



Sustainability Report 2013



Swinburne's 2013 Sustainability Report

- Represents our first sustainability report using the Global Reporting Initiative's Sustainability Reporting Guidelines (www.globalreporting.org)
- Reflects the University's approach to managing significant economic, environmental and social impacts
- Covers the calendar year from 1 January 31 December 2013
- Covers all Swinburne's Melbourne campuses. Student related data includes online students and international enrolments
- Reports against the Global Reporting Initiative's G3.1 Sustainability Reporting Guidelines at 'B' level
- Reports against the targets and actions set out in the University's 2020 Plan

Contents

Our commitment to sustainability	3
Our approach	6
Our students	10
Our research	14
Our communities	18
Our environmental impact	20
Our social impact – employees and students	26
Our economic impact	34
GRI G3 1 content index	38



Our commitment to sustainability

I am pleased to present Swinburne's 2013 Sustainability Report.

This report is a significant step on Swinburne's journey of sustainability. It is the first time that the university has reported its environmental and sustainability outcomes against the Global Reporting Index – the world benchmark for sustainability reporting.

Swinburne has a longstanding commitment to sustainability. We recognise that as a leading university we have an important role to play in preparing tomorrow's leaders and decision-makers to contribute to a sustainable future. At Swinburne, we apply sustainability thinking in our strategic planning and to the initiatives that we pursue.

Swinburne has been at the forefront of education for sustainability for some years. Sustainability concepts are progressively being embedded within the curriculum in all disciplines, in the design and construction of the on-campus built environment, and in campus management.

Through our National Centre for Sustainability, Swinburne has established an extensive suite of dedicated sustainability programs. These include Australia's first accredited course in Carbon Accounting, Diploma of Carbon Management, Diploma of Sustainable Landscape Design, Certificate IV in Sustainable Energy and Resources Efficiency Technologies and the Graduate Certificate in Education and Training for Sustainability.

Much of Swinburne's high-quality research is focussed on one or more aspects of sustainability and, increasingly, this research and its real-world application has the potential to transform lives and create more sustainable outcomes both for individuals and society. Advances in technology offer enormous potential to improve sustainability outcomes.

Take, for example, the way in which the world stores data. In 2013, Swinburne nanophotonics researchers, led by Professor Min Gu, developed a new technique to enable the data capacity of a single DVD to increase from 4.7 gigabytes up to 1000 terabytes. This is equivalent of 10.6 years of compressed high-definition video or 50,000 full high-definition movies. If this research can be successfully commercialised, it will offer great potential for reducing the electricity use and other environmental impacts associated with large-scale data storage.

Sustainability thinking is also a key feature of the way we manage our campuses and plan future investments. We recognise that there are significant gains to be made in making our high-quality education available online and have set an objective that 50% of our teaching will be delivered online by 2020. This is enabling us to be more efficient in the way that we plan and manage our physical environment.

This report aims to:

- identify the sustainability issues that impact on the environment and society as a result of Swinburne's activities;
- describe Swinburne's journey towards sustainability – highlighting our past achievements, current projects and the steps we need to take in the future; and
- provide our students, staff, alumni and partners with a snapshot of our progress towards sustainability in 2013 so that we have a better understanding of what we need to do to improve further.

In the future, it is our aim to align our sustainability reporting with our annual reporting cycle so that sustainability outcomes can be reported transparently at the same time as financial and other outcomes.

I commend this report to you and I look forward to your feedback

Professor Linda Kristjanson Vice-Chancellor and President



'Sustainability' implies that the critical activities of a university are ecologically sound, socially just and economically viable, and that they will continue to be so for future generations. A truly sustainable university would emphasise these concepts in its curriculum and research, preparing students to contribute as working citizens to an environmentally healthy and equitable society. The institution would function as a sustainable community, embodying responsible consumption of energy, water, and food, and supporting sustainable development in its local community and region.

- University Leaders for a Sustainable Future (ULSF)

Our values

Innovation: We thrive on leading through our educational excellence, business and research innovation and creativity in solving real world problems

Integrity: We expect honesty and the highest ethical standards in everything we do

Accountability: We are accountable to ourselves, each other and the communities we serve through transparency and evidence-based decision making

Diversity: We celebrate and respect the strength that difference creates

Teamwork: We encourage collaboration that underpins success through mutual respect, open communication and the sharing of responsibility

Sustainability: We foster positive social, educational and environmentally sustainable change.

Highlights

Swinburne's greenhouse gas emissions peaked in 2012 and then declined in 2013 – the first such decline since this measure has been reported. Our main contributions to greenhouse emissions are energy consumption, air travel and waste to landfill.

Increases in emissions from changes to the built environment at our Hawthorn campus, and in particular the construction of two major new modern teaching and research facilities, have been offset by reductions in emissions through consolidating the teaching, research and other activities that were previously undertaken at our Lilydale and Prahran campuses.

Greenhouse gas emissions from staff air travel peaked in 2011 and has now declined for two consecutive years. While some air travel is unavoidable, new methods of online collaboration are presenting opportunities for staff to pursue global partnerships without a commensurate increase in associated greenhouse gas emissions.

The university is committed to finding ways to manage our responsibilities to reduce carbon emissions while meeting growing student demand. In the period to 2020, we anticipate reductions in our greenhouse gas emissions through:

- an increase in the numbers of students studying online as opposed to studying on campus;
- more efficient space utilisation;
- continuing efforts to minimise staff air travel;
- initiatives to increase recycling and reduce waste to landfill;
- shifts away from printing to the digitalisation of documentation; and
- the new tri-generation capability in our Advanced Manufacturing and Design Centre.

2013 saw the commencement of a process of engagement and consultation with Indigenous elders from among the communities we serve in the development of the University's first Reconciliation Action Plan (RAP). The RAP is central to our commitment to improving the education of Aboriginal and Torres Strait Islander individuals and communities, and building career aspirations and pathways.

Swinburne also commenced the process of developing Swinburne's first Gender Equality Strategic Action Plan aimed at promoting gender equality and closing the gender pay equity gap. Historically, Swinburne's overall workforce has a slightly stronger representation of women than men. In 2013, the ratio of female to male staff was 52% to 48%. However, women currently occupy just 36% of senior leadership positions and this has been identified as an area in which Swinburne needs to improve.



Background

In developing this report, an internal stakeholder consultation process was undertaken in early 2013 to assess the effectiveness and outcomes of the University's 2010 Sustainability Strategy. The findings demonstrated that, although there had been high levels of commitment and uptake initially, progress in more recent years had been patchy and somewhat piece-meal. A significant contributing factor had been the ongoing changes and reform occurring across the tertiary sector and within the University.

As a result, in 2013 the Planning and Management Committee endorsed a decision to integrate the Sustainability Strategy into the University's major strategic plans rather than having it as a stand-alone strategy. This meant that the University's sustainability objectives would be more closely aligned to the organisation's 2020 Plan.

Following this, the Sustainability Strategy Steering Committee agreed to progress the development of the University's first sustainability report in accordance with the Global Reporting Initiative (GRI) framework. The first step was to carry out an internal data collection and review process using the GRI criteria and to review the University's performance against these criteria.

Determining our material impacts and engaging stakeholders

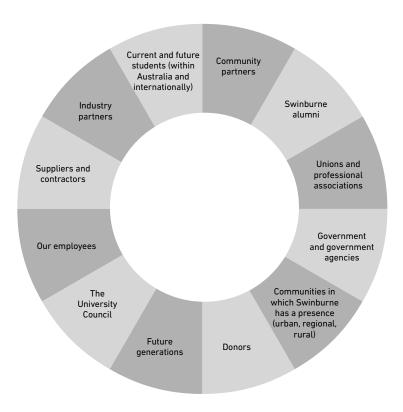
The determination of Swinburne's material sustainability impacts was informed through several processes. These included a benchmarking study to review sustainability reports across the tertiary sector, nationally and internationally, to review the material impacts of peer universities.

Swinburne was already a GRI organisational stakeholder. Therefore, specific GRI knowledge and guidance on determining material issues was sought internally. An informal internal stakeholder engagement process then occurred over several months whereby input was sought from senior leadership, a wide range of employees, sustainability academics and practitioners, and the student environmental group. Several external sustainability experts were also consulted.

A range of material issues were refined, and priorities for action were determined. These were then in line with the University's 2020 Plan and other University-wide strategies.

The sections of the report are therefore organised to reflect the 'pillars' that underpin the 2020 Plan: Teaching and Learning, Research, Industry and Community Engagement, Culture and Capability. The themes within the sections of the report have been prioritised according to material impact, the university's strategic priorities and the GRI categories.

Our stakeholders and intended audiences for this report



Sustainability Report: Our approach

Sustained, mutually beneficial engagement with industry and the wider community is a high priority for Swinburne. Our aim is to be the most userfriendly and connected university in Australia, focused on meeting the needs of stakeholders and partners.

Swinburne seeks to engage and collaborate with partners that align with:

- our values (sustainability, innovation, integrity, accountability, diversity and teamwork)
- our **location** (benefiting local communities)
- our research priorities (future manufacturing, sustainable future, digital frontiers, personal and societal wellbeing and inspirational science and technology)
- our commitment to graduates (positive citizenship).

This is our first sustainability report. Going forwards, we shall endeavour to engage our stakeholders more broadly in defining our material issues and responding to the concerns of key stakeholder groups.

We have chosen not to get the report externally assured as the University is audited regularly by regulatory bodies including TEQSA and ASQA.

Sustainability related risks

Swinburne has a risk management program in place that supports University strategy formation, planning and management, and helps to identify and address risks that have an impact on sustainability. The program is supported by a skilled network of people and a risk management information system to ensure that risks are pro-actively managed and reported. The University Council monitors and reviews these through its Audit and Risk Committee.

Swinburne categorises, analyses and reports on its risk information in a number of different ways. The following risks are being managed actively to support the achievement of the sustainability objectives.

Swinburne's sustainability-related risks

People	Failure to ensure safety of staff and students Inability to ensure safety and security of inbound and outbound students, and staff travelling for work Inability to develop and retain a high performing workforce Inability to attract talented staff
Financial	Decline in revenue as a result of partial and/or full fee deregulation Reduction in State and Commonwealth Government funding Failure to manage the University's cash and investment portfolio adequately Reduction in Government funding for research and innovation Volatility impacting international and domestic student markets
Continuity and contingency	Business disruption due to disaster or occurrence of significant events Impact of partial or full shut down of student residences Loss of campus – inability to use campus buildings and infrastructure Critical systems unavailable Inadequate/inappropriate space for the growth of the University
Regulatory	Failure to comply with current regulatory and governance requirements Failure to adhere to changing legislation and regulations Dampening impact of regulatory decisions on international student recruitment

Risk management and governance mechanisms

Swinburne's Risk Management Policy and Framework sits within the organisational Governance and Assurance structure. It follows the Australian and New Zealand Standard for Risk Management (AS/NZS ISO 31000:2009). Our Internal Audit and Risk Management framework provides a robust structure for the identification and management of risks throughout all levels of the University.

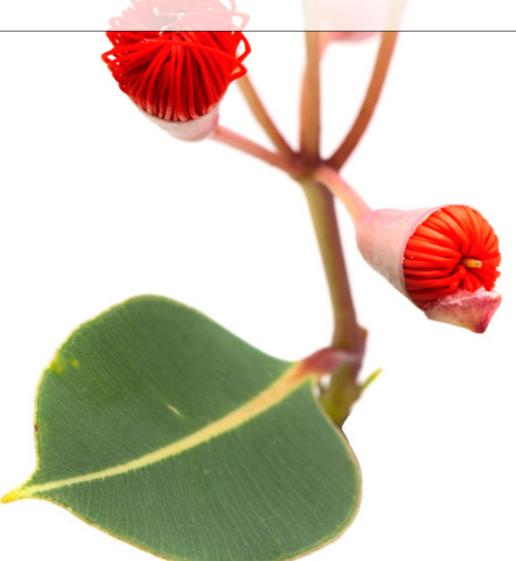
The University is governed by the Swinburne University of Technology Act 2010 under Victorian legislation. The Council is the University's governing body. Its primary responsibility is to manage the affairs of the University, including what the organisation should become in the future, and it oversees and monitors the assessment and management of risk across the University.

The Council delegates to the Vice-Chancellor the authority to undertake general management of the University. Responsibility for the our sustainability commitment statement sits with the Vice-Chancellor who reviews the commitment every two years. The Sustainability Strategy Steering Committee consists mainly of the University's senior leadership. This committee meets quarterly and provides feedback to the Vice-Chancellor through the Chair.

An overview of our governance framework can be viewed at: www.swinburne.edu.au/policies/governance/index.html



Our students



Swinburne's educational provision was again highly rated by students in 2013 as reported in the 2014 Good Universities Guide, with strong ratings for the quality of our teaching as well as for generic skill development and overall graduate satisfaction.

