

# Moorditj Boodja - Strong Country Sustainability Sub-Strategy Implementation Plan 2024-2027

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## Overview of Implementation Plan 2024-2027

Moorditj Boodja – Strong Country Sustainability Sub-Strategy will guide and direct actions towards achieving the university's sustainability goals by 2030 and provide the foundation for two successive three-year implementation plans, commencing with this Sustainability Implementation Plan 2024 – 2027. Following stakeholder consultation in 2027, a second implementation plan, spanning the period 2028 – 2030, will be released to further advance our sustainability objectives.

The Implementation Plan 2024-2027 is intended as a living document, designed to be responsive to the needs and priorities of the university, innovations in technologies and sustainable practices as well as potential legislative shifts. Key actions to be undertaken in the first three years of the strategy are detailed in the Implementation Plan, covering all facilities over which Murdoch University has operational control.

A whole of organisation approach is required to achieve the university's sustainability goals. As such, key teams across the university have been identified as either leading or supporting each initiative, harnessing the knowledge and expertise of staff across the university. Responsibility for actions have been allocated according to who is required to lead and support each initiative. In most cases, responsibility has been allocated to the leader of the relevant team. The leader can determine who in their team is best placed to undertake that action, thereby supporting the university's strategic theme of sustainability by enabling members of their team to undertake required actions.

The Office of the Pro Vice Chancellor Sustainability will work together with university stakeholders to ensure actions are undertaken in a way that is integrated with existing work wherever possible, reducing duplication and minimising additional workload. This approach will ensure the Implementation Plan is an empowering document which focuses action on the university's sustainability commitments and goals toward *Moorditj Boodja – Strong Country* and a sustainable future.



# Education (ED)

#### **EDUCATION (ED)**

Actions listed below seek to enhance staff and students' sustainability literacy, encourage active citizenship, and wherever possible, reduce environmental impacts of teaching delivery.

Focus	Action	Responsibility	Success Measure	Timeframe
Sustainability Integration	ED1: Map units that integrate sustainability (UN SDGs) within course offerings to provide	Lead: DVCE Support: PVCS, HoS & ADL&T	Mapping guide provided.	Q4 2024
	a baseline and highlight opportunities for further integration. Activity supported by	30,000	Mapping complete in Courseloop.	Q3 2025
	education and subject matter experts.		Identification of further integration opportunities.	Q4 2025
	ED1.1: Further integrate sustainability within unit offerings across schools (subject to disciplinary fit, degree structure and	Lead: DVCE Support: PVCS, HoS & staff with relevant discipline-	Revised spine units with updated sustainability content.	Q1 2026
	accreditation requirements) to provide opportunities to learn about sustainability across the curriculum, including targeted micro credential offerings. Activity supported by education and subject matter experts (see ED1.3).	based expertise	Increased number of unit offerings with sustainability focus (including targeted micro credential offerings) available across schools.	Q1 2026
	ED1.2: Maintain a public multidisciplinary listing of sustainability unit offerings or equivalent units of instruction as a resource for current and prospective students.	Lead: DVCE & CXO Support: PVCS, HoS & CPS	SDG integration mapped and visible in online Student Handbook.	Q2 2025
	ED1.3: Develop and deliver professional development and host ongoing multidisciplinary community of practice	Lead: DVCE	Staff professional development sessions developed and delivered.	Q4 2024 and ongoing



	sessions to support academic staff with integrating sustainability into the curriculum.	Support: PVCS, PCO & staff with relevant discipline-based expertise	Community of practice established and meets quarterly.	Commencing Q1 2025 and ongoing
Undergraduate & Graduate Programs	ED2: Continuation and further development of sustainability focused education programs for undergraduate and graduate students.	Lead: DVCE Support: PVCS, HoS & ADL&T	Maintenance and further development of number of available sustainability-focused undergraduate courses (2024-2027).	Ongoing
	ED2.1: Establish course learning outcomes for undergraduate students that include at least one sustainability-focused learning outcome and at least one sustainability-supportive learning outcome.	Lead: DVCE & ADL&T Support: PVCS	Sustainability integration into undergraduate course learning outcomes complete.	Q3 2025
	ED2.2: Establish sustainability-focused graduate attributes based on key competencies for sustainability.	Lead: DVCE & ADL&T Support: PVCS	Sustainability integration into graduate attributes complete.	Q3 2025
	ED2.3: Ensure options are available to enable all students to achieve sustainability-focused learning requirements while completing undergraduate courses (subject to disciplinary fit, degree structure and accreditation requirements).	Lead: DVCE & ADL&T Support: PVCS, HoS & CXO	Review complete.  Revised course learning outcomes with sustainability focus across disciplines.	Q3 2025 Q1 2026
	ED2.4: Scope feasibility of Graduate Program focusing on strategic themes.	Lead: PCO (L&D) Support: PVCS, PVCFN & PVCEDI	Scoping complete  Possible implementation (pending scoping)	Q3 2025 Q1 2026
Informal Curriculum	ED3: Provide co- and extra-curricular options for sustainability-focused learning (see EN2 & EN3).	Lead: DVCE Support: PVCS, CXO & Guild	Non-curricular options for sustainability-focused learning available.	Q4 2024 and ongoing
Applied Learning	ED4: Establish solutions-focused applied learning or living laboratory experiences for	Lead: DVCE & PVC Colleges Support: PVCS & CXO	Register of units with applied learning / living lab focus published online.	Q4 2025



	students that address sustainability challenges.		Ongoing monitoring and evaluation.	Ongoing
	ED4.1: Increase opportunities for students to engage in applied learning (placement,	Lead: DVCE, ADL&T, DirLT&T & SoE	Scope and create baseline.	Q4 2025
	projects and simulations) in sustainability fields.	Support: PVCS	Increased number of students engaged in applied learning with a sustainability focus (2024-2027).	Q4 2026
Indigenous Knowledges & Sustainability	ED5: Develop units with a specific focus on Indigenous knowledge systems and their understanding of, and contribution to, sustainability.	Lead: SoIK & SoHASS Support: PVCFN, PVCS, PVCLASS & HoS	Units developed and open to enrolment.	Q4 2026
Sustainability Literacy	ED6: Scope and design measurements of student and graduand sustainability literacy.	Lead: DVCE Support: PVCS & CXO	Scoping and design complete.	Q2 2025
Assessment	ED6.1: Conduct regular assessment/survey of students' sustainability literacy with the aim to improve sustainability literacy over time.	Lead: DVCE Support: PVCS & CXO	Assessment method in place. Survey at least 75 per cent of both incoming and graduating students to gauge sustainability literacy levels and impact of SDG integration.	First assessment complete in Q3 2025. Assessment ongoing.
Environmental Impact Reduction in Education Delivery	<ul> <li>ED7: Reduce teaching-related environmental impacts (e.g. laboratory waste) through:</li> <li>Create 'best practice' guides and establish community of practice;</li> <li>Create or update policies and procedures where appropriate; and</li> <li>Ongoing effort by teaching staff to reduce teaching-related environmental impacts.</li> </ul>	Lead: HoS, CXO(Library), Timetabling & CPS Support: PVCS	Best practice guides created and available on intranet.  Teams to discuss and include at least one sustainability goal in their operational plans (EN1.1).  For other measures see ED1.3, CR1, CR2, GV7, GV7.1, GV8 & TR2.3	Q1 2026 and ongoing Q3 2025 and ongoing Q2 2025 and
International Education (IE)	ED8: Reduce environmental impacts related to	IE (see TR8).		ongoing



C	ontinuing	ED9: Offer sustainability-focused courses externally to help build sustainability literacy in the wider community (see EN6).
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# Research (RE)

#### **RESEARCH (RE)**

Actions listed below seek to enhance the impact of research outcomes to support a sustainable future, while seeking to reduce environmental impacts of research activities.

Focus	Action	Responsibility	Success Measure	Timeframe
Positive	RE1: Develop measures of positive	Lead: DVCR&I & PVCS	Positive research impact metrics	Q4 2025
Research	sustainability-related research impacts (e.g.	Support: ITS	developed, and impact data	
Impact	emission reductions, water efficiencies,		included in reporting on key	
	etc.).		environmental aspects.	
	RE1.1: Develop sustainable research	Lead: DVCR&I	Sustainability criteria for research	Q4 2025
	protocols that consider reductions in	Support: PVCS & Fin	developed and published online.	
	research-related environmental impacts			
	(see GV6 & GV6.1).			
	RE1.2: Increase research translation in	Lead: DVCR&I	Enhanced application and capture of	Q1 2026
	sustainability management on campuses to	Support: Staff with relevant	in-house research in sustainability	
	improve sustainability outcomes (see	discipline-based expertise,	management on campuses (see	
	BD1.3).	PVC Colleges, HoS & PVCS	RE1).	
	RE1.3: Record research-related fieldwork	Lead: PVCS	GhG emissions stemming from	Q4 2025
	and travel activities (Scope 3 emissions).	Support: VCO(CD), CXO(RS),	research-related fieldwork and	
		CXO(COS), Fin & ITS	travel activities captured in GhG	
			Emissions Inventory (EG1.2).	



