# Alignment of CSIRO’s R&D with the six Modern Manufacturing priority areas

## Resources technology and critical minerals processing

CSIRO has one of the largest minerals research groups in the world. CSIRO partners with industry for mineral resource exploration, processing and purification, battery design and manufacturing. It also provides pilot-scale demonstration capability for battery metals and products.

*Read more*

[Rare earths and critical minerals provide significant opportunities for Australia - CSIRO](https://www.csiro.au/en/work-with-us/industries/mining-resources/Resourceful-magazine/Issue-22/Rare-earths-and-critical-minerals-provide-significant-opportunities-for-Australia)

[Mining and resources - CSIRO](https://www.csiro.au/en/work-with-us/industries/mining-resources)

## Food and beverage

Our expertise in food science and innovation helps the Australian food industry compete in domestic and global markets and make food products for Australian consumers that are safe, sustainable and taste great.

*Read more*

[Working with CSIRO's food innovation centre - CSIRO](https://www.csiro.au/en/work-with-us/industries/food/Working-with-us)

[Food - CSIRO](https://www.csiro.au/en/work-with-us/industries/food)

[Our facilities available to the food industry - CSIRO](https://www.csiro.au/en/work-with-us/services/research-and-development/Our-facilities)

## Medical products

We work with biomedical companies to deliver new medical treatments and technologies that benefit millions of people in Australia and overseas, helping them live longer, healthier and more productive lives.

*Read more*

[Health and medical - CSIRO](https://www.csiro.au/en/research/health-medical)

## Recycling and Clean Energy

Each year, 90 billion tonnes of primary materials are extracted and used globally, with only 9 per cent recycled. This is commercially unsustainable and there are significant detrimental impacts to human health and the environment.

*Read more*

[Circular economy work.](https://www.csiro.au/en/Research/Environment/Circular-Economy)

CSIRO is developing innovative approaches to energy production and storage with low-cost, environmentally friendly power sources that will fuel Australia’s future.

*Read more*

[Energy - CSIRO](https://www.csiro.au/en/work-with-us/industries/energy)

[Energy storage and battery technologies - CSIRO](https://www.csiro.au/en/research/technology-space/energy/Energy-storage)

[Photovoltaics - CSIRO](https://www.csiro.au/en/research/technology-space/energy/Photovoltaics)

## Defence

CSIRO partners with industry and the Australian Government to deliver or small and large defence force projects, from [improving air in submarines](https://www.csiro.au/en/News/News-releases/2018/Australian-submariners-to-breathe-easier) to [defence cyber security](https://www.csiro.au/en/News/News-releases/2017/Cyber-security-defence-and-public-sectors).

## Space

Collaborations between CSIRO and industry partners are positioning Australia strongly in the international space sector by providing strategic contributions to global value chains that result in economic return and improve the lives of Australians.

*Read more*

[Space - CSIRO](https://www.csiro.au/en/work-with-us/industries/space)

[Boeing](https://www.csiro.au/en/Do-business/Collaborative-research/Alliance-partners/Boeing)

[CSIROSat-1](https://www.csiro.au/en/Research/Facilities/CSIROSat-1)

[Puzzle Precision](https://blog.csiro.au/astronomy-is-great-business-for-local-rising-star/)