



Australia's National
Science Agency



Work with us to unlock
our sustainable future

Foreword

As Australia's population grows beyond 25 million, and climate change and competing demands for natural resources increase, the decisions we make around sustainability, adaptation and mitigation actions have never been more important.


Through our multi-disciplinary science and global networks, CSIRO aims to make a major contribution to these decisions, supporting our nation's resilience-building efforts and the sustainable management of our natural resources.

Cleaner and greener

Responding to the national challenge of 'Resilient and Valuable Environments', we deliver solutions for the sustainable development and stewardship of Australia's land, water, terrestrial ecosystems and communities.

Advancing this systems science is foundational to identifying pathways forward and making informed decisions and trade-offs around the current and future social, economic and environmental values associated with our natural and managed landscapes and our built environments.

We do this through fostering strategic relationships with our key partners and collaborating across the research ecosystem to address large and complex challenges at the interface of the environment, industry and society through integrated science and data.



Delivering solutions for sustainable development and stewardship of land, water, ecosystems and communities, valued at over \$12B in triple bottom line benefits.



We focus on regional and national outcomes through four key and interrelated impact areas:

- sustainable industries
- thriving communities, cities and regions
- sustainable water futures
- thriving natural systems.

National benefit

To achieve this, we are accelerating our investment and engagement in five priority areas to:

- inform and guide Australia's climate change and disaster resilience and adaptation efforts, particularly in the fields of bushfire and extreme event risk, planning of our regions, towns and cities, integrated supply chains and infrastructure assessments for increased resilience

- leverage our strengths in regional integrated water assessments to support national, state and local governments and authorities to ensure water security implications of climate change scenarios are taken into account in water planning, reform and infrastructure investment decisions
- focus efforts in sustainable waste management, enabling a national shift to a circular economy and the increasing demand for integrated legacy rehabilitation and contaminant management solutions
- build on our successful delivery of integrated biophysical/environment, social and economic assessments and regional-scale foresighting and decision support services that inform sustainable development of Australia's regions, and
- be a key partner in the development of CSIRO's Indigenous knowledge, rights and science, focused on land and water management, enterprise development, digital inclusion, and Indigenous-led initiatives.