Capture of Sustainability- Related Research	RE2: Improve capture of sustainability research projects (incl. HDR research) to demonstrate alignment with, and contribution to, UN SDGs.	Lead: DVCR&I & CXO(Library) Support: PVCS	Data captured and mapped against UN SDGs.	Q4 2025
Activity	RE2.1: Capture of sustainability-related research funding.	Lead: DVCR&I & CXO(Library) Support: PVCS	Data captured and mapped against UN SDGs.	Q4 2025
	RE2.2: Capture of sustainability-related research outputs.	Lead: DVCR&I, CXO(Library) & HoS Support: PVCS	Develop research repository and publication lists to capture staff outputs mapped against UN SDGs from 2015 onwards.	Q4 2025
Support for Sustainability- Related Research	RE3: Scope, develop and measure research related to sustainability to provide a benchmark for further growth and development.	Lead: DVCR&I Support: PVCS	Scoping complete and benchmark provided.	Q4 2025
	RE3.1: Scope and implement support measures and incentives for academic staff and graduate students across all academic departments to conduct collaborative sustainability-related research.	Lead: DVCR&I, HoS, Institutes & Centres Support: PVCS	Introduction of sustainability research focused VC Excellence Award.  Targeted funding and support for sustainability research in place (e.g. seed funding, strategic funds).	Q2 2025 Q4 2025
Partnerships	RE4: Identify and develop collaborations with external partners on sustainability solutions.	Lead: DVCR&I, DVCGE, Institutes & Centres & ADR Support: PVCS	Develop and regularly update records of external industry partnerships for sustainability-focused research collaborations.	Q2 2025
	RE4.1: Support participation in inter-campus research collaboratives or networks that champion sustainability-related research and innovation.	Lead: DVCR&I, HoS & Research Institutes & Centres Support: PVCS	Promotion, support and maintenance of sustainability-focused collaboratives or networks (see also RE2.2).	Ongoing
			Develop register of sustainability- focused research collaboratives and	Q4 2025



	networks for publication on research
	and sustainability websites.
Accessible	RE5: Improve equitable access to research outputs by encouraging open access publishing.
Research	

# Engagement (EN)

#### **ENGAGEMENT (EN)**

Actions listed here seek to foster a sustainability ethos and increase engagement with, and awareness of, sustainability issues and actions within the university and beyond.

Focus	Action	Responsibility	Success Measure	Timeframe
Sustainability	EN1: Undertake a staff and student	Lead: PVCS	Sustainability Survey undertaken.	Q3 2025
Culture &	sustainability culture survey biennially to	Support: MCO, CXO(S&I) &		
Ethos	track awareness of, and participation in,	PCO	Results shared with staff and	Q4 2025
	sustainability, and sustainability ethos		students.	
	(culture).			
			Increase in staff and student	Ongoing measured
			awareness of sustainability.	biennially
	EN1.1: Academic and professional staff teams	Lead: SLT, Dirs. HoS	All operational plans to include at	Q3 2025 and
	discuss and include at least one sustainability	Support: PCO & PVCS	least one sustainability related goal.	ongoing
	goal in their operational plans.			
	EN1.2: Continue to align Alumni and	Lead: A&L & ACC	Ongoing initiatives aligned to	Q4 2024 and
	Philanthropy efforts (including the Murdoch	Support: PVCS	building a sustainability culture.	ongoing
	Art Collection) to the strategic theme of			
	sustainability (e.g., sustainability-themed			
	mural to be added to Art Collection).			



Awareness & Promotion of Sustainable Behaviours	EN2: Develop comprehensive awareness programs, events and initiatives for staff and students across the priority areas to foster a sustainability ethos, increase sustainability and ESG literacy, and promote uptake of proenvironmental behaviours in areas including: <ul> <li>Sustainable transport options</li> <li>Waste reduction and circularity</li> <li>Energy and water efficiency</li> <li>Biodiversity and conservation</li> </ul>	Lead: PVCS Support: HBI, MCO & CXO, PVCEDI & PVCFN	Hold at least one event or initiative per quarter.  Increase in staff and student awareness of, and positive attitudes toward, sustainability (Measured through survey EN1).  Increase in number of staff and students demonstrating sustainable behaviours (2024-2027).	Q4 2024 and ongoing  Q3 2025 and ongoing  Ongoing
	EN2.1: Maintain internal and external sustainability webpages providing information about the university's sustainability efforts and showing progress toward meeting sustainability targets. (GV7.1)  EN2.2: Establish and support a Sustainability Collective, a quarterly meeting of staff and	Lead: PVCS Support: MCO  Lead: PVCS Support: HBI, Guild & CXO	Maintain webpages and intranet content with accurate, clear and up to date information.  Sustainability Collective established with meetings held quarterly.	Commencing Q3 2024 and ongoing
	students passionate about sustainability, designed to build engagement, collaboration and community.	Support. Hbi, Guilu & CAO	Increased engagement and collaboration within the university community (EN1).	Q3 2025
Student Engagement	EN3: Initiate and support sustainability- focused peer-to-peer education programs in which students can catalyse change among their peers (e.g., Responsible Futures program, student ambassadors; see ED4).	Lead: DVCE & PVCS Support: CXO & Guild	At least two peer-to-peer programs in place and active by 2026.	Commenced Q2 2024 and ongoing
	EN3.1: Provide ongoing support to student- managed, sustainability-focused groups including:	Lead: PVCS Support: Guild, SoE & CXO(COS)	Support in place for sustainability focused groups.	Commencing Q4 2024 and ongoing.



		<ul> <li>Ongoing support for Murdoch Community Gardens and other student volunteer programs.</li> </ul>			Commencing Q4 2024 and ongoing
		EN3.2: Provide support to sustainability- focused student projects.	Lead: DVCE & CXO Support: PVCS	Support in place for sustainability- focused student projects.	Ongoing
		EN3.3: Integrate sustainability information into written and online materials provided prior to, and during student orientation (e.g. end of trip facilities, public transport information).	Lead: PVCS & CXO Support: Guild	Information prepared and included in student orientation materials with aim to reach 100 percent of prospective students.	Initial offering by Q3 2025 Reviewed annually
		EN3.4: Initiate and support students to participate in projects (community service, volunteering, civic engagement) to raise awareness and foster active citizenship.	Lead: CXO & DVCE Support: PVCS, PVCFN PVCEDI, PVCI, Guild & HBI	Community service and/or other civic engagement programs on offer for student participation.	Commencing Q3 2024 and ongoing
Staff Engagement	nent	EN4: Continue to offer and enhance sustainability training and professional development opportunities in the annual staff Learning and Development catalogue (see ED1.3).	Lead: PVCS Support: PCO(L&D) & staff with relevant discipline- based expertise	In-person sustainability training module pilot program rolled out.  At least 4 sustainability training and development events included in the annual Learning and Development catalogue.	Q4 2024 Q1 2025 onward Review of offerings annually
		<ul> <li>EN4.1: Integrate sustainability information into employee onboarding process including:         <ul> <li>Add links to Sustainability information to monthly onboarding sessions;</li> <li>Review and update online</li> </ul> </li> </ul>	Lead: PVCS & PCO(L&D)  Support: Staff with relevant discipline-based expertise	Links to Sustainability information added to monthly onboarding sessions. Sustainability Awareness online module revised and updated.	Q1 2025 Q1 2026
		<ul> <li>Sustainability Awareness module; and</li> <li>Scope measures to increase completion of online module during onboarding process including</li> </ul>		Measures to increase completion of online module scoped and implemented.	Q3 2026



	possibility of making completion a requirement for all new staff.			
	EN4.2: Support staff to engage in community service programs via volunteering days on and off campus allocated in the Murdoch University Enterprise Agreement 2023.	Lead: PCO Support: PVCS	Entitlement of up to 2 paid days per year to be used for volunteering purposes.	Commenced Q1 2023
			At least two sustainability focused staff volunteering days organised per year.	Q1 2025 and ongoing
Community Partnerships & Civic Engagement	EN5: Continue to build and develop community (incl. not-for-profit, government and industry) sustainability-focused partnerships, including partnerships that support underrepresented groups and/or vulnerable populations in addressing sustainability challenges (e.g. Keep Carnaby's Flying: Ngoolarks Forever project) (see RE4).	Lead: HBI, PVCS, DVCGE, DVCR&I PVCEDI, PVCFN & NYI Support: CXO, A&P & PVCS	Overview of key sustainability- focused community partnerships listed on website.	Ongoing
Sustainability- Focused Research Institutes and Centres	EN6: Give visibility to multidisciplinary research institutes and centres focused on sustainability and/or on multidisciplinary, interdisciplinary, and/or transdisciplinary approaches to sustainability challenges.	Lead: ITS & MCO Support: PVCS, DVCR&I, Institutes & Centres	Strategic communications support provided by MCO.  Visibility of links to sustainability related research on website.	Ongoing
Outreach & Continuing Education	EN7: Scope opportunities and implement ongoing outreach offerings to provide education, training, and awareness regarding sustainability (see ED9).	Lead: PVCS Support: DVCE, MCO, DVCGE & HBI	Scoping complete.  Implementation of outreach measures commenced.	Q1 2026 and ongoing  Q3 2026 and ongoing
Shared Facilities	EN8: Provide free or low-cost access to facilities to the local community to strengthen and sustain the health and	Lead: CXO (Gym) Support: PVCS & CXO(COS)	Details of access to free or low-cost facilities accessible via university website and local council communications.	Q1 2025



	wellbeing of the community and help meet the needs of local residents.			
Inter-Campus	EN9: Provide support and opportunities to	Lead: DVCGE, PVCI & HBI	Ongoing support and opportunities	Ongoing
Collaboration	collaborate with other educational	Support: PVCS	for collaborations with other	
	institutions to help realise efficiencies that		educational institutions and	
	accelerate the movement to sustainability.		networks.	

# Governance (GV)

#### **GOVERNANCE (GV)**

Actions listed below seek to reduce environmental impacts from campus operations and ensure that all university activities are subject to sustainability considerations.