Universities have a vital role to play in preparing tomorrow's leaders. This includes fostering leadership that will ensure a sustainable future.

At Swinburne we are incorporating sustainability principles into our teaching and learning programs and equipping our graduates with skills that will assist them to contribute positively to society and reflect our values: innovation, integrity, accountability, diversity, teamwork and sustainability.

At Swinburne we continue to be recognised for the quality of the educational experience that we offer our students. It is a source of great pride that the University was awarded high ratings for overall graduate satisfaction, teaching quality and generic skills in the Good Universities Guide 2014. This speaks volumes about the dedication of our academic staff, the high standard of teaching we offer and why, increasingly, students are choosing to study with us.

As well, Swinburne received \$5.5 million in funding as part of the Federal Government's Higher Education Participation and Partnerships Program (HEPPP) for the Indigenous Futures Collaboration Project in 2013 – an initiative to help Indigenous students obtain a university education by lifting aspirations and improving retention.

We continue to develop innovative teaching techniques that engage and inspire our students in new ways. The rapid growth of Swinburne Online and the continued popularity of online courses delivered through Open Universities Australia have ensured that we are able to provide educational opportunities to students well beyond our campus footprint in Melbourne's east, including many from low socio-economic status (SES) and regional backgrounds.

Enhancing student participation in university decision-making forums

We are also committed to enhancing the student voice at all levels of the organisation. In 2013 a new model of student consultation was developed for introduction on 1 January 2014. This was designed to enhance the student voice in university life: in faculties, on the Swinburne Governing Council and on the Academic Senate.

Student Consultative Councils (SCCs) have been developed for each faculty. These SCCs are dedicated to student consultation on student and faculty related issues. Elected student representatives from across each faculty meet directly with senior faculty management four times per year. This extends the student voice in each faculty by increasing student representation and providing a dedicated forum to consider issues of direct relevance to students.

To ensure that the University Council has direct access to student views, student representatives are now invited to make formal presentations to Council annually to raise matters relevant to them and to put forward views to inform the operation of the Council. The presentations also provide an opportunity for Council members to ask questions directly of the student representatives to inform deliberations.

Academic Senate is a statutory body established by Council as the peak academic body within the University, and the principal policy-making and advisory body on all matters relating to and affecting teaching, research and educational programs. In 2014, student representation on the Senate was increased from two to three members

Sustainability

At Swinburne we are committed to a sustainable future. Thus, we incorporate sustainability principles into our teaching and learning programs, our social and built environments, and through our engagement with industry and the wider community.

Through our National Centre for Sustainability (NCS), we have established an extensive suite of dedicated sustainability programs. In addition, we have developed a number of specialised and innovative courses aimed at one or more aspects of sustainability. Further information on these is available at www.swinburne.edu.au/ncs/sustainability.html

Swinburne is a signatory of the Talloires Declaration and was awarded the Australian Skills for Sustainability of the Year Award 2010.

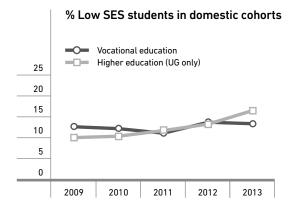
Embracing social inclusion and diversity

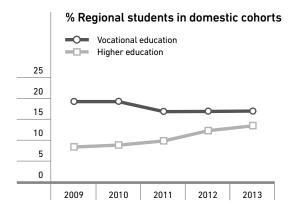
Swinburne is committed to attract, support and reach out to students from diverse backgrounds and geographical locations and intends to continue to build on its founding commitment to the provision of education that is socially inclusive. Current actions include:

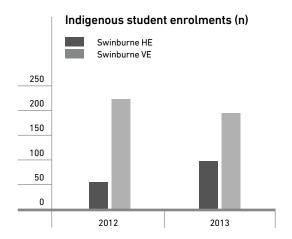
- Building on our connections to schools and outreach programs to raise the awareness of opportunities for tertiary study and increase participation and educational attainment in low socio-economic status, Indigenous, rural and remote communities
- Ensuring that we are constantly monitoring and adapting our access pathways to enable more students to study vocational and higher education programs successfully
- Catering to the needs of students from diverse backgrounds through our study and student support services
- Utilising our multi-campus locations and our reach through online learning to improve access to education in more communities.

In 2013 we committed over a million dollars to projects to assist students from low socio-economic backgrounds to study at Swinburne. Key initiatives focused on improving how we identify and assist students at risk of dropping out of their studies through the use of data analytics, online support programs and improved face to face programs.

We also introduced new online academic literacy needs assistance to help students self-identify their study needs and link them to learning support services. A further program involved the development of on-line self-assessments related to study skills, well-being and academic motivation from which students receive direct feedback and referral information. Each of these projects is being trialled in 2014.







Learning and Teaching and Swinburne's Reconciliation Action Plan for Aboriginal and Torres Strait Islanders

As a University, the Reconciliation Action Plan is our way of committing to improving the education of Aboriginal and Torres Strait Islander individuals and communities and building career aspirations and pathways. Importantly, it is also our way of learning about Aboriginal and Torres Strait Islander cultures, history, spirituality and connections to Country. It is the beginning of identifying ways that we can benefit from Aboriginal and Torres Strait Islander knowledge and ways of learning to improve our University.

Swinburne is committed to making a substantial contribution to the educational and employment outcomes of Aboriginal and Torres Strait Islander peoples. It is our aspiration to make a positive difference in the lives of individuals, families and communities, and engage in creative and innovative ways of learning and research.

Our 2014–2016 Reconciliation Action Plan includes the following action and targets:

Improve access to Swinburne courses and academic success for Aboriginal and Torres Strait Islander students through online and blended study options and the use of other digital technologies, new course offerings in fields including Health, and improved induction and support processes and materials.

TARGET	2014	2016
Aboriginal and Torres Strait Islander student enrolments in vocational education at Swinburne increased through online and blended study options (and new course offerings in 2016)	>220 enrolments	>240 enrolments
Aboriginal and Torres Strait Islander student enrolments in higher education increased through online and blended study options (and new course offerings in 2016)	>120 enrolments	>150 enrolments
Best-practice strategies identified (including through discussion with alumni) and implemented to induct and support Aboriginal and Torres Strait Islander students studying Swinburne courses oncampus and in online and blended study modes	September 2015	May 2016
Targeted Articulation Program (TAP) designed and implemented to enhance Aboriginal and Torres Strait Islander student participation, pathways, support and success in tertiary education at Swinburne	by 31 December	May 2016
Implement support programs to attract and retain Aboriginal and Torres Strait Islander students in online education	by Sept 2014	May 2016

www.swinburne.edu.au/chancellery/about/resources/documents/rap-2014-2016.pdf

Linking Swinburne values with graduate attributes

Our graduates will be forward thinkers, able to adapt to global challenges and technological advances. They will reflect Swinburne's values: innovation, integrity, accountability, diversity, teamwork and sustainability. To this end, our students will have the opportunity during their studies to develop skills, attributes and values that they can draw on throughout their career. Specific actions include:

- ensuring that our generic skills, graduate attributes and values are reflected in our course learning outcomes and prioritised within our extra-curricular enhancement activities
- enabling students to evidence their level of attainment through measures and recognition that can be incorporated into their e-portfolios
- establishing more opportunities to recognize and reward outstanding achievements, including excellence in demonstrating Swinburne's values.

Swinburne Emerging Leaders Award

A new program was developed in 2013 to recognise and enhance students' employability skills. Called the Swinburne Emerging Leaders Awards, these recognise extracurricular activities: students who qualify for them can have them included on their academic transcript. While a comparison with other universities showed that all Australian universities offer volunteering programs similar to Swinburne's, this will be the most comprehensive system targeted at employability skills. Students can register for up to seven separate Emerging Leaders Awards (sustainability, community service, work experience, campus life, global citizenship, research and careers). For each Award category, the student describes their involvement and explains the employability skill that they have developed through the experience. These skills map to the University's graduate attributes and to national employability standards. The Awards are available for all domestic and international Higher Education and VE students.

Table drawn from Swinburne's 2013-2020 Learning and Teaching Strategy

2013 Actions	2014 Target/Progress
Globally aware learners: Design, develop and evaluate activities to engage students in sustainability issues and contextually embed within their course of study	One new initiative within each teaching unit with global issues relevant to course content in all curriculum
Embracing social inclusion and diversity: Improve recruitment and retention of low SES, Aboriginal and Torres Strait Islander students and supporting them through provision of engaged learning, enrichment activities and learning support service	10% increase in commencing students from diverse backgrounds
Embracing social inclusion and diversity: The university's reconciliation action plan (RAP) will be developed and include commitment to relevant ATSI related learning and teaching goals	RAP developed and implemented
Linking Swinburne's values with graduate attributes: Develop a revised set of highly forward-focussed graduate attributes and an implementation plan to embed these into the curriculum	Stakeholder survey strategy renewed

Case Study 1: Tra Vinh University, Vietnam cross cultural sustainability exchange program

As part of a 2013 international sustainability project, Swinburne students engaged in experiential learning through immersion in the culture and educational context of an economy in transition. Swinburne students formed lasting friendships with students at Tra Vinh University (TVU), Vietnam, and collaborated with them to formulate a series of proposals to increase sustainability at TVU. Students gave presentations outlining these proposals to the Rector of TVU while written proposals were submitted to the entire senior management of the University. Senior management quickly responded by organising a Regional Conference on Sustainability and Education in Tra Vinh. Many of the Swinburne students participating in the project reported on the experience as 'life-changing' and several plan to return. Tra Vinh University created a short film about the exchange: www.youtube.com/ watch?v=dJZvjsoNoRk

Case Study 2: Give them wings and they will fly! Transforming VE teachers into Sustainability Champions – a national professional development program

The majority of Australians recognise that a transition to a low carbon economy and society is desirable and inevitable. Equipping Australian industries with employees who possess and can apply relevant sustainability skills and knowledge to support the transition, was the long term vision behind our program. Swinburne received funding from the Commonwealth Government to develop and deliver a transformational professional development program for VE (Vocational Education) teachers across Australia in 2012-13 and again in 2013-14.

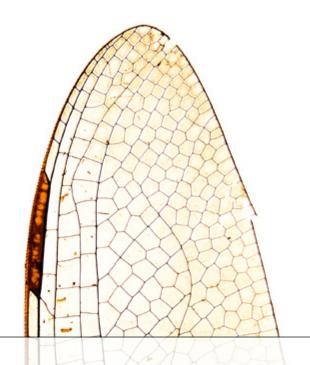
The purpose of the program is to transform VE teachers into 'Sustainability Champions' – through their teaching practice; and within their organisations. Much of the program's focus is to learn to create transformational learning environments that support shifts in thinking towards sustainability using Education for Sustainability principles and tools. In excess of 150 teachers from across every state and territory in Australia completed the program.

www.swinburne.edu.au/ncs/project-updates.html

Case Study 3: Increasing global sustainability awareness in Nepal

A new cultural studies tour was developed to incorporate a focus on raising student awareness of global sustainability issues. The tour engaged participants in formal study of culture, from within. That is, they were immersed within the culture they were seeking to understand. Students systematically and critically engage with, experience and reflect upon the foundations of effective and culturally sensitive communication practices through the use of auto ethnographic techniques.

In 2013 the unit involved a three week visit to Nepal during which time students participated in a three day/two night village homestay in a remote Nepalese village and a visit to an eco-village to receive briefings about water management, biogas, subsistence agriculture, farm animals and cropping. For the purpose of assessment, students presented, in both oral and written form, on the cultural understandings theory developed, drawing upon and sharing relevant intersections with their own disciplinary fields.

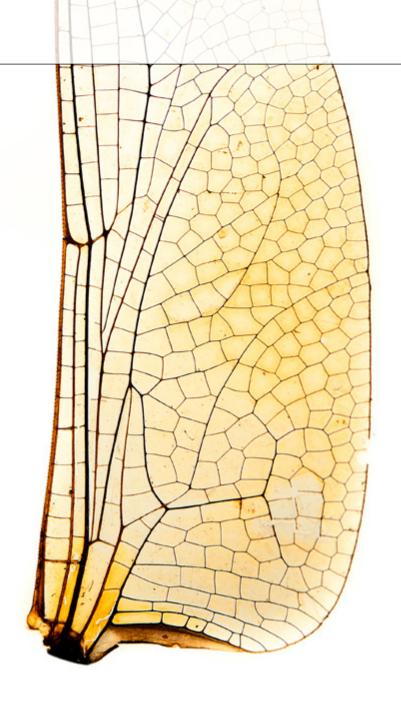


Our research

Swinburne is an internationally recognised research-intensive university. The Commonwealth Government's independent Excellence in Research for Australia (ERA) assessment in 2012 ranked 15 of Swinburne's fields of research at 'world-standard' or above.

