

Harry Butler Institute

Strategic Plan 2025–2030

Acknowledgment of Country

The Harry Butler Institute acknowledges the Traditional Owners of Country throughout Australia. We pay our respects to Elders past and present.



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Message from the **Executive Director**



Prof Treena Burgess
Executive Director,
Harry Butler Institute

The Harry Butler Institute (HBI) leads research that bridges the natural and applied sciences, industry and policy, and knowledge systems from the ecological to the cultural. In shaping our 2025–2030 Strategic Plan, we have built on our track record of delivering real-world impact through scientific excellence, industry partnerships, and community engagement.

At the core of the strategy are the Five Ps—People, Partnerships, Projects, Promotion and Policy. These pillars reflect our commitment to doing research that matters: empowering the next generation of researchers, co-creating knowledge with Traditional Custodians, generating solutions for environmental sustainability, and translating our science into actionable outcomes.

We are deeply aligned with Murdoch University's *Ngala Kwop Biddi* 2023–2030 Strategy and the cross-cutting themes of Sustainability, First Nations engagement, and Equity, Inclusion and Diversity. Our research centres operate across diverse domains, from biosecurity to aquatic and terrestrial ecosystems, energy and waste, and together exemplify the kind of interdisciplinary and mission-driven science that Murdoch champions.

This is an ambitious plan, and its success depends on collective effort. I extend my gratitude to the dedicated staff, students, partners and supporters who continue to contribute to HBI's journey. Together, we will build a brighter, more sustainable future grounded in evidence, inclusion and shared purpose.



Prof Treena Burgess
Executive Director,
Harry Butler Institute

Our **Mission**

To drive transformative research that advances environmental sustainability, delivering practical, evidence-based solutions through strong partnerships with government, industry, and communities.



Overview

The Harry Butler Institute (HBI) was established in 2017 and subsequently four research centres were developed to cover different aspects of environmental sustainability:

- Biosecurity and One Health
- Sustainable Aquatic Ecosystems
- Terrestrial Ecosystem Science and Sustainability
- Water, Energy, and Waste

As an institute, we are closely aligned with Murdoch University's strategic pillars of Sustainability, Equity, Diversity and Inclusion, and First Nations Engagement.

The vast majority of our members are based within the University's Colleges, with relatively few research-only staff directly within HBI. This strong connection with the Colleges is integral to our success.

Research Centres



Centre for **Biosecurity and One Health**



Centre for **Sustainable Aquatic Ecosystems**



Centre for **Terrestrial Ecosystem Science and Sustainability**



Centre for **Water, Energy, and Waste**

Strategic Pillars

Sustainability

Be a leading university in education, teaching and translational research in sustainability and sustainable practices.

Equity, Diversity and Inclusion

Build a welcoming, diverse and inclusive community.

First Nations

Become the University of Choice for First Nations peoples.

Governance

HBI operates under a governance structure led by an Executive Director, four Centre Directors, and Deputy Centre Directors, who collaboratively make management decisions.

Our core focus is on stakeholder collaboration to address real-world challenges, alongside a strong commitment to community engagement and outreach.



Vice Chancellor
Murdoch University

Deputy Vice Chancellor
Research and Innovation

Executive Director
Harry Butler Institute

Communications and Outreach

- Education and outreach
- Community engagement
- Events
- Public lectures
- Media engagement
- Social media
- HBI website management
- Reports and newsletters
- Video production

Operations

- Institute executive support
- Office management
- Recruitment and onboarding
- Financial management
- Budgetary planning
- Business development
- Safety and facility requirements
- Research ethics oversight
- Governance frameworks
- Industry engagement

Centre for Biosecurity and One Health

- Environmental biosecurity
- Prediction modelling
- Early detection
- Rapid response
- Best practice quarantine
- Integrated pest management
- Protecting food systems
- Biosecurity compliance
- Plant and animal diseases
- Antimicrobial resistance

