Impact Report
2019

Sustainable Development Goals

RMIT UNIVERSITY

Contents

Introduction

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The United Nations Sustainable Development Goals (SDGs), are a shared blueprint for peace and prosperity for people and the planet. RMIT recognises the important role of the education sector in achieving all 17 Goals.

The Vice Chancellor's Executive has committed to an enterprise-wide model to promote and coordinate Sustainable Development Goals activities across the University.

As part of our commitments to the global 2030 sustainable development agenda, RMIT is proud to publish its first SDG Impact report.

Together with the RMIT Sustainability Annual Report, this document highlights the impact of our teaching and learning, research and operations on the environment, global and local economies and society.

This report does not capture all the depth and breadth of activity happening across the University, but provides key highlights on every SDG. Combining quantitative metrics and case studies, we outline just some of RMIT's activities that are contributing to the 2030 sustainable development agenda.

This report provides information about the University's research contributions in 2019.

Methodology

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Cases studies (qualitative information) were used to provide examples of RMIT's contributions to each of the 17 SDGs and increase readers' awareness of the different ways in which RMIT is supporting, promoting and contributing to the SDGs. These cases studies were selected based on a consultation process, including review of relevant university websites and reports, and input from professional staff and academics. RMIT staff with particular expertise for the role universities can play to achieve the SDGs were also engaged. Over 50 staff members contributed to the identification, content and selection of the case studies.

Publications metrics (quantitative information) were provided based on a transparent approach conducted by an external organisation (Elsevier). RMIT decided to use the SDGs publication mapping information provided by Elsevier to improve the independence and credibility of the SDGs mapping process. Elsevier's SDGs publication mapping information is generated based on a set of Scopus queries related to each of the SDGs. Publications metrics used in this report were based on the Scopus data source last updated on 8 September 2020 and exported on 21 September 2020 (year range 2019). The RMIT publication performance and metrics, as well as all the Australian

and worldwide publication information used in this report was provided by Elsevier. Elsevier does not provide specific metrics for the SDG 17 as this SDG explicitly relates to all other SDGs. In this report the SDG17 metrics provided are based on the average of all other SDGs.

Research metrics (quantitative information) were provided based on an internal research mapping process. The RMIT research mapping approach is based on a set of keywords related to specific SDG targets and indicators (keyword search approach). This set of keywords was selected based on the United Nation's SDGs official documents and the list of SDGs keywords provided by the Sustainable Development Solutions Network (SDSN). It was then refined and tailored to fit RMIT's context and to reflect specific contributions to SDG targets and indicators. In order to improve the quality of the information provided RMIT combined manual assessment with a keywords search.

RMIT welcomes your enquiries and feedback on this report. Please email: sdgs@rmit.edu
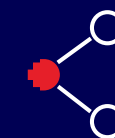
SDG 1: No Poverty

1 NO POVERTY

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End poverty in all its forms everywhere
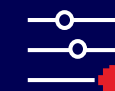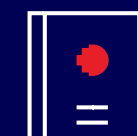
3.51%
National Contribution
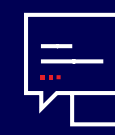(of all Australian publications 2019)

37.5%
Of all internationally co-authored publications were with developing countries

3.3
Citation impact based on global benchmarking
(global benchmark 1.8)

50.0%
Publication in top 25% of Journals
(Australia 61.5% / Worldwide 45.7%)

50.0%
Internationally co-authored publications
(global benchmark 28.3%)

32
Number of research projects
(at SDG target level)

Philanthropic impact

RMIT is dedicated to creating life-changing educational experiences for all students from all backgrounds and offering connected pathways between life, work and learning, supporting people to personalise the education that will best meet their needs. A tertiary education can transform the lives of students, giving them the opportunity to access knowledge and pursue their passion. The RMIT Philanthropy Fund was established thanks to the generosity of donors to support scholarships, research and other major projects.

RMIT provides an extensive range of assistance and support for financially vulnerable students including emergency accommodation, vouchers and grants. In 2019 there were 2,144 scholarships awarded from 17,984 applications. To help to eliminate the financial barriers which prevent students from pursuing tertiary study, over 1,800 students benefitted from RMIT equity-based scholarships.

Commencing student retention rates for those receiving a scholarship in 2019 was higher (91%) than non-scholarship holders (80.9%) and continuing students who hold a scholarship have a retention rate of 90.7% in comparison to non-scholarship holders at 83.6%.

Improving financial wellbeing

For low-income Australians, saving enough money to provide educational basics such as school uniforms for their children, or increasing their own employability through education can seem out of reach. Improving the financial literacy of these vulnerable Australians provides the backbone to improving their financial wellbeing and educational opportunities for themselves and their families.

Collaborating with ANZ and the Brotherhood of St Laurence, RMIT has definitively shown the long-term improvement in the financial health of lower-income Australians who are involved in matched-savings programs such as Saver Plus.

The first program of its kind in Australia, Saver Plus was developed by the School of Economics, Finance and Marketing to encourage saving for educational expenses. With more than 46,000 participants since 2003, it is the largest and longest-running savings program in the world.

The program involves financial education workshops and participants making regular deposits into an account then after ten months, ANZ matches the amount up to $500. This program showed that even up to seven years after completing Saver Plus, 87 per cent of participants were still saving the same amount or more, demonstrating the long-lasting effect of such schemes. There were also marked improvements in the financial wellbeing score of participants, increasing the average score of 64 out of 100 following the program compared to the national average score of just 59.

'Know Your Money Mindset' credential

The Know Your Money Mindset Credential is available to all RMIT students. This credential helps students recognise how personal values and mindset can impact money habits and influence financial decisions. With this knowledge, students can select strategies and resources available to them which can be tailored to their money needs and assist in developing healthy financial habits. The credential also provides links to useful tools and resources, where to get help when needed, and steps to developing healthy money management behaviours. This credential was developed by RMIT in partnership with the Australian Securities and Investments Commission (ASIC).

'You, Me & Money' project

The RMIT School of Economics, Finance and Marketing received funding from Ecstra Foundation to create a financial capability tool that would help prevent financial abuse in young adult relationships. This practical outcome was created after a PhD project found that financial abuse was too common in young people's relationships and mostly impacts young women. Importantly, young adults were not equipped with the knowledge and skills in navigating financial issues within their relationships.

The You, Me & Money project website helps young adults to understand what's healthy and what's not in managing money within relationships and to recognise 'red flags' signalling financial abuse. The website was co-designed with young adults and in partnership with Today and YLAB.

Environmental shocks and wellbeing

Globally, natural disasters kill an average of 60,000 people per year. Ninety-five per cent of disaster-related deaths occur in developing countries. Economic losses associated with natural disasters are estimated to be 15 times higher today than they were in the 1950s. Such shocks are widely acknowledged to disproportionately affect the poorest in society because they have fewer ways of coping with these shocks. For example, they may have less or no savings and inadequate housing.

Moreover, recurrent shocks increase the vulnerability of the poor to disasters, possibly placing communities perpetually at risk and reducing their ability to break out of a poverty cycle. Researchers from the Centre for International Development at RMIT have been investigating how households that experience environmental shocks cope to make ends using household-level data from Vietnam.

The Centre's work also examines the impact of environmental shocks on child health and parents' mental health. Existing literature demonstrates that environmental shocks can impact child health by reducing household income or through increasing the incidence of disease.
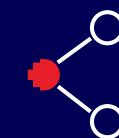
2 ZERO HUNGER

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End hunger, achieve food security and improved nutrition and promote sustainable agriculture
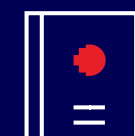
SDG 2: Zero Hunger

2.39%
National Contribution
(of all Australian publications 2019)

60.0%
Of all internationally co-authored publications were with developing countries

6.7
Citation times per publication
(Global benchmark 2.9)

77.3%
Publication in top 25% of Journals
(Australia 72.0% / Worldwide 52.2%)

66.7%
Internationally co-authored publications
(global benchmark 28.6%)

50
Number of research projects
(at SDG target level)

Food waste on campus

RMIT is actively addressing food waste on campus, through the Sustainable Retail Framework the University is focused on working with retailers to review portion sizes and implement retailer-specific strategies to minimise food waste. RMIT is working to keep retailer food waste out of landfill, encouraging retailers to partner with local food banks to donate excess food and to participate in the University's food and organics waste collection service. In 2019 there was a significant increase in the number of organics bins needed, with collection frequency doubling.

Free meals program

RMIT University Student Union (RUSU) is run by students for students. Many students find that healthy meals can be challenging due to the cost of living and general life pressures. To help provide food security amongst the student population and to promote healthy food choices, RUSU provides free healthy breakfasts and lunches to students every week. In 2019, RUSU gave out over 65,000 free breakfasts and over 60,000 free lunches to students across the RMIT campuses. Additionally, $198,000 in food vouchers and food deliveries were provided to students in need.

Fight Food Waste CRC

The Fight Food Waste Cooperative Research Centre (CRC) aims to improve the competitiveness, productivity and sustainability of Australian industries. The Program fosters high-quality research to solve industry-identified problems through industry-led and outcome-focused collaborative research partnerships between industry entities and research organisations. The Program aims to encourage and facilitate small and medium enterprise (SME) participation in collaborative research. The CRC and participants will deliver: New sources of revenue and market growth for food companies; less wasted resources through the supply chain from grower through to consumer; less waste ending up in landfill; and more donated food to feed hungry Australians. RMIT University leads the Reducing Supply Chain Losses program within this CRC.

Lessons from a simulated Mars mission

Food waste is a growing issue in many countries, including Australia, with the latest figures showing that in 2016-17 Australia produced 7.3 million tonnes of food waste, with almost 300kg per person going to landfill every year. An RMIT researcher spent two weeks at the Mars Desert Research Station in the US state of Utah, examining how the conditions of a Mars mission simulation with a limited choice of food, preparation and cooking options would affect the food waste generated.

Findings show that non-perishable food can create less waste in constrained circumstances - a finding highly relevant during the COVID-19 pandemic. The research team noted that waste is more likely when preparing meals that alter in form (such as cooking dried rice) and/or combine multiple ingredients.

Recommendations suggested to avoid food waste include:
- Buying only what you need, and will use
- If you run a food business, divert excess consumable food to food rescue organisations and charities that feed the hungry
- Where possible, give food waste to animals, such as backyard chooks
- Composting food in your backyard or a community garden
- More waste is generated during rushed mealtimes

Investigating the impact of International Landcare

Landcare, a grassroots community-led approach to sustainable land management, began in Australia in 1986. The model has evolved within the Australian community to a fully-fledged national program that has enjoyed bipartisan support from Government. Funded by the Australian Centre for International Agricultural Research (ACIAR), RMIT researchers undertook a project which studied the Landcare approach across six countries to determine how sustainable agricultural land management mobilised through Landcare contributes to development outcomes, including food security and poverty reduction; better management of natural resources and climate; gender equity and empowerment of women and girls and social cohesion.

Improving agricultural skills in conflict areas

Agricultural extension is a term used to describe advisory services which giving smallhold farmers in developing countries knowledge of agronomic techniques and skills to improve their productivity, food security and livelihoods.

The 'Improving the methods and impacts of agricultural extension' project is funded by the Australian Centre for International Agricultural Research (ACIAR) and aims to develop an improved 'model' for agricultural extension in conflict areas of Mindanao, Philippines. Farming households in conflict-vulnerable areas of Mindanao face many challenges to improving their livelihoods. These include dislocation to farm activities, difficulty in accessing markets, uncertainty about long-term investment in farm infrastructure, lack of social cohesion, and isolation from government information and services.

This project refines and evaluates agricultural extension methods in the more complex setting of conflict-vulnerable areas using a community-based extension to improve local farmers livelihoods. The improvement of agricultural extension methods will have two dimensions. At the farm level, the focus will be on refining an improved extension system that impacts on the technical, economic and social dimensions of farmer livelihoods. At the institutional (extension agency) level, the focus will be on how improved extension methods can be most appropriately incorporated into programs of agencies operating in the conflict areas.