Focus	Action	Responsibility	Success Measure	Timeframe
Commitment	GV1: Create measurable sustainability	Lead: PVCS	Release of Sustainability Strategy	Q4 2024
	objectives for teaching, research,	Support: SLT, PVCFN &	and Implementation Plan with key	
	engagement, operations, and governance.	PVCEDI	metrics identified.	
Environmental,	GV2: Strive for excellence in management of	Lead: SLT	Embedding of ESG considerations	Q3 2024 onwards
Social and	ESG dimensions and embodying ESG values	Support: USO, PCO, CXO, Fin	into relevant university policies and	
Governance	by:		procedures (see GV6).	
(ESG)	Supporting and enabling initiatives of			
Excellence	the Pro Vice Chancellors First Nations		Publishing of EDI, First Nations and	Q4 2024
	(FN), Equity Diversity and Inclusion (EDI) and Sustainability;		Sustainability sub-strategies.	
	Committing to transparency in ESG		Annual publication of ESG	Q1 2026 and
	reporting; and		performance as part of sustainability report (GV7.2).	ongoing



	Committing to participation by staff, students and students in university governance.		Participation in place.	Ongoing
First Nations Governance	GV3: Establish mechanisms for co-design with First Nation Peoples for culturally appropriate approaches to sustainability management, especially in relations to action BD1.2, WA3, WA3.1 & CL1.2.	Lead: PVCS Support: PVCFN, NYI & SolK & USO	Agreed mechanisms confirmed and in place.	Q2 2025 and ongoing
Expert Roundtables	GV4: Establish Expert Roundtables with relevant discipline experts to advise on, and assist with, technical aspects of sustainability management (e.g. biodiversity baseline data, energy management).	Lead: PVCS Support: HoS, Institutes and Centres	Ad hoc establishment of Expert Roundtables when sustainability management matters arise.	Ongoing
Sustainable Investments & Holdings	GV5: Formally incorporate environmental, social, and governance (ESG) factors and/or climate risk as material issues in decisions concerning investments, holdings and donations.	Lead: VC & Fin Support: PVCS	Updated Responsible Investment Charter published online.	Q4 2024
	<ul> <li>GV5.1: Commit to regular review of Responsible Investment Charter to align with university's strategic themes (Sustainability, First Nations, EDI). Such a review may include:</li> <li>Funds that are explicitly focused on sustainability or environmental, social, and governance (ESG);</li> <li>Sustainability-focused industries or sectors;</li> <li>Businesses selected for exemplary sustainability performance using positive screens;</li> </ul>	Lead: VC & Fin Support: PVCS	Updated Responsible Investment Charter published online.  Regular review	Q4 2024 Ongoing to 2027



	<ul> <li>Community development financial institutions (CDFIs);</li> <li>Place-based investments that target positive social and environmental impacts in economically divested areas; and/or</li> <li>Green revolving funds seeded from the investment pool.</li> </ul>			
	GV5.2: Publish annually a snapshot of university's investment holdings (including investments managed on the university's behalf), detailing the amount or percentage allocated to specific funds, companies, and institutions.	Lead: Fin Support: IRAB	Annual investment report published online.  Ongoing annually.	Q2 2025
Policy & Procedure	GV6: Review and update relevant university policies, procedures, standards, and guidelines to ensure alignment with sustainability objectives.	Lead: PVCS Support: USO & Staff relevant to policy area.	Initial review complete.	Q4 2025 and biennially
	GV6.1: Review and update existing, and develop new policies and procedures as required to ensure sustainability requirements are accommodated and supported, especially as they relate to key priority areas.	Lead: PVCS Support: USO & Staff relevant to policy area.	Updates in place.	Ongoing
Systems and Processes, Data Management & Reporting	GV7: Develop and maintain a data management system (DMS) that automates, consolidates, tracks and monitors data to support attainment of targets within university's key sustainability priority areas.	Lead: ITS, PVCS Support: Staff with relevant discipline-based expertise.	DMS developed.  Reviewed and maintained regularly.	Q3 2025 Ongoing
	GV7.1: Implement a publicly available sustainability data dashboard.	Lead: ITS Support: PVCS & CXO(COS)	Clear, accurate, up-to-date data publicly available on university's sustainability webpages.	Scoping complete by Q4 2024.



	GV7.2 Engage in transparent and accessible reporting of sustainability practices and progress toward sustainability KPIs and targets through:  Reporting annually on progress toward Senate KPIs;  Producing an annual Sustainability Report;  Engaging in publicly accessible Sustainability Tracking, Assessment & Rating System (STARS) Reporting; and  other reporting as required (e.g. TEFMA (annual), PRME (biennial) & CABie (annual)) (see GV2).	Lead: PVCS Support: ITS, Fin, CXO(RS) & CXO(COS)	Updated and maintained quarterly and where possible use of live data.  Annual reporting on Senate KPIs  Annual Sustainability Report produced.  STARS Reporting.  Other reporting as required.	Initial offering delivered by Q2 2025 and ongoing Commenced 2023  Commencing Q1 2025  Commencing Q1 2026
	GV7.3: Scope and implement improvements to reporting system used by staff and students to report faults to Facilities Management help desk. (see also WA2.1)	Lead: CXO(COS) & ITS Support: PVCS	Scoping complete.  Improvements implemented.	Q2 2025 Q4 2025
Projects, New Builds & Campus	GV8: Implement the Campus Development Plan in alignment with university's sustainability objectives (GV6 & CR1).	Lead: PVCS Support: CXO(RS)	Policy reviewed and updated.	Q2 2025
Planning	<ul> <li>GV8.1: Include sustainability and biophilic principles in campus development, including where possible:</li> <li>Infrastructure to enable active transport modes;</li> <li>Water Sensitive Urban Design (SUD)</li> <li>Energy efficient fixtures</li> <li>Renewable energy</li> </ul>	Lead: PVCS Support: VCO(CD) & CXO(RS)	Policy reviewed and updated.	Q2 2025



	<ul> <li>Water-wise fixtures with high Water Efficiency Labelling and Standards (WELS) (WA2)</li> <li>6 Star Green Star compliance on new capital projects; and</li> <li>No loss of designated conservation areas through infrastructure developments (see BD1).</li> <li>GV8.2: Review project planning and management documentation to ensure alignment with sustainability objectives and that environmental and sustainability impacts are identified and resolved at an early stage of project development.</li> </ul>	Lead: PVCS, VCO(CD) Support: CXO(RS)	Review complete.	Q2 2025 and then biennially as per requirements for CDP
Sustainable Procurement System	<ul> <li>GV9: Review Procurement Policy and Procedure to align with sustainability requirements. Policy and Procedure requirements may include:         <ul> <li>Minimum sustainability evaluation criteria to be applied within relevant procurement activities;</li> <li>Include sustainability and data collection requirements in relevant supplier contracts;</li> <li>Prioritise purchase of items for sustainability (e.g. longevity, provision or availability of repair/maintenance, energy efficiency etc.) and not based primarily on initial cost outlay;</li> <li>Reduce single use packaging, where possible.</li> </ul> </li> </ul>	Lead: PVCS Support: Fin(Proc)	Relevant Procurement Policy and Procedure drafted and in place.	Q4 2025 and ongoing



	GV9.1: Create a supplier code of conduct and ensure expectations exceed, or are additional to minimum regulatory compliance regarding:  • Environmental impact;  • Treatment of workers  • Governance and ethical business practices;  • Advancement of sustainability in the supply chain; and  • Monitoring and review	Lead: Fin(Proc) Support: PVCS, PVCFN, PVCEDI & USO	Supplier code of conduct approved and released.	Q3 2025
	GV9.2: Seek to ensure purchases of identified products align with STARS sustainability criteria (e.g. cleaning products, electronics, office furniture, office paper and laboratory equipment).	Lead: PVCS Support: Fin(Proc) & SLT	Ensure purchasing decisions align with updated Procurement Policy and Procedure (GV9).	Q1 2026
Sustainable Events	GV10: Create guidelines (see GV6) to define and support sustainable events for all events held on university campuses including:  Transport incl. nearby accommodation;  Merchandise;  Procurement (GV9);  Circularity (CR1); and  Food.	Lead: PVCS & MCO Support: CXO(COS)	Sustainable events guidelines developed and in place.	Q3 2025



# Energy (EG)

#### **ENERGY (EG)**

Actions listed below seek to reduce the university's energy consumption and subsequent GhG emissions and monitor and report on progress toward our target of net zero carbon emissions by 2030.

Focus	Action	Responsibility	Success Measure	Timeframe
Net Zero Emissions	EG1: Develop and commit to implement a decarbonisation roadmap to achieve net zero scope 1 & 2 emissions by 2030 and being carbon positive by 2035.	Lead: PVCS Support: VCO(CD), CXO(RS) & CXO(COS)	Published Decarbonisation Roadmap.  Net zero scope 1 & 2 emissions meeting and exceeding Senate KPI.  Carbon positive (Scopes 1&2).	Q1 2025 Q4 2030 Q4 2035
	EG1.1: Complete and maintain greenhouse gas (GhG) emissions inventory.	Lead: PVCS Support: VCO(CD), CXO(RS), CXO(COS), Fin & ITS	GhG Emissions Inventory for scope 1, 2 and 3 emissions updated annually and published online.	Ongoing
	EG1.2: Disclose GhG emissions annually.	Lead: PVCS Support: VCO(CD), CXO(RS), CXO(COS), Fin & ITS	Emissions data published under TEFMA, STARS, CABie & Race to Zero.  Annual Sustainability Report.	Ongoing  Commencing Q1 2026
Energy Use	<ul> <li>EG2: Scope and implement rolling plan to reduce energy consumption:</li> <li>Analyse energy consumption data and complete an energy audit to identify energy sinks and high energy use buildings, including high overnight</li> </ul>	Lead: PVCS Support: VCO(CD), CXO(RS) & CXO(COS)	Published Decarbonisation Roadmap with target to meet and exceed peer benchmark of:  123 kWh/m <sup>2</sup> GFA by 2030  2,830 kWh/FTE by 2030	Q4 2024 Reductions commence Q3 2025 with ongoing electrification and