Centre for Sustainable Aquatic Ecosystems

- Ecological restoration
- Megafauna monitoring
- Aquatic pest management
- Habitat assessment
- Impact of climate change
- Aquatic flora and fauna
- Marine ecosystems
- Rivers, estuaries, wetlands

Centre for Terrestrial Ecosystem Science and Sustainability

- Biodiversity conservation
- Climate change modelling
- Fire ecology
- Restoration ecology
- Animal morphology
- Livestock welfare modelling
- Threatened species
- Pest animal management
- Wetland ecology
- Plant health

Centre for Water, Energy and Waste

- Farm water supply
- Desalination and recycling
- Algal biotechnology
- Small wind turbines
- Solar panels and micro grids
- Smart cities — IoT and AI
- Extractive metallurgy
- Smart batteries
- Geopolymer concrete
- Circular economy

The Five Ps

At our 2024 strategy day we diligently developed our new strategy based on the Five Ps, ensuring this aligned to the overarching R&I Strategy for Murdoch University. The Five Ps—People, Partnerships, Projects, Promotion and Policy—form the foundation of the Harry Butler Institute's strategy to advance environmental sustainability.

These interconnected pillars enable HBI to achieve its mission of conducting impactful research, fostering collaboration, and engaging with the broader community.

This measurably enhances the reputation of Murdoch University as a leader in research that underpins environmental sustainability.

People
Empowering Staff and Students

Partnerships
Building and Sustaining Relationships

Projects
Developing and Delivering Thematic Research

Promotion
Communicating and Amplifying Impact

Policy
Translating Research into Policy Outcomes



1. People

Empowering Staff and Students

Objective: Empower staff and students through professional development, collaboration, and wellbeing initiatives to drive excellence and innovation.

Initiatives

- Establish an HBI Teams site to centralise communication and resources.
- Offer leadership, cultural awareness, project management, and mentoring opportunities.
- Strengthen collaboration with Colleges through joint events, HDR student supervision and projects.
- Support ECRs and HDR students via targeted funding, mentorship, and training.
- Act on staff feedback from the MU engagement survey.
- Prioritise staff wellbeing via the ACDC process and flexible working arrangements.
- Develop interdisciplinary initiatives across Centres and showcase progress.
- Audit and advocate for research facility improvements.

Expected Outcomes

- **Improved staff engagement and professional development uptake.**
- **Increased staff satisfaction and participation in annual engagement surveys.**
- **Grant success for staff and students.**
- **A strong vibrant culture of publishing and sharing research outcomes.**



Chris O'Brian awarded HBI Scholarship.
Photo Kat Sambrooks

2. Partnerships

Building and Sustaining Relationships

Objective: Build and sustain strong relationships with government, NGOs, industry, Traditional Custodians , and community stakeholders to amplify the reach and impact of HBI's work.

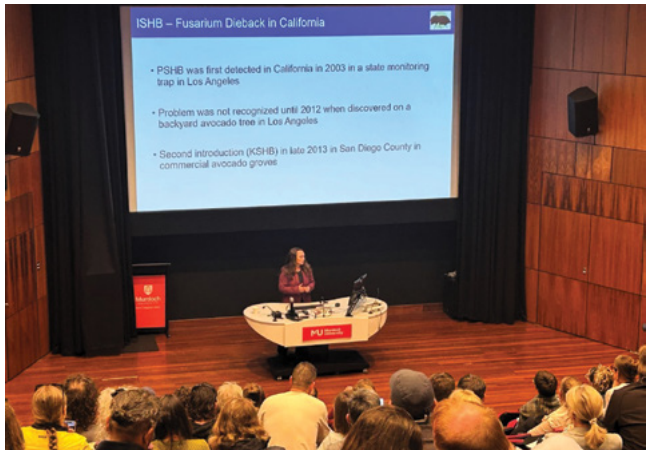
Initiatives

- Host stakeholder workshops to co-develop research priorities.
- Strengthen collaborations with Traditional Owner groups.
- Each Centre to host an annual showcase event.
- Hold an annual HBI Industry and Research Forum.
- Launch the HBI Visiting Scholar Scheme.
- Expand regional partnerships (e.g. Rockingham, Pilbara).
- Establish Centre-specific Stakeholder Groups.
- Develop partnerships aligned with HBI's thematic priorities.

