



Australia's National
Science Agency

Sustainable CSIRO

Safeguarding our future through our
Sustainability Strategy 2020-2030

Strategy highlights
March 2021



Cover: CSIRO has been adding solar power generation and consolidating its property footprint in Perth.

Below: The world-leading Australian Square Kilometre Array Pathfinder radio telescope is lighting up frontiers of CSIRO science and sustainability. This photo was taken to coincide with CSIRO's participation in the 2019 Sydney Mardi Gras.

Sustainable CSIRO outlines our sustainability vision and provides a snapshot of how, as Australia's national science agency, we are shaping our future through our Sustainability Strategy.



Sustainability is at the core of our purpose

We solve the greatest challenges through innovative science and technology.

CSIRO's purpose is to provide innovative scientific and technology solutions to national challenges; with opportunities to benefit industry, the environment, and the community, through scientific research and capability development, services, and advice.

Our key areas of research are focussed on Australia's greatest **challenges**, identified as:

- Food security and quality
- Health and wellbeing
- Resilient and valuable environments
- Sustainable energy and resources
- Future industries
- A secure Australia and region

Sustainability is therefore at the core of CSIRO's purpose.

The science and research we undertake deliver national benefits by providing solutions that protect our quality of life, our economic health and preserve our unique environment and our position in a globally competitive world.



Our science delivers national benefit by providing solutions that protect our quality of life, our economy and our unique environment.

Why have a sustainability strategy?

This Sustainability Strategy aims **to improve CSIRO's own performance in relation to its environmental and social impact, including application of CSIRO technical expertise and innovations where possible to solve internal challenges, and to improve governance and transparency of sustainability actions.**

CSIRO is a vast and complex organisation, with over 5,500 employees spread over 56 sites, comprising over 1,000 buildings, located both nationally and internationally. CSIRO manages one of the largest property portfolios among Commonwealth Government agencies, with a large environmental footprint. We are an Australian Government statutory authority. In addition to our own research, we look after National Facilities on behalf of the Australian government, such as the Australian Centre for Disease Preparedness, the National Research Collections and Marine National Facilities. We conduct world class research on behalf of the nation and nurture and develop young scientists. An organisation of this magnitude faces its own sustainability challenges.

CSIRO has made good progress in reducing its operational environmental impacts; the last five years have seen a steady reduction in gas and electricity-related emissions, currently sitting at 15% below 2000 levels. The recent expiry of our Carbon Strategy 2020, and advances in international best practice in sustainability, have presented an opportunity to evolve our approach to 2030 and beyond. The development of this strategy has also provided an opportunity to identify gaps in our practices and ways that we can do things better, by understanding what is important to our staff, wider stakeholders, and our future.



Newcastle, NSW is to be a demonstration site for net zero emissions (NZE) implementation.

This Strategy addresses Objective 4 of our Corporate Plan ('Ensure the sustainability of CSIRO') and will guide strategic objectives, metrics and initiatives around CSIRO's environmental and social impacts, providing a clear and cohesive sustainability vision across the organisation.

This will include setting bold and challenging targets that address our emissions profile, improve efficiencies in our resources management and ensure a responsible value chain, to name a few. In addition, select CSIRO sites will be exemplars of sustainable practices and provide a model for implementation.

Sustainability Strategy vision:

To be an exemplar of sustainable culture and practice, befitting of a world class research organisation that has sustainability at its core.

United Nations Sustainable Development Goals

Alignment to the UN Sustainable Development Goals (SDGs)

The SDGs are a set of 17 global goals, agreed by all UN Member States, which provide a 'blueprint' for a sustainable future. The SDGs serve as an urgent call to action, providing a common set of goals and targets for governments and businesses alike to address the world's biggest sustainable development challenges. They also provide a 'sustainability lens' through which to view an organisation's activities.

Australia has adopted the SDGs and it is the responsibility of all governments, businesses, and civil society to progress the SDG targets. **As Australia's national science agency, CSIRO plays a leading role in Australia's contribution to the SDGs, addressing many through the six key challenges that represent our key areas of research.**

This Sustainability Strategy is therefore a further opportunity to highlight the vast impact that CSIRO is having on advancing the SDGs and the unique role it can play in bringing together partnerships which will enhance and accelerate positive outcomes.



CSIRO is advancing the Sustainable Development Goals both within its operations and externally.

Our approach

The development of this strategy was informed by a materiality assessment, which identified a list of 20 topics¹ considered material to CSIRO's sustainability performance. The topics were tested through stakeholder workshops including a validation workshop with members of CSIRO's Executive team.

