

sustainability, environmental, innovation credentials and initiatives

Provincial Plants and Landscapes is a Multi, National Award winning, dynamic and multi-disciplinary team that conserves, restores, creates and beautifies natural, public and private environments. And we're Carbon Neutral.

We have grown our companies from scratch from 2 people operating out of a caravan with no power or running water to 4 offices in 2 states, 3 nurseries, a landscaping and revegetation company, a polyculture farm practicing restorative agriculture and an impressive multi-disciplinary landscape and environmental services team unmatched in Canberra.

We believe that green business is smart business. With Provincial you are not only getting great products and services from experts but an environmental leader that considers the inter-relationship between community, team, business, environment and economy.

Sustainability, Environmental and Innovation Awards

- Telstra ACT Business Innovation Award winner 2012
- Telstra ACT Business Woman of the year 2013 (Lisa Roberts)
- NSW Business Chamber (FSC) Regional Sustainability Award winner 2015
- NSW Business Chamber (FSC) Regional Business Innovation Award winner 2015
- NGIA (Nursery and Garden Industry) National Environment Award winner 2010, 2011, 2012
- NGIA (Nursery and Garden Industry) State (ACT) Environment Award winner 2010, 2011, 2012
- NGIA Hall of Fame (awarded after 3 consecutive years winning Environment Awards)
- Provincial is the only Certified Carbon Neutral Nursery and Landscaper in Australia
- National Women in Construction (NAWIC) Professional Woman of the Year 2016 (ACT)
- HIA GreenSmart accreditation (Lisa Roberts)
- NGIA Certified Nursery Professional (CNP) (Lisa Roberts)
- SCPA Certified Organic (Wandella) and Organic in Conversion (Brogo)

Sustainability and Environmental Policies

Copies attached

Provincial holds and maintains a 2nd party, externally certified, Quality Assurance Management system which meets the Australian Standards AS/NZS ISO 9001:2008 "Quality Management Systems", WHS management system which meets the Australian Standards AS/NZS 4801:2001 "Occupational Health and Safety Management Systems" and Environmental Management system which meets the Australian Standards AS/NZS ISO 14004:2004 "Environmental Management Systems". Our 2nd party certified Quality System is also approved by the ACT Government

Provincial are committed to improving our air, soil and water quality and increasing biodiversity and habitat by propagating and planting appropriate species in appropriate ways and by acting consciously to choose products and services that are eco-friendly. We restore unhealthy ecosystems back to their full potential. We create xeriscaped landscapes in residential and commercial settings using best practice techniques and methodologies.

We've grown and planted literally millions of plants that contribute to improving the amenity of communities and the health of wetlands, waterways, grasslands, urban, rural and coastal landscapes and denuded construction sites.



Our strong environmental and business credentials set us apart in a very dirty industry - the Nursery Industry is renowned for its use of chemicals and pesticides and the landscape and construction industries for waste. We are committed to minimising our environmental footprint and are industry leaders, leading by example by making a difference in our own back yard.

Provincial's founders have long been advocates for the environment. We do the work we do because we love it and because it is essential that it is done. We believe that green business is smart business and our series of Awards in Business, Innovation, Environment and Sustainability are testament to this fact

The political, social and economic reality impacting our industry

The nursery and landscaping industry is generally considered power hungry due to hothouses and growing lights, uses enormous amounts of water and is considered a polluter due to herbicide use, chemical fertilisers, plastic pots, transport, and construction waste. We believe that reputation, coupled with Climate Change and its socio-political and economic impacts will be the future driving forces for our industry.

Climate change affects everyone, and we are committed to minimising Provincial's environmental footprint and embracing opportunities. An independent audit by the Canberra Environmental Centre certified us Carbon Neutral - the only Carbon Neutral nursery / landscaper in Australia.

The work we do is focused on environmental restoration and landscape creation and enhancement. We practice xeriscaping (best practice landscaping), collect seed using FloraBank guidelines to grow hardy, local plants that support habitat enhancement and are enduring in local landscapes, undertake sustainable agricultural pursuits daily on our polyculture farm and act as a role model to others.