The 2013 Academic Ranking of World Universities placed Swinburne among the top 400 universities worldwide, and within the top three in Melbourne.

Swinburne's sustainability-related research is focused on finding solutions to the complex problems that face our society.



At Swinburne we are committed to a sustainable future and demonstrate this through the incorporation of sustainability themes and specific goals into our 2013–2020 Research Development Strategy. We aim to incorporate sustainability principles into our research wherever possible. It follows that we strive to make our research activities ecologically sound, socially just and economically viable, now and into the future.

Focus on outcomes and impact

Swinburne's 2020 Plan directs the University's research, development and deployment priorities around five outcome areas.

Sustainable futures: combining the engineering, social and environmental elements that address sustainability issues, inform public debate and influence government policy.

Personal and societal wellbeing: improving health and psychological wellbeing, tackling quality of life and social issues, and addressing the needs of socially disadvantaged groups and individuals.

Future manufacturing: integrating materials and manufacturing technologies with design, automation and information technologies to create new business opportunities.

Digital frontiers: changing the way we work, communicate and socialise through advances in information and communication technologies, business innovation and design.

Inspirational science and technology: capitalising on the University's strength in fundamental science and astrophysics to ignite the interest of the community and stimulate the next generation of leaders in science and technology.

We measure **impact** as the demonstrable contribution that our research makes to the economy, society, culture, public policy or services, health, the environment, or quality of life beyond academia that may be regional, national or international in nature or scope.

Indigenous participation and research

Various issues affect the participation of Indigenous people in research and research training, particularly at postgraduate level, including access to universities, financial constraints and community expectations. These issues are receiving attention through the establishment and activity of the University's Indigenous Education and Research Committee and the development of an organisational Reconciliation Action Plan (RAP). Other actions to improve Indigenous participation in research and research training, developed through discussion with Indigenous leaders, include:

- recognition that Indigenous students are often mature-age and have family and community support commitments, so that we offer targeted scholarships for masters and doctoral research degrees with appropriate conditions,
- identifying projects of special interest to Indigenous people and communities and, where possible, incorporating Indigenous knowledge systems in our academic and research student processes
- seeking the support of the Indigenous community in progressing our initiatives, partnering with organisations such as the Victorian Aboriginal Education Association Incorporated (VAEAI) and other Victorian universities to create a viable and supportive indigenous higher degree by research (HDR) community.

Increase participation in research training for training for Aboriginal and Torres Strait Islander students

Target Scholarship initiatives and industry and community partnerships leveraged to boost enrolments of Aboriginal and Torres Strait Islander students in higher degree by research (HDR) candidature New collaborative research projects designed and initiated in relevant topic areas, in consultation with Aboriginal and Torres Torres Strait Islander agencies and communities, government and partner universities 2014 2016 >2 students >4 students >3 new projects >3 new projects

www.swinburne.edu.au/chancellery/about/resources/documents/rap-2014-2016.pdf

Sustainability Report: Our research

Ethics and Biosafety

Swinburne is committed to conducting all research in accordance with the Australian Code for Responsible Conduct of Research, and Australian and State legislation and guidelines. The Swinburne Research unit is responsible for the University meeting its commitment to high professional and ethical standards with respect to human research activity, the care and use of animals for scientific purposes, and genetically modified organisms. Swinburne Research provides advice on research ethics policy and procedures to ensure compliance with internal and external regulatory and funding requirements, including proper monitoring and reporting.

www.research.swinburne.edu.au/ethics/

The following action is drawn from the University's 2013–2020 Culture and Capability Strategy

2013 Action	Progress
Augment research ethics education for staff and students	Research ethics education is occurring through a variety of central, academic unit or disciplined-based approaches and, significantly for students and research trainees, via supervisors. Some disciplines or professions are also bound by particular codes of practice. Primary information is being made available through web pages supplemented by induction sessions, workshops, one-to-one interaction and review feedback.

www.swinburne.edu.au/corporate/spq/planning-plans.html

Case studies

Solar Cell Research

Swinburne researchers working towards more efficient and cost-effective solar cell technology received a \$4 million grant in 2013 from the Science and Industry Endowment Fund. The Swinburne and CSIRO team led by Professor Min Gu, Director of Swinburne's Centre for Micro-Photonics, are using the cash boost to take NanoPlas, a patented thin film solar cell technology, from the laboratory to a small-scale pilot project.

Developed at the Victoria-Suntech Advanced Solar Facility, NanoPlas works by incorporating a thin layer of nanoparticles into conventional thin film solar cells to scatter light effectively into the cells. This increases the amount of light entering the cells, improving the conversion of light into electricity.

"One of the critical challenges the thin film solar cell faces is low energy conversion efficiency due to the insufficient absorption from the very thin silicon layer," Professor Gu says. "The new funding will allow us to address this issue."

Youth Homelessness

The Geelong Project is an innovative youth homelessness research and development project, developed and managed by a partnership led by Time for Youth with Barwon Youth and Swinburne University of Technology, together with Geelong schools and community services.

The project is designed to test a ground-breaking early intervention model, based on community and cross sector collaboration through the work of the Geelong Early Intervention Working Group.

The project supports young people and their families through a new interdisciplinary 'Early Intervention Team', which integrates support from schools and agencies and works with young people where and when needed.

The research program will enable new partnerships and pathways between schools and community agencies through the development of common tools and approaches to assist school and community sector workers.

Othe examples of our sustainability focused research can be found at: www.research.swinburne.edu.au/our-research/sustainability/

Case studies (continued)

Cooperative Research Centre (CRC) for Low Carbon Living

Funded by Department of Innovation, Swinburne is a member of the CRC for Low Carbon Living, a seven-year Cooperative Research Centre. The aim of this CRC is to provide government and industry with social, technological and policy tools to overcome identified market barriers that prevent adoption of cost effective low carbon products and services, while maintaining industry competitiveness and improving quality of life. This CRC undertakes research programs in Integrated Building Systems, Low-Carbon Precincts, and Engaged Communities.

www.lowcarbonlivingcrc.com.au/partners

Swinburne Sarawak Research Centre for Sustainable Technologies

The Research Centre for Sustainable Technologies at Swinburne's Sarawak campus was officially declared open in late 2012. The Centre is designed to boost the University's research program, promote research collaborations and instil best research practices, with the common emphasis on sustainability. A total of RM40 million will be invested into research over the next few years.

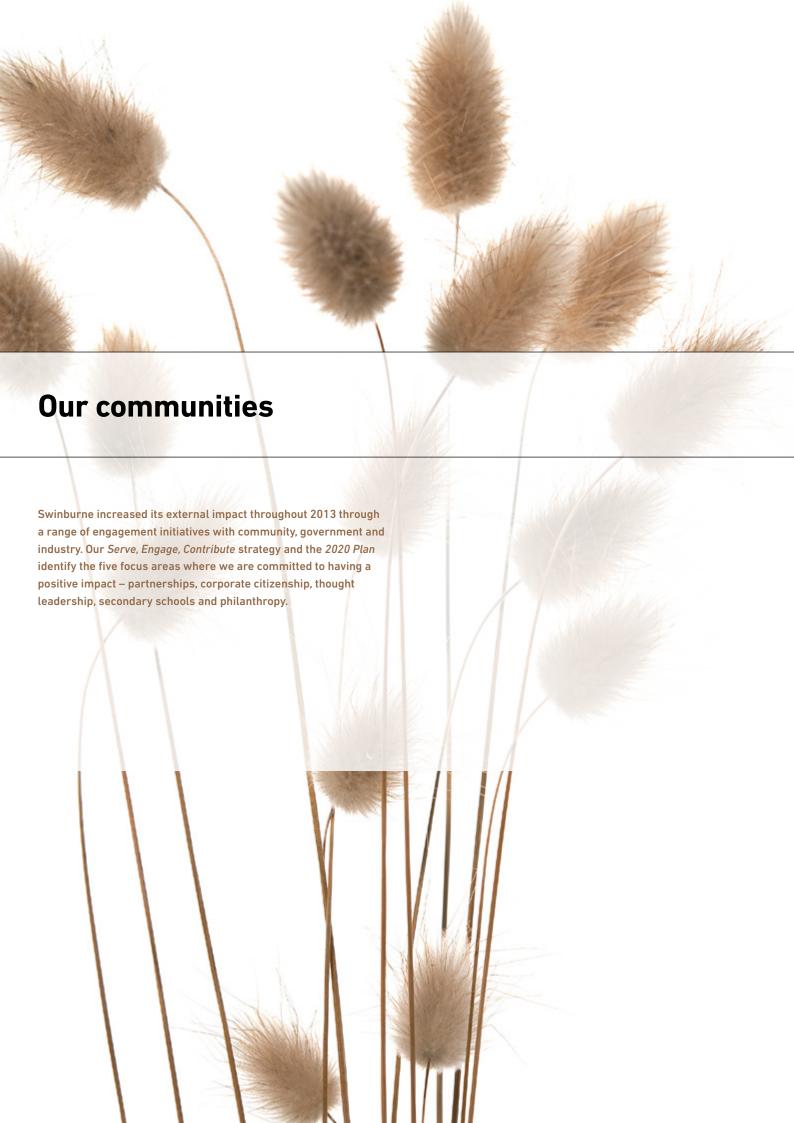
Based at the Centre are experts from Swinburne Sarawak's engineering, computing, science, business and design faculties. These researchers are currently involved in developing technologies and strategies for financially, socio-economically and environmentally sustainable development.

Sustainability related research targets

The following sustainability-related research targets have been established to support our 2013–2020 Research Development Strategy.

Indicators	2010	2011	2012	2013	2020	Notes on metrics
Staff actively involved in sustainability related research	45	24	48	175	200	Investigators named on identified sustainability related research publications
Post graduate research completions (where the thesis topic related to sustainability themes)	23	7	20	29	50	HDR (PhD, Professional Doctorate and Masters by Research) completions where the thesis had a sustainability theme
Sustainability themed research publications	30	15	25	110	250	Curated list of research publications derived from a report that identifies publications assigned with pre-determined sustainability related Field of Research codes (includes only HERDC approved publications)
Number of sustainability themed research projects	25	44	43	52	80	Curated list of research projects derived from a report that identifies projects assigned with pre-determined sustainability related Field of Research codes
Value of research funding awarded for sustainability related research projects	\$773K	\$1.35M	\$1.31M	\$4.6M	\$8M	Total value of Swinburne-led projects identified above

^{*} Note that in 2013 a more rigorous reporting methodology was employed. This has resulted in the capture of more relevant data. This explains the steep rise in numbers from 2012 to 2013.



How we engage

We seek to collaborate with partners that align with our:

- values (sustainability, innovation, integrity, accountability, diversity and teamwork)
- location (benefiting local communities)
- research priorities (future manufacturing, sustainable future, digital frontiers, personal and societal well-being and inspirational science and technology)
- commitment to graduates (positive citizenship)

As a positive citizen, Swinburne wants to be measured by who we include, not who we exclude.

Swinburne – a positive citizen

Contributing locally – new health precinct, a green transport plan, healthy eating

The Engagement Team has developed a strong relationship with the City of Knox, City of Boroondara and the State Regional Development Office. In 2013, we signed of a memorandum of understanding with the City of Knox which includes a commitment to work together on a developing a new health precinct in the eastern suburbs of Melbourne.

With the City of Boroondara, Swinburne is working on a green transport plan, a convivial city programme and we are committed to working with local food producers to encourage healthy and sustainable eating among the Swinburne population – with particular emphasis on international students.

Swinburne Innovation Schools Network

The University's Engagement Team is working with a variety of schools to examine ways in which science, technology, sustainability, innovation and online pedagogy can be shared between educators.

Encouraging social and economic innovation

The Team is also working in partnership with Swinburne's faculties to develop social and economic innovation through the development of an innovation lab and incubator. Further work is being done to encourage community organisations and industry to work on campus within our Factory of the Future, the Design Factory and the Digital Aquarium.

Critically, the Factory of the Future is working on the use of materials through the life cycle of product development and manufacturing – which includes a commitment to examining the recyclability of products.

The Engagement Team has also worked with Visy – a major partner of the organisation – to examine ways to develop new products with glass-product waste.

Case Study: In 2013, Swinburne hosted TEDxMelbourne's biggest event of the year at the Hawthorn campus. The independently organised event held in the University's Advanced Technologies Centre followed on from a successful TEDxMelbourne Women event hosted by Swinburne in December 2012. With the theme "Untapped", the event featured eight inspiring speakers and performers, from sustainability strategists to solar researchers, looking at unexplored ideas that have the potential to change our lives radically.