Foodbank meals via 'Y Waste' app

'Y Waste' is an app that facilitates the discounted sale of end-of-day food from quick-serve restaurants to consumers, rather than the food going to landfill. The Foodbank meals via Y Waste app project is a collaboration between Foodbank, Y Waste, Fight Food Waste CRC and RMIT. This project will ensure leftover food from quick-service restaurants is diverted from landfill to those who need it to subsequently reduce food insecurity in Australia. Building upon an initial pilot phase, the project is currently identifying pressure points which would limit the uptake of the app, designing solutions to these pressure points and prototype and road test design solutions.
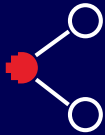
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Ensure healthy lives and promote well-being for all at all ages
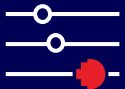

SDG 3:
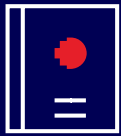# Good Health and Wellbeing

Research and Publications

1.34%
National Contribution
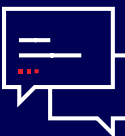(of all Australian publications 2019)

42.2%
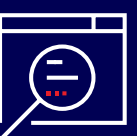Of all internationally co-authored publications were with developing countries

4.2
Citation times per publication
(Global benchmark 2.8)

74.8%
Publication in top 25% of Journals
(Australia 68.8% / Worldwide 54.7%)

47.0%
Internationally co-authored publications
(global benchmark 22.4%)

142
Number of research projects
(at SDG target level)

Staff and student wellbeing

RMIT is committed to providing a safe learning and work environment for all staff, students and visitors. RMIT's Global Safety Model underpins the University's operational safety, health and wellbeing, and operational risk management. The Global Safety Model is supported by policies, strategies, processes, guidance materials and proactive programs. In 2019, RMIT developed the 2020-2025 Health Safety and Wellbeing strategy which is built on a deep sense of care for each other, across the student and staff communities. In 2019, more than 250 staff and 10,000 students attended a series of wellbeing seminars and events. 'Assisting students in distress' training was delivered to over 1,000 staff and mental health first aid training was provided to hundreds of students and staff.

Student counselling service

RMIT provides professional counselling on each campus for students to talk about personal and study issues or mental health and wellbeing concerns. The counselling service is free for all currently enrolled RMIT students, including students on an approved leave of absence. One-on-one private conversations with counsellors are offered and all counsellors are registered psychologists, provisional psychologists, or social workers and are subject to either the Psychology Board of Australia's Code of Ethics and the Health Practitioner Regulation National Law (Victoria) Act 2009, or the Australian Association of Social Workers' Code of Ethics. The Student Counselling Service provided over 7,000 professional counselling appointments for students with a range of mental health and wellbeing issues in 2019.

Medical Hub

The 'Medical Hub @ RMIT' launched in 2019, offering no-gap fee consultations for RMIT students and staff. It offers a holistic approach to health in a safe environment for people of all backgrounds, cultures, beliefs, abilities and sexualities. The services offered support an approach to managing healthcare, which is sensitive to the individual needs of the local and wider community. Through innovative processes and systems, in a state-of-the-art facility, the Medical Hub provides a safe, inclusive and welcoming environment which enables confidential, sensitive, private and emotionally connected care.

New drug target for malaria

The latest finding in a decades-long research collaboration looks set to pave the way for the development of new malaria drugs that could both treat and block transmission of the deadly disease. The study, undertaken by a global team of researchers including those from RMIT's School of Health and Biomedical Sciences and published in Science, has identified a protein in the malaria parasite that is essential for proliferation throughout the life cycle of the disease.

The findings suggest that drugs developed to target the protein would enable treatment to be delivered at multiple stages of the parasite's life cycle, significantly reducing the likelihood of survival. The findings opened the door for the development of new targeted drug treatments, in what could be a critical step towards eradication. A drug targeting this protein would not only cure the malaria patient but also make them non-contagious. To have a dual function in one treatment for the first time – curing and blocking transmission – would bring us significantly closer to eradicating this debilitating and deadly disease.

Screening technology to detect Parkinson's disease

Screening technology to detect Parkinson's disease in its earliest stages is being developed by RMIT researchers and start-up company Jesse Medical. More than 10 million people worldwide are estimated to be living with Parkinson's disease, including over 80,000 Australians. Many treatment options for Parkinson's are only effective when the condition is caught early, but by the time patients show any commonly recognisable symptoms, many nerve cells in the brain have already suffered irreversible damage.

The new tool can spot the disease when there are no obvious symptoms and can also be used to monitor Parkinson's patients after diagnosis, to better manage their condition. The technology analyses drawing and writing tasks to catch the disease before obvious symptoms. The screening test involves completing seven dexterity tasks on a drawing tablet, including simple writing, writing with memory load and drawing a spiral by joining dots. The test can create a patient-specific baseline for the different aspects of complex Parkinson's symptoms. The data is transmitted over the cloud and customised software records the results and analyses them in real-time. The software is readily compatible with existing technologies, so the only equipment needed to run the screening test is a pen, paper and drawing tablet.

Air quality monitoring

The air quality project was initiated in 2019 by the US Consulate General in Ho Chi Minh City and implemented by RMIT University in coordination with UNICEF Vietnam, Saigon Innovation Hub and Clean Air Asia. Thirteen Air Quality Monitors (AQM) have been installed at local schools and social organisations across Ho Chi Minh City, in an effort to raise awareness of the increasing levels of air pollution. The RMIT project team worked closely with local schools and social groups to install 13 AQMs across eight districts to teach children more about the air that they breathe. With the new installations, the number of operating AQMs in Ho Chi Minh City now totals 18. Users can access an air quality index measured by the AQMs on the AirVisual mobile application. The data collected from the AQMs is expected to become a useful source for policymakers, government, industry and schools to revise the traffic and infrastructure system and waste disposal, and to consider other environmental and health solutions.

Network for digital health innovation

RMIT has partnered with the European Connected Health Alliance (ECHAlliance) for the launch of a digital health ecosystem. The Melbourne Ecosystem – the first Australian digital health ecosystem – will strengthen connections between patients, clinicians, researchers, policymakers, technology providers and the community. The project brings together people in the health and social care sectors with the aim to break down silos and open up opportunities for collaboration through regular meetings, events and online platforms and tools. RMIT's partnership with ECHAlliance in Melbourne has extended from the University's European hub in Barcelona and the Melbourne Ecosystem joins an international network of digital health ecosystems across three continents.

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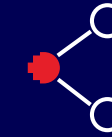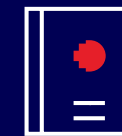Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all
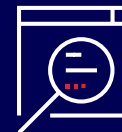
SDG 4: Quality Education

2.26%
National Contribution
(of all Australian publications 2019)

60.0%
Publication in top 25% of Journals
(Australia 57.8% / Worldwide 42.1%)

2.0
Citation times per publication
(Global benchmark 1.4)

67
Number of research projects
(at SDG target level)

30.0%
Internationally co-authored publications
(global benchmark 16.8%)

Work-Integrated Learning

Work-Integrated Learning (WIL) connects the classroom to the workplace and is an integral part of RMIT's commitment to work-relevant, industry-engaged education. Providing students with the opportunity to integrate academic learnings into workplace application, not only prepares students for real-life situations but also allows them to test drive their career options.

WIL is available across most disciplines and more importantly are co-designed with industry and community partners. Industry partners are engaged in the project and provide genuine, constructive feedback to the students. Whether the activity is a placement or project, WIL can be tied to one or more courses within the student's program, as the activity is formally assessed for credit and therefore contributes to their degree. In 2019, 14,272 RMIT students undertook WIL placements and projects.

Example WIL placement opportunity

Through a long-term partnership with the Australian Association of Social Workers (AASW), RMIT has developed a Sustainable Development Goals (SDGs) Work Integrated Learning placement opportunity. The AASW is the professional body representing more than 12,000 social workers throughout Australia, setting the benchmark for professional education and practice in social work and through their policy and advocacy work have a strong voice on matters of social justice, sustainability and human rights.

The placement offers the opportunity for the next generation of social workers to engage with issues around equality and sustainability. The non-government sector is a key partner in achieving the 2030 goals and as such is it imperative that students are ready for the challenges they will face as new graduates. During the placement, students in groups undertook a comprehensive review of the AASW's activities, with a focus on the policy and advocacy actions, and identified how they align with the 17 Goals and 169 targets. In the process students identifies sustainability opportunities for actions and provided a report to the organisation with recommendations for future projects.

Education for the SDGs

Aligned with RMIT's commitments to contribute to the SDGs equipping the next generation with skills and knowledge of sustainability challenges and opportunities, a wide range of RMIT's schools and colleges have taken actions and initiatives to accelerate education for the SDGs across the University. Examples include:

- Managing for Sustainability, School of Property, Construction and Project Management;
- Health and Physical Education, School of Education
- Accounting Organisation and Society, School of Accounting, Information Systems and Supply Chain
- Fashion & Textiles Sustainable Innovation Strategies and Environment, School of Fashion & Textile
- Sustainable Development Goals (SDGs): Real-World Strategies and Solutions, School of Architecture and Urban Design
- Accounting Thought and Ethics, School of Accounting, Information Systems and Supply Chain.

RMIT and Engineers Without Borders

The partnership between RMIT School of Engineering and Engineers Without Borders Australia (EWB) provides opportunities for engineering students to learn about global perspectives in engineering through real projects and to participate directly in community-based programs and initiatives focused on sustainable development and poverty alleviation. These opportunities are embedded within the curriculum or are available to students through involvement in the EWB Chapter. Connections with real-world projects increases the global relevance of the university curriculum and allows students to gain insights into how their engineering and technical skills can be applied to a humanitarian context and contribute to the sustainable development goals. This in turn develops a deeper understanding of the role of engineers as facilitators, change agents, creative problem-solvers, integrators and managers. As an example of this partnership, all first-year engineering students participate in the EWB Challenge. Inclusion of the EWB Challenge presents students with the opportunity to design and develop creative solutions that contribute to addressing the aspirations of a real community.

RMIT Online

After a shift in RMIT Online's strategic focus to courses designed to close skills gaps in 2018, demand for RMIT's alternative learning offers continued to increase in 2019. More than 19,000 students were enrolled across RMIT Online short courses and degrees in 2019. RMIT Online also made its international debut through a partnership with the Singapore Government's 'SkillsFuture Singapore' with the delivery of its iOS App Development with Swift and Developing Blockchain Strategy short courses.

In 2019, RMIT Online joined forces with the Amazon Web Services (AWS) Academy to create two new cloud computing courses and launched a Cyber Security Risk and Strategy course with Palo Alto Networks and NAB to close cyber skills gaps. A CRM Professional with Salesforce short course was also built in partnership with Salesforce's gamified, online learning platform, Trailhead, to create well-rounded CRM professionals. Digital Leadership was also introduced to meet ongoing soft skills shortages, along with a revamped MBA for the digital age. The RMIT Online Future Skills has more than 38 Future Skills courses available, co-created with 50 leading industry partners and covering topics including digital transformation, marketing, Augmented Reality (AR) and Virtual Reality (VR).

RMIT SDGs tour in Barcelona

Students on an RMIT Sustainable Development Goals (SDGs) study tour in Barcelona developed strategies to tackle urban heat – a growing challenge for cities around the world as urban populations increase. Led by RMIT's School of Global, Urban and Social Studies, students worked with the Barcelona City Council on the heat island effect. The group proposed innovative designs for public space and digital tools the city could use to make these spaces cooler. Taking inspiration from an approach employed in Australia called Shadeways, being led by RMIT's Centre for Urban Research, the multidisciplinary study group focused on enabling pedestrians and cyclists to map low-temperature routes for their travel and developed a shading system for common travel paths in Barcelona.
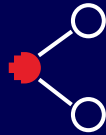
5 GENDER EQUALITY

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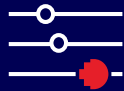Achieve gender equality and empower all women and girls
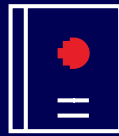
SDG 5: Gender Equality

5.21%
National Contribution
(of all Australian publications 2019)

25.0%
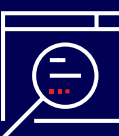Of all internationally co-authored publications were with developing countries

2.0
Citation times per publication
(Global benchmark 1.5)

60.0%
Publication in top 25% of Journals
(Australia 69.0% / Worldwide 56.7%)

33.3%
Internationally co-authored publications
(global benchmark 20.1%)

37
Number of research projects
(at SDG target level)

Employment outcomes

Led by the Gender Equality Action Plan, RMIT continues to identify and address barriers to women's inclusion and career progression. The University remains focused on delivering strategic, sustainable and meaningful change across the priority areas: leadership and governance, employment conditions and women's career advancement. In 2018-2019 62.8% of leadership promotions at RMIT were awarded to women, an increase from 33.3% in 2017. In 2019 44% of RMIT's senior leaders were female, up from 35% in 2017, with strategic efforts in place to continue to strive for parity.