	<ul> <li>energy use (including impact of light pollution on surrounding conservation reserves see BD1.3);</li> <li>Electrify campus services;</li> <li>Deliver energy-efficiency upgrades in existing buildings and external infrastructure in conjunction with the Campus Development Plan; and</li> <li>Prioritise buildings/infrastructure highlighted in energy audit.</li> </ul>			energy efficiency measures
	EG2.1: Integrated with Campus Development Plan, improve availability and accuracy of energy data by strategic smartmetering, sub-metering and increased efficacy of Building Management System (BMS).	Lead: VCO(CD), CXO(RS) & CXO(COS) Support: PVCS, Fin & ITS	Campus-wide roll-out of smart meters and sub-meters integrated with Campus Development Plan.	Q2 2025 onwards
	EG2.2: Link BMS with Gallagher (electronic access control) and Syllabus Plus (timetabling software) so that room controls (e.g. lighting, heating and airconditioning) are integrated with room usage.	Lead: VCO(CD), CXO(RS) & CXO(COS) Support: PVCS, Fin & ITS	Work commencing to integrate BMS with Gallagher and Syllabus Plus.	Q4 2025
	EG2.3: Seek to ensure compliance with net zero compatible energy efficiency frameworks for new builds (see GV8 & GV8.1).	Lead: VCO(CD), CXO(RS) & CXO(COS) Support: PVCS & Fin	Efficiency requirements embedded in policies governing infrastructure planning.	Q2 2025
Renewable Energy	EG3: Scope and implement plan to install on-site renewable energy (RE) generation capacity to increase annual energy consumption from renewable sources in line with Decarbonisation Roadmap.	Lead: PVCS Support: Staff with relevant discipline-based expertise, PVC Colleges, VCO(CD), CXO (RS) & CXO(COS) (supported also through education and	At least 95 percent of energy consumption using renewable energy by 2030.	Increase in renewable energy use by Q4 2025



		research projects see ED5, RE1.4 & GV4).		
	EG3.1: Prioritise RE-enabling infrastructure upgrades in line with Campus Development Plan and Energy Audits to meet 2030 emissions targets.	Lead: PVCS Support: VCO(CD), CXO(RS) & CXO(COS)	RE-enabling infrastructure upgrades commence.	Q2 2025
	EG3.2: Scope and (if practical) implement plan to install battery storage of renewable energy to cover night-time energy usage and/or for teaching/research purposes.	Lead: PVCS Support: Staff with relevant discipline-based expertise, PVC Colleges, HoS, VCO(CD), CXO(RS) & CXO(COS) (supported also through education and research projects see ED4, RE1.2 & GV4).	Scoping complete.  Plan (subject to scoping) implemented.	Q4 2024 Q4 2025
	EG3.3: Explore innovative energy projects (e.g. energy from waste and hydrogen).	Lead: PVCS Support: Staff with relevant discipline-based expertise, PVC Colleges, HoS, VCO(CD), CXO(RS) & CXO(COS) (supported also through education and research projects see ED4, RE1.2 & GV4).	Ongoing exploration of innovative energy projects.	Ongoing
Carbon Offsets	EG4: Investigate opportunities for on/off campus carbon offset generation (including but not limited to pyrogenic carbon capture (biochar), algae stormwater treatment, carbon farming).	Lead: PVCS Support: Staff with relevant discipline-based expertise, PVC Colleges, VCO(CD), CXO(RS) & CXO(COS) (supported also through education and research projects; see ED4, RE1.2 & GV4).	Feasibility study currently underway.	Q4 2024



# Circularity (CR)

#### **CIRCULARITY (CR)**

Actions listed below seek to eliminate waste generation, move towards circularity on Murdoch campuses and support achievement of our target of zero waste to landfill by 2030.

Focus	Action	Responsibility and Alignment	Success Measure	Timeframe
Waste Generation and	CR1: Scope and implement a plan to achieve zero waste to landfill Senate KPI by	Lead: PVCS & VCO(CD), CXO(RS), CXO(COS),	Scoping complete.	Q4 2025
Recovery	following the principles of the circular economy (see also GV8 & GV9).	Support: CXO(COPS – TS), Fin(Proc), CWWE & staff	Plan in place.	Q2 2026
		with relevant discipline- based expertise	Year on year reduction in waste to landfill.	Ongoing
			Progress toward target of zero waste to landfill by 2030.	Ongoing
	CR1.1: Carry out data review and waste audit/s to set a baseline for waste production per stream; to determine major waste production areas, waste types produced and contamination of waste streams.	Lead: PVCS & CXO(COS) Support: CXO(COTS) & CWWE	Audits and data review complete.	Q4 2025
	CR1.2: Focus on main waste items/source areas and create circular economy opportunities, including elimination of	Lead: PVCS & CXO(COS) Support: CXO(COTS) & CWWE	Main waste items/sources identified.	Q4 2025
	single use items wherever possible (GV9).		Management plan in place.	Plan in place Q2 2026



		Reduction in single use items	Q4 2027
CR1.3: Continue existing recycling streams (including e-waste, printer cartridges, batteries) and identify and implement	Lead: PVCS, ITS & CXO(COS) Support: HBI, CXO(COTS),	Opportunities for further recycling identified.	Q4 2025
opportunities to expand/introduce further recycling streams, including partnership with service providers and internal and external community groups.	WWE & Fin(Proc)	Further recycling streams implemented.	Q2 2026
CR1.4: Improve information available to staff and students for options to avoid disposal into landfill and develop and implement a comprehensive campaign to promote behaviours that support the circular economy (see ED1.3, RE1.1, RE6 & EN2).	Lead: PVCS Support: MCO & CXO	Program in place.	Q2 2025 onwards
CR1.5: Scope and implement a plan to reduce the on-site sale and distribution of single-use disposable food containers,	Lead: PVCS Support: CXO(COS), CXO(RS) & Fin(PP)	Scoping complete.	Q4 2025
<ul> <li>utensils, and beverage cups:</li> <li>Explore creation of a 'Waste Free Hub' including use of reusable crockery and cutlery;</li> <li>Explore BYO container opportunities with retailers; and</li> <li>Explore implementation of a mug library program.</li> </ul>		Plan in place (subject to scoping) and implemented.	Q2 2026 onwards
CR1.6: Scope and explore feasibility of waste to energy opportunities for residual general waste.	Lead: PVCS Support: CXO(COS) & Staff with relevant discipline- based expertise	Scoping complete.	Q4 2025



Waste Collection and Storage	CR2: Develop plan to enhance availability of, and access to, storage space/bins for	Lead: PVCS & CXO(RS), VCO(CD) & CXO(COS)	Plan developed.	Q4 2025
	<ul> <li>reuse/recycling streams:</li> <li>Provide loading bay and receivals area as part of Campus Development Plan, including equipment (e.g. cardboard compactor)</li> <li>Provide central storage location/s for unused items prior to reuse/redeployment.</li> <li>Review and improve availability of recycling stream/s bulk bins at strategic locations.</li> <li>Review and improve availability of internal and external bin stations, prioritising recycling streams.</li> </ul>	Support: ITS & CTS	Plan implemented.	Q2 2026 onwards
Materials Management	CR3: Review, improve and adequately resource (1FTE) equipment and furniture management systems and processes to ensure repair, sharing and redistribution are prioritised over disposal (GV8). Measures may include:  Improved asset recovery during staff offboarding process to ensure resources are retained centrally for redeployment;  Equipment share program, including storage and booking system;  External repair programs or adequately resourced internal repair centre;  Systems enabling equipment, furniture and other items that are no longer	Lead: PVCS, ITS, & CXO (COS) Support: Fin(Proc), HoS, COTS & PCO	Equipment management systems reviewed and updated.  Resourcing and program in place.	Q2 2025  Q4 2025 and ongoing



	<ul> <li>needed to be catalogued and stored for eventual reuse, donation or sale;</li> <li>Extended share and reuse program to student belongings (textbooks, lab coats, etc.) and partners (leasing, CLV) where possible; and</li> <li>Identification of recycling opportunities for furniture and equipment at end-of-life.</li> </ul>			
Construction & Demolition Waste	CR4: Scope and implement a plan to divert 90 percent or more of construction and demolition (C&D) waste from disposal through recovery operations:  Baseline construction and demolition waste; and Contractors ensure maximum diversion from landfill and show evidence of method to achieve (see GV 9.1).	Lead: PVCS Support: VCO(CD) & CXO(COS)	Scoping complete.  Plan for C&D waste in place.	Q4 2025 Q1 2026
Industrial and Hazardous Waste Management and Disclosure	<ul> <li>CR5: Scope and implement industrial and hazardous waste management program or protocol to include:</li> <li>Measures to minimise or reduce the use of hazardous materials;</li> <li>Legally compliant storage prior to collection for disposal; and</li> <li>Legally compliant disposal.</li> </ul>	Lead: HSW Support: PVCS, VCO(CD) & CXO(COS), COTS, CWWE, PVCELS & PVSSTEM	Management program in place.	Q1 2026 ongoing
	CR5.1: Publish information annually about the specific types of industrial and hazardous waste generated and how they are disposed of, recycled, and/or prepared for reuse.	Lead: HSW & PVCS Support: COTS, CXO(COS), PVCELS & PVSSTEM	Published annually as part of Sustainability Report. (GV8.2).	Q1 2026



Divert Organics from Landfill	<ul> <li>CR6: Scope and implement plan that diverts organics from landfill, due to the impact this waste source has on GhG emissions:</li> <li>Organic food recovery program from across campus, including food and beverage tenancies;</li> <li>Compostable packaging diversion from landfill;</li> <li>Expansion of organics waste diversion to Murdoch University Community</li> </ul>	Lead: PVCS & CXO(COS) Support: Community Garden & Guild Environmental Groups, CXO(RS), Fin(Proc), HBI, CWWE, TAHMU & Farm Operations	Scoping complete.  Plan to recover organics in place.	Q4 2025 Q2 2026
	<ul> <li>Gardens and/or anaerobic and pyrolytic treatment;</li> <li>Diversion of green waste from landfill by collecting and chipping/reusing on site;</li> <li>Diversion of laboratory, veterinary science and farm organics waste and deceased animals from landfill;</li> <li>Analysis of on-site or off-site processing; and</li> <li>Ongoing dialogue with Murdoch University researchers on organics waste initiatives and technologies.</li> </ul>			



# Transport (TR)

#### TRANSPORT (TR)

Actions listed below seek to reduce the university's transport and commuting related emissions and to monitor and report on progress toward our target of net zero transport and commuting emissions by 2030.