Swinburne Vice-Chancellor, Professor Linda Kristjanson, said the University – the only one in Victoria with a formal partnership with TEDxMelbourne – was pleased to be hosting the event.

"TEDxMelbourne's focus on 'ideas worth sharing' is aligned with Swinburne's focus on the future and our belief that innovative thought should be shared with the community," Professor Kristjanson said.

TEDxMelbourne is licensed by the TED organisation which seeks to share world changing ideas from leading thinkers.

The Swinburne-hosted event focused on a range of topics, including erasing traumatic memories; research on transparent, flexible technology; autism; and what one speaker called "the epidemic of over-seriousness".

"By hosting this event, we hope to act as a bridge between thought leaders and the wider community," Professor Kristjanson said. "This is in keeping with our vision of a University that not only leads in science, technology and innovation, but which is actively engaged externally."

The following objectives and actions are drawn from the University's 2013–2020 Industry and Community Engagement Strategy.

Strategic Plan objectives	2013-14 Actions	Progress
Swinburne's people, infrastructure and resources are shared with not-for-profit groups and selected communities to build their own capacity	Development of a new community hub space at Swinburne's campuses for sharing with community and not-for-profit organisations	In progress – Working across Faculties, Centres and our community partners this proposal is taking shape. In particular, collaboration with our partners in local Government are leading to exciting opportunities
Develop Swinburne's alliance of community partners – an Action Plan for Melbourne's East	Develop an economic development plan and a social action plan for improving health and well-being of our communities in Melbourne. Contribute to the development of our Reconciliation Action Plan (RAP) and its implementation	Swinburne is hosting a new Eastern Melbourne Industry Committee which intends to build a consensus-led economic plan for the East of Melbourne
Develop a network of Swinburne schools in the east of Melbourne that align with our values	Establish the Swinburne Innovation Schools Network	Ongoing



Our environmental impact

2013 Highlights include:

- Swinburne received a 5 Green Star rating certification for the Advanced Manufacturing and Design Centre (AMDC) on Hawthorn's campus from the Green Building Council of Australia. This rating reflects Australian excellence for sustainability in the built environment
- Staff related air travel decreased by 9.3% compared with 2010 levels (of carbon emissions)
- Our campus recycling rates increased by 14.8% on 2010 levels
- Four water bottle refill stations were installed at Croydon, Hawthorn and Wantirna campuses
- 300 LED lighting conversions have been completed across selected campus buildings and car parks
- A Green Travel Plan was developed for students and staff commuting to and from the Croydon, Hawthorn and Wantirna campuses (launched in 2014)
- 47% reduction in total number of stand-alone printing devices achieved since 2010, supporting a shift towards a reduced number of multi-function printers across the university
- Continued roll out of dual flush toilets across campus buildings
- Replaced less energy efficient boiler and air conditioning units to more energy efficient models
- Developed an Asbestos Register and commenced asbestos removal from older buildings.



The University continues to work towards delivering on the targets established in *Environmental Management System Policy* (2009) and the *Sustainability Strategy* (2009). Many of the associated activities are managed by Swinburne's Facilities and Services Team, and in 2013 the team rolled out further initiatives aimed at reducing waste to landfill, carbon emissions and energy use, and saving water.

At Swinburne, we aim to operate in an environmentally sound manner to encourage sustainability and reduce our impact on the environment. Our commitment is based on continual improvement in environmental performance and this allows us to demonstrate leadership in this area amongst our staff, students and the wider community.

Our Environment Policy focuses our efforts in six key areas:

Energy – minimise our carbon footprint and our impact on the environment; reduce use of energy and the subsequent production of greenhouse gas emissions

Buildings and Grounds – actively manage our property and grounds following sustainable best practice principles

Transport – encourage, support and increase the use of the sustainable modes of transport and alternative modes of conducting meetings and lesson/lecture delivery

Water – maximise water efficiency and reduce our consumption and reliance on mains water supply

Waste – minimise the volume of waste to landfill and increase our recycling program

Purchasing – maximise the environmental benefits of our purchasing decisions and minimise environmental harm

Our *Environment Policy* includes operations across all Swinburne's campuses in the Greater Melbounre area. This extends to all facilities that are within our direct control such as gyms, student accommodation, staff and student business travel activities and our supply chain.

During 2013, various initiatives aimed at reducing waste to landfill, reducing carbon emissions and energy use and saving water were rolled out across our campuses. Delivery through our Lilydale campus ceased and preparations to cease activity at our Prahran campus got underway. The long term environmental impacts associated with closing two campuses are likely to be significant as Swinburne seeks to consolidate its onshore activities down to three campuses.

Swinburne experienced a decline in student numbers particularly in vocational education (VE) delivery, and a reduction in staff numbers through voluntary redundancies. These changes are reflected in the EFTSL (equivalent full time student load) and EFTPL (equivalent full time student and staff load) data provided in this section.

Greenhouse gas (GHG) emissions

Swinburne's greenhouse gas emission inventory includes Scopes 1, 2 and 3 as defined by the Greenhouse Gas Protocol (*Greenhouse Gas Protocol 2004*, *A Corporate Accounting and Reporting Standard*. View: www.ghgprotocol.org/standards/corporate-standard). Since 2011, we have been reporting our Scope 1 and 2 emissions under the *National Greenhouse and Energy Reporting (NGER) Act 2007*.

The International Greenhouse Gas Protocol categorises these scopes as direct and indirect emissions as follows:

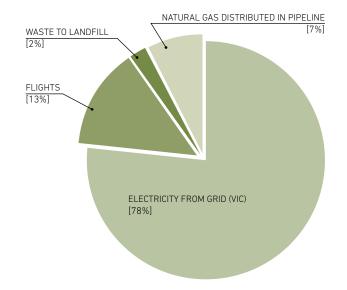
Scope 1 - all direct GHG emissions

 $\mbox{\bf Scope 2} - \mbox{indirect GHG emissions from consumption of purchased electricity,} \\ \mbox{heat or steam.}$

Scope 3 – other indirect emissions that organisations produce through their activities, but occur from sources not owned or controlled by the organisation. Examples of such activities include business travel, commuting, supply chain (procurement), waste and water.

The University's three main contributions to greenhouse emissions are our: energy consumption – purchased electricity derived from Victorian brown coal (Scope 2 and 3) and natural gas (Scope 1); travel (particularly our air travel – Scope 3); and waste to land fill (Scope 3). The overarching objective of our Environment Policy is therefore to target these areas in order to achieve maximum outcomes in the shortest time.

Swinburne University FY 2012/13 Total Carbon Emissions



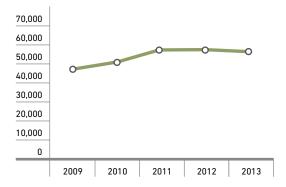
Performance

Over the last few years, Swinburne's carbon emissions and energy usage has increased from 52,979 tonnes in 2010* to 57,634 tonnes in 2012/13 (a 8.79% increase). Much of this increase can be attributed to the significant developments in the built environment, specifically the construction of the Advanced Technology Centre (ATC) and the Advanced Manufacturing and Design Centre (AMDC) on the Hawthorn campus.

The last two years (2011/12 and 2012/13) saw a slight 'flattening' of the rate of carbon emissions in spite of the ongoing construction. The most likely contributing factor was the decline in full time equivalent staff through voluntary redundancies and a decline TAFE delivery from the start of the 2013 academic year.

Going forward, we anticipate further reductions in the University's total carbon emissions through the AMDC's tri-generation capability; efforts to minimise staff air travel; initiatives to increase recycling and reduce waste to landfill; increase in the numbers of students studying online as opposed to studying on campus; more efficient space utilisation; and shifts away from printing to the digitalisation of documentation. Swinburne is committed to find ways to manage its responsibilities to reduce carbon emissions while doing what is necessary for our core business to meet growing student demand in future years.

Carbon emissions (tonnes)



The following GHG emission targets are drawn from the University's 2013–2020 Culture and Capability Strategy.

Greenhouse Gas Emission Targets	Metric	2010*	2010/11	2011/12	2012/13	2015 Target	2020 Target
Total Greenhouse gas emissions (tonnes of CO ₂ equivalent)**	tCO ₂ -e	52,979	58,326	58,519	57,634	<55,000	<51,000
Total Greenhouse gas emissions (tonnes of CO ₂ equivalent)per equivalent full time person ***	tCO ₂ -e/ EFTPL	1.81	2.06	1.97	2.04	1.95	1.81
Facility related emissions (includes Lilydale, Prahran & Healesville till 2015)	tCO ₂ -e per gross floor area m ²	0.25	0.25	0.23	0.23	0.22	0.23

- Under the National Greenhouse & Energy Reporting Scheme (NGERS) (2007) legislation, reporting of GHG emissions shifted from calendar year to financial year reporting. This occurred over 2010 to 2011.
- ** All data has been adjusted to exclude Green power credits as NGERS doesn't recognise credits derived from Green Power.
- *** EFTPL the sum of all full time equivalent hours for staff and the equivalent full time student load hours at all of the University's Victorian campuses (excludes international offshore, off campus and external).

Historically, purchasing of Green Power (electricity derived from renewable sources) was mandated at 25% for Victorian TAFE institutes. This requirement was later repealed by the current Government in 2012, but Swinburne chose to retain 25% Green Power for the VE side of its operations. The University's Green Power purchasing currently sits at 25% for Vocation Education and 5% for Higher Education totalling 9.8% of the University's total electricity purchased.

Energy consumption and efficiency

Our Energy Management Plan (2012) sets the direction for achieving Swinburne's energy objectives and targets. Energy management has been identified as significant for Swinburne, with many of our activities and operations, such as building heating and cooling, lighting and travel, contributing to climate change and other associated environmental impacts. The plan guides the University to reduce its use of energy and the subsequent production of greenhouse gas emissions, and to minimise our carbon footprint and our impact on the environment.

Over the past few years, consumption of energy onshore has risen by 9.79% compared to 2010 levels for reasons discussed in the previous section. The closure of our Lilydale campus last year contributed to a slight decrease in electricity consumption over the 2012–13 period. However, energy consumption per equivalent full time student increased over the same reporting period due to a decline in total student numbers on campus.

Compared to the Tertiary Education Facilities Management Association (TEFMA) benchmark, Swinburne's energy consumption per equivalent full time student is lower than most universities across Australia. Nevertheless, we recognise that our electricity usage represents our highest GHG emission source, and that we can continue to improve on our performance in this area. It is anticipated that the new tri-generation facility provided by the AMDC will contribute to a lowering of total energy consumption from 2014 onwards.

Energy use	2010	2011	2012	2013	2015 Target
Energy GJ*	149,632	159,328	167,594	164,276	139,639

^{*} Electricity and gas for all non-residential buildings.

Energy – is the total GigaJoule (GJ) consumption of energy purchased and includes all energy sources such as gas, steam, electricity, oil, coal, etc at point of purchase.

Energy Targets	Metric	2010	2011	2012	2013	2015 Target
Energy consumption per full time equivalent student	GJ/ EFTSL	5.6	6.2	6.1	6.4	5.4
Tertiary Education Facilities Management Association (TEFMA) benchmark	GJ/EFTS	L			9.6	

*EFTSL the sum of all full time equivalent student load hours at all of the University's Victorian campuses (excludes international offshore, off campus and external).

Average temperatures over 2013 indicated an increase of 1.2 degrees Celsius above the long-term average of 21.8 C (Australian Bureau of Meteorology Annual Climate Statement 2013). Australian temperatures are projected to continue to increase, with more extremely hot days and fewer extremely cool days (CSIRO 2014). Increased demand for air conditioning over extended hot days is very likely to contribute to increased electricity consumption.

Commuting

Transport has been identified as a significant aspect of Swinburne's emissions through activities such as air travel, use of fleet vehicles and student and employee commuting. Swinburne's *Transport Management Plan* (2012) directs the University to 'encourage, support and increase the use of the sustainable modes of transport and alternative modes of conducting meetings and lesson/lecture delivery'.

Swinburne's vehicle fleet has downsized from six cylinder to four cylinder vehicles and the total number of cars owned and operated by the university has reduced. Over the past year, fuel use in the fleet decreased by 25%; taxi use decreased by 37%; and flights reduced by almost 15%. The decline in staff air travel has contributed to a 9.3% decline in carbon emissions compared to 2010 levels (our baseline).

Staff air travel and motor vehicle travel (Mkm)



Greenhouse Gas Emission Targets	Metric	2010	2010/11	2011/12	2012/13	2014/15 Target
Staff air travel related total emissions	Total tCO ₂ -e	8,140	9,192	8,675	7,384	6,300
Staff air travel related emissions per equivalent full time staff	tCO ₂ -e per equivalent full-time staff	3.02	3.33	3.68	3.11	2.66

In 2013, initial work commenced on developing the University's *Green Travel Plan* in consultation with students and employees. The purpose of the Green Travel Plan is to promote a reduction in car travel associated with getting to, from and around Swinburne campuses. The Green Travel Plan aims to inform students and staff on alternative, environmentally sustainable ways to get to campus, rather than driving a vehicle. The Green Travel Plan will be completed and launched in 2014.