Expected Outcomes

- **Annual growth in collaborative research projects and external research income.**
- **5–10 international scholars hosted annually.**
- **Hubs of research and outreach activities in regional centres (e.g. Rockingham).**





Shannon Lynch visiting scholar PSHB public lecture.
Photo Dannon Wu

3. Projects

Developing and Delivering Thematic Research

Objective: Drive innovative, large-scale research initiatives that address pressing environmental sustainability, conservation, and biosecurity challenges.

Initiatives

- Launch flagship programs in aquatic and terrestrial ecosystems, water-energy-waste, eDNA, and biosecurity.
- Align projects with the UN Sustainable Development Goals (SDGs).
- Foster interdisciplinary collaboration across Centres and Colleges.
- Increase administrative support for managing large projects.
- Appoint a Research Project Development Officer.

Expected Outcomes

- **At least two new flagship projects launched by 2027 aligned with SDGs.**
- **Annual increase in interdisciplinary publications in Tier 1 journals.**



4. Promotion

Communicating and Amplifying Impact

Objective: Enhance the visibility and influence of HBI's research through effective communication, events, and outreach.

Initiatives

- Produce high-quality content with the Communications Manager and Videographer.
- Develop K-12 educational materials with the Education Specialist.
- Deliver research incursions into local schools.
- Host seminars, webinars, and public workshops.
- Publish an annual HBI Report highlighting key outcomes.
- Regularly engage with media outlets to delivery expert commentary on issues around sustainability.
- Hold centre-based thematic events and an annual HBI showcase.
- Share research via social media, podcasts, and videos.

Expected Outcomes

- **10+ multimedia pieces highlighting HBI research produced annually.**
- **Educational materials distributed to at least 20 schools by 2027.**
- **Four public engagement events annually with ≥90% attendee satisfaction.**
- **25,000 annual digital views by 2027.**



Bug Blitz Education program livestream.
Photo Dannon Wu



HBI Wetland Science Program.
Photo Pauline Charman

5. Policy

Translating Research into Policy Outcomes

Objective: Position HBI as a trusted source of science-based policy advice by translating research into accessible, practical outputs.