Employer of Choice for gender equality

RMIT has proudly held the Employer of Choice for Gender Equality citation since 2018, awarded by the Workplace Gender Equality Agency. The "Employer of Choice" citation highlights the extraordinary efforts undertaken across the organisation to drive positive change for gender equality. RMIT has worked hard to continue to put its commitment to gender equality into practice as an organisation that attracts, supports and progresses women.

Gender pay gap

RMIT is committed to addressing the gender pay equity gap. The RMIT Employee Lifecycle Policy addresses pay scale equity and demonstrates the University's commitment to measure and eliminate gender pay gaps. RMIT regularly measures gender pay equity and meets the requirements of the Australian Workplace Gender Equality Act of 2012. A "Pay Equity Update Report" is prepared and presented annually to key internal and external stakeholders. This report measures and tracks pay scale gender equity, establishes action plans to address improvement opportunities and provide results of the pay gap analysis.

RMIT also reports on the measurement, analysis and planned actions to promote pay scale gender equity externally to the Workplace Gender Equality Agency and internally to University leaders and RMIT Council each year.

Gender equality and empowering women

In 2019 RMIT University achieved an Athena SWAN Bronze award, showing a long-term dedication to improve gender equity and diversity. The award recognizes three years of rigorous analysis and unflinching reflection as the University mapped its efforts in promoting gender equity and developed a clear action plan for continued improvement and progression. The RMIT Diversity and Inclusion team is working across all areas of RMIT to implement a 4-year Action Plan to build towards a more inclusive, diverse and supportive environment for staff and students at RMIT.

Athena SWAN has an international reputation for creating a gender-inclusive workplace, with accredited institutions demonstrating a competitive edge in attracting the best scientists and engineers. Athena SWAN Charter is the most comprehensive and practical scheme to improve academics' careers by addressing gender inequity. Women in Science, Technology, Engineering, Mathematics and Medicine employed in organizations participating in the Athena SWAN Charter experience greater career satisfaction and fairness in the workload allocation, and increased opportunities for training and development. As the University works towards Silver accreditation, the action plan will focus on seven key areas, from Leading Local Action and Building the Pipeline to transforming Cultures and Engaging in Moments of Transition.

Elimination of violence against women

RMIT experts joined the national discourse on the issue of sexual violence against women on the International Day for the Elimination of Violence against Women (IDEVAW). The day marks the start of the United Nations' 16 Days of Activism against gender-based violence and calls on people from all walks of life to take a stand against sexual violence against women, including rape. RMIT is a longstanding leader in the areas of domestic and family violence research, training and innovation, with researchers pointing to a range of issues impacting women. They weighed in on sexual violence in the sex industry, the harms of image-based abuse within a domestic violence context and the added pressures domestic violence victims face in rural and regional Australia.

Research to prevent gender-based violence

Women who spend time in mental health inpatient facilities are not being protected from gender-based violence, according to new research. The study, 'Preventing gender-based violence in mental health inpatient units' shows women have experienced sexual assault, harassment and related threats from other inpatients, visitors and even staff in some facilities. Conducted by researchers from RMIT's School of Global, Urban and Social Studies and Charles Sturt University, the study also found many services lacked appropriate policies and procedures to support women who reported such violence during their stay. The research team points out that while some examples of women receiving supportive responses were uncovered, incidents of harassment were frequently disbelieved or not taken seriously. Australia's National Research Organisation for Women's Safety (ANROWS) commissioned the study.

Women transforming justice

RMIT's Centre for Innovative Justice (CIJ) is conducting an ongoing evaluation of Women Transforming Justice (WTJ), a collaboration between the Fitzroy Legal Service (incorporating Darebin Community Legal Centre), the Law and Advocacy Centre for Women (LACW) and Flat Out. The project is funded by the Legal Services Board and provides gender-informed legal assistance specifically to women seeking bail, combined with follow up case management and other support to women either while they are in custody or the community. WTJ recognises the very particular needs of a growing cohort within our community: women on remand – as well as the disproportionate impacts that recent bail and other legislative reforms have had on women and their children.

The CIJ's evaluation over the life of the project is assessing its implementation, the specific needs of women on remand and the extent to which the service is meeting these needs. Importantly, the evaluation is also measuring how successful the project is in raising awareness of these needs within the legal system and prompting a shift towards a more evidence-based, gender-informed approach.

—
Ensure availability and sustainable management of water and sanitation for all

SDG 6: Clean Water and Sanitation

5.27%
National Contribution
(of all Australian publications 2019)

63.0%
Of all internationally co-authored publications were with developing countries

4.4
Citation times per publication
(Global benchmark 5.0)

81.5%
Publication in top 25% of Journals
(Australia 78.4% / Worldwide 64.4%)

71.4%
Internationally co-authored publications
(Worldwide international collaboration 30.5%)

62
Number of research projects
(SDG target level)

Operational water use

RMIT's Sustainability Policy provides the guiding principle to minimise resource consumption through good design, including actively promoting efficient water use and maximising its reuse across the University.

In 2019, RMIT consumed a total of 182,426,000 litres of potable water in higher education operations, a decrease of 4% from 2018 (190,253,000 litres). The total volume of potable water is measured using water supply authority meters installed across all RMIT sites and provided to the University through regular invoicing.

RMIT has a total of 1,278,000 litres of rainwater and stormwater tanks installed across the campuses providing water for toilet flushing and irrigation purposes. Additionally, RMIT has a significant stormwater catchment pond at the Bundoora campus providing an additional 1,350,000 litres of storage, RMIT sustainably extracts water from the pond for irrigation purposes throughout the campus, further reducing the requirements for potable water use. These initiatives provide RMIT an estimated 12,000,000 litres of water reuse every year.

RMIT Design Standards provides minimum standards for new buildings and refurbishments to minimise water use, through general design principles, water sensitive urban design initiatives and specifying minimum water efficiency standards for fixtures and fittings. The University also applies water conscious planting through the selection of drought tolerant planting in the urban environment. The recent New Academic Street project features two new rooftop terraces which have been extensively planted in drought tolerant evergreen plants which require minimal water to maintain, reduce the urban heat island effect and provide relaxing areas.

RMIT actively promotes conscious water usage through messaging to the community such as the promotion of reusable water bottles and encouraging people to report dripping taps and toilets. RMIT also has 117 drinking fountains and an estimated 187 refill taps in kitchens and kitchenettes, providing students, staff and visitors with free drinking water.

Litter trackers project

Litter reduces water quality and harms aquatic life through ingestion, choking and accumulation of pollutants. As part of the Litter Trackers project, scientists from the RMIT School of Science are working with schools and community groups to launch GPS tracked bottles into Melbourne's waterways to demonstrate how and where litter travels once it enters our waterways. Education is an integral tool for achieving long-term change in community behaviours and reducing litter in waterways. The Litter Trackers program is the first study of its kind in Victoria to deploy GPS-tracked litter at 20 sites within Port Phillip Bay catchments to demonstrate the life of litter once it leaves a person's hand and reaches our waterways. This project also provides educational tools that can be used in schools, councils and by government.

Drops of wisdom

Drops of Wisdom is a three-meter diameter interactive tabletop display commissioned by Water New South Wales for the Warragamba Dam visitor centre. The work by the School of Design is the central feature in the permanent exhibition titled 'Water for Life' which tells the story of Sydney's dams and catchments, and the history and future of Sydney's water supply. The table displays 40 individual stories in four thematic groups – Water, Catchments, Dam, and People. These stories provide insights into the history of Warragamba Dam - Australia's largest urban water supply dam, and contemporary aspects of water usage, conservation, and sustainability. Drops of Wisdom utilises cutting-edge software for interactive 3D graphics, combined with a multi-touch gesture recognition system that makes the entire tabletop touch-sensitive. The multimedia application is designed for flexibility as new educational content is added to the database over time.
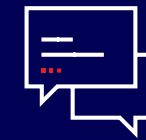
Creek revitalisation program

The Enhancing Our Dandenong Creek project is an award-winning collaborative initiative involving RMIT and Melbourne Water to renew and revitalise a Melbourne creek. Developed by Melbourne Water and key stakeholders including RMIT's Aquatic Environmental Stress (AQUEST) research group, the project focussed on improving the
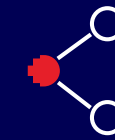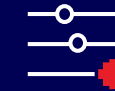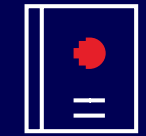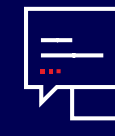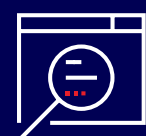
health of Dandenong Creek in Melbourne's south-east. As well as increasing liveability, reducing stormwater pollution from industry, creating habitats for native fish and upgrading the sewer network to control spills, the works included returning sections of the creek that had been underground for many years to open, flowing waterway. The project has seen measurable on-ground benefits, through the reintroduction of two nationally threatened fish species, and world-leading waterway renewal works. In 2019 the project received the Australian Water Association's prestigious National Program Innovation Award. Due to the success of the program, Enhancing Our Dandenong Creek Project is now transitioning into its second five-year program in 2019, with AQUEST continuing to play a key role.

Sustainable water desalination

The need for freshwater is considered a critical global problem, increasing the demand for alternative sustainable water sources, resulting in the growth of large-scale desalination plants. Reverse osmosis (RO) is known as the most widely developed desalination commercial technology. However, RO is an electrically driven process, traditionally supplied by combustion of fossil fuels. There are emerging techniques which are aiming to develop more sustainable ways of desalination systems by thermal and/or membrane-based processes by using waste heat or renewable energy sources.

The RMIT Energy Conservation and Renewable (Energy Care) group, aims to develop sustainable water desalination technologies by using waste heat or renewable energy sources. The Group has developed an alternative water desalination and irrigation system. This system is part of a project that uses a special thermal power pump (TPP) – developed in collaboration with University of Pune, India – which is driven by low-temperature thermal energy rather than electricity. The desalination and irrigation system developed is simple, compact and produces no greenhouse emissions.

This system has potential to help many coastal communities and enable saline groundwater to be turned into fresh water and used for agricultural irrigation – helping farmers in Australia and globally.

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Ensure access to affordable, reliable, sustainable and modern energy

# SDG 7: Affordable and Clean Energy

Research and Publications

5.88%
National Contribution
(of all Australian publications 2019)

**66.1%**
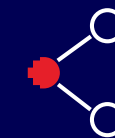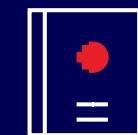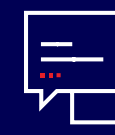Of all internationally co-authored publications were with developing countries

5.5
Citation times per publication
(Global benchmark 4.4)

74.4%
Publication in top 25% of Journals
(Australia 80.8% / Worldwide 62.8%)

56.5%
Internationally co-authored publications
(Worldwide international collaboration 24.4%)

57
Number of research projects
(at SDG target level)

The power of partnership

In partnership with the City of Melbourne, RMIT led a group of Melbourne universities and businesses to source wind energy produced in regional Victoria. In 2017, the University committed to purchasing 25% of its electricity from Crowlands Wind Farm in regional Victoria, under the first Melbourne Renewable Energy Project (MREP1). RMIT and six new partners used their combined purchasing power to secure wind energy through MREP2, facilitated by the City of Melbourne.