Focus	Action	Responsibility	Success Measure	Timeframe
Net Zero Transport Emissions Roadmap	TR1: Create and resource net zero transport emissions roadmap.	Lead: PVCS Support: Fin & CXO(COS), VCO(CD) & CXO(RS)	Resource in place.  Transport emissions roadmap created.	Q1 2025 Q1 2026
	TR1.1: Measure, track and report Scope 3 carbon emissions (see EG1.1).	Lead: PVCS Support: ITS, Fin & CXO & VCO	Emissions measured and tracked at least biennially.	Q2 2024 Ongoing
	TR1.2: Collect and analyse transport data, including staff and student travel survey, to determine transport trends and identify barriers and opportunities.	Lead: PVCS Support: CXO(COS)	Data collected and analysed.	Q3 2025, ongoing
Commute Modal Split – Reduce Single Occupancy Car Journeys	TR2: Reduce number of staff and students commuting by single occupancy car journeys.	Lead: PVCS Support: Fin, CXO(COS), CXO(RS) & PCO	Increase in students commuting by carpooling to 10 per cent and staff to 5 per cent (based on 2020 baseline) ascertained via annual travel survey (see TR1.2).	Measured annually  Reductions achieved by Q1 2027
	TR2.1: Review car-parking system including:  • Fees structure and value;  • Availability;	Lead: Fin, CXO(COS) & PVCS Support: CXO(RS)	Review complete and recommendations provided.	Q1 2026



	<ul> <li>Incentives to commute by carpooling;</li> <li>Administration of car parking, e.g. electronic permits; and</li> <li>Direct parking fee revenue towards sustainable transport initiatives</li> </ul>			
	TR2.2: Scope need for, and feasibility of, cross-campus connections (Perth, Rockingham, Mandurah and farm properties).	Lead: PVCS Support: CXO(COS), Fin & Heads of relevant Schools	Scoping complete.  Plan in place.	Q4 2025 Q4 2025
	TR2.3: Develop and maintain links to transport partners, including City of Melville, YourMove, Department of Transport, and Main Roads WA to collaborate for improved transport networks.	Lead: PVCS Support: CXO(COS)	Active collaboration with transport partners.	Commence Q4 2024
Commute Modal Split – Increase Active Transport	TR3: Increase number of staff and students commuting by active transport (defined as walking or cycling).	Lead: PVCS Support: CXO(AWE), CXO(COS), Fin & MCO	Increase in commuting by active transport to 10 per cent of students and 20 per cent of staff (based on 2020 baseline), ascertained via annual travel survey (see TR1.2).	Increase in active transport use annually from 2026
	TR3.1: Audit end-of-trip facilities (EOTF) available on campus.	Lead: PVCS Support: CXO(COS) & Fin	Audit complete.	Q4 2024
	<ul> <li>TR3.2: Develop plan to address barriers and opportunities to support use of active transport including:</li> <li>Review and refine processes (e.g., access to bike lockers and compounds);</li> <li>Improvement in infrastructure;</li> </ul>	Lead: PVCS Support: CXO(COS), CXO(SE), CXO(RS), VCO(CD) & HSW	Plan in place.	Q4 2025



	<ul> <li>Introduction of subsidies and incentives;</li> <li>Provision of bicycles for use on and around campus; and</li> <li>Promotion of social and health aspects of active transport.</li> <li>TR3.3: Include EOTF in all new buildings and major refurbishments in conjunction with Campus Development Plan (including retrofit of Boola Katitjin).</li> </ul>	Lead: VCO(CD) Support: PVCS, CXO(COS) & CXO(RS)	EOTF requirement incorporated in policies governing new buildings and refurbishments (GV8 & GV8.1).	Q1 2025
Commute Modal Split – Increase Public Transport	TR4: Increase number of commutes by staff and students using public transport.	Lead: PVCS Support: HSW & CXO  Lead: PVCS, CXO(RS) & HSW	Increase in commuting by public transport to 55 per cent of students and 35 per cent of staff (based on 2020 baseline), ascertained via annual travel survey (see TR1.2).	Targets reached by Q1 2027  Q4 2025 onwards
	<ul> <li>TR4.1: Partner with stakeholders (e.g. Public Transport Authority, Murdoch Health and Knowledge Precinct) to improve public transport offerings and infrastructure, including:</li> <li>Number and timing of bus services;</li> <li>Improved access to campus from surrounding public transport networks;</li> <li>Improve provision and safety of bus stops and live public transport information in conjunction with the Campus Development Plan;</li> <li>Provision of CAT (Central Area Transit) style shuttle bus from Murdoch Train Station, either</li> </ul>	Support: CXO(FM), CXO(CD) & CXO(COS)	Ongoing improvements in public transport infrastructure and services.	Q4 2025 Onwards



	permanently or during major events (e.g. graduation ceremonies or O- week). TR4.2: Scope and implement incentives	Lead: PCO & PVCS	Scoping complete.	Q4 2025
	for commuting by public transport.	Support: Fin & HSW	Plan in place.	Q2 2026
University Fleet	TR5: Review campus fleet, create a Fleet Management Policy and procedures/process to achieve efficiencies in fleet management (consider FTE resourcing requirement), including:  Reduction in university owned or leased vehicles;  Efficiencies and accuracy in collection of fuel use data for fleet and private; vehicles used for business travel; and  Plan to convert vehicle fleet to hybrid or electric/alternate fuel vehicles wherever possible.	Lead: Fin & CXO(COS) Support: PVCS, COTS, HSW & DVCR&I	Completed Fleet Management Policy	Q2 2025
Electric Vehicles	TR6: Review and implement an Electric Vehicle (EV) Charging Masterplan in conjunction with Campus Development Plan to improve infrastructure for EVs to support their uptake and use amongst staff and students; align with renewable energy coverage (see EG1).	Lead: VCO(CD) Support: PVCS, Fin, CXO(RS), CXO(COS)	EV Charging Masterplan completed.  Implement EV Charging Masterplan.	Q2 2025 Q4 2025
	TR6.1: Extend EV charging infrastructure	Lead: VCO(CD) & CXO(RS) Support: PVCS, Fin & CXO(COS)	Gradual rollout of rapid chargers for EVs on Murdoch campuses.	Q3 2025 and ongoing



Reductions in Emissions from Business Travel	<ul> <li>TR7: Review of travel policy with a view to:</li> <li>Identify preferred mode choices in a transport hierarchy</li> <li>Support reduction of emissions from business travel</li> </ul>	Lead: PVCS & Fin Proc Support: DVCR&I, ADR, DVCGE, PVCI & PVC Colleges & USO	Policy review completed.	Q4 2025
	<ul> <li>TR7.1: Facilitate travel by active or public transport for business travel where possible:</li> <li>Provide and encourage use of active transport options for use on and around campus; and</li> <li>Scope facilitation of additional support for use of public transport (for example, Transperth SmartRiders for business travel).</li> </ul>	Lead: PVCS Support: MCO, PCO, HSW & Fin(Proc)	Active transport options available to staff.  Promotion of active and public transport.	Q4 2025  Commence Q1 2026 (ongoing)
	<ul> <li>TR7.2: Scope opportunities to reduce emissions from business travel through means which may include:         <ul> <li>Reduce where possible, the number of flights (especially above economy class);</li> <li>Assess travel requirements for fieldwork activities (CR1.3); and</li> <li>Increase access to and use of alternatives to long distance travel (e.g. virtual meetings/video conferencing).</li> </ul> </li> </ul>	Lead: PVCS Support: DVCR&I, ADR, DVCGE, PVCI & PVC Colleges & USO	Scoping complete and recommendations provided  Recommendations in place where possible.	Q4 2025 Q2 2026
Measure and Manage Emissions from Student Air	TR8: Commit to record and scope measures to address emissions from student travel related to international	Lead: PVCI, DVCGE & PVCS Support: DVCE	Commence reporting under CABie (GV7.2).	Q3 2024 Q4 2024



Travel Relating to International Education (IE)	education (IE) (including study abroad and student exchange).		Engaged as signatory of the Climate Action Network for International Educators (CANIE) and member of the International Education Sustainability Group (IESG).	
Information and wayfaring	<ul> <li>TR9: Review and improve information available to staff, students and visitors on transport options, including:</li> <li>Online and printed maps;</li> <li>Online (intranet and external website) information;</li> <li>Signage and wayfinding around campus; and</li> <li>Create a 'one stop shop' for all transport enquiries.</li> </ul>	Lead: PVCS Support: MCO, CXO(COS), CXO(RS)	Information reviewed and updated	Q1 2025, ongoing
	TR9.1: Information provided to new students and staff to enable informed transport choices.	Lead: PVCS Support: MCO & PCO	Information provided as part of student O-day communications and staff onboarding	Q1 2025



## Biodiversity (BD)

#### **BIODIVERSITY (BD)** Actions listed below seek to protect, restore and enhance biodiversity values on Murdoch properties. Responsibility **Focus** Action **Success Measure** Timeframe **Nature Positive** BD1: Achieve net biodiversity gains in Lead: PVCS Net biodiversity gains year on year in Q4 2026 and Support: Staff with relevant relation to 2020 baseline (in line with relation to: ongoing discipline-based expertise, Nature Positive Pledge). habitat PVC Colleges, HoS, NB: definition forthcoming in connectivity between greenspaces VCO(CD), CXO(RS) & Biodiversity Management Plan (see Protected species and key indicator CXO(COS) (GV4) BD1.2). species: flora (e.g. banksias) fauna (e.g. quendas, cockatoos) BD1.1: Establish biodiversity baseline (flora Lead: PVCS Completion of biodiversity baseline. Q4 2025 and fauna) for South Street campus, Support: Staff with relevant NB: definition and boundaries especially all current and potential discipline-based expertise, forthcoming in Biodiversity conservation reserves, and scope/measure: PVC Colleges, HoS, Management Plan (see BD1.2). VCO(CD), CXO(RS) & Tree canopy; CXO(COS) (GV4) Completion of annual biodiversity Ongoing • Areas managed without use of harmful monitoring. fertilisers and pesticides; and • Vegetation (health, extent, structure and composition) & • Fauna (quantify vertebrate richness/diversity, priority species (TBC) population sizes and trajectories). Conduct annual biodiversity monitoring. BD1.2: Review, update, and resource (1FTE) Lead: PVCS & Farm Q2 2025 Plan resourced. implementation of Biodiversity Operations



