supports the local community.

Both of these projects are accredited by the voluntary carbon standard (VCS) and represent social and environmental benefits beyond carbon offsetting.

Future emissions reporting

To ensure Australia meets its international GHG reduction obligations, as defined by the Kyoto Protocol, the Australian Government has introduced the *National Greenhouse and Energy Reporting Act 2007*.

The Act requires companies to report their GHG when they emit more than the determined thresholds. While PB's emissions forecast shows that we are unlikely to be required to report our emissions, we will continue to monitor our emission profile.

Climate Change business unit

PB's Climate Change business unit combines expertise from across our company in a unit focused on climate change action. It is committed to living our values by providing adaptation and strategic advice to clients.

As we reflect on and adapt to doing business in the context of climate change, we extend our experience and expertise in this area to our clients.

Responsible project management

We manage environmental and safety risk at two levels.

At a corporate level, we have a PB A-P risk register which lists:

- likely PB activities
- associated environmental and safety hazards
- appropriate controls.

These risk registers are periodically reviewed and continually improved to minimise the likelihood and severity of environmental harm. Actions that the risk register review process deems necessary are prioritised, based on an assessment of their risk using PB's risk matrix.

At project level, we compile a project-specific health, environment and safety plan (HESP) using the same proactive planning and review process as at the corporate level.

The risk of disturbing the communities in which we work is proactively managed, project by project, by:

- advising affected community members of our intended works program
- restricting noisy works to business hours
- maintaining courteous and professional interactions with nearby land owners and members of the public
- leaving work sites in the same, or better, condition than we found them.

During 2010, we updated our Environmental Policy and Fieldwork Standard to close an identified gap in the management of our impact on communities.



Stakeholder engagement — achievements for 2010

The PB Stakeholder Engagement team enjoyed a successful year in 2010. A key achievement for the team was sharing resources and knowledge across the country. A truly national business is forming and staff from different states work together to deliver projects, provide ideas, and develop new procedures and systems. Community and stakeholder communication continues to be a challenge for our clients, and in 2010 the team worked on a number of contentious projects. PB was successful in managing issues and building better relationships for our clients and the communities in which they operate.

In 2011, our team is looking forward to working collectively on projects again, further strengthening our input on strategic projects, and growing our business and capability. Key growth areas for our team are issues management, and social impact assessment and monitoring. The PB Stakeholder Engagement team will continue its sustainable growth, while working in partnership with existing and new clients in a continually changing social environment.

Engaging stakeholders on the Jacinth-Ambrosia Mineral Mine Project



PB undertook a community engagement adviser role during the operation phase of the Jacinth-Ambrosia Mineral Mine on the far west coast of South Australia, for Iluka Resources Ltd. The \$420 million mine development, located approximately 200 km north-west of Ceduna, is potentially the richest zircon deposit to date globally. The development is estimated to potentially supply 25% of the world's demand.

The Iluka Resources and PB alliance began in 2007. Together, this alliance incorporated and delivered a community engagement plan, with the intention of developing a relationship that would continue through production and future exploration in the region. With site production predicted to carry over 12 years, Iluka was keen to establish trusted relationships with the local and Indigenous communities from the early stages of development and into operations.

In a collaborative effort, PB and Iluka Resources worked towards maintaining and enhancing positive relationships with the far west coast Indigenous community and the community of Ceduna.

Some of the key initiatives used to establish our relationships included establishing a community liaison committee, and developing an internal communication strategy, an education, employment and training program, and an Aboriginal business development strategy for the Far West Native Title Claimant Group. The team also prepared and executed a mine tour program for community and key government stakeholders; and facilitated community information sessions, including a safety awareness program for the community and staff.