LED lighting

Our energy efficiency related initiatives included the replacement of a gas fired boiler and replacing light fittings with LED luminaires. As a result we have retro-fitted LED lighting in several locations including: 400B building – all fittings; Wantirna car park – partial replacement of metal halide lights; ATC building – all halogen lighting replaced; and AR building – all high bay lighting replaced.

Since 2011, we have implemented close to 300 LED conversions (out of 10,000 light fittings) across all our campuses. Due to the costs of undertaking a University wide luminaire replacement, conversions are being undertaken gradually. We intend to double the number of LED conversions by 2015.

Implementation of LED lighting to increase energy efficiency

Metric	2010	2011	2012	2013	2015 Target
Number of existing lighting converted to LED	0	100	200	300	600

Built environment

Case study: Located at Swinburne's Wantirna Campus, the Knox Innovation Opportunity and Sustainability Centre (KIOSC) is an immersive eco-environment and trade training centre for the delivery of sustainability education and training. KIOSC offers vocational education (VE) courses to secondary school students, including courses in engineering, renewable energy and laboratory skills.

Made possible through funding from the Commonwealth Government, the Knox Consortium of Schools, and the City of Knox, the \$10.3 million training centre was officially opened in April 2013 by Senator the Hon Jacinta Collins, Parliamentary Secretary for School Education and Workplace Relations. Vice-Chancellor Professor Linda Kristjanson welcomed the partnership with local schools to connect students to innovative learning experiences that should "...open up their eyes to practical applications of classroom learning."

Featuring a mixture of technology-rich collaborative areas, immersive presentation spaces, laboratories and a Discovery Centre, the design of the building reflects its purpose of operation – sustainability, inclusion and innovation. Constructed and fitted out with 'sustainable' materials, the structure is extremely energy efficient and its large eave and blades act as a canopy and screen, positioned for thermal quality to respond to the position of the sun.

During 2013, the KIOSC Discovery Centre won the 'Best New Entire Educational Facility' category at the Council of Educational Facility Planners International (CEEPI) Victorian Chapter Awards. The Centre was also shortlisted for a World Architecture Festival (WAF) award in the Higher Education/Research category, up against other innovative architectural designs from around the world, including the Halley VI Antarctic Research Station in Antarctica and Rikkyo Lloyd Hall in Japan.

Construction of the **AMDC** at Hawthorn progressed significantly during 2013 with a revised practical completion date in early 2014. The building was awarded a 5 Green Star rating by the Green Building Council of Australia (GBCA) indicating 'Australian excellence'. The AMDC is Swinburne's second 5 Green Star rated building, following the Advanced Technology Centre (ATC) which was Australia's first in the GBCA's education category.

Swinburne Vice-Chancellor and President, Professor Linda Kristjanson, said "the building has been designed to ensure that it leaves a minimal carbon footprint. It has been made from materials that encourage natural light and self-generation of electricity made possible through the design of the central atrium, which creates a well of natural light that filters through the floors, combined with the rippling exterior vertical fins which have been designed to meet the winter and summer angles of the sun."

The AMDC also encourages staff and students to leave their cars at home, and instead opt for riding their bikes to University, with 140 new bicycle spaces available. The building's tri-generation capacity will contribute to Swinburne reducing its carbon emissions. www.swinburne.edu.au/media-centre/news/2014/06/5-star-amdc-opens-its-doors.html

Water use

Our Water Management Plan sets the direction for achieving Swinburne's water objectives and targets through maximising water efficiency and reducing our reliance of mains water supply. Water management has been identified as a significant priority for Swinburne, with many of our activities and operations, such as the operation and maintenance of our buildings contributing to Victoria's already stretched water resources.

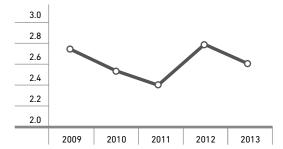
Over the past few years, water consumption has increased slightly (by 2.64%) compared with 2010 levels. Campus based water consumption peaked in 2012 due to high temperatures and a long drought over the summer months. In addition, burst water pipes at our Lilydale and Wantirna campuses contributed to higher than normal water use.

Because conserving water is a high priority for Swinburne, over recent years, a number of water efficiency measures have been put in place. These include; waterless urinals, rainwater tanks, stormwater harvesting, planting of drought resistant varieties, and conversions to low flush and dual flush cisterns.

Water Use Targets	Metric	2010	2011	2012	2013	2015 Target
Water use (excluding student residences)	Kilolitres	73,852	73,579	80,358	75,804	53,367
Water use	Kilolitres per EFTPL	2.53	2.59	2.71	2.69	1.9

^{*}EFTPL the sum of all full time equivalent hours for staff and the equivalent full time student load hours at all of the University's Victorian campuses (excludes international offshore, off campus and external).

Water consumption (kl/EFTSL)



Case study: Water Refill and Drinking Stations – With the support of Yarra Valley Water, Swinburne installed two water refill and drinking stations on our Hawthorn campus. Two further water refill stations were implemented at our Croydon and Wantirna campuses. Providing our students with water refill and drinking stations reduces the purchasing, disposal and waste creation associated with plastic bottles. Students have responded very favourably to this initiative. www.swinburne.edu.au/corporate/facserv/4%20%20YV%20Water.pdf

Waste and recycling

The University's Environmental Policy (2009) and Waste Management Plan (2012) acknowledge principles of first 'avoid', then 'reduce', then 'reuse' and then 'recycle' before discarding waste to landfill. Waste has been identified as a significant factor for Swinburne contributing to climate change and pollution to air, water and land. Waste is created through many of our operations and activities such as purchasing, building refurbishment, facilities, student accommodation, and marketing and communications.

Minimising the creation of waste in the first place and reducing our carbon footprint and impact on the environment is a shared responsibility. We acknowledge putting these principles into practice has been slower than desired.

Waste to landfill has been steadily increasing over the last few years. It peaked during 2012 and declined slightly over 2013 (leaving a net 13.5% increase on 2010 levels). This was due in part to increased waste being generated from campus closures, recently acquired student residences, and teaching resource-intensive courses such as horticulture and landscaping. While recycling and composting solutions are in place for some waste sources (for example the metal and brick recycling facility for Building Studies courses), there remain many areas that can be improved upon.

On the positive side, recycling rates across the campuses have increased by 14.8% on 2010 levels. An excellent example of creative recycling came about as a result of excess furniture following the closures of the Lilydale and Prahran campuses. Almost all surplus furniture was donated to local primary and secondary schools, another TAFE institute, the Knox Community Garden group, local Mens' Sheds, church groups and the University of the Third Age.

Waste Related Targets	Metric	2010	2011	2012	2013	2015 Target
Waste to landfill	Tonnes	660	788	859	749	510
Waste to landfill	Kg per EFTPL	22.6	27.8	28.9	26.5	18.1
Recycling	As combined % of recycling and general waste to landfill	12.2%	30.44%	16.41%	27%	30%
Recycling – Tertiary Education Facilities Management Association (TEFMA) benchmark	% combined W Comingled/mix and cardboard		31.4%			

^{*}EFTPL the sum of all full time equivalent hours for staff and the equivalent full time student load hours at all of the University's Victorian campuses (excludes international offshore, off campus and external).

Our waste reduction projects included the roll out of a new rubbish disposal system at Croydon campus in 2012 called the *Swin Bin* initiative. Each staff member's rubbish bin was replaced with a paper recycling box and small desktop container; large enough for tissues, wrappers and other non-recyclable waste.

The small desktop container compels people to think about items that might be recycled. Staff take responsibility for emptying their own paper recycling bin and desktop container into a nearby waste station. This hands-on approach encourages mindfulness by staff to recycle. Based on the success of this initiative at our Croydon campus, we will roll this approach out to our other campuses over 2014.

Paper use and printers

In 2011, we formalised our sustainable *Purchasing Management Plan*. This Plan guides the University's procurement by taking into account key considerations of maximising the environmental benefits of our purchasing decisions and minimising environmental harm and reducing our carbon footprint and our impact on the environment.

Working alongside our principle paper supplier Office Max to gather procurement data, we started measuring our total paper use from 2010. Overall we have succeeded in reducing our paper use by 12% on 2010 levels. Our paper use per EFTPL (equivalent full time person load) ranks our performance very favourably compared to other universities. We foresee increased reductions in paper use through digitalisation of paper forms.

During 2013, we initiated further digitalisation of forms by converting to online. At the start of the year, there were over 20 paper-based forms and a few digital forms used to log over 3,500 ITS service requests per year. By December 2013, many of these forms were moved online with the remainder due to be put online by the end of March 2014.

Paper is one of the greatest causes of deforestation, particularly of old growth forests in Australia. In line with our Purchasing Plan, we acknowledge renewed efforts need to be made to ensure more quality recycled paper (100% post-consumer waste) is used across the University.

Paper use	2010	2011	2012	2013
Reams of paper	46,427	38,601	39,087	40,824
Reams of paper per EFTPL	1.59	1.36	1.32	1.45

^{*} EFPL (Equivalent Full-time Person Load) = Student (EFTSL) + Staff (FTE)

Printer use

From 2010 we began to track the number of printers leased and purchased. The table below demonstrates that we have been successful in reducing the overall number of printing devices by 47% on 2010 levels. Individual printing devices are being substituted with multi-function printers and photocopiers. Our printing devices to staff ratio has increased from 2:1 in 2010 to 3:1 in 2013 across the University. Comparisons with other organisations indicate that Swinburne's printing device to staff ratio is still high and that we tend to print excessively. Ongoing efforts to manage this are in place.

Printer use	2010	2011	2012	2013
No. printing devices purchased/leased	1147	967	787	608
No. multifunction printers purchased/leased	70	93	116	147



Our social impact - employees and students



Highlights for 2013 include:

- Swinburne became the first Victorian university to introduce a totally smoke-free environment
- For the eighth year in a row, Swinburne was recognised as an Employer of Choice for Women
- Development of the University's Gender Equality Strategic Action Plan aimed at promoting gender equality (and closing the gender pay equity gap)
- Commencement of an engagement and consultation process with Indigenous elders in development of the University's first Reconciliation Action Plan
- Participation in the Global Corporate Challenge 2013 with 44 Swinburne teams (308 participants)
- Provision of WorkHealth checks to 209 staff across the University
- Swinburne's WorkCover employer performance rate was 37% better than the like industries' weighted average (for all Victorian vocational education and higher education providers), resulting in a premium rate of 0.32% compared with 0.51% for like providers.
- End year lost time injury frequency rate (LTIFR) equals 2.98 (down from 3.86 in 2012)

Staff categories

Swinburne's total full-time equivalency (FTE) figure for staff in 2013 was 2,371. This number includes sessional staff in both Higher Education and Vocational Education (VE). Since 2010, the University has experienced a 12% decrease in its overall workforce.

The changes to total FTE by organisational unit since 2010 reflect significant shifts that have occurred within Swinburne over the past few years. While Higher Education teaching and research staff have icreased by close to 7% in total FTE, Vocational Education teaching has decreased by 58% since 2010. General staff (non-teaching) in both Higher Education and Vocational Education have experienced decreases of 17% and 58% respectively.

Staffing profile by organisational unit					
Swinburne FTE	2010	2011	2012	2013	% change based on 2010
Higher Education: Teaching and Research	611	614	620	653	6.90%
Higher Education: General Staff	265	291	264	220	-17%
Higher Education: Sessional	243	305	224	244	0.40%
Vocational Education: Teaching	490	482	284	206	-58%
Vocational Education: General Staff	208	179	104	88	-58%
Vocational Education Teaching: Sessional	215	220	235	224	4.20%
Chancellery/Corporate	612	614	568	683	12%
NICA	31	35	36	35	13%
SSAA	18	19	18	18	0
UNIVERSITY TOTAL	2,693	2,758	2,351	2,371	-12%

Note: Staff numbers are averaged over the year. Swinburne College staff are included with Vocational Education staff. Sarawak-based staff are not included.

Gender composition and age distribution

Historically, Swinburne's overall workforce has a slightly stronger representation of women than men. In 2013, the ratio of female to male staff was 52% to 48%. However, women currently occupy just 36% of senior leadership positions. Higher Education teaching and research and Swinburne College roles have greater male representation whereas general professional (non-teaching), VE teaching and management have greater female representation. Swinburne's efforts to address equal opportunities across all roles is discussed later in this section.