Jane Coram
Director, Land and Water

Sustainable industries

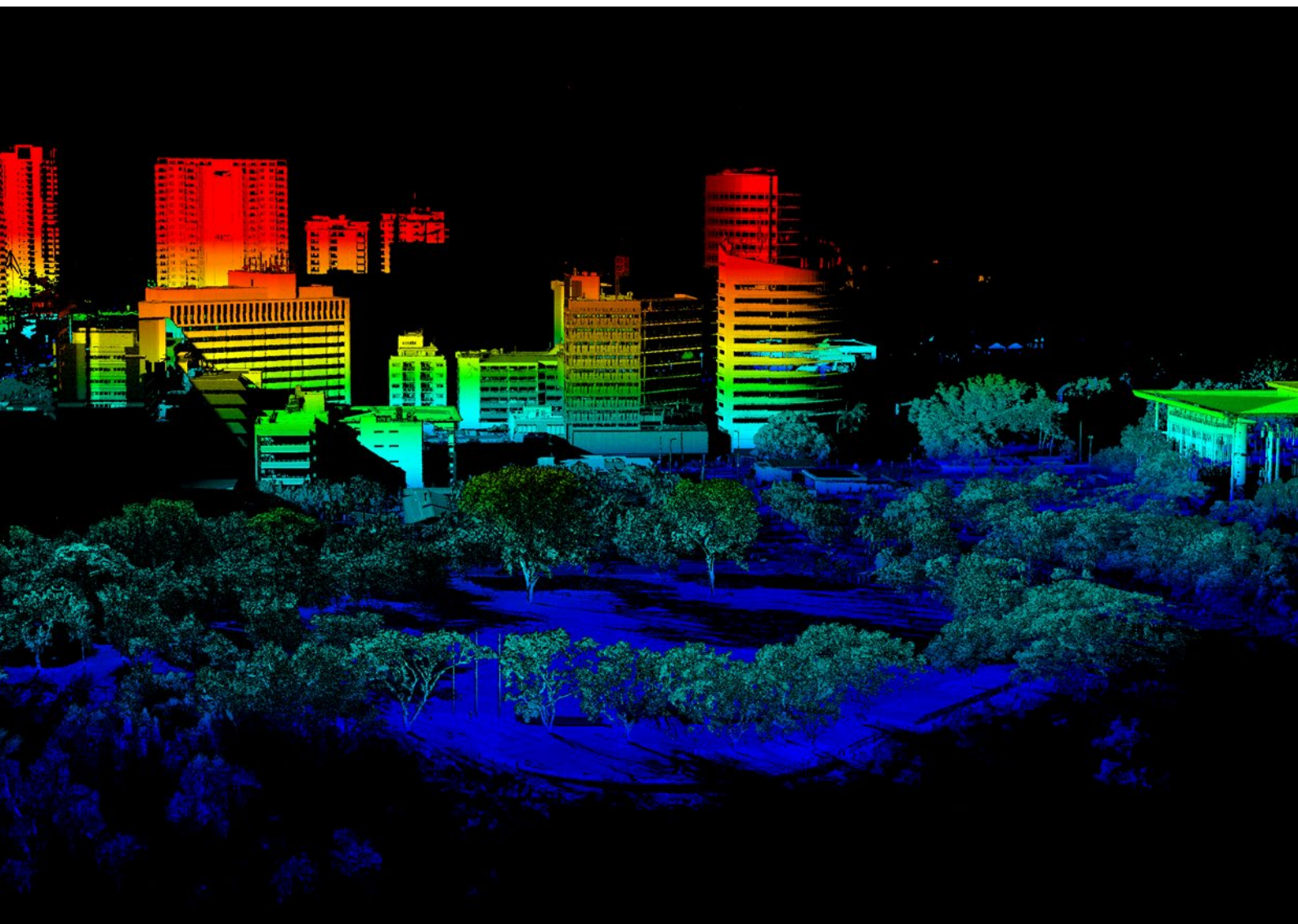
Industry prospers without detrimental impact and zero waste and pollution is achieved through a circular economy.

Zero harm industry

Supporting industry to operate without detrimental impact to the public, environment or economy through new clean/green production routes, contaminant management and new sensing systems to manage portfolio risk and enable directed end-of-life outcomes.

From waste to wealth and health

Enable a new era where waste can be repurposed for wealth or health opportunities, including transitioning it to new commodity or energy opportunities through novel resource recovery/ modification technologies. When not possible, secure human and environmental health through implementing novel remediation or safe disposal technologies to effectively remove our populations and environments from its effects.





Thriving communities, cities and regions

Communities, cities and regions, including Indigenous peoples, thrive economically and socially, and are resilient to climate change and disasters.

Sustainable and resilient regions, cities and communities

Developing diversified, sustainable economies and increasing resilience to climate change, through knowledge creation, sharing and joint decision-making.

Indigenous knowledge, rights and science

Supporting Indigenous stewardship of land, water and sea, through Indigenous-led approaches to decision-making, enterprise and industry, knowledge and technology, and sustainable management of natural systems.

Sustainable water futures

Water is safe, trusted and secure, and equitably managed during extremes of drought and flood.

Water security and adaptation

Co-production, design and delivery of water and related services, tools and technologies in Australia and internationally to inform operations, management, planning and policy choices from enterprise to basin scale that supports industry, communities and the environment.

Safe water

Ensure our water is safe for both use and re-use by understanding transport pathways, biotic and abiotic effects and developing sensitive quality 'triggers and treatments' to ensure human and aquatic ecosystem health, government compliance and consumer expectations.

Leverage our strengths in regional integrated water assessments, ensuring the most current water security implications of climate change scenarios can be taken into account in water planning, reform and infrastructure investment decisions.





Thriving natural systems

The condition, resilience and value of our natural capital improves and continues to support the culture and livelihoods of all Australians.

Resilient and adaptive landscapes

Reverse long-term trends in land degradation and biodiversity decline by implementing novel sustainability and risk management solutions and foresighting that will improve the condition, resilience to environmental change and value of our natural capital, to support the culture and livelihoods of all Australians.

Strengthening our integrated biophysical, social and economic analysis and modelling capabilities to address cross-cutting issues, through larger, national and regional impact assessments undertaken in partnership.

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.

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