Part 6

Science and Industry Endowment Fund

Trustee's report

SIEF Trustee, Dr Larry Marshall

Over the past year, I have reflected on the foresight of the Federal Parliament in the early 20th century to future proof and embed national resilience through science and technology, and how the Australian nation continues to benefit to this day.

In 1926, the Australian Government established the Science and Industry Endowment Fund (SIEF) to support the training of the nation's scientists for the benefit of the nation. Almost 100 years after the *Science and Industry Endowment Act 1926* was passed, SIEF remains true to its purpose of assisting Australian industry, furthering the interests of the Australian community and contributing to the achievement of Australia's national objectives. SIEF was established at the same time as CSIRO and is connected through the legislation. This connection endures today as SIEF and CSIRO work closely together, while SIEF still strongly retains its independence from CSIRO.

In both 1926 and 2020, the Australian Government recognised the need to boost the nation's manufacturing capabilities to deliver positive economic outcomes, through taking up research outcomes by industry and building STEM capability.

This year, SIEF continued to invest in science and technology that assists industry:

- Future National ICT Industry Platform: backing digital transformation to create new Australian technology-based industries that can reach global scale.
- SIEF Ross Metcalf STEM+Business Fellowships: connecting small- to medium-sized enterprises (SMEs) with research organisations, driving innovation and collaboration (read more about these fellowships on page 92).
- Experimental Development Program: accelerating the commercialisation of Australian developed technologies giving Australia a competitive advantage.
- Generation STEM initiative: attracting, supporting, retaining and training NSW students in STEM, creating an innovative STEM-skilled workforce essential for the growth of Australia and its economic prosperity. Read more about Generation STEM on pages 82 and 85.

Partnering businesses with research and development

A lack of connections can prevent businesses from collaborating with scientists and researchers on their problems to identify solutions. The SIEF Ross Metcalf STEM+Business Fellowships have been highly successful in breaking down barriers that exist between industry and research organisations. The program is managed by CSIRO, which has facilitated 42 early-career fellowships over the life of the program. This year, 6 new projects were contracted. Due to the successful outcomes of their initial projects, many SMEs have applied for a second project. An example of this is the SME Australian Bay Lobster Producers (ABLP), an aquaculture business that produces premium quality Moreton Bay bugs. A key concern for the company was monitoring their growth tanks to maintain the health of their animals. This was being undertaken manually, and there was a strong desire to improve the process through automation. The first fellowship developed a digital-vision software that is now integrated into ABLP's production facility and is providing significant operational benefits. After the success of the first fellowship, ABLP applied for a second fellowship to develop a probiotic lobster feed to make further improvements to its high-value food product.

Digital transformation of supply chains

To boost the value of exports and secure new agricultural markets, Australia needs to grow its high-value markets where global consumers will pay a premium for quality, safety and provenance. This requires building robust supply chains that deliver trusted products. Digitally transforming Australia's supply chains would enhance brand trust, privacy and efficiency for producers.

Through the Future National ICT Industry Platform Program, made possible through the NICTA Gift, SIEF is funding Digital Initiatives that are developing digital solutions to address supply chain integrity and food provenance. The Supply Chain Integrity Digital Initiatives have developed technologies that validate claims about the origin of a product, its authenticity and adherence to ethical production practices, and improves efficiency for primary producers. For instance, cattle farmers can benefit greatly from an automated farm provenance system that integrates a suite of novel technologies for on-farm data provenance, data trust and automated compliance.

The system is designed to provide trusted, auditable evidence of complying with industry regulations and guidelines. By adopting smart automated data collection technology, farmers and producers can automatically verify compliance, which replaces manual checks and reduces regulatory burdens. Read about the technology and its impact on page 208.

Industry focused science and technology

The CSIRO Gift's Experimental Development Program (EDP) commenced in 2015 to address a significant gap in funding options available for progressing technology to a stage suitable for attracting commercial investment and market uptake.

Developing new technologies that are backed by excellent science benefits Australian industries and gives them a competitive edge. To date, SIEF and its co-investors have funded 15 projects and a total of $36 million. Many of the collaborators are Australian SMEs.

The Megasonics EDP project successfully demonstrated that an increased amount of oil can be extracted from olive paste, and without the use of enzymes, by using high-frequency ultrasound standing waves (megasonics). This provides an opportunity to maximise oil recovery and increase the prospective market to countries where the enzymes are banned when producing extra virgin olive oil. The process also increases the content of phenolic compounds in the oil, which creates a healthier product. Financially, this means additional revenue from increased oil yields, reduced production costs at traditional yield levels and a higher quality product that can demand higher prices. This technology may also be applied to other oil feedstocks (such as palm oil), therefore increasing the market for this technology. Read about Megasonics and its impact on page 209.

In my role as SIEF Trustee, I am assisted by the advisory bodies and expert reviewers who generously contribute their time and expertise to SIEF to provide advice for funding decisions across the portfolio. I sincerely thank them for the advice they have provided this year.

Being an advisor, board member, and even a trustee can be a thankless task, but when I see everything we have delivered for our country, it's a task I give thanks for having the privilege to fulfil.

I am proud of what SIEF has achieved this year by assisting Australian industry, furthering the interests of the Australian community and contributing to supporting national objectives. I am confident it will continue to do so for the next 100 years so that we can see science and technology change the future and make life better for all Australians.