The new deal will see 22 RMIT buildings powered by 100% carbon neutral electricity from January 2021. Tango Energy will provide 110 GWh of renewable electricity per year to the purchasing group over 10 years. Most of the wind power will be produced at the Yaloak South Wind Farm near Ballan, with the remaining energy coming from other wind farm projects in regional Victoria. The deal is equivalent to providing enough renewable power for more than 22,000 households a year and, when combined with MREP1, that figure jumps to enough power for 40,000 households a year. Together the two contracts will provide 70% of RMIT's grid electricity supply, bringing significant savings in energy costs per year.

Energy use

In 2019 RMIT achieved a 22% per cent decrease in end-use energy intensity from the 2007 energy baseline. This result was achieved following a large-scale energy efficiency program, renewable energy contracting, solar PV rollout and the recent focus on building optimisation. RMIT continues to operate onsite co-generation and tri-generation plants at the City and Bundoora West campuses.

RMIT has installed solar PV across the rooftops of the University building portfolio, maximising the use of on-site renewable energy generation wherever possible. Solar installation sites were selected with the assistance of Masters students from the School of Property, Construction and Project Management. During 2019 RMIT generated over 24GWh of electricity onsite. RMIT's existing renewable energy contract provided 7,600 MWh of carbon neutral electricity in 2019. RMIT achieved a 48% decrease in greenhouse gas emissions in 2019 from the 2007 emissions baseline. An energy savings working group was formed to focus on building optimisation and worked to ensure that heating, ventilation and air conditioning (HVAC) systems were scheduled to operate during timetabled hours and any anomalies were resolved.

Advancing electronics research

Decreasing energy use is a a major societal challenge. The ARC Centre of Excellence in Future Low-Energy Electronics Technologies (FLEET) is a partnership with Australian and international universities and organisations that addresses this challenge by realizing fundamentally new types of electronic conduction without resistance in solid-state systems at room temperature. FLEET connects 20 chief investigators from seven participating organisations around Australia and 25 partner investigators from 18 organisations internationally. The current FLEET team is highly interdisciplinary with high-profile researchers from atomic physics, condensed matter physics, materials science, electronics, nanofabrication and atomically thin materials. RMIT researchers lead the Fleet Enabling Technology B — Nano-Device Fabrication. The Centre will build capacity in Australia for advanced electronics research and train the workforce for the electronics industry of the future.

Transforming household energy use

Research by RMIT and Monash University researchers shows energy sharing platforms may be key to supporting our transition to new energy technologies, cleaner energy, and better consumer outcomes. Households are adopting new energy technologies to help manage their electricity bills, reduce environmental impact and help stabilise the grid. However, they are often overly complicated processes that can discourage them from pursuing opportunities to participate in the energy market. The study revealed that Australians eager to shift to clean technologies like solar, are keen on platforms similar to Airbnb or Uber that would allow them to trade and share their excess power. It found that research participants, regardless of political or environmental persuasions, were keen to embrace new energy technologies and also want those who can't afford solar, or aren't allowed to install it themselves, to benefit. The research found that households already consider feeding electricity into the grid for collective use as a form of sharing energy with other households – but that they want to be confident their home-generated, clean electricity benefits people who need it, rather than boosting energy company profits.

Culture and climate

RMIT Europe's researchers are contributing to a European project that will improve understanding of how cultural dynamics and social practices interact with local climate and building design and technologies at a household level. CULTURAL-E, is examining household behaviour in energy consumption for the design of Plus Energy Buildings (PEB) – a type of building that generates more energy from renewable sources than it consumes. It is widely known that building characteristics and their integrated energy systems are not the only factors that determine energy use in buildings. This research looks at new ways of understanding the nature of energy usage and performance in buildings, which includes the impact of cultural and climate differences. For example, average data on energy consumption in households in Finland and Italy – two European countries with opposite climates – show that in southern European households the value triples in cooking and laundry practice. Researchers suggest this could be linked to the use of common laundry facilities in northern Europe and cultural behaviours such as traditional cooking in Mediterranean countries.

Solar powering the chemical industry

New technology developed by RMIT researchers with collaborators from CSIRO, the Melbourne Centre for Nanofabrication and the University of Melbourne harnesses sunlight to drive chemical reactions and is paving the way for a more sustainable chemical manufacturing industry, one of the globe's biggest energy users. RMIT researchers have developed a nano-enhanced material that can capture 99% of light and convert it to power chemical reactions. As well as reducing the environmental impact of chemical manufacturing, the innovation could one day be used to deliver technologies like better infrared cameras and solar-powered water desalination. Published in ACS Applied Energy Materials, the research addresses the challenge of finding alternative energy sources for chemical manufacturing. This project aims to use this photocatalysis technology to harness sunlight efficiently and convert solar energy into chemicals, with the aim of transforming this vital industry into one that's renewable and sustainable.
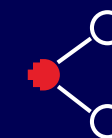
8 DECENT WORK AND ECONOMIC GROWTH

—
Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all
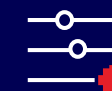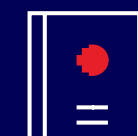
SDG 8: Decent Work and Economic Growth

5.07%
National Contribution
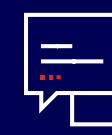(of all Australian publications 2019)

44.1%
Of all internationally co-authored publications were with developing countries

2.1
Citation times per publication
(Global benchmark 1.3)

53.1%
Publication in top 25% of Journals
(Australia 62.1% / Worldwide 40.3%)

38.5%
Internationally co-authored publications
(Worldwide international collaboration 23.6%)

64
Number of research projects
(at SDG target level)

Global commitments

As signatories to both the United Nations Global Compact and the University Commitment to the Sustainable Development Goals (SDSN), RMIT is committed to addressing modern slavery, forced labour, human trafficking and child labour across its sphere of activity.

RMIT's Modern Slavery Statement working group is developing an action plan that sets out commitments for the first cycle of Modern Slavery Statement reporting. The plan will help identify and address risks of modern slavery across operations and supply chains, and develop education and awareness across the RMIT community.
The RMIT Corporate Social Responsibility Framework, which is a component of the University's Sustainability Policy, specifically addresses human trafficking, slavery, forced labour, child labour and slavery-like practices.

Careers and employability

RMIT's Careers and Employabilty services play a significant role in preparing students to be ready for life and work upon graduating. In 2019, expanded services were provided to students through the RMIT Job Shop with 14,457 students engaged. Other notable achievements included 990 students employed on campus through 'Jobs on Campus' and a 73% increase in career mentoring partnerships, with 3,320 partnerships achieved.

Targeted strategies have been enhanced for specific cohorts of students including final year, Indigenous, international and students from low socio-economic backgrounds, resulting in significantly increased engagement across all these cohorts. In 2019, the first RMIT Indigenous Careers Fair was held in partnership with RMIT's Ngarara Willim Centre. Career Success aims to enhance employability for low socio-economic status, Aboriginal and Torres Strait Islander, asylum seeker and refugee students through proactive outreach and high touch interventions reaching over 1,643 students in 2019.

Sustainable supply chains

RMIT is committed to ensuring its supply chains and partnerships meet fundamental responsibilities in the areas of human rights, labour, environment and anticorruption. Guided by the Sustainable Procurement Plan, RMIT integrates sustainability considerations into its procurement practices including processes, responsibilities and governance. The University's approach to sustainable procurement is aligned with the international standard, ISO 20400:2017 Sustainable procurement – guidance. RMIT drives social and environmental outcomes through the entire procurement lifecycle. This includes a comprehensive Corporate Social Responsibility screening process for all prospective suppliers. All tenders have a weighting for sustainability, Indigenous and student engagement outcomes. All engaged suppliers must contractually commit to the RMIT Supplier Code of Conduct. The University also drives sustainability outcomes through the contract management process with existing vendors.

Reducing modern slavery with technology

Forced and bonded labour and poverty wages have been uncovered in Australia's meat and cleaning industries, and since 2016, eight government inquiries have identified inadequate enforcement tools as an impediment to effective regulation. The project 'Reducing Modern Slavery with New Digital and Enforcement Technologies' from RMIT's Centre for International Development, aims to assess the ways in which enforcement can be enhanced by adapting advances in digital technologies to the needs of labour regulators for their strategies to reduce modern slavery.

This project compiles case studies of enforcement efforts in domestic meat processing and cleaning supply chains, and the practical applications of digital technologies. A range of technologies could enhance detection, enforcement and coordination between labour regulators that are as yet unexplored either in Australia or overseas. These include radio frequency identification, remote sensing, blockchain, crowdsourcing data collection and the use of artificial intelligence or machine learning. The toolbox of options designed in the project will enhance enforcement powers using feasible and readily useable applications that are within the budgets of regulators. The tools can be applied to other jurisdictions.

RMIT Activator and entrepreneurship

RMIT Activator is focused on developing the next wave of entrepreneurs, whether that means creating something for themselves, finding smarter ways to study or working as an 'intrapreneur' inside a company. Over a two-day program in July 2019, 'Ignite' covered the fundamentals of the entrepreneurial mindset and allowed participants to build their repertoire of lean and agile tools. This event is just one example of the hundreds of programs, workshops and events run by Activator and the wider RMIT Careers and Employability Team to support entrepreneurship in the RMIT community and beyond.

For the first time in 2019, RMIT utilised philanthropic funding to undertake 'impact investing' which is an investment designed with the intention of generating a measurable, beneficial social or environmental impact alongside a financial return. RMIT began working with Skalata Ventures, a not-for-profit organisation that runs an independently funded seed program to scale and grow early-stage companies into significant and sustainable businesses. This fund supports future pathways and seed investment for the start-up community such as those which are developed through the RMIT Activator program.

The health consequences of child labour

The Health Consequences of Child Labour research project, conducted by RMIT's Centre for International Development, is exploring the impacts of child labour in developing countries. Previous empirical studies are inconclusive because, until now, existing data sources could not disentangle between different work activities performed by child workers in developing countries.

This project addresses this gap by investigating how child work relates to health and household income by better understanding how these work activities are being performed and how these activities are impacting the total resources available for households. The project is based on a unique child labour survey conducted in Peru by its Government and the International Labour Organisation (ILO).

9 INDUSTRY, INNOVATION AND INFRASTRUCTURE

—
Build resilient infrastructure, promote sustainable industrialisation and foster innovation

SDG 9:
Industry, Innovation and Infrastructure

RMIT Activator

Entrepreneurs play a vital role in achieving the UN Sustainable Development Goals. They are the future leaders of ventures who create jobs, drive sustainable growth, and most importantly apply their vision, passion and creativity towards addressing the pressing social and environmental challenges facing our world. RMIT Activator is the University's growth engine for entrepreneurship and innovation. RMIT Activator has aligned its entrepreneurial vision with the potential for responsible innovation to positively change the world. In step with the University's strategic ambitions for sustainability, RMIT Activator's priority is to get behind the change-makers and support new ventures that address the SDGs and key issues such as inequality and diversity. RMIT Activator also worked extensively with industry partners and RMIT academics, researchers and professional staff to foster innovative and entrepreneurial mindsets and skillsets amongst students; running internal hackathons, supporting course redesign and delivering micro-credential courses directly to over 9,000 students. The economic impact of Activator-powered start-ups in 2019 was over $3.8 million. RMIT's vision of establishing a thriving incubator and accelerator program in the Asia Pacific region took another giant stride forward in 2019, with the launch of Activator Vietnam in Ho Chi Minh City.

Autonomous decision-making technologies

A major new research centre hosted by RMIT is investigating how rapidly emerging autonomous decision-making technologies can be used safely and ethically for all Australians. The Australian Research Council (ARC) Centre of Excellence for Automated Decision-Making and Society, brings together national and international experts from the humanities, and the social and technological sciences. The research into automated decision-making will ensure technology provides the best possible outcomes for society and industry and that machine learning and decision-making technologies are used responsibly, ethically and inclusively. The research will help formulate policy and practice, inform public debate, and train a new generation of researchers and practitioners.