Headcount by Gender (percentage)	2010	2011	2012	2013
Female	51%	52%	50%	52%
Male	49%	48%	50%	48%

Headcount	20	10	20	11	20	12	20	13
by Gender and Award (percentage)	F	М	F	М	F	М	F	М
ACAD (Higher Education teaching)	40%	60%	41%	59%	42%	58%	42%	58%
AWA	43%	57%	42%	58%	-	-	-	-
HEWV (General Professional)	70%	30%	71%	29%	68%	32%	69%	31%
NICA	39%	61%	44%	56%	49%	51%	47%	53%
PBC (General Professional)	22%	78%	35%	65%	37%	63%	29%	71%
SSAA	68%	32%	65%	35%	56%	44%	63%	38%
TAFEX (senior VE staff)	83%	17%	75%	25%	89%	11%	100%	0%
TEACH (VE teaching)	55%	45%	54%	46%	53%	47%	56%	44%
SCPL (Swinburne College)	-	-	-	-	-	-	25%	75%
Grand Total	51%	49%	52%	48%	50%	50%	52%	48%

Swinburne's employee age profile has shifted over the past four years towards a slightly younger average age range. In 2013, the largest age bracket represented was 25-35 years compared with 2010 when the age bracket with most staff was 45-55 years.

Staff Age Group Percentage from 2010-2013

Age Bracket	2010	2011	2012	2013
< 25 Years	2.50%	3.10%	2.30%	4.75%
25 - < 35 Years	23.50%	24.40%	24.80%	26.37%
35 - < 45 Years	23.30%	23.20%	23.80%	22.48%
45 - < 55 Years	27.50%	27%	25.40%	23.27%
55 - < 65 Years	19.60%	19.40%	19.40%	18.02%
65 + Years	3.60%	2.90%	4.30%	5.11%
Grand Total	100%	100%	100%	100%

Note: 2013 current by age (includes HE & VE), 2010-2012 HE only

Sustainability Report: Our social impact

Recruitment, Retention and Turnover

Changes in State Government funding arrangements, resulting in significantly lower levels of funding in recent years, have adversely impacted the vocational education part of the University. The decrease in total employee headcount since 2010 is reflected mainly across the general professional (HEW) and VE teaching (TEACH) categories.

Recruitment has been steady maintaining overall employee numbers at a stable level over the past few years. Staff turnover as a result of resignation, redundancy, dismissal, death and retirement has been low (3.8% in 2013).

Turnover (and Headcount) by Award	2010	2011	2012	2013
ACAD	47 (2248)	38 (2260)	56 (2311)	53 (2123)
AWA	6 (21)	2 (12)		
HEWV	169 (1119)	147 (1187)	290 (976)	65 (1061)
NICA	1 (164)	9 (209)	7 (140)	(158)
PBC	1 (23)	2 (37)	5 (38)	9 (38)
SSAA	8 (19)	5 (20)	2 (18)	5 (16)
TAFEX	3 (12)	2 (12)	5 (9)	1 (8)
TEACH	66 (1851)	68 (1743)	146 (1299)	26 (820)
SCPL	_	-	-	1 (4)
Turnover (and Headcount) total	301 (5457)	274 (5480)	511 (4791)	160 (4228)

Turnover includes resignation, redundancy, dismissal, death and retirement (excludes all expiry by contract end)

Performance indicators	2012	2013	2015 Target	2020
Staff employed for less than two years as a representative of staff turnover	21%	25%	< 18%	< 10%

Measure excludes staff on fixed term contracts of two years or less

Equal opportunities for all in the workplace

Swinburne was recognised for the eighth consecutive year in 2013 as an 'Employer of Choice for Women' by the Equal Opportunity for Women in the Workforce Agency (E0WA). To be recognised as an E0WA Employer of Choice for Women (www.eowa.gov.au/E0WA_Employer_Of_Choice_For_Women.asp), employers are required to meet stringent criteria each year which include offering a minimum of six weeks paid maternity leave after twelve months of service; providing the ability for female managers to work part-time; ensuring that the percentage of female managers is the same or greater than 28% or the industry average, and ensuring that a pay equity analysis has been undertaken and any gap identified is less than their industry average. This citation is recognition of the University's commitment to providing a workplace supportive of all employees.

Gender pay equity

In 2013, there were 275 employees in senior leadership positions, of which 64% were male and 36% were female. The average total remuneration package for males in senior leadership positions was 6% higher than for women in similar roles. The definition of senior leadership positions includes employees classified as: HEW 10+; PBC; ACD+ and TAFEX.

Gender equality and related flexibility mechanisms are critical aspects to our organisation's success. Swinburne is committed to remaining an advocate and supporter of gender equality, and has identified gender equality as a strategic priority. To this end, within Swinburne's 2014–2020 People Strategy we have developed and implemented a Gender Equality Strategic Action Plan (GESAP) which is reviewed on a yearly basis.

Whilst the initiatives that will be implemented across Swinburne are aimed at promoting and improving gender equality for both women and men, we recognise the historically disadvantaged position of women in the workplace. So, we aspire to having an equal number of women and men in senior leadership positions by 2020.

The Action Plan will address and support gender equality across all facets of the 'employment life cycle, 'including recruitment, retention, performance management processes, promotions, talent identification and identification of high potential staff, succession planning, training and development and resignations.

The following table of actions is drawn from the University's 2014–2020 People Strategy. www.swinburne.edu.au/corporate/spq/planning-plans.html

Gender Equality Actions	Time frame
Develop and implement our Gender Equality Strategic Action Plan, to be reviewed on a yearly basis, incorporating initiatives and programs that support the attainment of gender equality at Swinburne and which aim to:	Mid 2014
• close the gap between the number of females in leadership positions compared to the number of males in leadership positions;	
• close the gap between pay rates for woman in leadership positions compared to the pay rates of men in leadership positions;	
• ensure a 50:50 gender mix on interview panels;	
• ensure there is at least one woman on the short-list for jobs;	
• educate staff on recruitment panels regarding 'gender blindness';	
• identify opportunities for women for career development;	
• support mentorship programs for women; and assist women to return to work from parental leave	
Undertake gender remuneration analysis of the workforce (Swinburne wide) by classification level to identify gaps where they exist and to identify the reasons for the gaps	Dec 2014
Undertake gender remuneration analysis for senior leadership roles with the aim of closing the gap between pay rates for woman in leadership positions compared to the pay rates of men in leadership positions	Dec 2014
Undertake gender remuneration analysis at the organisational unit/department level to identify gaps where they exist and to understand the reasons for these gaps	Dec 2014
Implement action plans (including setting the targets) at the organisational unit level and University level to address the core issues and to close the gap	Dec 2015
Before 2020, achieve 50/50 gender distribution in senior leadership roles (from 64% males and 36% females in 2013)	2020
Before 2020, the average total remuneration package will be equivalent for women and men in senior leadership positions	2020

Note: Swinburne's definition of senior leadership roles is different to the Workplace Gender Equality Act definition.

The Equal Opportunity for Women in the Workplace Act 1999 (EOWW Act) has been renamed the Workplace Gender Equality Act 2012 (WGE Act) to put a focus on promoting and improving gender equality and outcomes for both women and men in the workplace. All non-public sector employers with 100 or more employees are required to report annually under the WGE Act. In accordance with the requirements of the Workplace Gender Equality Act 2012 (Act), Swinburne is required to lodge an annual compliance report with the Workplace Gender Equality Agency.

To access our latest report, view: www.swinburne.edu.au/corporate/hr/equity/workplace_gender_equality.htm.

Flexible work

Providing flexibility to support employees in balancing work and life responsibilities is important. Historically, flexible work arrangements arose out of a wider recognition that many women needed flexibility to balance participation in paid employment and family responsibilities but it is important that we no longer associate the need for flexible work arrangements solely with

It is accepted that both men and women should be enabled to adjust their work/life balance for family or other reasons, by agreement with the University, without prejudice to their work or their careers. Staff are encouraged to take all annual leave accrued over the year in the interests of rest, work/life balance and refreshment.

2013 Actions	Targets
Develop and implement flexible work arrangements campaign	2014
Actively review annual leave taken by employees and advise line managers as appropriate to support a safe and healthy workplace.	2014
Increase average days of annual leave taken by employees (14.4 days of annual leave taken by employees in 2013)	18 days (pro-rata for part time staff)
Support women to return from parental leave (86% in 2013)	>90% of women returning from parental leave
Actively review long service entitlements and advise line managers as appropriate to support a safe and healthy workplace	2014

Women in leadership

Gender equality, particularly for our senior leaders, is a key priority for Swinburne, with a target of equal females to male in senior positions by 2020. A number of initiatives have been launched in 2014 to assist us achieve this *People Strategy* target.

Performance indicator	Baseline	Target	s
	2013	2015	2020
Percentage of senior leaders who are female	36%	>42%	50%

For further information on Swinburne's policies to promote equal opportunities for women, view:

www.swinburne.edu.au/corporate/hr/equity/women/index.htm

Equal opportunities for Indigenous Australians

2013 saw the commencement of a process of engagement and consultation with Indigenous elders from among the communities we serve in the development of the University's first *Reconciliation Action Plan* (RAP). As a university, it is our way of committing to improving the education of Aboriginal and Torres Strait Islander individuals and communities and building career aspirations and pathways.

Importantly, it is also our way of learning about Aboriginal and Torres Strait Islander cultures, history, spirituality and connections to Country. It is the beginning of identifying ways that we at Swinburne can benefit from Aboriginal and Torres Strait Islander knowledge and ways of learning to improve our University.

In all areas of activity Swinburne recognises and respects the history and diversity of spirituality, heritage and contemporary aspirations of Aboriginal and Torres Strait Islander cultures and peoples across Australia. These aspirations include improved health and increased access and achievement in vocational and higher education and employment.

Swinburne's vision is to build a culture that promotes and practically supports Aboriginal and Torres Strait Islander peoples and other Australians to come together to learn and make a positive difference in the lives of individuals and communities. This is being achieved through collaborative and mutually beneficial research, teaching and learning activities, and engagement.

Our vision for reconciliation is also to create a university learning environment that builds on relationships that are based on two-way knowledge sharing; mutual respect and understanding, and lifelong learning across all our core business areas: culture and capability; research; teaching and learning; and engagement.

Our vision is further supported by the Swinburne University of Technology Act 2010, the United Nations Declaration on the Rights of Indigenous Peoples, the Council for Aboriginal Reconciliation Act 1991, the National Aboriginal & Torres Strait Islander Education Policy (AEP), and the recommendations included within the 2012 Final Report of the Review of Higher Education Access and Outcomes for Aboriginal and Torres Strait Islander Peoples.

The following targets are drawn from the University's 2014–2016 Reconciliation Action Plan

Performance indicator	Ta	rgets
	2014	2016
Innovative recruitment strategies developed and implemented to boost the percentage of Aboriginal and Torres Strait Islander employees in Swinburne's complement of ongoing/contract staff	>0.4%	>0.5%
Staff induction and student orientation programs revised to incorporate cultural awareness material and information about the University's RAP and implemented on an ongoing basis	31 July	31 May
Professional development provided for externally-facing (domestic and international) marketing and recruitment staff to ensure that in their work they represent reconciliation as a core University principle	30 June	30 June 2015
University-wide protocols developed and implemented to ensure that respect for traditional custodianship guides the conduct of research, educational delivery and other project activity throughout Australia and internationally. (This work will be based on the relevant National Research Ethics Guidelines.)	31 May	31 May

The Reconciliation Action Plan can be viewed at: www.swinburne.edu.au/chancellery/about/resources/documents/rap-2014-2016.pdf.

Diversity and inclusion

Swinburne is committed to providing an equitable and inclusive work and study environment free from discrimination, harassment and bullying. We aim to provide our staff and students with an environment that is safe, flexible, fair, culturally-appropriate, friendly and professional. The University celebrates the diversity of its community and recognises the rights and responsibilities of all community members.

At Swinburne, we aspire to create an environment where all staff and students can reach their full potential regardless of any factor other than their ability to do their job. We believe that diversity of thought, background, and experience drives relationships and delivers crucial benefits to our people and our students. It is critical to the achievement of the University goals that the organisational culture respects, values and actively pursues the benefits of our diversity.

The University's equity and diversity values are reinforced, for example; by being integrated within our recruitment, retention and achievement strategies, and by having all staff undertake compulsory equity and diversity training.

Looking forwards, the University's *Culture & Capability Strategy 2013-2020* intends to increase diversity in the University community through the following actions.