Dr Larry Marshall
SIEF Trustee

SIEF advisory bodies

CSIRO Gift Advisory Council Members

Emeritus Prof Alan Robson (Chair)
Dr Peter Riddles (Chair, EDP Review Panels)
Mr Nigel Poole
Dr Ezio Rizzardo
Professor Margaret Sheil
Professor Tom Spurling

Generation STEM Consultative Council

Mr David Wright (Chair)
Ms Maile Carnegie*
Mr Martin Graham*
Ms Chloe Read
Ms Gail Fulton
Dr Ian Oppermann
Dr Dave Williams

NICTA Program Advisory Council

Ms Michelle Price
Dr Jon Whittle
Mr John Paitaridis
Dr Simon Barry*

*Indicates retirement from the Councils.

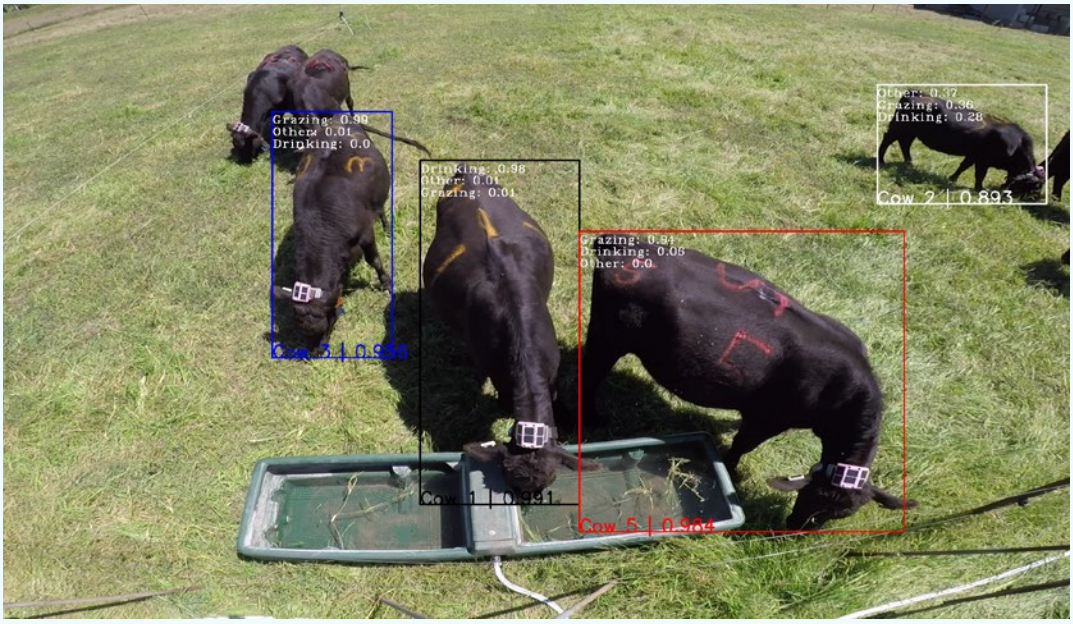
Automated and trusted compliance tools for food supply chains

There is an increasing demand for robust supply chains that deliver food that global consumers can trust. Boosting Australia's high-value food export markets where premiums are paid for quality, safety and provenance will require advanced digital solutions.

SIEF invested $2.4 million in the Automated Farm Provenance *work* package, part of a NICTA Gift funded Digital Initiative to develop new technologies to enhance supply chain integrity. The investment enabled a suite of new technologies to be integrated into a system greater than the sum of its parts, which culminated in a virtual demonstration to the Australian red meat industry in December.

The work developed a system to automatically verify compliance to guidelines and regulations on the farm for the red meat industry as a test case. The proof-of-concept combined a secure data provenance system (by storing data using a private Ethereum IoT Edge blockchain) with a data trust engine (calculating and validating reputation and data trust via multiple sources) with automatic determination of various animal welfare regulations using logic and rules based on data from livestock smart ear tags and data from the cloud.

The SIEF investment has created new intellectual property, research knowledge and capability for advancements in supply chain integrity. New CSIRO research and development efforts will continue this work with a focus on developing novel automated compliance tools and platforms for food export supply chains and animal monitoring systems for welfare and sustainability assurance. By developing new technologies that automatically verify compliance and monitor animal welfare, we can replace manual checks and reduce regulatory burdens across Australian supply chains and strengthen Australia's valuable reputation as a trusted and safe source of food.



Video cameras are used to determine if the animal is drinking enough water to comply with industry welfare standards.

Megasonics for enhanced virgin olive oil recovery

The olive oil industry faces constraints to existing physical extraction methods. Oil must be extracted immediately and is confined to a short window for processing olives, about two months per year. Since 2013, CSIRO has been investigating the application of Megasonics to olive oil extraction, and prior to 2018, had successfully demonstrated the technology up to 300 kilograms per hour.

Megasonics refers to the application of ultrasound waves in the high frequency range (>0.4 to several megahertz) to separate low density oil droplets from higher density solid particles. CSIRO previously developed the Megasonics technology to enhance oil recovery in vegetable oil processing streams and holds the global exclusive process patent to the technology.

