

Economics Legislation Committee
ANSWERS TO QUESTIONS ON NOTICE
Industry, Innovation and Science Portfolio
2016-17 Supplementary Budget Estimates
20 October 2016

AGENCY: COMMONWEALTH SCIENTIFIC AND INDUSTRIAL RESEARCH ORGANISATION

TOPIC: Engagement with SME Manufacturing

REFERENCE: Written Question – Senator Carr

QUESTION No.: SI-108

1. How would you characterise the CSIRO's engagement with SME manufacturing companies in Australia?
2. How many companies would you deal with annually?
 - a. What are the types of engagements you have with companies? How would you characterise them?
3. Where would an SME company go if they wanted CSIRO's help to solve a problem?

ANSWER

1. The large majority of Australian owned companies with whom CSIRO works are SMEs and working with them is an important element in delivering on CSIRO's role to conduct scientific research to assist Australian industry and to further the interests of the Australian community. CSIRO assists SMEs directly by helping businesses to grow and gain a competitive advantage through accessing cutting edge research and technology and indirectly by identifying opportunities for research to benefit SMEs and connecting them with the best Australian researchers and facilities to achieve that (which may not necessarily be within CSIRO).
2. In 2015-16, CSIRO worked with 1,068 Australian SMEs. Australian SMEs represent 44 per cent of CSIRO's total customers and 67 per cent of Australian industry customers. CSIRO Manufacturing in particular, engages with 400 to 500 SMEs each year, and engages in direct research activity with approximately 100 SMEs per annum.

Examples of the type of engagements we have with SMEs include collaborative or contract research projects, licensing technologies, researcher placement programs, use of open access facilities, collocating business on our sites and customised equity transaction deals. The CSIRO Manufacturing unit also works particularly closely with SME Connect to utilise appropriate funding mechanisms to assist SMEs to develop affordable, impactful projects.

In the last financial year, the CSIRO SME Connect team facilitated 23 Innovation Connections projects in the 'advanced manufacturing' sector across three states and with nine research organisations including CSIRO, Deakin, Monash, QUT, RMIT, Swinburne, University of Newcastle, University of Wollongong and UTS, with a total research spend of \$2.1 million. In addition, CSIRO Manufacturing was involved in a further three 'advanced manufacturing' projects, as well as 14 projects in the medical and mining equipment and technologies sectors, worth over \$1.6 million. In total, CSIRO Manufacturing has been the research provider in 69 Innovation Connections (and equivalent programs) projects since 2009, with a total value of over \$8.5 million worth of research.

CSIRO Manufacturing hosts large groups of SMEs across our sites to introduce SMEs to new technologies, such as monthly additive manufacturing events; hosts challenge workshops one-on-one with individual SMEs, and has a quarterly company-visit program in place which takes research scientists to visit SMEs. CSIRO Manufacturing also connects with SMEs through a number of innovation centres as a means of industry engagement across multiple industry segments. These include Lab 22 for Additive Manufacturing (Clayton VIC, with satellite hubs in NSW and SA); the Centre for Industrial Flow Chemistry (Clayton); Hub for Biotech and Start up (Lindfield, NSW); Biomedical Materials Translation Facility and Biomedical Manufacturing consortium (Clayton); Batri Hub (Waurin Ponds, Geelong); and the Carbon Fibre precinct (Waurin Ponds). We also support SMEs to identify and collaborate on high-value opportunities through CRC programs, for example CRC for Innovative Manufacturing and Rail Manufacturing CRC and more recently CRC-Projects to enhance the competitiveness and productivity of SMEs.

The CSIRO Infrastructure and Technologies business provides testing and consulting services to approximately 100 manufacturing SMEs per year. This allows SMEs to test new products, for example, fire safety, and provides certification to national and international standards.

SMEs can also connect with CSIRO through focused industry-research collaboration programs, research innovation hubs & precincts and Industry Growth Centres. For example, the Manufacturing Business Unit is strongly aligned with the Advanced Manufacturing and MTP Connect Growth Centres; the Plastics and Chemical Industry Association (PACIA) and peak industry groups South East Melbourne Manufacturers Alliance (SEMMA -representing 200 companies); Northlink (A regional partnership of industry, education and government representing 200 companies); Committee for Geelong; HunterNet (a regional industry peak body that represents over 200 companies in and around NSW Central Coast and Newcastle); Sydney Aerospace & Defence Interest Group (SADIG amongst others).

3. SMEs have a number of options to engage with CSIRO, some of which have been described in answers to the previous questions.

CSIRO SME Connect provides a single point of contact for Australian SMEs to interact with CSIRO, universities and public research organisations. SME Connect works with SMEs to assist them in identifying opportunities for research to benefit their business, connects them with the best Australian researchers and facilities (not necessarily within CSIRO), participates in project scoping, facilitates access to, and applications for, grants and oversees the completion of project agreements. CSIRO, through SME Connect, is a service provider in the Innovation Connections element of the Department of Industry, Innovation and Science Entrepreneurs' Programme and manages the STEM⁺ Business Fellowship program on behalf of the Science and Industry Endowment Fund. Details on SME Connect can be found at www.csiro.au/SMEconnect.

In addition to the SME Connect Team, CSIRO has an extensive network of Business Development professionals and Researchers Leaders within Business Units who can facilitate SMEs working directly with CSIRO business units such as Manufacturing, Minerals, Agriculture and Food and Data61.

SMEs can also contact CSIRO Enquiries which can work with SMEs to direct them to the right area within CSIRO to meet their needs. Contact details for CSIRO Enquiries are 1300 363 400, csiroenquiries@csiro.au or www.csiro.au/en/Contact