Within our nurseries we produce food for our team and to distribute locally. We undertake R&D to continually improve practices eg. Carbon farming is increasing the carbon in our soils to help retain water during drought for our nurseries

The bottom line is reduced costs with increased efficiency as well as increased employee allegiance and a differentiation for our company. Our vision to be and showcase sustainability is palpable and we have multiple strategies in place to remain so. We truly believe that as well as doing the right thing we are insuring our future in the industry.

We've made it a priority to increase infrastructure to support and expand our environmentally-focused business and make sustainable choices always. Provincial undertakes multiple initiatives in house to ensure maximum environmental protection and sustainability.



best practice initiatives to reduce greenhouse gas emissions, reduce our carbon footprint and be an innovative, sustainable business

BUSINESS MODEL INNOVATIONS

- Provincial is the only certified Carbon Neutral nursery and revegetation company in the ACT and NSW – and in Australia
- We operate under a triple bottom line – social, economic and environmental
- Our holistic business model has been developed so that all elements are interdependent yet can operate independently (nurseries / landscaping and revegetation / sustainable agriculture / education / philanthropy)
- In this economic climate it's critical to be sustainable and find solutions to client needs all whilst undertaking R&D with a future focus - we do it all. No one is doing what we're doing, how we're doing it. Our range and scope, infrastructure, intellectual property, qualification, recognition and green credentials are unique. Our systems enable efficiency and transparency and the opportunity to duplicate and self-manage. The vast majority of competitors and affiliates operate in only one aspect of our model eg. only a nursery, a landscaper or food producer. Our advantage is in the interplay between what we do.
- Our behaviour has a knock-on effect - we encourage people to adapt a changing climate and educate them in options for living and growing a green business
- We are a green business. Being growers, we are acutely aware of our connection to the environment and adaptable to growing / environmental conditions that don't remain stable. Being green makes our systems more robust. As wetlands and revegetation experts and xeriscaping experts we contribute to conserving and restoring our public spaces and natural environments, waterways, wetlands, bush land and farmland
- We grow and plant appropriate plant types - The types of plants we grow contribute directly to environmental restoration and carbon sequestration projects. Our plants are primarily provenance species and are sun and frost hardened to ensure they settle into a site well. We also proudly support Flora for Fauna. Our plants are grown in pesticide and herbicide free outdoor spaces
- We utilise best practice seed collection, plant propagation and planting techniques making us as efficient as possible. Our business is acknowledged by industry (the NGIA) as a role model in environmental sustainability
- Efficient business practices and manufacturing techniques saves \$\$ and resources
- We grow and plant locally appropriate plant types - drought tolerant, sun and frost hardened, low maintenance
- We practice eco-friendly 'green' landscape design, permaculture principles, BD, and water sensitive urban design
- We undertake revegetation and rehabilitation projects and wetlands creation
- We are Xeriscape professionals actively affecting change on commercial landscapes
- Company policy articulates clear guidelines on materials and resources use and choices, minimising waste and chemical free choices where ever possible
- Our team is empowered by our environmental ethos and strive to follow company policy on sustainability
- We make regular donations of plants and services that 'give back' to the community, schools and environmental groups, and undertake sponsorship of events to promote public awareness of environmental issues
- Our Director actively engages in education programs in schools and special interest and business groups on issues relating to environmental sustainability in business. She has written 2 eBooks on best practice landscaping and maintenance