SIEF's investment enabled a Megasonic reactor system to be designed and installed for commercial testing for the first time in olive oil processing. The investment enabled and advanced the technology readiness of Megasonics in olive oil by scaling and demonstrating the technology at 3,000 kilograms per hour with commercial partner, Boundary Bend. This financial investment was critical to progressing the research to the commercial testing phase.

The commercial trial demonstrated the potential of Megasonics to extract up to 3.7 per cent additional olive oil while still maintaining oil shelf life. Further, the technology was demonstrated to be able to produce existing oil yields but at a faster and more efficient rate.

The technology has promising potential in Australia's domestic olive oil industry, currently worth $512 million annually across approximately 120 producers, and globally, across approximately 800 processing plants. It presents an opportunity to improve olive oil processing productivity and possibly deliver health benefits through improved oil phenolic composition. SIEF's funding at a critical junction in the technology's development has paved the way for future commercial prototype development and will be a considerable legacy of the Experimental Development Program if it is adopted widely in the future.

Industrial 3 tonnes per hour Megasonics demonstration olive oil extraction.

Australian National Audit Office

INDEPENDENT AUDITOR'S REPORT

To the Minister for Industry, Science and Technology

Report on the annual financial statements

Opinion

In my opinion, the financial statements of the Science and Industry Endowment Fund (SIEF) for the year ended 30 June 2021:

(a) comply with Australian Accounting Standards – Reduced Disclosure Requirements and the *Science and Industry Endowment Act 1926*; and

(b) present fairly the financial position of SIEF as at 30 June 2021 and its financial performance and cash flows for the year then ended.

The financial statements of SIEF, which I have audited, comprise the following as at 30 June 2021 and for the year then ended:

- Statement by the Trustee and Chief Finance Officer of the Commonwealth Scientific and Industrial Research Organisation (CSIRO) as Service Provider to SIEF;
- Statement of Comprehensive Income;
- Statement of Financial Position;
- Statement of Changes in Equity;
- Cash Flow Statement; and
- Notes to the financial statements, comprising a summary of significant accounting policies and other explanatory information

Basis for opinion

I conducted my audit in accordance with the Australian National Audit Office Auditing Standards, which incorporate the Australian Auditing Standards. My responsibilities under those standards are further described in the *Auditor's Responsibilities for the Audit of the Financial Statements* section of my report. I am independent of SIEF in accordance with the relevant ethical requirements for financial statement audits conducted by the Auditor-General and his delegates. These include the relevant independence requirements of the Accounting Professional and Ethical Standards Board's APES 110 *Code of Ethics for Professional Accountants (including Independence Standards)* (the Code) to the extent that they are not in conflict with the *Auditor-General Act 1997*. I have also fulfilled my other responsibilities in accordance with the Code. I believe that the audit evidence I have obtained is sufficient and appropriate to provide a basis for my opinion.

Trustee's responsibility for the financial statements

The Trustee of SIEF is responsible under the *Science and Industry Endowment Act 1926* for the preparation and fair presentation of annual financial statements that comply with Australian Accounting Standards – Reduced Disclosure Requirements and the rules made under the Act. The Trustee is also responsible for such internal control as the Trustee determines is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, the Trustee is responsible for assessing the ability of SIEF to continue as a going concern, taking into account whether SIEF's operations will cease as a result of an administrative restructure or for any other reason. The Trustee is also responsible for disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless the assessment indicates that it is not appropriate.

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38 Sydney Avenue, Forrest ACT 2603
Phone (02) 6203 7300

Auditor's responsibilities for the audit of the financial statements

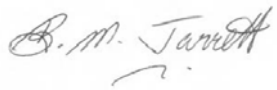
My objective is to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes my opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with the Australian National Audit Office Auditing Standards will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of the financial statements.

As part of an audit in accordance with the Australian National Audit Office Auditing Standards, I exercise professional judgement and maintain professional scepticism throughout the audit. I also:

- identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for my opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control;
- obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of SIEF's internal control;
- evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by the Accountable Authority;
- conclude on the appropriateness of the Accountable Authority's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on SIEF's ability to continue as a going concern. If I conclude that a material uncertainty exists, I am required to draw attention in my auditor's report to the related disclosures in the financial statements or, if such disclosures are inadequate, to modify my opinion. My conclusions are based on the audit evidence obtained up to the date of my auditor's report. However, future events or conditions may cause SIEF to cease to continue as a going concern; and
- evaluate the overall presentation, structure and content of the financial statements, including the disclosures, and whether the financial statements represent the underlying transactions and events in a manner that achieves fair presentation.

I communicate with the Trustee regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that I identify during my audit.

Australian National Audit Office



Brandon Jarrett

Senior Executive Director

Delegate of the Auditor-General

Canberra

11 August 2021

SCIENCE AND INDUSTRY ENDOWMENT FUND
STATEMENT OF COMPREHENSIVE INCOME
For the year ended 30 June 2021

	Notes	2021	2020
		$	$
EXPENSES			
Scientific research grants	2	**5,008,502**	11,546,425
Service fee under services agreement with CSIRO		**544,000**	578,064
Audit and bank fees		**15,500**	15,570
Other fees		**56,931**	3
Total expenses		**5,624,933**	12,140,062
REVENUE			
Gifts, bequests and donations	3	**18,000,000**	10,000,000
Interest	4	**548,880**	1,139,994
Total revenue		**18,548,880**	11,139,994
Net profit/ (deficit)		**12,923,947**	(1,000,068)
Other comprehensive income		**-**	-
Total comprehensive income/(loss)		**12,923,947**	(1,000,068)

The above statement should be read in conjunction with the accompanying notes.