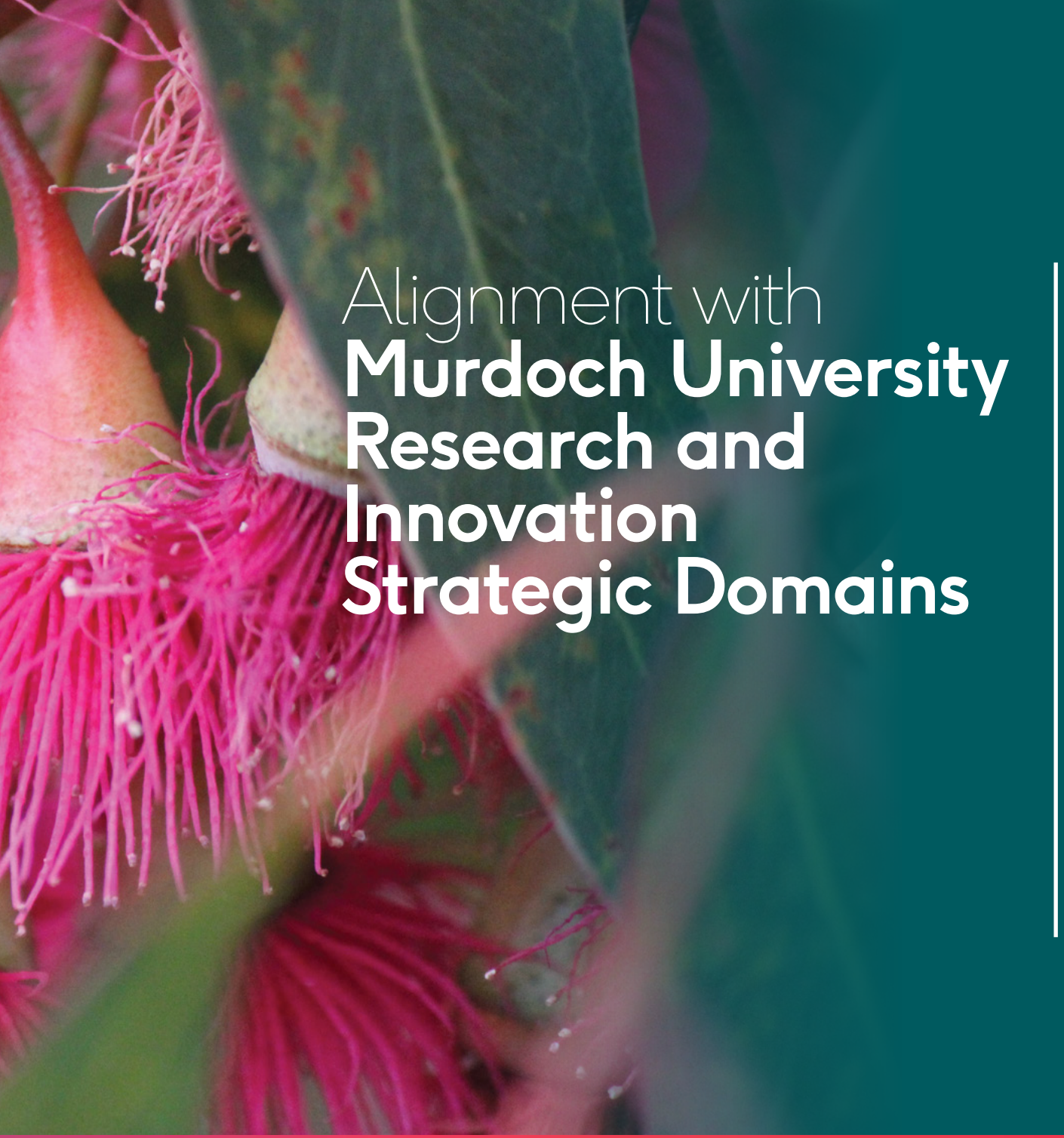
Initiatives

- Establish an HBI Policy Hub.
- Publish concise, high-impact policy briefs.
- Use Overton database to track policy influence.
- Maintain a searchable repository of policy outputs.
- Facilitate training in communicating management and policy implications of science outputs.
- Proactively engage with government bodies on management policy implications of research.
- Engage with NGOs and community organisations regarding evidence-based materials.

Expected Outcomes

- **Ten new policy briefs published and made accessible.**
- **Increased government engagement on research implications, and evidence of policy uptake.**
- **Demonstrable impact on new or revised policy by 2030.**





Alignment with Murdoch University Research and Innovation Strategic Domains

Culture
Foster inclusivity, collaboration, and development. (People, Promotion)

Partnerships
Strengthen ties with external stakeholders. (Partnerships).

Impact
Conduct translational research for sustainability. (Projects, Promotion, Policy).

Support
Enhance infrastructure and operational excellence. (People, Promotion, Policy).

Graduate Research
Build capacity in future research leaders. (People)

Research Infrastructure
Invest in world-class research tools and facilities.


Container #
0041




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Office of the Executive Director Harry Butler Institute

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Murdoch University

Harry Butler Institute

Ngala kwop biddi.
Building a brighter future, together.