MATERIALS AND SUPPLIES / RECYCLING AND WASTE MINIMISATION

- We source low embodied energy materials wherever possible
- We reuse and recycle extensively and operate holistic systems where nursery bi – products are reused
- Provincial nurseries recycle in-house pots and trays. We use natural products to clean trays such as vinegar as a cleaner, a natural anti-bacterial, instead of bleach.
- Our nurseries are chemical-free and onsite we minimise our use of herbicide using organic alternatives as the first option
- Our SE NSW production nurseries are 1. Certified organic (Wandella) and 2. Organic in conversion (Brogo)
- We are a low impact company who avoids toxic substances
- Recycling systems, composting and use of nursery bi-products, waste minimisation, use of eco-friendly products - Bi products from the nurseries are used to create worm farms and organic vegie gardens and orchards for staff and family (low food miles); We practice composting; We recycle paper products for worm farms; Recycled office and stationery products are used on all available occasions in all 3 offices; Double sided printing or multiple pages per page is undertaken whenever possible with black ink set to default; Our nursery trays are reused and we prefer hiko trays to reduce the quantity of tubes required; We reuse potting mixes to bulk up and create gardens for seed crops and food

ENERGY

- We are not reliant on mains power or water
- We operate primarily on solar power with 3 solar energy systems (2 KW; 4KW; 5K with grid feedback) in place
- We utilise solar hot water, wood fired and heat pump technology
- We use energy efficient light bulbs; Turn off lights when not in a room; turn off electrical appliances rather than leaving them on standby; Program equipment to power down after a certain period of inactivity; We choose LED lights on our projects
- Energy efficient buildings - We are always looking at ways to improve on our existing structures by applying passive solar design principles to impact on indoor and outdoor comfort; Most of the built structures at Wandella have significant thermal mass to moderate temperature extremes; All our roofs have been heavily insulated to assist with temperature control; We've sealed gaps in doors and window frames to reduce heat loss and gain; Ceiling fans have been installed at Wandella and Tanja; Windows are opened for cross ventilation; Curtains and blinds closed at night in winter helps retain heat and keep heat out when drawn in summer; We've built shade structures around buildings to keep the building envelope cool; Erection of pergola's with shade cloth and deciduous vines around the Wandella office and nursery potting areas keep things cooler in summer and allow sun through in winter; Water features positioned under or near windows in the path of prevailing breeze facilitate indoor cooling; We've integrated shade into our landscape to create cool zones and mini oasis; We have utilised reconstituted sandstone pavers for hard surfaces around buildings as they keep cool and do not reflect heat onto buildings



WATER

- We harvest over 3 million litres of rainwater annually and practice water use minimisation
- We are utilising solar pump technology at our primary production nursery to save significantly on fuel and diesel costs
- We practice efficient watering practices and water use minimisation practices are in place. Hand watering is limited and only done by experienced staff; Water-efficient trigger nozzle to all hoses used for irrigation; All fitted taps and hoses are inspected regularly to ensure no leaks are occurring; We avoid overhead watering during the middle of the day where possible; We water deeply and less often to conserve water; We utilise pot space efficiently to cut down on water lost between plant; We practice hydrozoning – grouping similar pot sizes and plant varieties with similar watering needs grouped together; We use the natural environment to provide shade (tree canopies) for shade loving plants and to reduce water requirements in summer; Shade structures are employed in summer to reduce water requirements; We have created ponds to hold our wetland plants rather than water daily in the nursery; Utilise brooms instead of water for cleaning of hard surfaces; We educate and train staff in water efficient behavior; We undertake research of water efficient behaviours and infrastructure; We don't waste potable water down the toilet – our production nurseries have composting toilets (our design!) and our NSW offices use dam or river water saving litres of potable water per flush

FLEET AND TRANSPORT

- We provide staff vehicles for carpooling, continually review and improve fleet management and vehicles operate on diesel. We are researching creation of our own bio fuels to fuel our diesel vehicles and eventual conversion to electric vehicles that can be charged by our solar systems!; Efficient transportation strategies for supplies and outgoing order deliveries include making less trips with larger loads, always travelling with full loads, placing supply orders for all 3 offices at once and sourcing products locally where possible; staff are trained in driving efficiency as careful driving can reduce fuel consumption by 30% (and will reduce other expenses, emissions and driver stress!); Vehicles are maintained and serviced regularly; Fuel is not stored in containers nor remains in pumps or tools for more than 4 weeks
- We have excellent vehicle fleet management (using Fleetmatics to monitor performance)
- We practice efficient transport practices – we reduce and combine car trips and product transport
- We have nurseries in 3 locations (ACT and NSW) so can service varied locations efficiently