SCIENCE AND INDUSTRY ENDOWMENT FUND
STATEMENT OF FINANCIAL POSITION
As at 30 June 2021

	Notes	2021	2020
		$	$
ASSETS			
Current assets			
Cash and cash equivalents	5	**77,698,752**	64,603,883
Trade and other receivables	6	**278,601**	465,023
Total assets		**77,977,353**	65,068,906
LIABILITIES			
Current liabilities			
Payables			
Accrued audit fee	7	-	15,500
Total payables		**-**	15,500
Total liabilities		**-**	15,500
Net assets		**77,977,353**	65,053,406
EQUITY			
Contributed equity		**200,000**	200,000
Retained surplus		**77,777,353**	64,853,406
Total equity		**77,977,353**	65,053,406

The above statement should be read in conjunction with the accompanying notes.

SCIENCE AND INDUSTRY ENDOWMENT FUND
STATEMENT OF CHANGES IN EQUITY
For the year ended 30 June 2021

	Retained Surplus		Contributed Equity		Total Equity	
	2021	2020	**2021**	2020	**2021**	2020
	$	$	**$**	$	**$**	$
Opening Balance	**64,853,406**	65,853,474	**200,000**	200,000	**65,053,406**	66,053,474
Net profit/(deficit)	**12,923,947**	(1,000,068)	**-**	-	**12,923,947**	(1,000,068)
Closing Balance	**77,777,353**	64,853,406	**200,000**	200,000	**77,977,353**	65,053,406

The above statement should be read in conjunction with the accompanying notes

SCIENCE AND INDUSTRY ENDOWMENT FUND
CASH FLOW STATEMENT
For the year ended 30 June 2021

	Notes	2021	2020
		$	$
OPERATING ACTIVITIES			
Cash received			
NICTA Gift		-	5,000,000
CSIRO Gift		**18,000,000**	5,000,000
Interest received		**807,312**	1,505,730
GST credits received		**492,033**	2,717,266
Total cash received		**19,299,345**	14,222,996
Cash used			
Payments to grantees		**5,509,352**	13,992,355
Other payments		**695,124**	644,321
Total cash used		**6,204,476**	14,636,676
Net cash provided/(used) by operating activities	8	**13,094,869**	(413,680)
Net increase/(decrease) in cash held		**13,094,869**	(413,680)
Cash at the beginning of the reporting period		**64,603,883**	65,017,563
Cash at the end of the reporting period		**77,698,752**	64,603,883

The above statement should be read in conjunction with the accompanying notes

SCIENCE AND INDUSTRY ENDOWMENT FUND
NOTES TO AND FORMING PART OF THE FINANCIAL REPORT
For the year ended 30 June 2021

Note 1 Overview

The Science and Industry Endowment Fund (referred to as "the Fund") was established under the *Science and Industry Endowment Act 1926* with the Trustee of the Fund being the Commonwealth Scientific and Industrial Research Organisation's (CSIRO) Chief Executive and is a not-for-profit entity. An appropriation of 100,000 pounds was received at the time the Fund was established. The principal activity of the Fund is to provide assistance to persons engaged in scientific research and in the training of students in scientific research.

In October 2009 the Minister for Innovation, Industry, Science and Research announced a gift of $150 million to be donated by CSIRO to the Fund. The gift is intended to be used for scientific research for the purposes of assisting Australian industry and furthering the interests of the Australian community or contributing to the achievement of Australian national objectives. The gift was made subject to the terms of a Deed of Gift between the Trustee and CSIRO dated 15 October 2009. In 2018, 2020 and 2021, CSIRO made further gifts of $10 million, $5 million and $18 million respectively, to the Fund. These gifts were also made subject to the terms of the Deed of Gift between the Trustee and CSIRO dated 15 October 2009. The total cash payments made by the Fund in 2020-21 under the Deed of Gift were $2,807,338 (GST exclusive).

In June 2017, the NSW Government acting through the NSW Department of Industry provided a $25 million endowment to the Fund to create the NSW Generation STEM Program. The program will be delivered over a 10-year period and will implement activities including research, to increase the supply of STEM (science, technology, engineering and mathematics) skilled labour to meet the current and future needs of New South Wales. The total cash payments made by the Fund in 2020-21 under the NSW Endowment were $275,000 (GST exclusive).

In November and December 2018, National ICT Australia Limited (NICTA), a controlled entity of CSIRO, provided two gifts to the Fund in the total amount of $20 million to fund the Future National ICT Industry Platform Program. A further $5 million was provided to the Fund by NICTA in December 2019. The program is to support research activities and projects at a scale that address challenges in the field of information and communications technology (ICT) and it is intended that the outcomes from the Program will benefit Australia by helping create new Australian technology-based industries and/or applied technology platforms that can reach a global scale. The total payments made by the Fund in 2020-21 under the Future National ICT Industry Platform Program were $2,558,094 (GST exclusive).

