

ANFF Sustainability Statement

The Australian National Fabrication Facility (ANFF) is a network of state-of-the-art micro- and nanofabrication facilities across Australia, providing access to cutting-edge equipment and expertise for researchers and industry. ANFF is committed to fostering a culture of sustainability across its headquarters and Nodes, as well as in the broader research community. We recognise that our activities have an impact on the environment and society. We are committed to advancing sustainable practices in nanofabrication, research and operations, as we strive to minimise any negative effects while promoting positive change.

Our sustainability vision is to enable and support research that contributes to the well-being of people and the planet, while reducing our own environmental impact and enhancing our social responsibility.

ANFF recognises our responsibility to contribute to a more sustainable future. By embracing sustainable practices, we aim to reduce our environmental impact, promote resource efficiency and drive positive change in the field of nanofabrication. Together with our partners, researchers and stakeholders, our network will lead by example and inspire others to adopt sustainable practices.

Sustainability Strategy

ANFF's sustainability strategy employs a "top-down meets bottom-up" approach. ANFF's governance has implemented a sustainability Key Performance Indicator mandating annual reporting on sustainability initiatives from each Node, demonstrating our organisation-wide commitment to sustainable practices. Meanwhile, our staff-driven Sustainability Expert Working Group convenes regularly to address common sustainability challenges, share solutions and initiatives being implemented at our various Nodes, and inspire network-wide dedication to sustainability. This group also leverages relationships with academic and industry partners to disseminate knowledge and promote the principles of lab sustainability.

Our sustainability goals are aligned with the United Nations Sustainable Development Goals and are based on the following pillars:

Environmental Stewardship

We are dedicated to minimising our environmental footprint and promoting the responsible use of resources. Energy efficiency, waste reduction and pollution prevention are prioritised in all aspects of our operations. Through continuous improvement and innovation, we aim to minimise the consumption of water, energy and raw materials associated with our research and fabrication processes. ANFF also seeks, with our stakeholders, to reduce greenhouse gas emissions and increase the use of renewable energy sources across our Nodes. We aspire to monitor and report on our environmental performance.

Waste Reduction and Recycling

ANFF is engaged in minimising waste generation and promoting recycling initiatives across its various activities. We implement waste management practices at HQ that prioritise source reduction, reuse, and recycling of materials, and encourage similar programs at our Hubs. Proper waste segregation and responsible disposal methods will divert waste from landfills and promote the circular economy.

Energy and Resource Efficiency

Striving to optimise energy efficiency in our facilities and processes, ANFF invests in state-of-the-art equipment and infrastructure that reduces energy consumption while maintaining high-quality research outcomes. We encourage energy conservation measures, such as LED lighting, efficient HVAC systems and smart building automation, that minimise our energy demand and greenhouse gas emissions. This includes the consideration of energy efficiency during procurement of new tools.

In addition, ANFF will examine the use of consumables such as water and gas and other laboratory resources. Throughout our network, the creation of new protocols will minimise the use of these valuable resources while ensuring the maintenance of the service levels we provide.

Travel Minimisation

While travel is an essential part of our network's activities, we recognise the environmental impact of transportation. ANFF is committed to minimising travel and using alternatives whenever possible, including the use of video conferencing, webinars and online platforms for communication and collaboration among our staff, Nodes and Hubs, researchers, and other stakeholders. Our staff and researchers are encouraged to choose low-carbon modes of transport, such as public transit, cycling, or walking, when travelling locally. We also support the use of carbon offset schemes for air travel and other activities where possible and financially prudent.

Education and Engagement

Across the ANFF network, our staff, Nodes and Hubs foster a culture of sustainability. We encourage our network to engage positively with their stakeholders such as researchers and host universities to lead the push towards new ways of achieving sustainable operations. Efforts to date include hosting workshops and seminars focused on sharing and developing new sustainability initiatives. ANFF will collaborate with the academic community, industry and government agencies to share knowledge, promote sustainable nanofabrication practices and adopt best practice from our international peers.

Sustainable Research

ANFF encourages and supports sustainable research practices that prioritise environmental and social considerations. Promotion of interdisciplinary collaborations will address global challenges such as renewable energy, clean water and sustainable materials. By focusing

on sustainable nanofabrication techniques and materials, we contribute to the development of environmentally friendly technologies with reduced environmental impacts throughout their life cycle. The dissemination of best practices and knowledge on sustainable nanofabrication to our users and partners will amplify the reach of our local and national initiatives.

Social Responsibility

In our commitment to fostering a diverse, inclusive, and respectful work environment that values the contributions of all our staff, users and stakeholders, ANFF upholds the highest standards of ethical conduct and integrity in our research and operations. We engage with our local and national communities to raise awareness of and provide education on nanotechnology and its related fields, including the potential benefits and risks of emerging technologies. Collaborations with other organisations and initiatives that share our vision social responsibility will advance sustainability outcomes in science and society.