Innovation and Industry commitment

- Partner in the NGIA 2020 vision for greener urban spaces
- Appointed to Reserve Bank business advisory panel (Lisa Roberts)
- Partner with NGIA 2020 vision
- Ambassador for StartUp Australia and NextGen project
- BVSC (Bega Valley Shire Council) Mentor for the Innovation Hub Initiative
- NAWIC Mentor developing opportunities for Women in Construction (CEO Shadow Program)
- NAWIC Mastermind Facilitator (for business owners)
- NAWIC Alumni Group facilitator
- Author of Environmental, Plant and Landscape references

Some initial opportunities to innovate and increase sustainability

- Power 100% renewable - negotiating a 10KW grid-feedback system for Pialligo and our Brogo polyculture farm.
- Additional Solar Pumps for water extraction at Pialligo and Wandella (Brogo in place)
- Additional water storage for water security – another 2 million litre holding dam for our nursery
- Electric cars (Tesla) being integrated into our Fleet
- Increase staff awareness programs for continual improvement and sustainability
- Products – eg. options for vegetable based printer cartridges; researching the potential of biodegradable trays
- Installation of green roofs and green walls – plant trials in Canberra and Wandella; opportunity on large construction projects
- Engaging landholders in plantings for Carbon sequestration
- Enact our Aquaponics system at a commercial scale incorporating water recycling throughout the nursery (and create food as an output)
- A system to collect runoff and recycle spent water at production nurseries
- ACT Govt collaboration – platform needed for them to better understand plants, landscaping, maintenance and best practice
- Industry education between fields (eg Architects with Civil engineers with nurseries) to understand impacts of decision around landscape treatment and the reality of actual costs
- Education programs – Industry and Schools; workshops; additional eBook reference books (in process)
- ACT Govt and Developers – understand and embrace water quality ponds / wetlands in urban landscapes to capture storm water run-off, clean water and keep waterways healthy
- Right plants, right place, right treatment
- We've developed our own waterless composting toilet system which would be amazing to create in kit form and distribute to remote, dry or developing places
- There is a palpable need to give back to those less fortunate both here and internationally and our innovative model allows us to do that in numerous ways. Our contributions relate specifically to our business values and practices providing clean water, food, revegetation, sustainable agricultural pursuits, education and shelter.



At Provincial Plants and Landscapes (Provincial) our Environmental Policy is based on a belief that the environment in which we live and work is a significant priority and must be considered during all work performed on our behalf. We are dedicated to preventing environmental harm to local ecosystems and communities and are continually improving our environmental performance. We work to rehabilitate local ecosystems and communities.

Provincial conforms to statutory / regulatory requirements and recognises community and client needs and environmental issues and safety requirements. Our Environmental Management system meets the Australian Standards AS/NZS ISO 14004:2004 “Environmental Management Systems”

This Environmental Policy aims to integrate a philosophy of sustainable development into all the organisation’s activities and to establish and promote sound environmental practice in our operations. Our Values and commitment to Zero Harm sees us providing best practice solutions based on sustainable environmental management practices and principles.

Provincial is committed not only to complying with applicable law in all of its operations but to minimise risks and impacts through the development of robust and documented systems to implement, measure, monitor, and disseminate excellent environmental performance both within its operations and to the broader community.