Social impact hackathon

Entrepreneurship Week (E-Week) is an annual calendar highlight, enabling the RMIT community to come together to experience first-hand the exciting world of entrepreneurship. RMIT entrepreneurship week 2019 was delivered as a collaboration between RMIT Activator, RMIT Careers & Employability and University partners. Every year, the Entrepreneurship Week raises a new and exciting theme to promote awareness and bring attention to pressing and trending issues awaiting to be solved. By providing a platform to real-world problems, RMIT hopes to encourage innovation for impact, not only by the University community, but also reaching out to the wider entrepreneurial ecosystem for insights, expertise and collaboration. In 2019 the Entrepreneurship Week had 800+ registrations, 21 events and over 30 speakers.
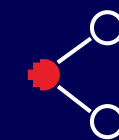
Making train stations about more than transport

A report from the RMIT Centre for Urban Research found train station precincts with more shops and apartment blocks are key to getting residents walking, with stations in Melbourne's north and south-east ripe for redevelopment. Examining 230 train stations across Melbourne, the researchers identified those in the city's middle suburbs as ready to be further developed into activity centres with more retail and apartment blocks. Author Dr Lucy Gunn suggests that if we want to reduce car dependency and get the most out of our train stations, redeveloping the area around them is the best way to encourage walking, cycling and active public transport use. Many train station precincts in Melbourne don't have basic features and amenities like supermarkets or bicycle storage that make living nearby useful for active transport or local living. Nor do they have high enough residential density, which means residents end up using their car instead of walking or cycling to and from home. The report suggests that rethinking train stations to make them about more than just transport is the future for a more healthy, liveable Melbourne.

Improving noise levels near freeways

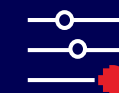New air pollution modelling suggests vehicle emissions along mega-projects such as the North East Link, Monash Freeway and Eastern Freeway will exceed Victoria's new air pollution standards by 2036, creating poor air quality in the surrounding areas. To help protect both local residents and drivers from noise and air pollution, RMIT School of Design academics and industry partners are proposing "ecological buffers" using vertical gardens and green walls to improve noise and air pollution. The Transforming Melbourne Motorways' Noise Barriers project is also proposing to reduce noise pollution by integrating sound capturing systems of residual noise with microphones that can change the typical noise heard on highways into something more melodic.

Blockchain and land management systems

RMIT researchers are examining how blockchain could provide greater legal security and contribute to the economic and social development of countries with limited land management systems. Researchers from the School of Property, Construction and Project Management believes that blockchain could particularly be of use in situations where there has been a natural disaster, war, or corruption at a regional or national level. Blockchain's distributed digital ledger system, which sees information immutable and validated by all parties, could allow for land title ownership and transactions to be verified and safely recorded.

Digital inclusion

Findings from the fourth Australian Digital Inclusion Index (ADII) showed that while internet services continue to improve, lower-income households are being priced out. Published by Telstra, RMIT and Swinburne Universities, the annual report provides a snapshot of Australians' online participation using the measures of access, affordability and digital ability. The Index provides a vital evidence base, which can help develop positive strategies to ensure all Australians gain the benefits of the digital economy. The research found that for the first time the impact of the NBN rollout has driven the biggest improvement in access since benchmarking began in 2014. It also highlighted marginal improvements in digital ability across the board, not only in building skills but also increasing confidence in the use of different technologies. However, affordability remained the biggest barrier to overall inclusion, with the share of total household budgets spent on services increasing in 2019.

10 REDUCED INEQUALITIES

—
Reduce inequality within and among countries
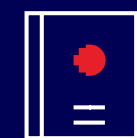
SDG 10:
Reduced Inequalities

3.09%
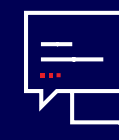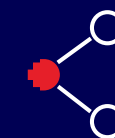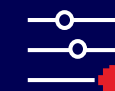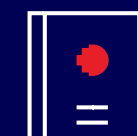National Contribution
(of all Australian publications 2019)

37.5%
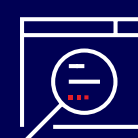Of all internationally co-authored publications were with developing countries

3.9
Citation times per publication
(Global benchmark 1.9)

81.3%
Publication in top 25% of Journals
(Australia 62.0% / Worldwide 52.8%)

37.5%
Internationally co-authored publications
(Worldwide international collaboration 22.3%)

89
Number of research projects
(at SDG target level)

Diversity and Inclusion framework

Led by the values of inclusion, passion and courage, RMIT aims to create an environment where everyone can contribute, grow and succeed. The University Diversity and Inclusion Framework, and related Action Plans, are designed to build a diverse and inclusive community by:
- promoting diversity and inclusion through visible commitments and actions,
- implementing leading practice in the equity and inclusiveness of policies, facilities, services, workplace culture and behaviour
- Improving access to education, employment and enterprise for diverse students
- Improving access to employment at the University for staff with a diverse range of personal circumstances and characteristics

The implementation of the Diversity and Inclusion Framework is supported by a high-level Committee reporting to the Vice-Chancellor's Executive, relevant policies, Executive Sponsors, and Working Parties comprising passionate and engaged staff and students. Diverse members of the RMIT community shape the agenda through their contributions to events, communications, programs, and active participation in forums and online communication channels.
- 61.4% of all commencing Higher Education students are first-generation students
- 16.7% of students are of low socio-economic status
- 4,359 students participated in RMIT's Social Inclusion Programs such as I Belong and SNAP Access Scheme in 2019
- 21 students who were people seeking asylum received the RMIT Welcome Scholarship a holistic access and support package

Reconciliation

RMIT recognises and respects the unique culture and contribution that Aboriginal and Torres Strait Islander people bring to our communities. The University is also proud to provide study, cultural and personal support to our Aboriginal and Torres Strait Islander students. RMIT's Act legally endorses our commitment to use our expertise and resources to involve Aboriginal and Torres Strait Islander people of Australia in its teaching, learning, research and advancement of knowledge activities.

Reconciliation at RMIT is about a shared journey in the relationship between Aboriginal and Torres Strait Islander peoples and non-Indigenous peoples. The journey is grounded in Aboriginal and Torres Strait Islander self-determination and sovereignty, and recognises the need to work respectfully and lawfully on Country. RMIT's Reconciliation Plan, Dhumbah Goorowa 2019-2020, means 'commitment to share' in the language groups of the Woi wurrung and Boon wurrung peoples of the eastern Kulin Nation. Dhumbah Goorowa is the second plan with its priorities and initiatives building on a strong foundation created by the first Reconciliation Plan (2016-2018). It will make essential changes to redefine our relationship working with, and supporting the Aboriginal community in their self-determination journey, and to transform our ways of knowing, working, and being on Country.

Accessibility

RMIT values the richness of diversity among staff and recognises the contribution being made already by those working with disability. All RMIT facilities comply with current regulations and provide access for people with disabilities. Mobility maps are publicly available providing details of the accessibility of the campus. The Accessibility Action Plan sets out actions to improve the experience of students, staff and visitors with disabilities. This action plan details the actions and targets to the built environments, facilities and grounds in order to make the University an accessible space. The Accessibility webpage provides details of the programs and tools available. In 2019 RMIT completed $800,000 of building accessibility upgrades, including entry works, furniture and amenity upgrades across the campuses.

Impact of ethnic diversity

A study 'Neighbourhood Ethnic Diversity and Mental Health in Australia', by the School of Economics, Finance & Marketing, published in the Health Economics journal, highlights a need for trust-building programs in local communities. The study, based on 16 years of data from the Household, Income and Labour Dynamics in Australia (HILDA) survey, found higher levels of neighbourhood ethnic diversity were associated with poorer mental health, with lower levels of neighbourhood trust as the key factor linking the two. It was noted that trust is the glue that binds social networks, and

social networks and feelings of inclusion are important predictors for mental health and wellbeing. The research underlines how it is not the diversity itself that is the problem, but is the lack of trust that often accompanies it. The study showed that for a diverse neighbourhood and a homogenous neighbourhood - where both had similar levels of trust - then mental health was generally better in the diverse neighbourhood. Policies to increase bonding and social capital and promote awareness of the benefits of diversity should help to build trust and reduce the negative effect of diversity on mental health.

Globalization, populism and humanitarian sensibility

The Global and Language Studies Centre at RMIT was commissioned by the Australian Red Cross to inquire into the nature of humanitarianism in Australian society. It was conceived against a backdrop of apparent declining public support for humanitarian causes worldwide and intensifying hostility in western societies especially, towards persons seeking asylum and towards refugees, primarily from Muslim-majority countries in the Middle East. In this context, this project was framed with four principal objectives: (1) to distil the insights of past inquiries and to situate this project amongst current studies of humanitarianism; (2) to gain insight into the current discursive and socio-political milieu; (3) to understand how some Australians have been moved to act upon humanitarian and charitable sensibilities; and (4) to build capacity to counter populist strategies and arguments by developing an extensive body of contrary evidence to support interventions.

Indigenous global growth program

RMIT Activator is delivering a global growth capacity building program to support 15 established and trading indigenous enterprises with national and international growth aspirations. Funded by DJPR and co-designed with the indigenous business community, the Trade Routes program combines capability building, mentoring and business innovation and acceleration to take indigenous knowledge, products and services to the global stage. The program draws heavily on indigenous expertise, supports a participant's rights to self-determination, and creates the basis for community support and knowledge transfer. This program aims to accelerate cultural, social and economic prosperity for Indigenous Australians and the wider community, both nationally and internationally.

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Make cities inclusive, safe, resilient and sustainable

SDG 11: Sustainable Cities and Communities

8.33%
National Contribution
(of all Australian publications 2019)

59.6%
Of all internationally co-authored publications were with developing countries

3.8
Citation times per publication
(Global benchmark 2.8)

69.9%
Publication in top 25% of Journals
(Australia 70.9% / Worldwide 50.6%)

46.9%
Internationally co-authored publications
(Worldwide international collaboration 24.4%)

128
Number of research projects
(at SDG target level)

Support of arts, culture and heritage

RMIT's spaces are accessible to the public, this includes all open space, student study areas, libraries, galleries, historic buildings and cultural heritage locations. RMIT offers free physical access to comprehensive collections of books, periodicals (print) and other course-related materials. The University provides access to online databases and audio-visual collections. There are four Library sites located on the City, Brunswick, and Bundoora campuses. RMIT provides loan services to staff and students, as well as a fee-based library membership to individuals in the community. The libraries provides resources, services and facilities to support the information needs of RMIT's large and globally distributed student and staff community. Readers viewed over 11 million ebook chapters in 2019 and over 6 million eJournal articles in the same year. Through Open Educational Resources students saved $255,147 on textbook purchases since 2018. In 2019, RMIT libraries received over 1.6 million physical visitors.

RMIT contributes significantly to local arts and cultural activities throughout the community. RMIT has the Capitol Theatre, Kaleide Theatre and the RMIT Gallery - these three places, along with other exhibition and event spaces, provide a significant number of public programs, major public events and major exhibitions every year.

RMIT recognises and respects the unique culture and contribution that Aboriginal and Torres Strait Islander people bring to our communities. RMIT is proud to provide study, cultural, & personal support to Aboriginal & Torres Strait Islander students in their learning journey. The Ngarara Willim Centre supports Aboriginal and Torres Strait Islander peoples to reach their potential with a range of study, living and cultural services. All RMIT students and staff are offered a micro-credential that provides guidance on how to recognise and respect the living history and culture of Australian Aboriginal and Torres Strait Islander peoples.

The RMIT Design Standards guide all projects to preserve cultural and Indigenous heritage across the campuses. The fundamental purpose is to "ensure a socially inclusive environment that is welcoming for all, contributes to Indigenous Reconciliation and reflects RMIT's value of inclusion" and "protect and enhance heritage items, cultural and architectural including Indigenous heritage".

Sustainable transport

RMIT promotes sustainable commuting choices within the University community through a range of initiatives. RMIT has five centrally-located large secure bike parking facilities, allowing staff and students to park and lock their bikes securely at all University campuses. RMIT also installs bike hoops at key locations across all campuses, promotes free bike insurance schemes and bike repair workshops. RMIT also participates in national cycling campaigns such as 'Ride to Work Day'.