2014 Actions

Develop a strategy to increase the representation of presently under-represented groups in our staffing complement and in our student body

Develop a diversity awareness program as part of the diversity strategy

 ${\sf Develop} \ {\sf and} \ {\sf implement} \ {\sf a} \ {\sf Reconciliation} \ {\sf Action} \ {\sf Plan} \ {\sf including} \ {\sf an} \ {\sf Indigenous} \ {\sf Employment} \ {\sf Strategy}$

Widen our access to courses through online/blended study options to facilitate inclusion of low SES and regional students ${\sf SES}$

Replace the Disability Action Plan with a new Accessibility Action Plan and develop appropriate targets in line with University strategy

Launch an ALLY group to support lesbian, gay, bisexual, transsexual and intersex (LGBTI) people www.swinburne.edu.au/corporate/hr/equity/about.htm

Grievance and complaint handling procedures

Staff

The University maintains policies and procedures for dealing with staff grievances and disputes. In relation to disputes arising from the interpretation, application or operation of the *Swinburne University of Technology Academic and General Staff Enterprise Agreement* 2009, clause 52 provides the resolution process for such disputes. In relation to disputes arising from the interpretation, application or operation of the *Victorian TAFE Teaching Staff Multi-Business Agreement* 2009, clause 10 provides the resolution process.

In relation to complaints falling outside of the relevant industrial instruments, the University has policies and procedures in place for dealing with matters such as staff grievances, discrimination, sexual harassment, bullying and harassment.

In 2013, these procedures were set out in relevant Equal Employment Opportunity (EEO) policies. These policies and procedures provided informal and formal resolution processes. From 1 January 2014, the EEO policies were replaced by the University's *People, Culture and Integrity Policy* which is available at: www.swinburne.edu.au/policies/hr/index.html

We take all allegations of discrimination, sexual harassment, bullying and harassment seriously, and encourage staff to use the internal resolution processes set out in the relevant policies. Staff can also access external forums in relation to their concerns.

In 2013, there were no adverse findings relating to any EEO policies. Swinburne provides staff (including casual and sessional staff) with equal opportunity and workplace behaviour training. All staff members are required to undertake the online induction process and online equal opportunity and workplace behaviour training on commencing employment, as well as refresher training every two years.

All managers and supervisors are also required to attend an equal opportunity and bullying workshop every two years. We provide staff with reminders of EEO and grievance policies, as well as any other relevant EEO issues, via staff newsletters and bulletins. We are committed to achieving these objectives by providing our staff and students with clear policy, education, training and practice. In this context, We are committed to identifying and eliminating barriers that may be encountered by staff and students such as discriminatory selection criteria, access to training and development, and support and mentoring.

Policies and procedures are in place to ensure that inclusive and merit principles are upheld in employment, education and the provision of services. For 2013, these included *Staff and Student Grievance* policies, a *Code of Conduct and Anti-Discrimination, Sexual Harassment, and Eliminating Bullying and Violence* policies and procedures. From 1 January 2014, the above policies and procedures were replaced by our *People, Culture and Integrity Policy* which is available at: www.swinburne.edu.au/policies/hr/index.html

Students

We are committed to ensuring that all students have a positive relationship with the University and its staff members. Where problems arise, there are appropriate procedures that include processes for receiving and processing complaints. Student matters are resolved in a series of stages. These stages are: local resolution, complaint management, review, internal appeal and external appeal to the Victorian Ombudsman. Not all student matters will pass through all stages. The Ombudsman's office received 73 complaints about the University in 2013.

Performance indicator	Baseline	Targets 2015 2020 < 5 < 3	
	2013	2015	2020
Decrease in incidents of bullying, harassment or discrimination	7	< 5	< 3

Employee relations

The Swinburne University of Technology Academic and General Staff Enterprise Agreement 2009 nominally expired on 30 June 2012 and will remain in operation until a new Agreement is approved by the Fair Work Commission. The University and the National Tertiary Education Union (NTEU) met regularly throughout 2013 in an attempt to negotiate a new Agreement.

At the time of preparing this report, a new Agreement had not been reached. TAFE teaching staff members continue to be covered by the *Victorian TAFE Teaching Staff Multi-Business Agreement* 2009 (MBA) which nominally expired on 30 September 2012. The MBA will remain in operation until a replacement Enterprise Agreement is reached with staff and the Australian Education Union (AEU).

In 2012, the Victorian Government notified Swinburne and the other Victorian dual sector universities that they were exempt from State Government industrial relations policy and accordingly were able to negotiate new stand-alone agreements, rather than again go through an agreement process that had been previously common to all Victorian TAFE institutes.

At Swinburne, we value staff feedback and a consultative approach and acknowledge the right of staff to be represented in their work. We believe that our proposed new Enterprise Agreement and People Policies provide terms and conditions that compare well in our sector. The Enterprise Agreement(s) should strike a balance between providing attractive terms and conditions of employment for current and prospective staff, whilst providing the industrial workforce infrastructure which ensures that the University is able to manage its workforce arrangements in order to support its broader organisational objectives.

For further updates, view:

www.swinburne.edu.au/corporate/hr/eb/

The following targets are drawn from the University's 2014–2020 People Strategy

2013-14 Actions

Engage and consult with staff and the relevant union(s) at the appropriate times regarding organisational change $\frac{1}{2} \left(\frac{1}{2} \right) = \frac{1}{2} \left(\frac{1}{2} \right) \left(\frac{1}{2$

Communicate with staff about organisational processes and decisions relating to organisational change

Reduction in the number of disputes raised over the Academic and General Agreement (52 formal disputes raised over 2012/13)

Safety and Wellbeing

Highlights for 2013 included:

- Swinburne became the first Victorian university to introduce a totally smoke-free environment
- Safety management system reviewed and improved including specific requirements for high risk/critical areas such as contractor safety management, plant safety, chemical management, manual handling and personal protective clothing and equipment
- OH&S objectives embedded in business unit plans across all organisational units
- Standardised templates and guidance material for risk registers and risk assessments introduced and available online
- Completion of four internal OH&S audits aligned to the requirements of AS/NZS4801 and with an audit schedule developed for 2014
- Participation in the Global Corporate Challenge 2013 with 44 teams (308 participants)
- Provision of WorkHealth checks to 209 staff across the University
- Implementation of an online OH&S system, Riskware, with full implementation to be completed in early 2014
- Swinburne's WorkCover employer performance rate was 37% better than the like industries' weighted average (for all Victorian vocational education and higher education providers), resulting in a premium rate of 0.32% compared with 0.51% for like providers.
- End year lost time injury frequency rate (LTIFR) equals 2.98 (down from 3.86 in 2012)

We are committed to providing a work and study culture that is conducive to the good health and well-being of our staff and students – on-campus and increasingly for those working and studying predominantly or entirely off-campus. We need to ensure that health and safety are seen as responsibilities shared by all staff and students, and by contractors and other visitors to our campuses.

Notable well-being initiatives included becoming Victoria's first smoke-free university; and rolling out Mental Health First Aid training. www.swinburne.edu.au/stuserv/health/index.html

Swinburne is committed to OH&S and Equal Employment Opportunity principles, with responsibility for both shared by management and all staff. In terms of OH&S metrics, 2013 saw a pleasing decrease in the lost time for injury frequency rate (down from 3.86 in 2012 to 2.98 in 2013) and in notifiable incidents (down from 10 in 2012 to 7 in 2013).

Conversely, the number of Workcover claims increased from 26 in 2012 to 31 in 2013. There has been a continued focus on the development and embedding of Swinburne's safety management system and a culture of OH&S accountability and engagement.

In line with the 2012–2015 Occupational Health and Safety Strategy, business units were required in 2013 to embed specific OH&S objectives into their annual business unit plans. These included mandatory objectives around implementing the OH&S management system across the business and actively developing and supporting an OH&S culture within their business unit. www.swinburne.edu.au/corporate/hr/ohs/

Improved risk assessment processes and standardisation of OH&S systems and processes across Swinburne has seen increased management awareness and capability in identifying, addressing and controlling OH&S risks. This has resulted in a reduced number of incidents and injuries in 2013.

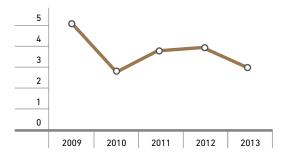
Statistical OH&S indicators	2007	2008	2009	2010	2011	2012	2013
Incident/hazard reports received*	200	222	312	452	426	364	312
Notifiable incidents	7	9	7	8	5	10	7
Number of lost time injuries*	5	14	21	11	20	18	14
WorkCover claims*	17	18	29	20	27	26	31

^{*} Includes National Institute of Circus Arts (NICA) and Swinburne Student Amenities Association (SSAA) data.

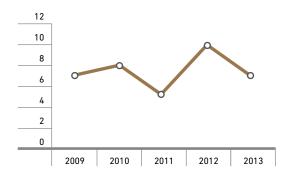
Notifiable incidents

The University reported seven incidents to WorkSafe Victoria in 2013 under its responsibility outlined in the *Occupational Health & Safety Act* 2004. While WorkSafe attended/followed up in relation to notifications on three occasions, there were no improvement notices or prohibition notices issued. In all cases the regulator was satisfied with existing control processes already in place or actions we were undertaking already to minimise the likelihood of such incidents reoccurring.

Lost time injury frequency rate (LTIFR)



Number of notifiable incidents



Safety and wellbeing targets

Performance indicator	Baseline	Targ	ets
	2013	2015	2020
Lost time injury frequency rate (LTIFR)	2.98%	< 2.5%	2%
Number of WorkCover claims	31	< 25	< 20
% staff who feel safe on campus	95%	95%	95%
% students who feel safe on campus	84%	90%	95%

Case Study: Swinburne leads the way in providing assistance to those who experience domestic violence

In a first for Victorian universities, Swinburne is leading the way in providing assistance and increased safety to those who experience domestic violence in their lives. Thanks to a landmark agreement between the University and the National Tertiary Education Union (NTEU), additional leave, flexible work arrangements, the ability to change work location and contact details, and additional support from trained staff within the organisation are available to all Swinburne employees who experience domestic violence.

Following a conference hosted by UNSW and the Australian Domestic and Family Violence Clearinghouse, Swinburne's Coordinator of HDR Supervisor Development and Engagement, Ms Michelle Brocker, saw the opportunity for Swinburne to include provisions for staff experiencing domestic violence in the new draft enterprise agreement.

Recognising that she was in a privileged position compared with her corporate colleagues in having access to the CEO, Ms Brocker requested a meeting with Vice-Chancellor, Professor Linda Kristjanson, to put forward a case for the new provisions. Following a positive discussion, Ms Brocker was assigned the task of making the new provisions a reality. "It is exciting to see this added to the suite of provisions that values and actively fosters a supportive and safe Swinburne culture, particularly for women," Ms Brocker said.

"Women are more likely than men to experience violence by a partner. In 2012, an estimated 17% of all women aged 18 years and over (1,479,900 women) and 5.3% of all men aged 18 years and over (448,000 men) had experienced violence by a partner since the age of 15." ABS 2012 Personal Safety Survey

Embedding sustainability values into our culture

'Sustainability', along with 'integrity', 'accountability', 'teamwork', 'diversity' and 'innovation' are Swinburne's explicit values. These provide the foundation for setting behavioural expectations. Based on our 2013 staff survey *Your Voice*, employee awareness of the University's values was 79% with 'what do they mean?/how do I demonstrate them?' at 72%. When employees were probed further to comment on how well we are improving in our approach to sustainability, the response was 54%. While there are many areas that can be improved upon, this response pattern suggests that we need to do more to demonstrate our commitment to sustainability.

We are working to embed the Swinburne values across the University by incorporating them into all management and leadership processes and activities. Initially the measure for this will be greater recognition of the Swinburne values and later, the level at which these values are demonstrated. Our performance assessment process will reflect this.

Our culture actions

2013-14 Actions

Embed the Swinburne values of sustainability, integrity, accountability, teamwork, diversity and innovation across the university

Individual objectives of Swinburne leaders to include measures based on achievements and the demonstration of values

Embed the Swinburne values into the academic promotions process

Approach to sustainability - staff response

Performance indicator	2013	2015	2020
	Actual	Target	Target
% staff favourable response in the Your Voice survey to recognising an improvement in Swinburne's approach to sustainability	54%	> 60%	>90%



Our economic impact



As a public university, Swinburne receives the majority of its revenue via Australian and Victorian Government grants for the provision of higher and vocational education and from student fee payments. In 2013, we received \$276.9 million from the Australian Government – a 23% increase on 2012, mainly in higher education enrolments.

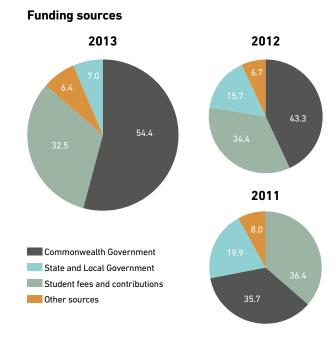
Conversely, the Victorian Government component of total government revenue has been declining since 2011. Swinburne has seen a 56% decrease in Victorian Government funding since 2012 (a 63% decrease since 2011). This reflects the ongoing reforms being made to Victorian Government vocational education funding arrangements and rules.