Provincial is committed to planning, carrying out and monitoring its operations in order to

- Comply with relevant EPA regulations, any local council development application consent conditions and any additional client requirements relating to the environment
- Set environmental targets for each major project site in an Environmental Management Plan
- Prevent pollution and waste and minimise the emission of noise, dust and polluted discharge from its premises
- Respond promptly to any emergency situation which could cause adverse environmental impacts
- Minimise our impact on our environment and maximise the effective use of resources
- Support the principles of Ecologically Sustainable Development

To ensure our objectives are met we will

- Regularly review environmental compliance
- Ensure compliance with client and project environmental requirements and specifications
- Use a risk based approach to implement any mitigation measures where environmental impacts are identified
- Manage risks and prevent problems from occurring
- Promote continuous improvement towards best practice in environmental management
- Provide appropriate training and instruction to ensure that staff understand how to implement an EMP and follow internal environmental policies and procedures
- Sustain a culture of environmental awareness and responsibility
- Encourage staff to offer suggestions to engage in continual improvement on how environmental protection measures can be improved. Such suggestions will be assessed by management and implemented as appropriate
- Minimise our use of non-renewable resources and products

This policy applies to all employee’s, subcontractors or visitors to Provincial sites. It is the responsibility of these parties to ensure they understand and apply the required statutory obligations, business policies and procedures and associated documentation as it applies to their scope of work and to contribute to the continual improvement of such

Lisa Roberts

Lisa Roberts | Managing Director

Date 17/11/2017 | Review Date 17/11/2018



The earth's environment is under severe stress from uncontrolled human activity, threatening the survival of our society and the performance of Provincial Plants and Landscape's mission. Provincial accepts that it must work to preserve the environmental sustainability of the planet, at all levels of its operations – in its own practice, as a participant in a community of practice, and as a participant in the Australian social discourse.

Provincial aspires to minimise its impact on our environment and maximise the effective use of resources. We strive to achieve this by increasing communication and awareness of our efforts in accordance with this policy and fostering responsible environmental behaviour amongst staff, volunteers, and users at all levels.

Provincial is committed not only to complying with applicable law in all of its operations but to minimise risks and impacts through the development of robust and documented systems to implement, measure, monitor, and disseminate excellent environmental performance both within its operations and to the broader community.

To remain sustainable and maintain our position and reputation in our fields, Provincial's Integrated Business Management (IBMS) and Environmental Management System (EMS) are externally certified and subject to continual improvement. This Environmental Sustainability Policy aims to integrate a philosophy of sustainable development into all the organisation's activities and to establish and promote sound environmental practice in our operations. Provincial is committed to applying the principles of sustainability in both decision making and activities that we engage in.

Provincial commits itself to sustainability in the following ways

- Growth and Economic Benefit | making decisions using a holistic approach that considers social, economic and environmental needs and considerations whilst growing Provincial for increased benefit to our staff and the community via landscaping, horticultural, environmental and rehabilitation solutions
- Labour Practices | keeping our workplaces free from environmental and safety hazards and risks and through thorough WHS safety and training. By providing excellent employment conditions, opportunities and recognition and by employing Equal Opportunity for all
- Community protection, amenity enhancement and respect | by demonstrating commitment to best practice work and environmental management practices and a dedication to creating enhanced living environments and public spaces we increase community respect. Allowing for public consultation as appropriate
- Environmental responsibility and efficient resource use | by establishing and following environmental policy that drives best practice environmental management internally and is communicated to all contractors or partners

Provincial also commits itself to minimising its impact on our environment and to sustainability through

- Providing a safe and healthful workplace
- Having an environmentally sustainable aware culture, where responsibility is assigned and understood
- Being an environmentally responsible neighbour in our community
- Conserving natural resources by reusing and recycling
- Using, in our own operations, processes that do not adversely affect the environment
- Ensuring the responsible use of energy and natural resources throughout the organisation
- Participating in efforts to improve environmental protection and understanding
- Conducting rigorous audits, evaluations, and self-assessments of the implementation of this policy
- Working with suppliers who promote sound environmental practices
- Enhancing awareness among our employees, volunteers, and users – educating and motivating them to act in an environmentally responsible manner

This policy applies to all employee's, subcontractors or visitors to Provincial sites. It is the responsibility of these parties to ensure they understand and apply the required statutory obligations, business policies and procedures and associated documentation as it applies to their scope of work and to contribute to the continual improvement of such

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