All RMIT campuses are located next to key public transport hubs across Melbourne and the University actively promotes public transport to staff and students, providing information on ticketing and the key routes to get to campus. Local RMIT students are eligible for the local concession tickets under the Myki ticketing system and RMIT additionally subsidises public transport tickets for international students. Staff have access to discounted public transport tickets through the RMIT Commuter Club.
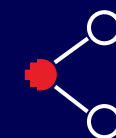
Sustainable buildings

RMIT aims to create sustainable and inclusive spaces that enhance the experience and wellbeing of its people and have a positive impact on the surrounding environment and society. RMIT has been a member of the Green Building Council of Australia (GBCA) since 2002. The GBCA rate the sustainability of buildings, fitouts and communities through the holistic sustainability rating system – Green Star. RMIT has seven certified projects under the Green Star rating tools, all of which can be seen under the GBCA Project Directory. RMIT also takes significant elements of the Green Star rating tool and applies this for all University projects under the RMIT Design Standards - this ensures that significant sustainability elements are embedded into projects of all scales at RMIT University.
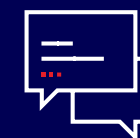
Australia's most liveable regional cities revealed

Research from the RMIT Centre for Urban Research has mapped health and liveability across Australia's 21 largest cities, revealing that Victoria is home to Australia's most liveable regional cities – Ballarat, Bendigo and Geelong. The cities were ranked for social infrastructure, access to publ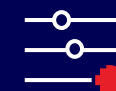ic transport, access to supermarkets, distance from alcohol, public open space, local employment and housing affordability. The researchers suggest careful planning for population growth and recommend avoiding more urban growth on the fringe to maintain liveability in regional cities. Drawing on over eight years of research findings, the data for each of the 21 largest cities in Australia is available now via the recently launched Australian Urban Observatory developed by the RMIT Healthy Liveable Cities Group.

Digital tool provides green solutions for city planners

RMIT researchers have contributed to a new digital tool as part of the EU-funded URBAN GreenUP project to assist authorities and urban planners to identify the best Nature-Based Solutions (NBS) to tackle the environmental problems in their cities and retrieve feasible solutions based upon their specific needs. Urban regeneration is just one challenge being addressed by the URBAN GreenUP project as part of its goal to increase the sustainability of our cities through innovative NBS. Nature-based solutions outlined in the catalogue include cycling and pedestrian improvements, floodable parks, green roofs and facades, and urban tree planting. The tool is freely available on the project website.

Urban liveability in Bangkok

The Centre for Urban Research and the Global Compact Cities Programme are partnering with the Bangkok Metropolitan Administration to develop and test a suite of open source 'urban liveability' indicators aligned to the UN SDGs. Urbanisation acceleration is the fastest in cities within low-to-middle income countries, and globally, Asia is urbanising most rapidly. Well-designed, liveable cities are essential for providing infrastructure that supports economic activity, governance, commerce and trade, while providing access to health and social services, education, and civic opportunities. The aims of this project are to: 1) Identify and source open source liveability spatial data inputs and indicators aligned with the SDGs and suitable for use in the Bangkok context; 2) Apply and test conceptually relevant liveability indicators across Bangkok; 3) Develop the capacity of the Bangkok Metropolitan Administration for utilising liveability data in policy and planning; and 4) Generate translational outputs that maximise the useability and scalability of indicators for application for different cities.

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Ensure sustainable consumption and production patterns
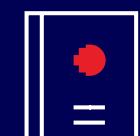
SDG 12: Responsible Consumption and Production

6.95%
National Contribution
(of all Australian publications 2019)

60.3%
Of all internationally co-authored publications were with developing countries

6.1
Citation times per publication
(Global benchmark 2.8)

62.5%
Publication in top 25% of Journals
(Australia 69.4% / Worldwide 52.0%)

63.5%
Internationally co-authored publications
(Worldwide international collaboration 26.4%)

135
Number of research projects
(at SDG target level)

Sustainable procurement

RMIT is committed to ensuring its supply chains and partnerships meet fundamental responsibilities in the areas of human rights, labour, environment and anticorruption. RMIT has a Sustainable Procurement Plan which includes key strategies to support the achievement of RMIT's sustainable procurement objectives, ethical sourcing of food, services and supplies.

RMIT is committed to driving social and environmental outcomes through the entire procurement lifecycle. This includes a comprehensive screening process for all prospective suppliers. All tenders have a weighting for sustainability, indigenous and student engagement outcomes. All suppliers must commit to the supplier code of conduct and RMIT also drives sustainability outcomes through the contract management processes with existing vendors.

Waste minimisation

The RMIT Waste Management Plan aims to prioritise avoidance and reuse activities before recycling, recovery of energy, and disposal. The operational waste profile is provided by RMIT's waste contractor and includes landfill, mixed-recycling, paper/cardboard and organic waste from all on-shore campuses. In 2019, RMIT produced a total of 1,248 tonnes of waste and had a diversion rate of 24%. This is a 2% improvement from 2018. The landfill waste produced is equal to 23kg per student.

RMIT also provides information to students and staff, including signage throughout campus, focusing on waste minimisation and management of waste. A central focus for 2019 was waste avoidance, throughout the year initiatives were undertaken on campus including trials of mug libraries, recycling stations, organics bins and working with retailers and the RMIT Events teams to avoid waste through better planning and operations. This included the trial of several new initiatives including, not supplying single-use plastics, reusable glasses collected and washed for future events and the use of Hydration Stations – temporary drinking fountains to avoid the use of plastic cups.

Utilising biosolid resources

The ARC Training Centre for the Transformation of Australia's Biosolids Resource focusing on Australia's biosolid use as a valuable resource, providing new practices, technologies and products for improved land management and training. This new Centre will pave the way for improved and more environmentally sustainable practices across the globe. Biosolids are a by-product of the wastewater treatment process that can be used as fertiliser, in land rehabilitation or as a construction material. However, around 30% of the by-product still goes to landfill in Australia. The Centre will build on RMIT's expertise in environmental science and technology. In addition to providing new practices and technologies, the Centre will develop a skilled workforce ready to use the new technologies as they emerge.

A team at RMIT's School of Engineering has demonstrated that fired-clay bricks incorporating biosolids could be a sustainable solution for both the wastewater treatment and brickmaking industries. Biosolids are a by-product of the wastewater treatment process that can be used as fertiliser, in land rehabilitation or as a construction material. Around 30% of the world's biosolids are stockpiled or sent to landfill, using up valuable land and potentially emitting greenhouse gases, creating an environmental challenge. The research showed how making biosolids bricks only required around half the energy of conventional bricks. As well as being cheaper to produce, the biosolids bricks also had a lower thermal conductivity, transferring less heat to potentially give buildings higher environmental performance. About 5 million tonnes of the biosolids produced in Australia, New Zealand, the EU, US and Canada currently go to landfill or stockpiles each year. Using a minimum 15% biosolids content in 15% of bricks produced could equate to 5 million tonnes of waste diverted.

On the road to circular economy

Researchers from the School of Engineering have shown how a blend of old tyres and building rubble could be used as a sustainable road-making material, in a zero-waste solution to boost recycling and support the circular economy. Construction, renovation and demolition account for about half the waste produced annually worldwide, while around 1 billion scrap tyres are generated globally each year. The new material is the first to combine recycled rubble and rubber in a mix that is precisely optimised to meet road engineering safety standards. Designed to be used for base layers, the recycled

blend is more flexible than standard materials, making roads less prone to cracking. Traditional road bases are made of unsustainable virgin materials – quarried rock and natural sand. This new blended material is a 100% recycled alternative that offers a new way to reuse tyre and building waste, while performing strongly on key criteria like flexibility, strength and permanent deformation.
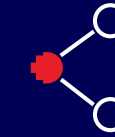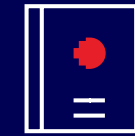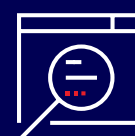
Sustainable buildings and construction

RMIT is one of the leaders in the The Sustainable Buildings and Construction Programme (SBC). The partnership with the UNEP and the Ministry of the Environment Finland, has produced a database to capture case studies and best practices on circular economy, resilient and affordable built environments. The database is organised in the form of an easy to use spreadsheet that captures detailed information simply and effectively preparing and showcasing studies for spreading awareness and knowledge about on the SBC's themes, and for showcasing at international platforms such as the UN's High-Level Political Forum, One Planet newsletters and other media opportunities at a global scale. The case studies on circular economy have already been showcased on the Circle Economy website. A similar repository of information is already in progress for cases about affordable and resilient built environment.

Making stronger concrete with sewage

Engineering researchers at RMIT have shown how a by-product of steel making can be used to both treat wastewater and make stronger concrete, in a zero-waste approach to help advance the circular economy. Produced during the separation of molten steel from impurities, steel slag is often used as a substitute aggregate material for making concrete. Steel slag can also be used to absorb contaminants like phosphate, magnesium, iron, calcium, silica and aluminium in the wastewater treatment process, but loses its effectiveness over time.

The researchers examined whether slag that had been used to treat wastewater could then be recycled as an aggregate material for concrete. The concrete made with post-treatment steel slag was about 17% stronger than concrete made with conventional aggregates, and 8% stronger than raw steel slag. The study was the first to investigate potential applications for "sewage-enhanced" slag in construction material.

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Take urgent action to combat climate change and its impacts

SDG 13: Climate Action

2.43%
National Contribution
(of all Australian publications 2019)

47.3%
Of all internationally co-authored publications were with developing countries

4.8
Citation times per publication
(Global benchmark 3.3)

71.7%
Publication in top 25% of Journals
(Australia 80.6% / Worldwide 68.2%)

52.2%
Internationally co-authored publications
(Worldwide international collaboration 36.2%)

35
Number of research projects
(at SDG target level)

Energy and emissions

RMIT University is committed to becoming carbon neutral by 2030 and strives to achieve this target ahead of schedule. RMIT is taking urgent action to combat climate change and its impacts, both through the commitment to reducing greenhouse gas emissions and adapting the University and its systems to a changing climate. RMIT achieved a 48% decrease in greenhouse gas emissions in 2019 from the 2007 emissions baseline.

RMIT is committed to reducing its emission profile, driven through the implementation of the RMIT Carbon Management Plan. RMIT's Carbon Management Plan covers the University's entire scope 1&2 emissions profile, as this is the area where the University has the highest level of control.

In 2019 RMIT reported an emissions profile of 32,873 tonnes in higher education activities, consuming 298,515 gigajoules of energy. Of this approximately 24,712 gigajoules are from renewable energy sources, representing over 8% of the University's total energy consumption. Initiatives implemented to move the Universities energy profile to renewable energy sources include the installation of over 600kW of on-site solar PV and the recent signing of long-term renewable energy supply agreements.

Climate change adaptation

Climate change and its impacts are posing a significant risk for society today. In Australia, extreme weather events such as droughts, bushfires, cyclones and floods are expected to become more frequent and more severe. Universities, such as RMIT, are important public organisations that have significant elements at risk from climate-related impacts; including buildings, infrastructure assets, and its community. It is therefore important that key climate risks are identified, and the necessary adaptation options implemented to increase resilience to future climate shocks and stresses. The RMIT Climate Change Adaptation Plan is mainstreaming climate change considerations, developing the data and knowledge necessary for informed climate adaptation and to establish coordination mechanisms for the University. The adaptation plan outlines three significant climate impacts to RMIT University, as well as overarching actions to adapt to these impacts.

Community-led action for disaster and climate resilience

There is a common assumption that community-led processes are slow and require a lot of resourcing. However, research suggests they are in fact quite the opposite and lead to much more satisfied and stronger communities. Researchers at the Centre for Urban Research are investigating ways community-led processes before and after a disaster can enable communities to be resilient to uncertain futures.

Work is being undertaken with the rural community of Tarnagulla in Central Victoria to co-produce their resilience action plan to adapt for future climate extremities and emergency management, such as heatwaves and bushfires. The very act of bringing community members with varying views together creates a mutually trusting space for sharing views. By increasing the community's awareness of their strengths, challenges and risks, they can arrive at a shared long-term vision and empower them to explore community-led initiatives to achieve their vision for strengthening resilience.
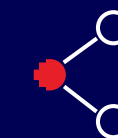
Dry lakes and rivers release more CO2 than thought

A major study spanning six continents revealed that greenhouse gas emissions from dry inland waterways have been significantly underestimated. Waterways have long been recognised as an important part of the global carbon cycle. But researchers have now shown they release higher levels of CO2 as they dry, meaning that as waterways continue to dry out with climate change, they will release more and more greenhouse gases.