Management Plan for especially for all existing and potential conservations	Support: FNG, PVCFN, NYI, SoIK, CXO(COS) & CXO(RS)	Plan reviewed and updated.	Q1 2026
reserves and protected species managed by the university, including:  Soils;  Land use;		Plan implemented.	Q2 2026 and ongoing
<ul> <li>Farm properties;</li> <li>Integrated pest, disease and weed management; and</li> <li>Priority listing of flora and fauna.</li> <li>To be undertaken in consultation and</li> </ul>			
collaboration with First Nations stakeholders to ensure culturally sensitive approaches to land management.			
<ul> <li>BD1.3: Identify areas of high conservation value for potential protection and protect and enhance existing conservation reserves with a view to increasing:</li> <li>Conservation reserves;</li> <li>Tree canopy; and</li> <li>Areas managed without use of harmful fertilisers and pesticides.</li> </ul>	Lead: PVCS & CXO(COS) Support: Staff with relevant discipline-based expertise, PVC Colleges, HoS, VCO(CD) & CXO(RS) (supported also through education and research projects see ED4, RE1.2 & GV4)	Area of protected, restored or otherwise managed ecologically is equal to or greater than the total area of managed green space.	Ongoing
BD1.4: Review and improve biodiversity outcomes on university-managed farmland,	Lead: Farm Operations Support: CXO(COS), Staff	Review complete.	Q3 2025
(including the composition of pastures).	with relevant discipline- based expertise, PVC Colleges, HoS & PVCS (supported also through education and research projects (see ED4, RE1.2 & GV4)).	Enhanced biodiversity outcomes on farmland (2024-2027).	Q4 2026 onwards



Pest, Disease and Weed Management	BD2: Implement Integrated Pest, Disease and Weed Management Plan (see BD1.2), which provides clear control aims, objectives and operational guidance.	Lead: PVCS Support: Staff with relevant discipline-based expertise, PVC Colleges, HoS & CXO(COS) (supported also through education and research projects see ED4, RE1.2 & GV4)	Plan finalised and implemented.	Q1 2026
	BD2.1: Develop pilot project with Campus Operations Services to reduce and where possible eliminate use of known harmful fertilizers and pesticides.  NB: 'harmful' includes appropriate use and handling.	Lead: PVCS & CXO(COS) Support: Farm Operations, staff with relevant discipline-based expertise, (supported also through education, research and student volunteer projects (see ED4, RE1.2 & GV4).	Pilot project complete.	Q4 2025
	BD2.2: Increase areas managed without use of harmful fertilisers and pesticides, resulting in decreased percentage of areas managed by known harmful pesticide control of invasive plant and animal species throughout campus.	Lead: PVCS Support: CXO(COS) & Farm Operations	No use of known harmful fertilizers and pesticides.  Decreased percentage of total campus under management by nonpesticide control for invasive plant and animal species.	Q3 2026 and ongoing
	BD2.3: Ensure grounds services team and providers provide, on at least an annual basis, an inventory of fertilisers, pesticides and herbicides used on campus grounds.	Lead: PVCS & CXO(COS) Support: Farm Operations	Annual report provided.	First report by Q4 2025, then ongoing.
	BD2.4: Make publicly available university's approaches to pest management for education and knowledge sharing.	Lead: PVCS Support: CXO(COS) & MCO	Pest management information shared online and via targeted channels	Q1 2026



# Water (WA)

#### WATER (WA)

Actions listed below seek to reduce scheme water and groundwater consumption, maximise water use efficiencies and protect surface and groundwater resources.

Focus	Action	Responsibility	Success Measure	Timeframe
Net Reductions in Scheme Water & Groundwater Use	WA1: Commit to realising net reductions in use of scheme water and groundwater at all university properties.	Lead: PVCS Support: CXO(COS) & Farm Operations	Net reductions in scheme water and groundwater use (2024 – 2027).	Q1 2025 ongoing
	WA1.1: Scope and create plans to capture, treat, reuse, and/or return water including (see GV4):	Lead: PVCS Support: Staff with relevant discipline-based	Scoping complete.  Plans in place.	Q4 2026 Q1 2027
	<ul> <li>Rainwater;</li> <li>Stormwater;</li> <li>Greywater; and</li> <li>'Third Pipe' systems for capture and treatment of 'black' water.</li> </ul>	expertise, PVC Colleges, HoS & VCO(CD)	Increased ratio of water recycled to total water withdrawal.	Ongoing, measured annually
Scheme Water Use	<ul> <li>WA2: Scope and implement plan to reduce scheme water use per gross floor area (GFA) (see GV4):</li> <li>Identify high water use areas;</li> <li>Audit water fixtures/equipment and prioritise outdated/inefficient fixtures;</li> <li>Install water-wise fixtures with high Water Efficiency Labelling and Standards (WELS) rating;</li> </ul>	Lead: PVCS Support: FNG, Staff with relevant discipline-based expertise, PVC Colleges, HoS & CXO(COS) CXO, VCO(CD) & MCO (supported also through education and research projects see ED4 & RE1.2)	Scoping completed.  Plan in place.	Q4 2026 Q1 2027



	<ul> <li>Improve reporting of asset faults (see GV 7.3);</li> <li>Adopt water sensitive design for landscaping and built infrastructure (GV8 &amp; GV8.1); and</li> <li>Promote water saving behaviours (see ED1.3, RE1.1, RE6 &amp; EN2).</li> </ul>			
	<ul> <li>WA2.1: Improve coverage and efficacy of submetering (including data loggers), including:</li> <li>Meter network review;</li> <li>Phased installation, prioritising high water use areas; and</li> <li>Single line drawing of network.</li> </ul>	Lead: CXO(COS) & CXO(FM) Support: PVCS	Continuous improvement.	Ongoing
	<ul> <li>WA2.2: Convert residual use of scheme water in landscaping to recycled water and adopt water efficiency measures, including:</li> <li>Use of native, drought-tolerant plants;</li> <li>Review of soil management to improve water penetration and retention; and</li> <li>Regularly review of irrigation schedule to reduce wastage.</li> </ul>	Lead: CXO(COS) Support: PVCS	Scoping complete.  Net reductions in demand for scheme water used for landscaping in line with WEMP.	Q4 2026 Q3 2027
	WA2.3: Continue to support ongoing comprehensive leak detection and repair programme including connection of meters to reporting software to enable real-time leak identification.	Lead: CXO(COS) & CSO(FM) Support: PVCS	Ongoing completion of leak detection and repair works in a timely manner.	Ongoing
Groundwater Consumption & Quality	<ul> <li>WA3: Reduce groundwater consumption to reduce impact on adjacent wetlands through:</li> <li>Consult and collaborate with First Nations stakeholders to ensure culturally sensitive approaches to water management</li> </ul>	Lead: CXO(COS), Farm Operations & Fin(PP) Support: PVCS	Decrease of groundwater consumption (2024-2027).  Pasture and amenity parkland areas quality	Q4 2026



	<ul> <li>Improved monitoring (i.e. metering and linking to a transparent and centralised control system)</li> <li>Improved soil management,</li> <li>Infrastructure and equipment upgrades (e.g. irrigation).</li> </ul>		maintained at 2020 levels and possibly enhanced.  Investments made in upgrades to irrigation infrastructure and monitoring methods.	
	WA3.1 Scope potential use of vertical flow constructed wetlands to purify black water for irrigation purposes (see GV4 & WA1).	Lead: PVCS Support: PVCFN, NYI, SolK, Staff with relevant discipline-based expertise, CXO(COS), CXO(RS) & VCO(CD)	Scoping complete.  Implementation pending scoping.	Q4 2026 Q1 2027
Water Pollution	WA4: Prevent contamination of, and decontaminate where necessary, ground and surface water to ensure water pollution (including PFAS) in Conservation Category Wetlands is reduced to an environmentally acceptable level.	Lead: Farm Operations, PVCS & CXO(COS) Support: DWER	Water of sufficient quality to be released into adjacent wetlands (e.g. release of water from Melaleuca Swamp into Beeliar Wetland Chain (i.e. Coolbellup / North Lake).	Q4 2025
	WA4.1: Develop guidelines and provide training for spillage prevention, management, spill kit use and incident reporting for chemicals used on campuses.	Lead: HWS, CXO(COS) Support: PVCS, CXO(CPS)	Guidelines and staff training in place.	Q4 2025
	WA4.2: Monitor ground water quality and surface water quality in Chelodina, Melaleuca and North Lake, including:  • Identify and mitigate risks associated	Lead: PVCS Support: VCO(CD) & Staff with relevant discipline- based expertise	Monitoring ongoing annually.  Water quality improved.	Commencing Q4 2024 Q4 2027
	with nutrient and other contaminant export to the wetlands.		Transfer pump unnecessary and decommissioned.	Q4 2027



WA4.3: Scope potential for water treatment	Lead: PVCS	Scoping complete.	Q4 2026
(e.g. algae and vertical wetlands).	Support: Staff with		
	relevant discipline-based	Implementation pending	Q1 2027
	expertise, CXO(COS),	scoping.	
	CXO(RS) & VCO(CD)		