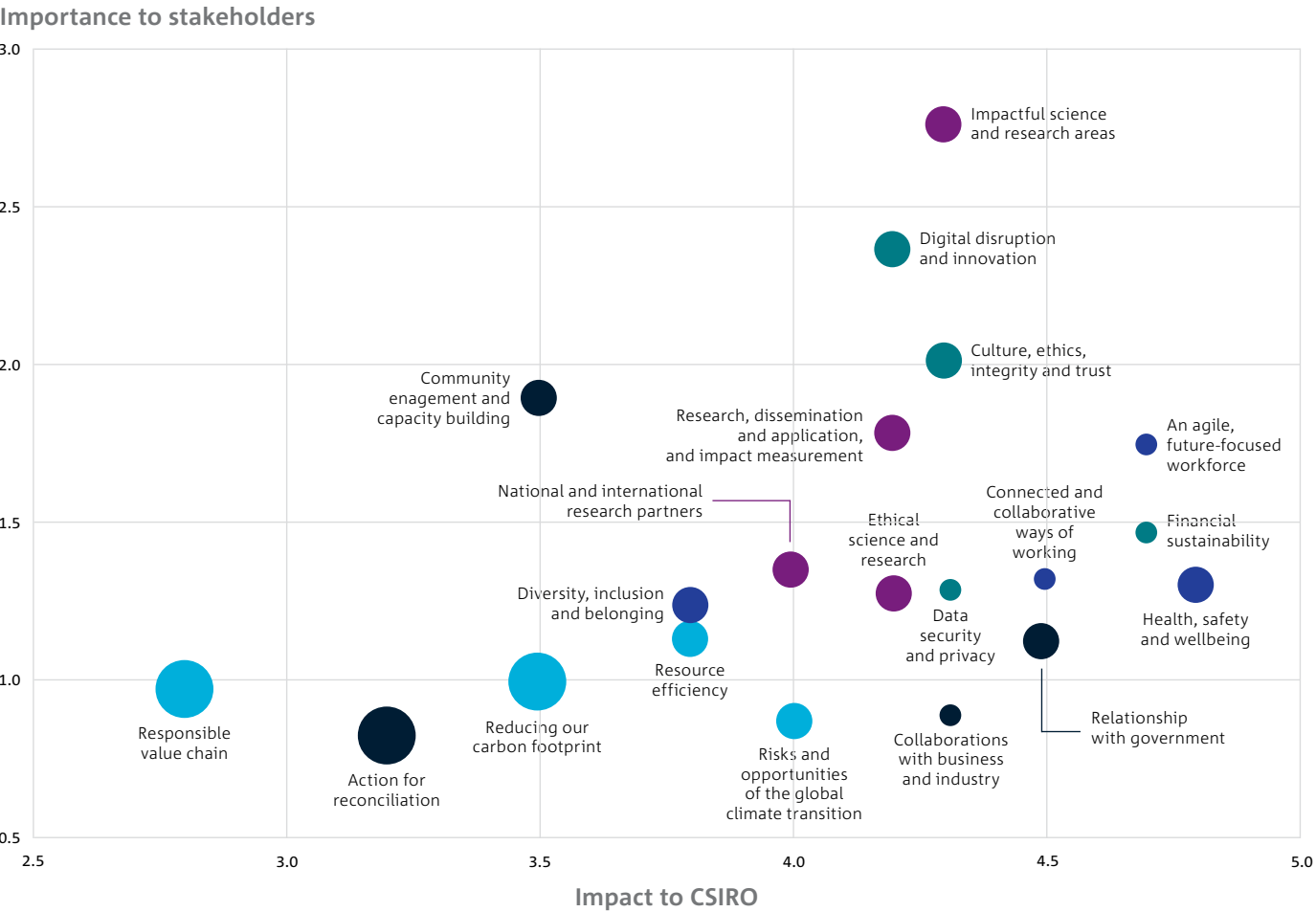
Following this, priority actions to improve the environmental and social impact of CSIRO's material issues, and to improve governance and transparency of sustainability performance, were identified under six key focus areas as set out on page 8. These actions also considered existing work and opportunities where CSIRO technical expertise could be applied to solve internal challenges.



CSIRO science is supporting solar charging infrastructure and introduction of electric vehicles to our fleet.

¹ The 20 topics are set out on page 7.

CSIRO Materiality Matrix



Time Scale

- Short term (feeling the impact now)
- Medium term (impact will become material in the next five years)
- Long term (impact felt out beyond five years)

Material topics

- Environmental and social impact
- Excellent science
- Foundations
- Our people
- Partnerships and engagement

Priority actions

The following table provides an overview of the priority actions identified under each focus area of our Sustainability Strategy.