In any one financial year a maximum amount of $25 million exclusive of Goods and Services Tax (GST) can be disbursed from the Fund for the CSIRO GIFT, NSW Generation STEM Program and the Future National ICT Industry Platform Program (under the Deeds of Gift/Endowment). The total payments made by the Fund under these gifts and programs in 2020-21 were $5,640,432 (GST exclusive).

Basis of Preparation of the Financial Statements
The financial statements for the Fund are general purpose financial statements and are required by:

- Section 10 of the *Science and Industry Endowment Act 1926.*

The financial statements have been prepared in accordance with:

- Australian Accounting Standards and Interpretations – Reduced Disclosure Requirements (Tier 2) issued by the Australian Accounting Standards Board (AASB) that apply for the reporting period.

The financial statements have been prepared on an accrual basis and are in accordance with the historical cost convention. No allowance is made for the effect of changing prices on the results or the financial position. The financial statements are presented in Australian dollars and values are rounded to the nearest dollar unless otherwise specified.

SCIENCE AND INDUSTRY ENDOWMENT FUND
NOTES TO AND FORMING PART OF THE FINANCIAL REPORT
For the year ended 30 June 2021

Note 1 Overview (continued)

Key Judgements and Estimates
The accounting policies are set out below. Within the current financial year, there were no significant management judgements or estimates used in the preparation of the financial statements.

New Australian Accounting Standards
All new/revised/amending standards and/or interpretations that were issued prior to the sign-off date and applicable to the current reporting period did not have any impact on the financial statements of the Fund.

Taxation
The Fund is exempt from all forms of taxation except Goods and Services Tax ('GST').

Events after the Reporting Period
At the time of signing of the financial statements, the Trustee is not aware of any other significant events occurring after the reporting date that could impact on the financial report.

Note 2 Scientific Research Grants

	2021	2020
	$	$
Future National ICT Industry Platform Program	**2,288,094**	7,694,540
Research Infrastructure Investment	**200,000**	990,000
Promotion of Science Program - Scholarships and Fellowships	**100,000**	607,848
Experimental Development Program	**2,220,408**	2,254,037
NSW Endowment Grant	**200,000**	-
Total	**5,008,502**	11,546,425

Accounting Policy
The Fund awards grants to support approved eligible applications in instalments, subject to the completion by Grant Recipients of funding milestones which are verified through provision of satisfactory Progress Reports to the Fund Manager. All costs associated with providing Scientific Research Grants are expensed at acceptance of relevant Progress Report.

The Fund is a subsidiary entity of CSIRO. For the 2020-21 financial year, the Fund has recognised $5 million in grant expenses as transferred directly to CSIRO to support scientific research and infrastructure projects within CSIRO and/or collaborative projects with external organisations (2019-20: $11.5m).

SCIENCE AND INDUSTRY ENDOWMENT FUND
NOTES TO AND FORMING PART OF THE FINANCIAL REPORT
For the year ended 30 June 2021

Note 3 Revenue from Gifts, Bequests and Donations

	2021	2020
	$	$
NICTA Gift	**-**	5,000,000
CSIRO Gift	**18,000,000**	5,000,000
Total	**18,000,000**	10,000,000

Accounting Policy
Gifts, bequests and donations are recognised as revenue when the entity gains control of the funds, where the consideration to acquire an asset is significantly less than fair value. Except for certain amounts that relate to activities that are reciprocal in nature, in which case revenue is recognised only when it has been earned. Gifts, bequests or donations receivable are recognised at their nominal amounts as a financial asset under *AASB9 Financial Instruments* as highlighted in paragraph 8 of *AASB1058 Income of Not-for-Profit Entities*.

The $18 million gift received from CSIRO is to be used to further Fund objectives.

Note 4 Interest Revenue

	2021	2020
	$	$
Cash bank account interest	**61,998**	108,489
Term deposits interest	**486,882**	1,031,505
Total	**548,880**	1,139,994

Accounting Policy
Interest revenue is recognised using the effective interest method as set out in *AASB9 Financial Instruments.*

Note 5 Cash and Cash Equivalents

	2021	2020
	$	$
Cash at bank	**30,648,752**	14,118,883
Term deposits	**47,050,000**	50,485,000
Total	**77,698,752**	64,603,883

Accounting Policy
Cash and cash equivalents include cash on hand and demand deposits in bank accounts with an original maturity of twelve months or less that are readily convertible to known amounts of cash and subject to insignificant risk of change in value. Cash is recognised at its nominal amount.

SCIENCE AND INDUSTRY ENDOWMENT FUND
NOTES TO AND FORMING PART OF THE FINANCIAL REPORT
For the year ended 30 June 2021

Note 6 Trade and Other Receivables

	2021	2020
	$	$
Interest receivable	**169,757**	428,189
GST receivable	**108,844**	36,834
Total receivables	**278,601**	465,023
Less impairment loss allowance	**-**	-
Total trade and other receivables	**278,601**	465,023

Accounting Policy
Trade receivables are financial assets held for collecting the contractual cash flows of the asset, where the cash flows are solely payments of principal and interest that are not provided at below-market interest rates. They are subsequently measured at amortised cost using the effective interest method adjusted for any loss allowance.

Note 7 Accrued Expenses

	2021	2020
	$	$
Audit Fee	**-**	15,500
Total	**-**	15,500

Accounting Policy
In 2020-21 audit fees were included and paid as part of service fees to CSIRO.