# Climate Resilience (CL)

CLIMATE RESILIENCE  Actions listed below seek to enhance climate change resilience, risk assessment and mitigation on campus relating to infrastructure, natural environment & human wellbeing.					
Focus	Action	Responsible	Success Measure	Timeframe	
Climate Resilience Risk Assessment and Mitigation	CL1: Conduct a baseline assessment to identify vulnerabilities on our campuses related to likely climate change scenarios and in the local community.	Lead: PVCS Support: HBI, staff with relevant discipline-based expertise & CXO(COS)	Finalised baseline assessment.	Assessment complete Q2 2026	
	CL1.1: Draft and implement a risk matrix and plan for climate change risk mitigation (infrastructure, natural environment & human wellbeing) informed by First Nations knowledge of, and contribution to climate resilience (see GV3), to enhance the climate resilience of our campuses.	Lead: PVCS, PVCFN & ARCM Support: HBI, Staff with relevant discipline-based expertise (GV4) & CXO(COS), Solk & FNG	Finalised climate resilience risk mitigation plan and active implementation.	Q3 2026 onwards	
	CL1.2: Include Sustainability representative on Audit and Risk Committee to ensure ongoing work and focus on climate resilience efforts.	Lead: PVCS & ARCM Support: USO	Sustainability Representative appointed to Audit and Risk Committee (GV3).	Q1 2025	
				Q1 2025 and ongoing	



	CL1.3: Conduct an audit of natural resources at each campus to understand and quantify their contribution to carbon capture and storage. Prioritise these resources for protection, conservation and enhancement (see BD1.2)	Lead: PVCS Support: HBI, CXO(COS) & DVCELS	Climate resilience as standing agenda item for Sustainability Committee to be briefed by Climate Resilience Advisory Group. Audit completed.  Integration of priority areas into Biodiversity Management Plan.	Q4 2025 Q1 2026
	CL1.4: Enhance and maintain a tree register including tree health, carbon capture and storage value, financial contribution to climate mitigation and resilience.	Lead: PVCS & CXO(COS) Support: HBI & DVCELS	Tree register established.  Data inclusion into university's carbon balance.	Q4 2024 Q2 2025
	CL1.5: Integrate climate impact considerations and contingency plans for extreme weather events and impacts (including fire, water shortage and heat) into policies governing infrastructure and landscape design (see GV6 & GV6.1).	Lead: PVCS, HSW & ARCM Support: CXO(COS) & USO	Review of existing policies completed.  Climate change considerations integrated into existing/new policies	Q4 2025 Q1 2026
			and contingency plans in place.	
Wellbeing & Work	CL2: Create strategies and programs to support and foster a holistic approach to student and employee support, access, equity, engagement and wellbeing (GV2).	Lead: PCO, HWS & CXO (AWE), PVCEDI Support: PCVFN & PVCS	Ongoing review, and development of strategies and support programs.	Ongoing
First Nations and Community Wellbeing	CL3: Recognise the uneven impacts of climate change on communities; support strategies and programs to foster health, safety, and wellbeing (GV2).	Lead: PVCFN, SoIK, NYI, PCO, HWS & CXO, PVCEDI Support: PVCS	Ongoing review, and development of strategies and support programs.	Ongoing



## Glossary

Active transport

The transport of goods and/or people through non-motorised means, requiring human physical activity (e.g. cycling, walking).

AdvanceHE Framework for Education for Sustainable Development (ESD) The ESD Framework, designed by AdvanceHE, a UK-based charity that promotes inclusivity and sustainability in higher education, and seeks to equip students with the requisite skills to contribute to a sustainable future.

<u>Australasian Campuses</u> <u>Towards Sustainability</u> (ACTS) ACTS is a member-led organisation that supports campuses to play a pivotal role in the sustainability transformation, creating and supporting a range of programs, resources, developmental and networking opportunities for members.

Biodiversity

Biodiversity speaks to system variety in terms of having diversity of plant and animal species, which is highly important for ecosystem stability, productivity and resilience.

Boodiyar Djena Biddi Certificate The Boodiyar Djena Biddi Certificate, also known as Murdoch Mettle, is a certificate earned through completing a series of future-focused immersive experiences that build on the knowledge and skills obtained through a degree. The certificate recognises students for demonstrating citizenship and leadership in the areas of First Nations, Equity, Diversity and Inclusion and Sustainability.

**CANIE Accord** 

CANIE is an international education practitioners' initiative that seeks to drive action on climate change. The CANIE Accord is an institutional pledge that strengthens organisational commitments to the decarbonisation of international education. The initiative is well-aligned with the Climate Action Barometer for International Education.

Carbon neutral

Carbon neutrality is achieved when an entity that produces carbon emissions removes the same volume of carbon emissions from the Earth's atmosphere.

Carbon offset

Carbon offsets compensate for emissions of carbon dioxide or other greenhouse gases by way of reducing, avoiding or removing emissions elsewhere.

Carbon positive

Carbon positivity goes beyond reaching net-zero emissions for it is about extracting more carbon from the atmosphere than is released.

Circular economy

In a circular economy, materials never become waste, allowing nature to regenerate. This is achieved through processes such as maintenance, reuse, refurbishment, remanufacture, recycling, and composting so that products and materials are kept in circulation.

Climate Action Barometer for International Education (CABie™) CABie is a global benchmark, designed specifically for the international education sector, that enables the tracking and comparing of sustainability policies, practices and emissions for international education. Murdoch University became a CABie signatory in 2023 and will commence reporting in 2024.

Climate resilience

The ability of human and environmental systems to withstand and cope with climate hazard events.



Conservation reserve Areas set aside for the protection of biodiversity and/or natural or cultural

heritage values.

Courseloop Murdoch University's curriculum management system.

Cultural Land Management Cultural land management encompasses a range of environmental, natural

resource, commercial, economic and cultural activities that are based on holistic relationships between First Nations societies and their ancestorial

lands and seas.

End-of-trip facilities (EOTF) End-of-trip facilities are designated places, such as showers, locker facilities

and secure bike parking, that support people who use active modes of

transport for commuting.

Greenhouse Gas (GhG) Heat-trapping greenhouse gases such as carbon dioxide (CO<sub>2</sub>), methane or

sulphur dioxide, which drive global warming.

Gross Floor Area (GFA m<sup>2</sup>) At Murdoch University, the gross floor area is the sum of the floor areas of

the spaces within the buildings on its campuses.

CO2-e is the abbreviation for 'carbon dioxide equivalent', which beyond

carbon dioxide accounts for other greenhouses gases including methane,

nitrous oxide, ozone and water vapor.

**Emissions Inventory** 

Boundaries

For scopes 1 and 2 the following facilities are included:

**Owned facilities** 

Main Campus South Street (Perth)

Rockingham Mardella Farm **Leased Facilities** 

Mandurah

Mundijong Farm

Health Futures Institute ANPC (Fiona Stanley)

Yawardani Jan-ga Equine Assisted Learning Program (Broome)

Singapore Dubai

**Unmetered Facilities** 

Coral Bay Research Station Food Futures Institute (Peel)

For scope 3 emissions the following emissions categories are included:

**Upstream scope 3 emissions** 

Category 1: Purchased goods and services Category 3: Fuel and energy related activities Category 5: Waste generated in operations

Category 6: Business travel

Category 7: Employee commuting **Downstream scope 3 emissions** 

Category 13: Downstream leased assets

Indigenous Cultural and Intellectual Property (ICIP)

Often also referred to as "cultural heritage", ICIP refers to all aspects of Aboriginal and Torres Strait Islander peoples' traditional knowledge and cultural expressions, including stories, songs, language and sacred information. The UN Declaration on the Rights of Indigenous Peoples



recognises ICIP rights, which are underpinned by the principles of self-determination and free, prior and informed consent.

Innovative Research Universities (IRU)

IRU is a coalition of public universities across Australia committed to inclusive education and innovative research that advances our communities.

<u>International Association of</u> Universities (IAU) IAU seeks to be global voice of higher education for its 600 members to a wide range of international and inter-governmental organisations, in particular to UNESCO.

ISO14001

The international standard, developed by the International Organization for Standardization (ISO), for designing and implementing an environmental management system that improves environmental performance and compliance.

**Living Laboratory** 

Living laboratories are physical or virtual spaces for exploration, experimentation and collaboration within real-world contexts. At Murdoch University, the campus as a living lab is a test-bed for research, innovation and the co-production of knowledge, enabling a learning within and from the campus environment.

Murdoch University Strategy Ngala Kwop Biddi 2023 - 2030 Murdoch University's strategy, also known as *Ngala Kwop Biddi*, which translates to Building a Brighter Future Together, identified Sustainability as one of three key strategic themes and laid the foundation for this Sustainability Strategy.

Nature Positive

Ensuring more nature in the world in 2030 than in 2020 and continued recovery after that (Nature Positive Initiative, 2023).

**Nature Positive Universities** 

Nature positive is a commitment to enhancing biodiversity values by way of halting and reversing nature loss. The Nature Positive Pledge for universities commits organisations to conduct biodiversity baselines assessments, setting biodiversity targets, and reporting on progress towards achieving them.

Net zero carbon emissions

The term 'net zero carbon emissions' refers to the amount of GHGs that are removed from the atmosphere being equal to those emitted by human activity. In contrast to carbon neutrality, net zero places greater emphasis on mitigating emissions, only allowing offsetting unavoidable, residual  $CO_2$  as a last resort.

Open access

Free availability on the public internet, permitting any user to read, download, copy, distribute, print, search, or link to the full texts of peer-reviewed research articles, crawl them for indexing, pass them as data to software, or use them for any other lawful purpose, without financial, legal, or technical barriers other than those inseparable from gaining access to the internet itself. The only constraint on reproduction and distribution, and the only role for copyright in this domain, should be to give authors control over the integrity of their work and the right to be properly acknowledged and cited. [Adapted from the definition used by The Budapest Open Access Initiative.]



Perth to Peel Urban Greening Strategy 2023-2036 A Western Australian state government strategy designed to make the Perth and Peel regions greener, cooler and more liveable in the facing of a warming climate through education and urban greening measures.

Race to Zero – Universities and Colleges

Race to Zero is a higher education campaign supported by <u>EAUC</u>, <u>Second Nature</u> and <u>UN Environment Programme</u> which drives emission reductions in the tertiary sector. The Race to Zero pledge compels participating organisation to set climate targets in line with the Paris Agreement and to report on their progress towards meeting them.

