

## **Growing Australian SMEs**

Small and Medium Enterprises (SMEs) are crucial to Australia's economy, but they often lack the resources they need to grow and maintain their competitive advantage in a global market.

CSIRO supports Australian SMEs by providing access to research expertise, funding programs, world-class facilities, training, and commercialisation support. For many SME's, we act as the research and development (R&D) division that they don't have in-house. We've helped SMEs achieve growth through the creation of new products, improved processes and expansion of services and customer bases. We work with businesses on technology and technology-based ventures: we drive an end-to-end R&D process and help make opportunities investment-ready before others will even consider the venture.

Many SMEs approach us with a challenge. We then find the right experts, research, services and facilities they need to solve it. Here are some examples of how we work with Australian SMEs:

SME research facilitation and funding – we help SMEs articulate the problem they need to solve, locate the right research expertise to help and connect them to potential funding programs CSIRO's dedicated SME support team, SME Connect, links Australian SMEs of all sizes to world-class expertise and facilities across the research sector through three programs:

- 1. Innovation Connections (an element of the Entrepreneurs' Programme) which we deliver on behalf of the Department of Industry, Science, Energy and Resources a facilitated service that helps businesses identify research needs, access research expertise, and obtain R&D funding.
- CSIRO Kick-Start a dollar-matched funding scheme for start-ups and small businesses to undertake R&D projects with CSIRO - e.g. product prototyping; method and process improvement; testing new materials.
- 3. SIEF STEM<sup>+</sup> Business offers funding to place early career researchers in companies for between 1 and 3 years to deepen relationships, deliver research projects and accelerate the adoption of new ideas and technology.

We also 'support the supporters' through the Incubator Support element of the Entrepreneurs' Programme, delivered on behalf of the Department of Industry, Science, Energy and Resources. Incubators provide start-ups with mentorship, expertise or access to investors. In turn we provide a facilitated service to help incubators access Australian Government funding through the Entrepreneurs' Programme to help start-ups develop capabilities needed to succeed in international markets.

## Access to high tech industrial systems, prototyping and production facilities

CSIRO offers access to our state-of-the-art facilities and expert technicians to work with companies to support innovation. For example:

**Flow chemistry** – our FloWorks facility enables businesses to see if their operations can be improved by flow chemistry. Flow chemistry radically improves existing chemical processes allowing for rapid, reduced waste production of chemicals.

**Additive Manufacturing** – Lab22 is the leading facility for innovation in metallic additive manufacturing. A comprehensive array of equipment and technologies are accessible by industry for research and commercialisation.

**Biomedical Materials Translational Facility** – helps MedTech companies turn discoveries into market ready products. It contains the equipment to develop a product though scale-up, prototyping, pre-clinical testing and industry evaluation.

**Recombinant Protein Production Facility** – provides Australian veterinary and pharmaceutical biotech companies with access to state-of-the-art facilities for protein production, process development and optimisation.

**Food Innovation Centre** – food, ingredient and equipment manufacturing companies access expertise, technologies and support - adopting innovative technologies, improving process efficiency to create high value products for new markets.

## **Collaboration Hubs**

We share our space as well as our expertise with SMEs to support collaboration. For example:

**Lindfield Collaboration Hub** – a dedicated space for start-ups and SMEs to develop unique, high-tech products and devices. Early stage and established companies can access our facilities, science know-how, experience, business networks and commercialisation expertise.

**Centre for Hybrid Energy Systems** – a hub in Clayton for researchers and industry providing an ideal test environment to investigate cost, efficiency and emissions-related challenges and opportunities to integrate renewable energies.

## We help industry understand the value of innovation to their business

For example – our Innovate to Grow Program is a 12-week online learning program that helps SME leaders develop R&D skills, projects and collaborations. The program enables an SME to work on a real business project or opportunity, and provides relevant expert connections and links to funding and further R&D facilitation programs.

	As an online course, it's provided regional SMEs across Australia with access to CSIRO expertise that they otherwise could not easily have gained.
We upskill innovators in tech transfer and commercialisation	We work with universities and industry to deliver tailored innovation and entrepreneurship programs designed to equip early-stage innovators and their teams with the skills and knowledge to innovate better and faster to fast-track great research and technology into real world outcomes.
We help industry access R&D capability and upskill researchers to be industry ready	Our Industry PhD program brings together business and research by placing PhD researchers into industry where they contribute to capability-building in the business, combining research excellence across the university, industry and science sectors.
Testing and assurance services – we provide companies with a path to market for innovative products	CSIRO provides an extensive range of independent and trusted testing, assessment and consulting services that businesses can rely on. For example:  • Our building testing and certification services include fire protection/performance, paints/coatings, plumbing, energy efficiency, facades, slip resistance and material durability.
	In response to COVID-19 we rapidly established NATA accredited testing capability for surgical masks.
csiro precincts bring together innovation and research partners in a shared space with a culture of collaboration	<ul> <li>The precincts are building on innovation and industry 'hot spots' that already exist across Australia:</li> <li>Solutions for the minerals and energy industries: the National Resource Sciences Precinct in Perth</li> <li>Solutions for biomedical, advanced manufacturing, manufacturing, aerospace, energy and many other industries: the Australian Manufacturing and Materials Precinct in South East Melbourne</li> <li>Solutions for the agriculture and environmental industries: the National Agricultural and Environmental Sciences Precinct in Canberra</li> <li>Solutions for water, tourism, agriculture, biosecurity, energy and many other sectors: the Ecosciences Precinct in Brisbane</li> </ul>
Strategic insights and advice	Our strategic advisory teams work with businesses to develop informed strategies to leverage science, technology and innovation to address significant opportunities and challenges brought about by long-term economic, environmental, social, and technological trends.