Note 8 Cash Flow Reconciliation

	2021	2020
	$	$
Reconciliation of operating surplus to net cash from/(used by) operating activities:		
Operating surplus/(deficit)	**12,923,947**	(1,000,068)
Changes in assets and liabilities		
Decrease/(increase) in receivables	**186,422**	1,752,402
Increase/(decrease) in payables	**(15,500)**	(1,166,014)
Net cash from/(used by) operating activities	**13,094,869**	(413,680)

Note 9 Contingent Assets and Liabilities

No contingent assets or liabilities existed as at 30 June 2021 (2020: nil).

SCIENCE AND INDUSTRY ENDOWMENT FUND
NOTES TO AND FORMING PART OF THE FINANCIAL REPORT
For the year ended 30 June 2021

Note 10 Related Party Disclosures

The Fund is a wholly controlled subsidiary of CSIRO. The Trustee is the Chief Executive of CSIRO who is remunerated through CSIRO and not paid an additional salary for his role as Trustee of the Fund. There were no transactions during the reporting period between the Trustee and the Fund. Related parties to this entity other than the Trustee are other Australian Government entities.

Significant transactions with related parties can include the payment of grants, the purchase of goods and services. In considering relationships with related entities, and transactions entered into during the reporting period by the Fund, it has been determined that there are no related party transactions required to be separately disclosed. Grants are awarded based on assessment against a set of established selection criteria prior to approval. All eligible applications are assessed equally.

Note 11 Schedule of Commitments

The below table shows the monies the Fund is committed to pay on its executed grant funding agreements as at 30 June 2021, subject to grantees meeting funding milestones.

	2021	2020
	$	$
BY TYPE		
Grants commitments payable	**31,724,140**	38,557,048
GST receivable on grants payable	**(2,884,013)**	(3,505,186)
Total net commitments by type	**28,840,127**	35,051,862
BY MATURITY		
Grant commitments payable		
One year or less	**8,453,552**	13,270,964
From one to five years	**15,240,588**	18,851,084
More than five years	**8,030,000**	6,435,000
Total grants payable	**31,724,140**	38,557,048
GST commitments receivable		
One year or less	**(768,505)**	(1,206,451)
From one to five years	**(1,385,508)**	(1,713,735)
More than five years	**(730,000)**	(585,000)
Total commitments receivable	**(2,884,013)**	(3,505,186)
Net commitments by maturity	**28,840,127**	35,051,862

SCIENCE AND INDUSTRY ENDOWMENT FUND
NOTES TO AND FORMING PART OF THE FINANCIAL REPORT
For the year ended 30 June 2021

Note 12 Financial Instruments of the Financial Statements

Note 12.1 Categories of Financial Instruments

	2021	2020
	$	$
Categories of financial instruments		
Financial assets under AASB 9		
Financial assets at amortised cost		
Cash and cash equivalents	77,698,752	64,603,883
Interest receivable	169,757	428,189
GST receivable	108,844	36,834
Total financial assets at amortised cost	**77,977,353**	65,068,906
Total financial assets	**77,977,353**	65,068,906
Financial liabilities		
Financial liabilities at amortised cost		
Accrued audit fee	-	15,500
Total financial liabilities at amortised cost	-	15,500
Total financial liabilities	-	15,500

Note 12.1 Categories of Financial Instruments (continued)

Accounting Policy

Financial Assets

The Fund classifies its financial assets under *AASB9 Financial Instruments* as financial assets measured at amortised cost.

The classification depends on both the entity's business model for managing the financial assets and contractual cash flow characteristics at the time of initial recognition. Financial assets are recognised when the entity becomes a party to the contract and, as a consequence, has a legal right to receive or a legal obligation to pay cash and derecognised when the contractual rights to the cash flows from the financial asset expire or are transferred upon trade date.

Financial Assets at Amortised Cost

Financial assets included in this category need to meet two criteria:

1. the financial asset is held in order to collect the contractual cash flows; and

2. the cash flows are solely payments of principal and interest (SPPI) on the principal outstanding amount.

Amortised cost is determined using the effective interest method.

Effective Interest Method

Income is recognised on an effective interest rate basis for financial assets that are recognised at amortised cost.

Financial liabilities

Financial liabilities are classified as either financial liabilities 'at fair value through profit or loss' or other financial liabilities. Financial liabilities are recognised and derecognised upon 'trade date'.

Financial Liabilities at Amortised Cost

Financial liabilities, including borrowings, are initially measured at fair value, net of transaction costs. These liabilities are subsequently measured at amortised cost using the effective interest method, with interest expense recognised on an effective interest basis.

Supplier and other payables are recognised at amortised cost. Liabilities are recognised to the extent that the goods or services have been received (and irrespective of having been invoiced).

Note 12.2 Net Income and Expenses from Financial Assets

	2021	2020
	$	$
Interest revenue	**548,880**	1,139,994
Total	**548,880**	1,139,994

SCIENCE AND INDUSTRY ENDOWMENT FUND
DIRECTORS DECLARATION
For the year ended 30 June 2021

SCIENCE AND INDUSTRY ENDOWMENT FUND

STATEMENT BY THE TRUSTEE AND CHIEF FINANCE OFFICER OF COMMONWEALTH SCIENTIFIC AND INDUSTRIAL RESEARCH ORGANISATION (CSIRO) AS SERVICE PROVIDER TO THE SCIENCE AND INDUSTRY ENDOWMENT FUND

The attached financial report for the year ended 30 June 2021 has been prepared based on properly maintained financial records and in accordance with Australian Accounting Standards and other mandatory financial reporting requirements in Australia, and gives a true and fair view of the financial position of the Science and Industry Endowment Fund as at 30 June 2021 and of its performance for the year then ended.