Economic performance

Swinburne receives the majority of its revenue through Australian and Victorian Government grants to support the provision of higher and vocational education, and from student fee payments. The financial assistance received from the Australian Government comes in the form of research grants, contributions to the cost of providing higher education, scholarships and funding for capital works. In 2013, we received \$276.9 million from the Australian Government. This represents a 23% increase on 2012; reflective of a steady increase due to the removal of caps on enrolments over the last few years.

In contrast, Victorian Government funding has declined sharply since 2011. We have experienced a 56% decrease in Victorian Government funding since 2012 (and a 63% decrease since 2011). This reflects the ongoing reforms being made to VE funding arrangements and rules.

The Commonwealth Government has signalled that it intends to reduce its contribution to the meeting the cost of providing higher education in the future. This presents a challenge, and a real risk, for Swinburne and other universities, because all providers rely significantly on revenue from the Commonwealth at present. We are addressing this by strengthening our commitment to high quality teaching, excellence in research and strong engagement with industry. Notwithstanding, it is highly likely that Swinburne and other universities will need to increase student fees to meet the shortfall.



PERFORMANCE (\$000)	\$000	\$000	\$000	\$000
Income from continuing operations	2013	2012	2011	2010
Australian Government financial assistance:				
– Australian Government grants	159,221	140,302	102,486	102,303
– HECS-HELP – Australian Government payments	87,569	63,429	50,983	45,189
– FEE-HELP	28,614	20,491	19,223	17,712
– SA-HELP	1,512	1,199	-	_
State and local Government financial assistance	35,466	81,205	95,010	80,564
HECS-HELP – Student payments	9,088	8,585	8,606	7,579
Fees and charges	158,996	173,358	177,170	166,282
Investment revenue	8,414	12,889	14,227	10,743
Royalties, trademarks and licences	2,319	1,954	1,952	1,872
Consultancy and contracts	17,776	14,507	17,746	15,630
Other revenue	4,408	6,548	5,249	4,018
Total revenue (direct economic value generated)	513,383	524,467	492,652	451,892
Expenses from continuing operations				
Employee related expenses	256,299	281,986	268,682	242,664
Depreciation and amortisation	27,233	31,777	27,932	27,157
Repairs and maintenance	19,503	13,726	13,884	10,562
Borrowing costs	109	8,172	15,130	125
Impairment of assets	1,592	3,793	1,584	157
Losses on disposal of assets	979	527	1,525	132
Investment losses	-	-	-	_
Deferred Superannuation expense	226	188	199	307
Other expenses	168,676	163,614	125,622	119561
Total expenses (economic value distributed)	474,617	503,783	454,558	400,665
Net Operating result (economic value retained)	49,961	19,891	38,140	51,315
Current and non-current Assets	1,005,425	989,036	1,065,066	936,914
Current and non-current Liabilities	233,468	285,055	327,989	232,743
Equity	771,957	703,981	737,077	704,171

View Swinburne's 2013 Annual Report at: www.swinburne.edu.au/corporate/spq/docs/annualreport2013.pdf

Direct and indirect economic impacts

Sustained, mutually beneficial engagement with industry and the wider community is a high priority for Swinburne. Our aim is to be the most user-friendly and connected university in Australia, focused on meeting the needs of our stakeholders and partners.

It is difficult to quantify the direct and indirect economic impacts of the University's activities in 2013, particularly those delivered through our 'core' business activities – education and research. For example, 5,700 students graduated from Swinburne's higher education courses in 2013 (4,040 undergraduate degree completions and 1,660 postgraduate degree completions including 140 higher degree by research completions). These graduates will make an enormous contribution to society over the course of their professional careers, in disciplines as diverse as business, biochemistry, education, engineering, health and IT. The contribution that will be made by those who completed apprenticeships and other vocational education programs at Swinburne in 2013 (2,617 completions in VE) is equally inestimable, as is the benefit that will derive from the University's research activity.

A major contribution is also made through the provision of expertise in many fields. Again, the value of this contribution is impossible to quantify, but Swinburne is regarded within government and the wider community as a trusted source of expertise and 'thought leadership', particularly in relation to science, technology and innovation, and public policy.

It is perhaps easier to quantify the direct financial impact of the University as a business operation and thus as a significant employer. For example, in 2013 employee benefits and on-costs amounted to \$256M, spending on capital works, repairs and maintenance was \$100M, and spending on such things as equipment, library acquisitions, stationery, operating leases and so forth was in excess of \$150M. All of this expenditure was, in effect, invested directly into the community, and a significant proportion of it delivered important new community assets such as the University's Advanced Manufacturing and Design Centre.

Cost of living and minimum wage

Swinburne's campuses are located in and close to the city centre and in the eastern suburbs. The cost of living for our students and employees living, studying and working at our eastern suburban campuses tends to be less than for those based at our city and Hawthorn campuses.

Swinburne offers a range of support services to students such as; equity scholarships; refugee and asylum seeker status support; accommodation assistance; study and living expenses support; health and well-being; childcare facilities; personal development and counselling; career guidance. Further information is available at; www.swinburne.edu.au/stusery/

Swinburne's minimum wages at entry levels compare favourably with the minimum wage set by the Australian government but below national averages in the sector.

Minimum wage levels 2013	Ratio
Australian Government minimum wage	1.00
Higher Education academic minimum wage (Level A, point 1)	1.81
Higher Education academic minimum wage (Level A, point 1) national average*	1.87
TAFE Teaching minimum wage (T1.1) Swinburne	1.61
Professional minimum wage (HEW 1,Level 1) Swinburne	1.31
Professional minimum wage (HEW 1, Level 1) national average*	1.30

^{*} National average derived from group of 13 post-1960s universities (source: NTEU)

Investment practices

Swinburne's investment portfolio is managed by Jana Investment Advisers Pty Ltd at the direction of the University Council which, in turn, draws on advice from its Finance Committee on investment policy and practice. The invested assets are held through trust structures, rather than through specific companies, in line with Jana's Environmental, Social and Governance (ESG) policy and Socially Responsible Investment (SRI) policy.

Procurement practices

We promote principles of sustainability in our procurement practices. Sustainable procurement aims to reduce the adverse environmental, social and economic impacts of purchased products and services throughout their life, including consideration to waste disposal and the cost of operation and maintenance over the life of the goods.

'Value' for money is central to our procurement practices. For Swinburne, this means that all relevant financial and non-financial costs and benefits are taken into account over the entire life of the procurement. As a responsible organisation, we aim to:

- adopt strategies to avoid unnecessary consumption and manage demand
- minimise environmental impacts over the life of the goods and services by choosing products or services that have lower adverse impacts associated with any stage in their production, use or disposal
- foster innovation in procuring sustainable products and services
- ensure that fair and ethical sourcing practices are applied and that suppliers are complying with socially responsible practices, including legislative obligations to employees.

Recent examples of sustainable procurement:

- Power Management we purchase energy efficient equipment with power management settings where available, for operating low power, sleep and off modes. For example, we are introducing and replacing existing desktop network telephones with power management systems that enable sleep mode from 6pm on weekdays.
- Increasing Asset Lifecycle we purchase equipment with longer warranties and consider the associated operating, maintenance and consumable costs prior to purchase. For example, we are increasing the lifecycle of staff desktop computers and laptops from three years to four years; and increasing the server environment lifecycle to four years and in some cases extending this by three years.
- Minimising Print Waste we are implementing strategies to deal with waste associated with printing such as enabling default double-sided/duplex, monochrome printing and encouraging the purchasing of recycled or sustainable sourced paper.

Sustainable Procurement Actions	Progress
Develop a strategy for sustainable procurement	Draft Strategy Sourcing Strategy developed. Final to be completed end 2014.
Incorporate Sustainable Vendor Assessment processes within tender programs	Ongoing
Introduce Sustainable Procurement development training for procurement staff	Ongoing
Implement an e-tendering system to replace manual and hardcopy tender processes, minimising paper collection, printing, disposal and records storage	Ongoing
Introduce workflow management and replace hardcopy forms	Ongoing
Increase lifecycle of IT hardware - extending the lifecycle of desktop monitors to 8 years	Ongoing
Implement print toner automation, partnering with Swinburne's stationery supplier to implement just in time toner delivery to reduce toner stockpiling	Ongoing

Profile Disclosure and Ca	tegory	Reported	Report Section or full GRI Content Index	Page
		Fully	Our commitment to sustainability	3 – 5
1.1 – 1.2	Strategy and analysis	Fully	Our approach	6 – 9
2.1 – 2.10	Organisational profile	Fully	www.swinburne.edu.au/sustainabilityreport	
3.1 – 3.4, 3.6 – 3.13	Donat	Fully	www.swinburne.edu.au/sustainabilityreport	
3.5	Report parameters	Fully	Our approach	2, 6 – 9
4.2 – 4.14, 4.16 – 4.17	Governance, commitments and		www.swinburne.edu.au/sustainabilityreport	
4.1	engagement	Fully	Our approach	6 – 9
4.15		Fully	Our communities	18 –19
G3.1 DMAs	Disclosure on management approach	Fully	www.swinburne.edu.au/sustainabilityreport	
Performance indicator an	nd category	Reported	Report Section or full GRI Content Index	Page
EC1	Economic performance	Fully	Our economic impact: economic performance	35
EC4	Economic performance	Fully	Our economic impact: economic performance	35
EC5	Market presence	Fully	Our Economic impact: cost of living and minimum wage	36
	Market presence		Our social impact: gender composition and age distribution	27
EC8 – EC9	Indirect impacts	Partially	Our economic: direct and indirect impacts	36
EC9	man set impacts	Partially	Our communities	18 – 19
EN1 – EN2	Materials	Fully	Our environmental impact: paper use and printers	25
		Fully	Our environmental impact: energy consumption and efficiency	21 – 22
EN3 – EN4 EN6 – EN7	Energy	Fully	www.swinburne.edu.au/sustainabilityreport	
		Fully	Our environmental impact	21 – 22
EN8	Water	Fully	Our environmental impact: water use	24
EN16 – EN17		Fully	Our environmental impact: greenhouse gas emissions	21 – 22
	Emmisions, effluents, waste	Fully	Our environmental impact: greenhouse gas emissions	21 – 22
EN18	Ziminisions, circums, waste	Fully	Our environmental impact: built environment	23 – 24
		Fully	Our envionmental impact: commuting	23
EN22		Fully	Our environmental impact: waste and recycling	25
EN26	Products and services	Fully	Our economic impact: procurement practices	37
EN28	Compliance	Fully	www.swinburne.edu.au/sustainabilityreport	
EN29	Transport	Fully	Our environmental impact: greenhouse gas emissions	21 – 22
		Fully	Our environmental impact: commuting	23

Performance indicator an	d category	Reported	Report Section or full GRI Content Index	Page
LA1	- Familia van ant	fully	Our social impact: staff categories	27
LA2	Employment	fully	Our social impact: recruitment, retention and turnover	28
LA3 - LA5	Employment & labour relations	fully	www.swinburne.edu.au/sustainabilityreport	
LA7	Occupational health & cafety	fully	Our social impact: safety and wellbeing	32 – 33
LA6, LA9	Occupational health & safety	fully	www.swinburne.edu.au/sustainabilityreport	
LA11 - LA12	Training and education	fully	www.swinburne.edu.au/sustainabilityreport	
		fully	Our social impact: equal opportunities for all in the workplace; diversity and inclusion	28 – 30
LA13	Diversity and equal opportunity	fully	Our students: embracing social inclusion and diversity	11 – 12
		fully	www.swinburne.edu.au/sustainabilityreport	
1 4 1 4		fully	Our social impact: gender pay equity	28 – 29
LA14 Equal remuneration for men and	Equal remuneration for men and women	fully	Our social impact: women in leadership	29
HR1		partially	Our economic impact: investment practices	36
HR2	Investment and procurement practices	partially	Our economic impact: procurement practices	37
HR3		fully	www.swinburne.edu.au/sustainabilityreport	
HR4, HR11	Non-discrimination, remediation	fully	www.swinburne.edu.au/sustainabilityreport	
HR5	Freedom of association and collective bargaining	fully	www.swinburne.edu.au/sustainabilityreport	
HR9	Indigenous rights	fully	www.swinburne.edu.au/sustainabilityreport	
501	Local communities	partially	Our communities	18 – 19
S01	Local confimunities	partially	Our approach: our stakeholders	6 – 8
S03	Corruption	fully	www.swinburne.edu.au/sustainabilityreport	
PR5	Product and service labelling	fully	Our students	10 – 13
		fully	Our research	14 – 17



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The information in this report was correct at the time of publication (May 2014)
The University reserves the right to alter or amend the material contained in this publication.

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