Testing of sediments from dried parts of nearly 200 rivers, ponds, lakes and reservoirs around the world confirmed this is a global phenomenon, which collectively accounts for around 6% of carbon dioxide emissions. The global collaboration was led by the Helmholtz Centre for Environmental Research (UFZ) in Germany and the Catalan Institute for Water Research (ICRA) in Spain. The study published in Nature Communications revealed an important piece of the puzzle for predicting carbon emissions more accurately.
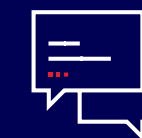
Climate resilient Honiara

The overarching aim of this project is to enhance the resilience of the Honiara city (the Solomon Islands) and its inhabitants to current and future climate impacts and natural disasters. This project focuses on pro-poor adaptation actions that involve and benefit the most vulnerable communities in the city. The 'Climate Resilient Honiara' Project is a four-year project funded by the UNFCCC Adaptation Fund and administered by UN-Habitat. RMIT engages with multiple local partners and provides scientific support to a range of different urban climate resilience activities. A large multi-disciplinary team of academics from six different schools at are developing nature-based solutions for adaptability and resilience of five highly vulnerable informal settlements in Honiara. The solutions for the urban environment are based on spatial mappings of disaster risk and co-design workshops with the community during field visits and in consultation with local stakeholders.

Local climate resilience

The RMIT Centre for Urban Research Climate (CUR) is conducting a research project that investigates the framings and practices of local governments, community groups and NGOs as they seek to create local adaptation strategies. The Climate Adaptation Australia project is concerned with responses to climate change and variability at the local scale. It critically investigates tensions, synergies and potentialities between local governance agencies' formal policies and innovations by local groups and NGOs. The project investigates the framings and practices of local governments, community groups and NGOs as they seek to create local adaptation strategies that reflect lived realities at the neighbourhood scale.

Sharing climate knowledge

The Climate Change Exchange, conducted by CUR, is a project that is establishing a collaborative climate change research-practice network to meet the knowledge sharing, capacity building, and research needs of various government and policy stakeholders. The project aims to help facilitate a network of researchers and practitioners through collaborative partnerships between participating organisations. These organisations include universities, local governments, statutory authorities, State Government departments and other bodies such as Primary Care Partnerships, The Victorian Council of Social Services and Jesuit Social Services.

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Conserve and sustainably use the oceans, seas and marine resources for sustainable development
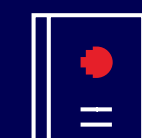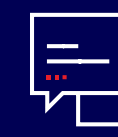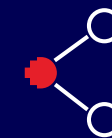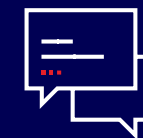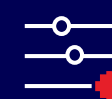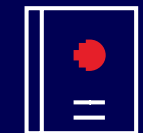
SDG 14:
Life Below Water

2.27%
National Contribution
(of all Australian publications 2019)

28.4%
Of all internationally co-authored publications were with developing countries

4.7
Citation times per publication
(Global benchmark 2.5)

80.6%
Publication in top 25% of Journals
(Australia 82.2% / Worldwide 61.8%)

63.2%
Internationally co-authored publications
(Worldwide international collaboration 33.5%)

29
Number of research projects
(at SDG target level)

Plastic use

RMIT promotes the waste hierarchy of 'Reduce, Reuse, Recycle' through the Waste Management Plan to minimise its impact on the environment, including reducing the use of plastic. A central focus for the Sustainability Team in 2019 was waste avoidance.

Throughout the year there were several initiatives undertaken on campus to avoid, reduce, reuse and recycle plastic, including trials of mug libraries, new plastic recycling stations and working with retailers and events teams to avoid waste through better planning and operations.

Additional actions included campaigns encouraging students and staff to bring their own reusable coffee cups, drink bottles or lunch containers and reusable bags. RMIT worked with the on-campus retailer to support these initiatives, reducing the use of single-use items, accepting reusable cups and providing free drinking water.

Industry partnership to improve aquaculture

RMIT researchers are working with Australia's tuna industry to develop a novel diagnostic testing technique for application on water, to assist tuna farmers to make informed decisions about managing the health of their stock. RMIT researchers from the School of Science worked to develop a new test for two tiny parasites that threaten Australia's ranched Southern Bluefin Tuna, and are working with industry to develop best practice for treatment. The first findings from the collaboration, published in the Journal of Aquaculture, revealed the effectiveness of targeted treatments of ranched tuna and a reduction in parasite numbers.

The research aims to also make recommendations on best practice for managing the handling of fish once caught to reduce any effects the parasite may have. According to the research team, improved diagnostic testing would help to provide more accurate guidelines for when to treat affected fish, reducing the cost of treatment and lowering mortality.

Evaluating sun cream environmental impact

For a number of years, researchers from the School of Science have been examining the environmental impact of sunscreens on Port Phillip Bay. The project has been assessing the impact of sun protection products used by Australians that are washed off into the marine environment and subsequently interact with the Australian marine environment.

A vast number of seawater samples from the most highly populated beaches in Victoria have been collected by citizen scientists and have been analysed for various metal nanoparticles and chemicals used in sun cream. A detailed environmental toxicology assessment has also been performed on the water samples, generating data sets which will correlate the use of sun cream and the potential environmental impact.

Marine pest monitoring of the Gippsland Lakes

The Marine Biosecurity and Biodiversity group in the School of Sciences and has been working on a project which monitors pests in the Gippsland Lakes. Pests are introduced, non-native, species that are known to cause significant harm to endemic biodiversity and habitats, shipping, coastal infrastructure, seafood industries and coastal communities, and can have immense economic impacts. South-eastern Australia contains the highest concentration of introduced marine pest species in Australia and accordingly, there are concerns about the spread of marine pest marine species from areas of high infestation, such as Port Phillip Bay, to other parts of the Victorian coastline.

Outside of major ports, there have been few systematic surveys for marine pests in coastal areas. The Marine Pest Monitoring of the Gippsland Lakes research project investigates thresholds at which invasive species can be managed (eradication control), provide strategies for management of these species, providing early detection as to what species may cause potential impacts to the ecology of the Gippsland Lakes (range expansion).

Microplastic pollution

Research by the RMIT Ecotoxicology Research group has shown that the water-absorbing green floral foam used by florists is contributing to the world's microplastic problem. A study published in 'Science of the Total Environment' found the plastic foam, which breaks into tiny pieces, can be ingested by a range of freshwater and marine animals and affect their health.

The study is the first to examine the environmental effects of foam and looked specifically at the impact of this widely-used substance on aquatic animals. A range of invertebrates were tested with different feeding modes and all animals ingested the foam, with some species demonstrating stress responses as a result of consuming the material. The vast majority of florists who use foam are disposing of floral foam particles down the sink, according to a recent survey by the Sustainable Floristry Network.

The pesticide detectives

The Pesticide Detectives is an extensive national Citizen Science project investigating the occurrence and concentrations of pesticides used in homes and gardens as well as agricultural and urban settings in Australia's waterways. Funded by the Department of Industry, Innovation and Science, Pesticide Detectives is a collaborative project combining the scientific expertise of RMIT University's Aquatic Environmental Stress Research Group (AQUEST) scientists and Citizen Science volunteers in the collection of sediment samples from waterways across Australia.

Australia's waterways have intrinsic ecological, economic and social value. Information on the quality of Australia's water resources is of critical interest to local, state and federal agencies as water quality is integrally linked to the long-term availability of clean water. Of primary concern is the ever-increasing use of chemicals in our everyday life, and the risks they pose to the health and beneficial uses of waterways.
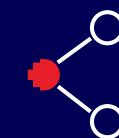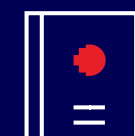
15 LIFE ON LAND

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Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, halt and reverse land degradation, and halt biodiversity loss

SDG 15:
Life on Land
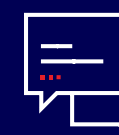
Conserving and enhacing biodiversity

Through the Sustainability Policy, RMIT has made a commitment to preserve cultural heritage, enhance biodiversity and promote healthy functioning ecosystems. This commitment is embodied through the strong research capabilities at the University which focus on ecosystems conservation and biodiversity enhancement. For example, the Interdisciplinary Conservation Science Research Group (ICON Science) is a team of researchers working to better understand and manage the interactions between society and our natural environment. There work at RMIT is founded on the belief that conserving biodiversity demands a multidisciplinary approach that reconciles ecological, social and economic dimensions.

ICON Science examines these different drivers of change, often with a focus on urban and semi-rural environments. They aim to address the gap between conservation theory and real-world practice in complex planning environments. ICON works as part of RMIT University's Centre of Urban Research (CUR) and Centre for Environmental Sustainability and Remediation (EnSuRe), and the Threatened Species Recovery Hub and Clean Air and Urban Landscape Hub of the Australian Government's National Environmental Science Program.

Phillip Island Nature Parks

Phillip Island Nature Parks (PINP) are currently pursuing several interventions and awareness campaigns aimed at reducing conflicts and harmful interactions between off-leash dogs and local wildlife on PINP-managed beaches. Reducing harm and disturbance to Hooded Plovers (Thinornis rubricollis) during the breeding season has been a focus of these efforts, which has included volunteer observation and discussion with beachgoers to keep dogs on leads where required. The People, Nature, Place Research Program (PNP) in the Centre for Urban Research at RMIT are assisting with research that helps to gain a better understanding of the effectiveness of these interventions over time. The research is part of a wider-reaching, longer-term examination of the extent to which the community (local and visitor) understands the protection measures for local wildlife on beaches, and how greater care, respect and responsibility for local wildlife could be fostered amongst beachgoers, residents and visitors to Phillip Island.

Airborne imagery for monitoring parks

RMIT is partnering with Parks Victoria to improve understanding and assess the feasibility of using airborne thermal imagery for monitoring large mammals in parks and reserves, where factors such as terrain limit the application of traditional monitoring techniques. This research project uses the population of eastern grey kangaroos (Macropus giganteus) in the Plenty Gorge Parklands to test two fundamental knowledge gaps that will inform a broader research program on the use of high level vertical and low level oblique thermal images captured by Unmanned Aerial Vehicles (UAVs) to monitor large herbivores. Specifically, it will examine how kangaroo detection by UAV thermal images is influenced by factors such as vertical altitude, oblique range, time of day, terrain and foliage density.

Conservation on private land

The People, Nature, Place Program led a project which explored the tensions, assumptions and challenges of private land conservation in the context of neoliberal environmental governance. The increasing popularity of private land conservation (PLC) globally has quickly translated into an array of policies and programs aimed at achieving ecological benefits. The growth of PLC is entwined with the rise of neoliberal governance, with private land proving congruous with the promotion of market-based instruments (MBIs) and the reliance on private protected areas for conservation in place of government investment in public lands. Despite a growing literature on the implications of neoliberal environmental governance, there remains a need for specific insights into the way that individual landholders and ecologies can co-opt or resist the rationalities of MBIs in the practice of private land conservation. Through semi-structured interviews and property walks with 18 landholders, the research examined the implementation of a reverse-auction tender scheme called 'EcoTender' in Victoria, Australia.

Antarctica's moss piglet

Moss piglets – tiny soil invertebrates, also called "water bears" – have been able to survive in incredibly intense conditions - from extreme temperatures and pressures to radiation and even outer space. In Antarctica, the conditions in the soil are too harsh for soil invertebrates such as worms, so it's up to the moss piglets to keep the

soil healthy. Scientists from RMIT are now trying to find out how these micro-animals can cope in contaminated soil in Antarctica. RMIT Soil Scientists undertook a world-first project to study the effect of soil contamination on moss piglets in Antarctica. The research with the Australian Antarctic Division is part of the development of the first guidelines for healthy, clean soils in Antarctica. These guidelines will ensure the sustainability of global scientific endeavours in Antarctica.