In our opinion, at the date of this statement, there are reasonable grounds to believe that the Science and Industry Endowment Fund will be able to pay its debts as and when they become due and payable.

Larry Marshall

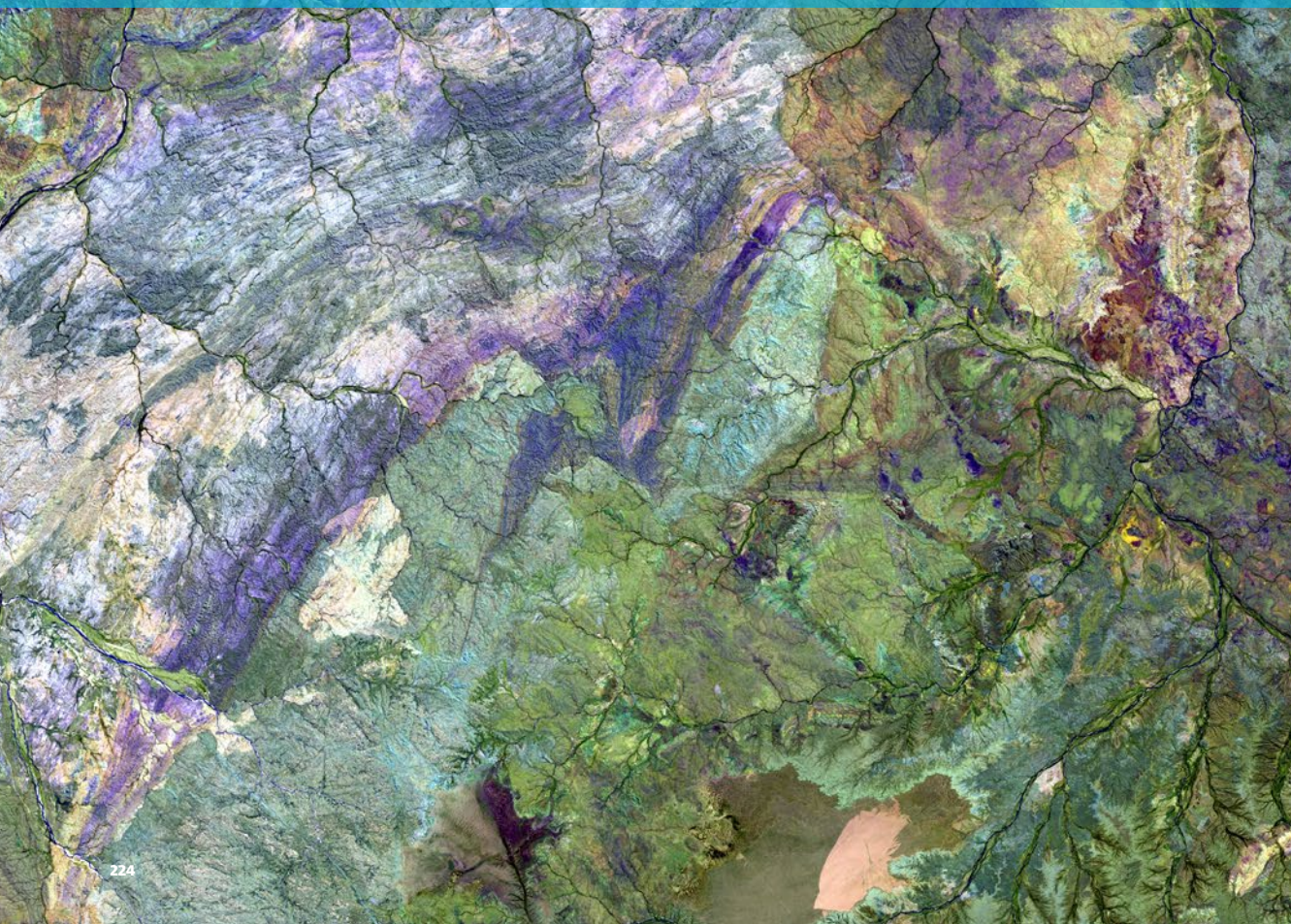
Trustee of the Science and
Industry Endowment Fund

10 August 2021

Tom Munyard

Chief Finance Officer of CSIRO
as service provider to the Science and Industry
Endowment Fund

10 August 2021



Analysis of performance

Our efforts this year contributed to us delivering towards our outcome (see Table 3.8):

- Australian industries maintain and improve their competitiveness through the application of new technologies and solutions.

Strategic investments by SIEF in scientific research to address national challenges for Australia

This year, SIEF continued its strategic purpose of investing in scientific research that addresses issues of national priority for Australia. Recognising that science has been, and will be, a key driver of Australia's economic, industrial, environmental and cultural development, SIEF invests in research that contributes to the sustainable growth of Australia. It delivers grant programs to support scientific research that address national challenges and programs in STEM education pathways and employment in New South Wales.