Recovery and return water management

Water recovery is the process of treating and reusing wastewater, which is used at Murdoch University to reduce scheme and/or groundwater consumption. Treated water is also returned to local ecosystems to maintain their health, functions and resilience.

Science Based Targets initiative

The Science Based Targets initiative (SBTi) is a corporate climate action organization that enables companies and financial institutions worldwide to play their part in combating the climate crisis. Targets are considered 'science-based' if they are in line with what the latest climate science deems necessary to meet the goals of the Paris Agreement – limiting global warming to 1.5°C above pre-industrial levels.

Scope 1 emissions

Direct greenhouse gas (GHG) emissions that occur from sources that are controlled or owned by the organisation.

Scope 2 emissions

Indirect GHG emissions associated with the purchase of electricity.

Scope 3 emissions

Emissions from value chain activities (incl. purchased goods and services, business travel and employee commuting)

Senate Key Performance Indicators - Sustainability

Following the release of Ngala Kwop Biddi, two key performance indicators related to sustainability were set to track our progress toward our targets of net zero carbon emissions by 2030 and net zero waste to landfill by 2030. Progress toward these KPIs is reported to Senate on an annual basis. Sustainability KPI 1 - Net carbon emissions of operations (kgCO<sub>2</sub>e/m<sup>2</sup>GFA) Sustainability KPI 2 - Proportion of waste to landfill (kg/m<sup>2</sup>GFA).

Students Organising for Sustainability (SOS)

UK-based, student-led charity promoting sustainability education in the tertiary sector.

Sustainable Development

In 1987, the United Nations Brundtland Commission defined sustainable development as a development that 'meets the needs of the present without compromising the ability of future generations to meet their own needs'. This concept goes beyond environmental concerns, including economic and social aspects (WCED 1987).

Sustainability

Many definitions for sustainability exist, yet most lack specificity or a sound ecological logic. Farley and Smith (2020) provide scientifically robust definition, describing sustainability as "the ability of an activity to sustain a system by improving its quality and operating within its limits". In operational terms at Murdoch University, this means that we are seeking to maintain and enhance ecological values on our campuses while seeking continuously to reduce our overall environmental impact.



Sustainability challenge

An issue or situation that threatens or undermines ecological integrity, racial equity and social justice, or the ability of future generations to meet their needs (e.g., biodiversity loss, poverty and inequality, and climate change), OR a goal or objective that contributes to the resolution of such an issue or situation (e.g., ecosystem health, universal human rights, and renewable energy generation). To identify sustainability challenges, it may be helpful to reference the targets embedded in the Sustainable Development Goals (SDGs), the principles outlined in the Earth Charter, and/or the Doughnut of social and planetary boundaries. (ref. STARS)

Sustainability learning outcomes (based on <u>STARS</u> 2.2)

#### Sustainability-focused learning outcomes:

- Students will be able to define sustainability and identify major sustainability challenges.
- Students will have an understanding of the carrying capacity of ecosystems as related to providing for human needs.
- Students will be able to apply concepts of sustainable development to address sustainability challenges in a global context.
- Students will identify, act on, and evaluate their professional and personal actions with the knowledge and appreciation of interconnections among economic, environmental, and social perspectives.

#### Sustainability-supportive learning outcomes:

- Students will be able to demonstrate an understanding of the nature of systems.
- Students will have an understanding of their social responsibility as future professionals and citizens.
- Students will be able to accommodate individual differences in their decisions and actions and be able to negotiate across these differences.
- Students will be able to analyse power, structures of inequality, and social systems that govern individual and communal life.
- Students will be able to recognize the global implications of their actions

Sustainability-related research

**Direct – Sustainability as a Primary Outcome:** Research activities and scholarly work that explicitly address or explicitly focus on sustainability challenges with tangible outcomes relevant to the UN SDGs. (definition adopted from STARS)

Indirect – Sustainability as a Secondary Outcome: Research activities and scholarly work that implicitly address sustainability concerns, conceptually enrich the sustainability field, further our understanding of the interdependence of ecological and social/cultural/economic systems or discuss, debate or problematise sustainability approaches and/or drivers of unsustainability.

Sustainability Tracking,
Assessment & Rating
System (STARS)

A tool developed by and for higher education which recognises the unique missions, challenges, obligations, constraints, and opportunities of colleges and universities. It provides a tool for looking at all facets of our institutions—curriculum and research, campus operations, planning and institutional capacity—with the goal of aiding strategic planning, fostering cross-sector dialogue about sustainability on campus, and stimulating conversations and learning between institutions.



<u>UNESCO key competencies</u> for sustainability **Anticipatory competency:** the abilities to understand and evaluate multiple futures – possible, probable and desirable; to create one's own visions for the future; to apply the precautionary principle; to assess the consequences of actions; and to deal with risks and changes.

**Strategic competency:** the abilities to collectively develop and implement innovative actions that further sustainability at the local level and further afield.

**Collaboration competency:** the abilities to learn from others; to understand and respect the needs, perspectives and actions of others (empathy); to understand, relate to and be sensitive to others (empathic leadership); to deal with conflicts in a group; and to facilitate collaborative and participatory problem solving.

**Critical thinking competency:** the ability to question norms, practices and opinions; to reflect on own one's values, perceptions and actions; and to take a position in the sustainability discourse.

**Systems thinking competency:** the abilities to recognize and understand relationships; to analyse complex systems; to think of how systems are embedded within different domains and different scales; and to deal with uncertainty.

**Normative competency**: the abilities to understand and reflect on the norms and values that underlie one's actions; and to negotiate sustainability values, principles, goals, and targets, in a context of conflicts of interests and trade-offs, uncertain knowledge and contradictions.

**Self-awareness competency**: the ability to reflect on one's own role in the local community and (global) society; to continually evaluate and further motivate one's actions; and to deal with one's feelings and desires.

**Integrated problem-solving competency:** the overarching ability to apply different problem-solving frameworks to complex sustainability problems and develop viable, inclusive and equitable solution options that promote sustainable development, integrating the abovementioned competences."

<u>United Nations Sustainable</u> Development Goals (SDGs) Also known as Agenda 2030, the SDGs—adopted by all United Nations Member States in 2015—provide a global blueprint for achieving future sustainability, seeking to end poverty and other deprivations and pursuing strategies that improve health and education, reduce inequality, and spur economic growth — all while tackling climate change and working to preserve species and ecosystems.

Water Efficiency Labelling and Standards (WELS)

The WELS standard is Australian Standard 6400:2016 for water efficient products.

Western Australian Waste Strategy The State Government's Waste Avoidance and Resource Recovery Strategy 2030 (WARR) follows the same framework of the National Waste Policy, setting ambitious targets to achieve the vision for "Western Australia to become a sustainable, low-waste, circular economy" (Western Australia 2019, 10). An integral part of the strategy is the waste hierarchy concept, which prioritises strategies that Avoid waste, above Recovery and Disposal.



## List of Acronyms & Abbreviations

ACC Art Collection Curator

ACDC Annual Career Development Conversation
ACTS Australasian Campuses Towards Sustainability

ADL&T Associate Deans Learning & Teaching

ADR Associate Deans Research
A&P Alumni & Philanthropy

ARCM Audit, Risk & Compliance Management

CANIE Climate Action Network for International Educators

CD Campus Development
CDP Campus Development Plan
CPS College Professional Services
CSO Commercial Services Office

CWWE Centre for Water, Waste & Energy

CXO Chief Experience Officer

CXO(COS) Chief Experience Officer (Campus Operations & Services)

CXO(RS) Chief Experience Officer (Resource Scheduling)
CXO(SE) Chief Experience Office (Student Experience)
CXO(S&I) Chief Experience Officer (Strategy & Insights)
DirLT&T Director Learning, Teaching & Technology

DVCE Deputy Vice Chancellor Education

DVCGE Deputy Vice Chancellor Global Engagement
DVCR&I Deputy Vice Chancellor Research & Innovation

EDI Equity, Diversity and Inclusion
EFTSL Equivalent Full-Time Student Load

EOTF End-of-Trip Facilities

ExDirHBI Executive Director Harry Butler Institute

Fin(Proc) Finance (Procurement)
FFI Food Futures Institute
FM Facilities Maintenance
FTE Full-Time Equivalent
GhG Greenhouse Gases

GRO Graduate Research Office
HDR Higher Degree by Research
HFI Health Futures Institute

HoS Heads of School

HSW Health, Safety & Wellbeing

IAU International Association of Universities

IPRC Indo-Pacific Research Centre

IRAB Investor Responsibility Advisory Body

IRMA Integrated Research Management Application

IRU Innovative Research Universities
ITS Information Technology Services

L&D Learning & Development

LTT Learning Teaching and Technology
MCO Marketing & Communications Office
NYI Ngangk Yira Institute for Change
OD Organisational Development



PCO People & Culture Office

PP Property Portfolio

PRME Principles for Responsible Management Education

PVCB Pro Vice Chancellor Business

PVC Colleges Pro Vice Chancellors of all Murdoch University Colleges

PVCEDI Pro Vice Chancellor Equity, Diversity & Inclusion

PVCHE Pro Vice Chancellor Health & Education
PVCI Pro Vice Chancellor Health & Education

PVCELS Pro Vice Chancellor International PVCFN Pro Vice Chancellor First Nations

PVCLASS Pro Vice Chancellor Law, Arts & Social Sciences

PVCS Pro Vice Chancellor Sustainability

PVCSTEM Pro Vice Chancellor Science, Technology, Engineering and Mathematics

SDSN Sustainable Development Solutions Network

SLT Senior Leadership Team

SoHASS School of Humanities, Arts & Social Sciences

SoE School of Education

SolK School of Indigenous Knowledges
SOS Students Organising for Sustainability

TEFMA Tertiary Education Facilities Management Association

USO University Secretary Office VCO Vice Chancellor's Office

WEMP Water Efficiency Management Plan