TARGETS & MEASURES	WHEN	ALIGNMENT TO SDGS
Focus area 1- Governance and transparency: Increase transparency around sustainability performance through improved governance processes and systems, including regular public reporting aligned to the SDGs		
Establish Sustainability Steering Committee	By June 2021	8 DECENT WORK AND ECONOMIC GROWTH 16 PEACE, JUSTICE AND STRONG INSTITUTIONS 17 PARTNERSHIPS FOR THE GOALS
Develop performance measurement framework	By 2021	
Publish Sustainability Report	By 2022	
First refresh of materiality assessment	By 2025	
Report to Board	Annually to 2030	
Focus area 2- Excellent and impactful science: Apply CSIRO’s technical expertise to solve internal challenges, and respond to global priorities by creating internal and external partnerships that drive the SDGs		
Establish Sustainability Advisory group incorporating CSIRO science expertise	By 2021	17 PARTNERSHIPS FOR THE GOALS
Identify opportunities under CSIRO Missions program to apply science solutions to operational challenges	Ongoing annually to 2030	
Focus area 3- Our people and capacity building: Create a culture that supports our highly capable and diverse workforce on sustainable practices, and promote capacity building and understanding of sustainability issues through community and industry engagement		
Sustainability communications and engagement plan	By 2021	8 DECENT WORK AND ECONOMIC GROWTH 17 PARTNERSHIPS FOR THE GOALS
Develop training plan and material to improve sustainability skills of staff	Ongoing to 2025	
Focus area 4- Sustainable property portfolio: Ensure fit-for-purpose buildings, aspiring to net zero carbon impact, that stimulate excellent science and improve staff health and well-being		
Property Strategy Implementation Plan reviewed	By 2021	7 AFFORDABLE AND CLEAN ENERGY 9 INDUSTRY, INNOVATION AND INFRASTRUCTURE 11 SUSTAINABLE CITIES AND COMMUNITIES 13 CLIMATE ACTION
Sustainable Buildings strategy incorporating ESD and data capture systems	By 2021	
Physical climate risk assessment of property portfolio	By 2025	
New buildings maximise net zero carbon impact	Ongoing to 2030	
Consolidated and sustainable property portfolio	By 2030	

TARGETS & MEASURES	WHEN	ALIGNMENT TO SDGS
Focus area 5- Transition to a clean energy future: Improve energy demand management and efficiency to support the transition to net zero emissions		
Define organisational emissions boundary	By 2021	7 AFFORDABLE AND CLEAN ENERGY 12 RESPONSIBLE CONSUMPTION AND PRODUCTION 13 CLIMATE ACTION
Net zero emissions (NZE) pathway defined	By 2021	
Engage and align with CSIRO's NZE Mission team	By 2021	
Transitional climate risk assessment undertaken	By 2025	
Newcastle demonstration site achieves NZE	By 2025	
All CSIRO sites use 100% renewable electricity	By 2030	
Net zero scope 1 and 2 emissions achieved	By 2030	
Beyond net zero material scope 3 ¹ emissions achieved (noting this Board-approved target extends past this Strategy's 2030 end date)	By 2050	
Focus area 6- Responsible value chain and resource use: Understand the environmental and social impacts of purchase decisions, and embed circular economy thinking and the highest standards of responsible procurement		
Supplier due diligence processes reviewed to ensure supply chain integrity around environmental and social considerations	By 2025	6 CLEAN WATER AND SANITATION 12 RESPONSIBLE CONSUMPTION AND PRODUCTION 15 LIFE ON LAND
Water management strategy developed to improve efficiency	By 2025	
Develop waste strategy that aligns with National Waste Policy Action Plan	By 2025	
Target 80% recovery rate (by weight) for all waste streams	By 2030	



Responsible resource use and waste management is targeted within CSIRO's operations.

¹ Note that the inclusion of scope 3 emissions goes beyond the usual concept of NZE

Governance

Achievement of the Sustainability Strategy will require input and ownership of the targets across all research and support functions of CSIRO. Therefore, a comprehensive governance framework shall be established to support implementation of the Strategy.

The Executive Sponsor for implementation of the strategy is CSIRO's Chief Operating Officer. Two supporting committee's will also be formed - the Sustainability Steering Committee will provide oversight and strategic direction on progress and reporting, while the Sustainability Advisory Group will provide advice on aligning sustainability actions with leading science practice.

The Steering Committee shall determine when and how often issues relating to the Strategy shall be reported to the Executive Team and Board, with issues to be reported at least once per year.

A sustainability report will be developed and published by FY2022 and annually thereafter, detailing progress made on the priority actions. In line with CSIRO's rolling strategy approach, the Sustainability Strategy will be reviewed on a regular basis, and at least annually, to be able to adapt to rapidly changing circumstances or events.

The governance and reporting framework will enable CSIRO to manage, review, track and report its performance under the Strategy.



CSIRO Board on a visit to Lab22 - Australia's centre for innovation in metallic additive manufacturing. The Board oversees governance for CSIRO including for sustainability initiatives.



Our scientists are helping agricultural industries to sustainably feed and clothe Australians and grow our share of premium agribusiness markets.

As Australia's national science agency and innovation catalyst, CSIRO is solving the greatest challenges through innovative science and technology.

CSIRO. Unlocking a better future for everyone.

Contact us

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For further information

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