The Experimental Development Program (EDP) addresses the gap in funding for progressing technology development to a stage suitable for attracting commercial investment and market uptake. Engagement with industry is an intrinsic part of each project, ensuring that technologies meet industry's and society's needs. The Trustee approved 3 EDP projects this year in the priority areas of health, manufacturing and energy. SIEF supported 6 EDP projects in 2020–21.

The Megasonics EDP project aimed to improve the processing efficiencies of olive oil extraction for increased productivity and revenue, while maintaining the olive oil's properties and preferentially using only physical means. SIEF provided funding to construct a pilot plant to process olives at a rate of 2,000–3,000 kilograms per hour and trials to evaluate and demonstrate extra virgin olive oil recovery, oil quality and shelf life in an operational environment. The application of high-frequency ultrasound standing waves (megasonics) provided improvements in extra virgin olive oil recovery of up to 3.9 per cent and an increase in phenolic compounds in the olive oil. This creates a healthier product while maintaining the sensory and chemical properties characteristic of extra virgin olive oil. Read more about Megasonics on page 209.

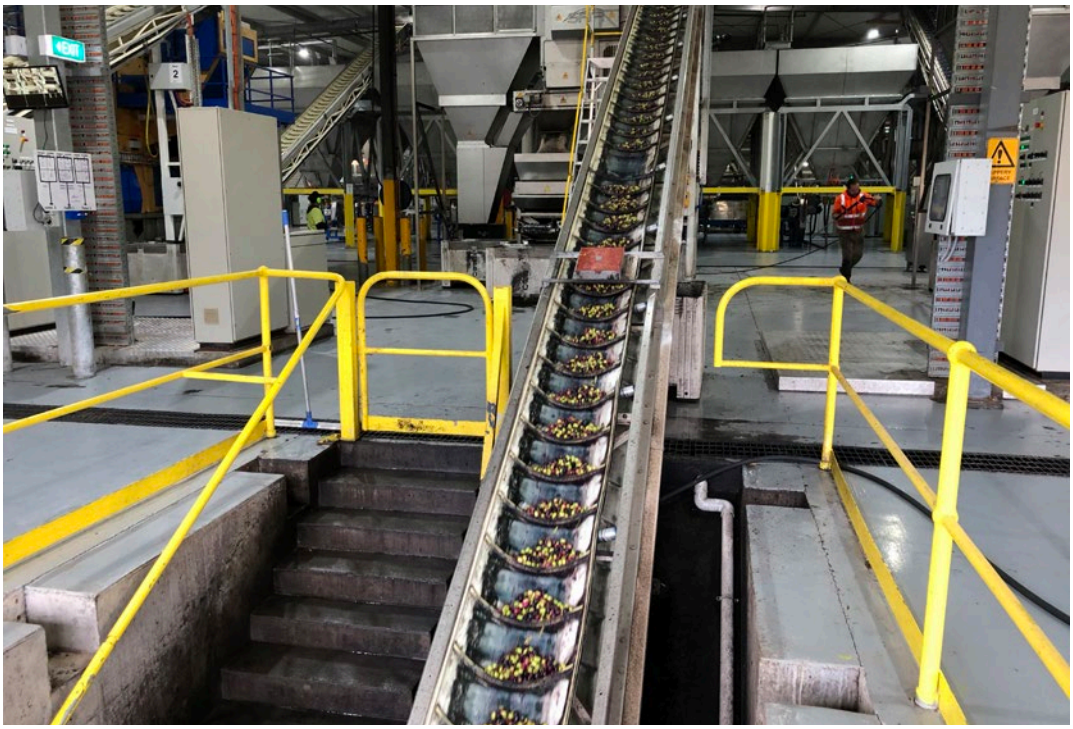
Table 3.8: Summary of our performance for managing funding directed to industrial scientific research activities

PERFORMANCE MEASURES SOURCE: 2020–21 CORPORATE PLAN	TARGET	RESULT
Strategic investments by SIEF in scientific research to address national challenges for Australia		
SIEF invests in programs aligned with published strategic objectives that address national challenges and contribute to Australia's sustainable future	Evidenced by an impact case study or evaluation for each active SIEF program	**Achieved**: Megasonics Experimental Development project and the Digital Initiatives project completed

The Future National ICT Industry Platform Program provides funding for large-scale research activities (Digital Initiatives) in information and communications technology for the benefit of Australia. It creates new Australian technology-based industries or applied technology platforms that can reach a global scale.

The Supply Chain Integrity Digital Initiative is addressing the national research priority of enhancing food production through novel technologies integrated into the production chain. Completed in early 2021, the digital initiative developed technologies that validate claims about the origin of a product, its authenticity and adherence to ethical production practices, and improves efficiencies for producers using the red meat sector as a use case. These technologies will protect Australia's reputation as a trusted supplier of premium food products. Read more about the Supply Chain Integrity Digital Initiative on page 208.

The Generation STEM program delivers education programs to support scientific research and employment in New South Wales. COVID-19 impacted the ability to continue face-to-face outreach. However, it provided opportunities to develop virtual events and online resources, including a virtual student showcase event in December. Generation STEM continues to increase education pathways and employment opportunities for New South Wales students, including those in regional and remote areas. Read more about Generation STEM on pages 85 and 206.



Ripe olives being conveyed into the megasonic assisted olive process.