Green spaces for biodiversity and human wellbeing

The ICON Science Research Group's project 'Designing green spaces for biodiversity and human wellbeing' aimed to determine mechanisms linking urban design to socio-ecological benefits from green spaces. Ecological restoration in urban green space could attract more biodiversity into urban environments, reduce maintenance costs, provide a market advantage for the development industry and improve a sense of place for residents. However, how best to encourage biodiversity using urban design is poorly understood, and little is known about how green spaces create health and wellbeing. This project altered levels of green space design explanatory variables in modular experimental plots, in both Royal Park, the City of Melbourne's largest public green space, conducting biodiversity and human wellbeing experiments and develop urban design recommendations that support biodiversity and human wellbeing.

Statistical analysis of foodwebs and species distributions

The ICON Science Group led the 'Statistical approaches for analysing foodwebs and species distributions' project. The research project aimed to provide innovative new Bayesian modelling tools to improve our understanding of species distributions and their foodweb networks. Developing a general framework for extending species distribution models to deal with multiple species, incorporating both their interactions as well as errors in detection. Identifying how species are distributed over the landscape, interact and self-organize into foodwebs are central goals in Ecology. The project also aimed to develop a robust Bayesian methodology for partitioning complex foodweb networks into ecologically relevant compartments as there are currently no reliable methods to achieve this. The outcomes of this project are of relevance to conservation policy and management of threatened species.
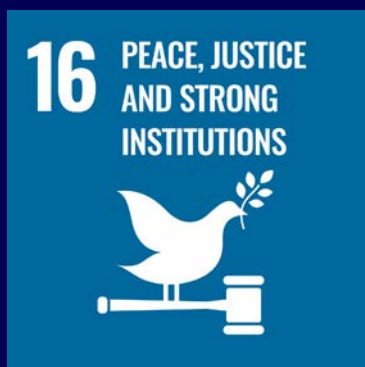
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Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels

SDG 16: Peace, Justice and Strong Institutions

Innovative justice

The Centre for Innovative Justice (CIJ) led by its Director Rob Hulls, a former Victorian Deputy Premier and Attorney-General, CIJ's objective is to develop, drive and expand the capacity of the justice system to meet and adapt to the needs of its diverse users. The CIJ meets this objective by conducting rigorous research which focuses on having an impact – taking their research findings, most of which involve direct engagement with service users, and using them to develop innovative and workable solutions.

Legal support for students

The RMIT Student Legal Service provided 1,187 legal services to students in 2019. This service is staffed by community lawyers from Youthlaw. The main areas of assistance to students is around security of tenure (housing), issues with employment, fines and interaction with the criminal justice system, and family/personal violence. The goal of targeted legal support to students is to assist them to navigate often confusing systems and processes at times of stress and to empower them to learn to self-advocate. The RMIT Student Legal Service team provides assistance on fines (including public transport, driving, toll and parking), traffic accidents and driving problems, renting and tenancy, employment law, criminal law and police powers, consumer and debt matters and safety-related matters.

Changing the Course

RMIT has developed 'Changing the Course', a strategic plan and framework designed to build a community where every student and staff member is safe, respected, and free from sexual harm. The framework actions include 1) Communications and social marketing such as the 'Be the Change' campaign, which aims to support the community to address sexual violence and the social norms that make it acceptable; 2) Direct participation programs such as student bystander inventions workshops, which empower individuals to recognize and intervene where they witness sexism and sexual harassment.

This program addresses the norms and attitudes that drive sexual violence; 3) Provision of support and care: Creating a single intake point to support those experiencing sexual harm and targeting interventions aimed at those at risk of perpetrating these behaviours; 4) Strengthening institutional responses through policy and process review to ensure that those seeking help for sexual harm do not have their trauma compounded by the institutional response mechanisms. RMIT recognises that sexual harm disproportionately affects women and fits within a spectrum of gendered violence. Consequently, the 'Changing the Course' Advisory Group works closely with the Diversity and Inclusion Working Group to address the drivers of gendered violence.
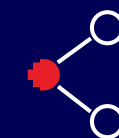
Restorative justice

Open Circle, a restorative justice service launched by RMIT's Centre for Innovative Justice (CIJ) conducts restorative justice conferencing for a range of crimes in the adult jurisdiction, and other incidents of harm like workplace injuries and traffic collisions. Open Circle also consults on restorative practice for organisations and conducts research. Restorative justice involves those affected by a crime or other incident of harm coming together to address what has happened, its impact on people, and implications for the future.

The new service meets an urgent need in Victoria and is part of an increasingly accepted recognition of the crucial role restorative justice plays in complementing traditional criminal justice processes. The launch follows a successful pilot restorative justice program run by CIJ, in which independent research interviews with participants indicated the program had met their needs in ways the formal justice system could not. The program, based on local and international research and existing services, supports victims and others affected, to have a safe, respectful, face-to-face dialogue with offenders or others involved, supported by a neutral facilitator.

UN peace operations

The research by the School of Global, Urban and Social Studies, consists of a structured focused comparison of five UN peace operations in the Democratic Republic of Congo, South Sudan, Mali, Central African Republic and Haiti. The 3-year project aims to evaluate the contribution of police to the implementation of protection of civilians (POC) mandates in United Nations peace operations. The broad goal of the project is to identify ways of improving civilian protection into the future. Police peacekeepers are deployed in large numbers to protect hundreds of thousands of civilians in increasingly complex conflict situations. However, rapidly evolving contributions of police to the implementation of POC mandates have not been subject to systematic evaluation. Among others, the project aims to understand how POC mandates are implemented by police in UN peace operations and how have they changed since their inception. Identifying policing practices that might mitigate the risks and enhance the efficacy of UN police in implementing civilian protection mandates and provide recommendations for policy development and practice in relation to the use of police for civilian protection purposes in UN peace operations.

Ethnic diversity and a sense of belonging

Researchers from the College of Design and Social Context investigated 'the impact of ethnic diversity, socioeconomic disadvantage and sense of belonging on Islamophobia and social cohesion locally and nationally'. The project aimed to achieve two key outcomes: 1) Provide nationally representative evidence based on a) the analyses of Census and the HILDA Survey data, separately and in combination and b) a national survey on acceptance of Muslims/Islamophobia; and 2) Provide empirical evidence about the ways in which ethno-religious diversity, disadvantage and acceptance of Muslims/Islamophobia impact on community cohesion in chosen localities through interviews with stakeholders and a survey of a representative sample of local populations.

Supporting justice for people with disabilities

Supporting Justice is a system change project working with people with lived experience and key stakeholders from the criminal justice and disability service systems to address the over-representation of people with disability in the criminal justice system. Supporting Justice aims to drive system change by bringing people with disability to the centre of the process and ensuring their voices are heard in relation to justice system reform. The report 'Recognition Respect and Support: Enabling Justice for people with an Acquired Brain Injury', found that fragmented and inconsistent responses throughout the criminal justice and disability service systems meant that the needs of people with a disability were rarely recognised and responded to appropriately.

17 PARTNERSHIPS FOR THE GOALS

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Strengthen the means of implementation and revitalise the global partnership for sustainable development

SDG 17: Partnerships for the Goals
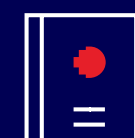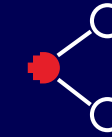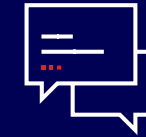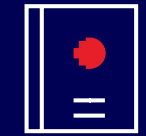
Research and Publications

4.4%
National Contribution
(of all Australian publications 2019)

44.0%
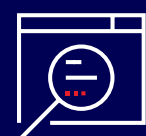Of all internationally co-authored publications were with developing countries

4.0
Citation times per publication
(Global benchmark 2.7)

70.0%
Publication in top 25% of Journals
(Australia 70.0% / Worldwide 54.0%)

50.0%
Internationally co-authored publications
(Worldwide international collaboration 26.0%)

64
Number of research projects
(at SDG target level)

RMIT's commitment to partnerships

The RMIT Sustainability Policy commits the University to adopt a leadership role at a national and international level to shape a sustainable environment and society, contributing to the UN Sustainable Development Goals. The policy also commits RMIT to proactively engage in partnerships and projects with industry, government, non-government organisations and communities on sustainability.

For more information on key RMIT Sustainability Partnerships, visit the RMIT website.

Preventing aquatic pollution

A new $5 million partnership between RMIT's School of Science and Melbourne Water will help combat pollution in Australia's waterways and bays. Leading experts in aquatic ecology and pollution research will join forces to investigate ways to protect Melbourne's waterways and keep them healthy for the long term. Key elements of the research include: (1) investigating pollutants including pesticides, industrial pollutants, and subtle and emerging pollutants such as nanoparticles and pharmaceuticals; (2) developing new ways to monitor and assess the risk of aquatic pollution; (3) focusing on chemicals that affect aquatic plants and animals; and (4) identifying effective options to reduce aquatic pollution in waterways.

The contribution of creative practices to sustainability

RMIT was named a partner in The EU Horizon funded project, which looks at how creative practices can contribute to sustainability. The European research project is named CreaTures: Creative Practices for Transformational Futures. It aims to demonstrate effective pathways through creative practice to achieve sustainability, social cohesion and peaceful co-existence during times of rapid change. The project is a unique opportunity to coalesce transdisciplinary research and arts for society to better engage with creative practices and their impacts in co-creating sustainable futures.

Sustainability skills for the world of work

The UNEVOC Centre at RMIT is part of that International Centre for Technical and Vocational Education and Training of the United Nations Educational, Scientific and Cultural Organisation. It provides an inclusive global learning network focused on skills for the world of work.

UNEVOC at RMIT partner with government, industry, and the not-for-profit sectors to support and to equip all young people and adults with the skills required for employment, decent work, entrepreneurship and lifelong learning, and to contribute to the implementation of the 2030 Agenda for Sustainable Development as a whole. The partnership has three priority areas: (1) Fostering youth employment and entrepreneurship; (2) Promoting equity and gender equality; (3) Facilitating the transition to green economies and sustainable societies.

Co-creating solutions to wicked social challenges

The RMIT Social Innovation Hub is an inclusive and collaborative co-working space where organisations, technology, research, innovators and ideas collide to co-create impactful solutions to wicked social challenges. It aims to foster and build a collaborative, co-working community to help break down the silos that keep social organisations, technologies, research, industry, academics and innovators apart.

Current members of the Social Innovation Hub include: Melbourne Innovation Districts, a partnership between the City of Melbourne, RMIT University and the University of Melbourne to shape the city's future by developing urban innovations through open collaborations; the RMIT-Cisco Heath Transformation Lab, a lab operating at the intersection of the human and technology to bring solutions to health challenges; Centre for Innovative Justice, a centre conducting research that develops innovative solutions to develop, drive and expand the justice system; Law and Advocacy Centre for Women, a not-for-profit providing gender-specific response to assist women in the criminal justice system and Youthlaw, a not-for-profit assist young people with their legal rights and advocate for effective laws, policies and service response.

Innovation in the city

The annual City Challenge, an initiative of RMIT's Global Experience Office, which involves over 500 students to research and develop their own innovative solutions to real challenges.

This year students were challenged to find solutions to Melbourne's waste management issues. The City of Melbourne partnered with the University and Common Purpose to address their aim of zero landfill waste by 2030. Students were given a crash course on the waste industry and met with industry representatives, including Sustainability Victoria, Queen Victoria Market, and waste management company Veolia, to learn about waste management and sustainability and help them interrogate areas of interest and develop their ideas.

European collaboration

The Jean Monnet Sustainable Development Goals Network, hosted at the RMIT's EU Centre, brings together international and national researchers, policy think tanks and Non-Government Organisations who share a primary interest in enhancing the effective contribution of the EU to the implementation of the Sustainable Development Goals (SDGs) in the Asia Pacific. It is supported by the Erasmus+ Programme of the European Union.

By strengthening collaboration amongst researchers and policymakers, the Network promotes a more effective evidence-base for EU institutions to engage with nations in the region to implement the SDGs. The Jean Monnet Sustainable Development Goal Network has direct involvement in National and International SDG policy development and network members developed an analytical framework for understanding the implementation of the SDGs. In 2019 they continued their research on the EU's role through examining their contribution to the SDGs in Laos, Bangladesh and the Philippines, as well as India and China. They also undertook research on the role of the EU in promoting the Asia-Europe Meeting, as a means of generating collaborative focus on the implementation of the SDGs.