

Appendix 4: Science and Industry Endowment Fund Annual Report 2016–17

TRUSTEE'S REPORT

As the Science and Industry Endowment Fund (SIEF) enters its 90th year, I'm honoured to have led it through a period of exciting change, as we completed projects funded under the 2009 CSIRO gift and embraced the exciting new prospects of fresh funding sources.

SIEF begins the new year with programs like STEM+ Business Fellowships, which builds deeper collaboration between researchers and SMEs, and the Experimental Development Program, which accelerates research into applications as diverse as prawn farming, cropping, drone mapping and navigation, hydrogen fuels and dry ice manufacture.

The impacts of SIEF's investment in the national innovation system are significant and, this year, we welcomed the outcomes of an evaluation of the impact and value of SIEF activities. The Impact Review considers not only return-on-investment measures, but the full scale and scope of SIEF's impacts and the associated value. The report evaluated the prospective benefits of five representative SIEF-funded research projects (Energy Waste, Early Nutrition, Plant Breeding, RAFT for medical applications and Distal Footprints), and a sixth, eReefs, previously analysed as part of an impact assessment.

The review found that while SIEF has invested \$153.2 million in strategic scientific research since 2009, it has delivered more than 20 times that value in the six case studies alone, with a net present value of \$3.5 billion. In fact, benefits resulting from just the three highest yielding projects would largely offset the full amount spent by SIEF across all its programs.

SIEF's contribution to Australia is not just scientific and economic, it also supporting the growth of our STEM workforce capacity and capability. Over the period 2010 to 2016, SIEF has supported the development of five leading-edge, strategic and cross-disciplinary research facilities. SIEF has also supported 302 ECRs through its Promotion of Science and Research Projects programs, with almost 40 per cent of them being women. ECRs surveyed as part of the Impact Review said the SIEF program provided them with mentoring and general advice, helped them to develop collaborative relationships

and improved their career mobility and research and non-research skills. This, in turn, has helped ECRs develop their research track record and establish their research careers. All this significantly contributes to the capacity and quality of research and development undertaken in the Australian innovation system.

SIEF Experimental Development Program projects

Hydrogen as fuel

As it enters its second year, the Experimental Development Program (EDP) is funding a new project to address the growing global demand for clean hydrogen fuel. The two-year project builds on CSIRO's expertise in separating pure hydrogen from mixed gas streams and converting ammonia to high-purity hydrogen. By using ammonia produced in Australia, renewable hydrogen can be distributed to new markets in Japan, Korea and Europe using existing infrastructure. This research is a significant opportunity to bridge the gap in the technology chain for a device that can efficiently and inexpensively convert ammonia into high-purity hydrogen at or near the point of use. This has great potential to establish an Australian renewable hydrogen export industry.

Spray-on polymer membrane

The Spray-on Polymer Membrane EDP project supports the development of a product that improves the retention of water in soils using a sprayable membrane that is applied to the soil surface to improve crop productivity. Efficiencies are achieved by reducing soil evaporation so more water is retained in the soil. It also inhibits weed growth so competition for the water in the soil is reduced. The saved water is used by the crop plants through the transpiration process to produce greater yields, more income and improved farm profitability. The polymer membrane is biodegradable and does not pollute soil and water systems. The membrane is the result of research in CSIRO's Agriculture and Manufacturing teams and was further developed through CSIRO's ON accelerator.

Collaborations between researchers and SMEs

SIEF's STEM+ Business Fellowship program teamed 19 SMEs from across Australia with some of the brightest and best early-career researchers in science, technology, engineering and mathematics to work on business-relevant innovation projects.

The program is forging closer links between research and industry, a key objective of the National Innovation and Science Agenda. The STEM+ Business Fellowship Program provides grants of up to \$105,000 per annum to 2-3 year research projects that will create industry savvy early-career researchers for the future.

Supporting early-career scientists

The inspiring Lindau Nobel Laureate Meetings, held annually in Germany since 1951, introduce Nobel Prize winners in chemistry, physiology, medicine and physics to younger generations of scientists. Since 2013, SIEF has worked with the Australian Academy of Science (AAS) to provide fellowships for Australian-based early-career scientists to attend the Lindau Meetings. This unique experience allows attendees to interact with their science heroes, exchange ideas, gain exposure to areas in their chosen disciplines and establish new contacts and networks with their peers. The 67th meeting of Nobel Laureates focused on chemistry and was attended by a SIEF-AAS delegation of nine outstanding young Australian scientists. This was followed by a once-in-a-lifetime study tour of world class chemistry research facilities and equipment.



The Australian delegation with Nobel Laureate Marty Chalfie. Image: Australian Academy of Science

SIEF advisory bodies

Advisory Council

Prof Alan Robson (Chair)
Mr Nigel Poole
Dr Peter Riddles
Dr Ezio Rizzardo
Prof Margaret Sheil
Prof Tom Spurling

Expert Panel

Prof Tom Spurling (Chair)
Dr Oliver Mayo
Dr Trevor Powell
Dr Ezio Rizzardo
Prof Elaine Sadler

EDP Review Panels

Dr Peter Riddles (Chair)
Mr Nigel Poole

In addition to the advisory bodies, a large number of reviewers continue to generously contribute their time and expertise, for which I am very grateful. As another year closes on my role as Trustee of SIEF, I couldn't be prouder of the demonstrable gains we've made. SIEF continues to be a vital endowment at every stage of the science cycle, from supporting STEM education, growing early-career scientists, to strengthening science and industry partnerships. It is a crucial and valuable part of the national innovation system that secures the future innovation of our nation and the world.

Dr Larry Marshall
SIEF Trustee



INDEPENDENT AUDITOR'S REPORT

To the Trustee of the Science and Industry Endowment Fund

Opinion

In my opinion, the financial report of the Science and Industry Endowment Fund for the year ended 30 June 2017:

- (a) gives a true and fair view of the financial position of the Science and Industry Endowment Fund as at 30 June 2017 and its financial performance and cash flows for the year then ended; and
- (b) complies with Australian Accounting Standards.

The financial report of the Science and Industry Endowment Fund, which I have audited, comprise the following statements as at 30 June 2017 and for the year then ended:

- 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;
- Statement of Comprehensive Income;
- Statement of Financial Position;
- Statement of Changes in Equity;
- Cash Flow Statement; and
- Notes to and forming part of the financial report, including a Summary of Significant Accounting Policies.

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 the Science and Industry Endowment Fund 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* to the extent that they are not in conflict with the *Auditor-General Act 1997* (the Code). 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 the Science and Industry Endowment Fund is responsible for the preparation of a financial report that gives a true and fair view and that comply with Australian Accounting Standards. The Trustee is also responsible for such internal control as they determine is necessary to enable the preparation of a financial report that gives a true and fair view and that is free from material misstatement, whether due to fraud or error.

In preparing the financial report, the Trustee is responsible for assessing the Science and Industry Endowment Fund's ability to continue as a going concern, disclosing matters related to going concern as applicable and using the going concern basis of accounting unless the Trustee either intends to liquidate the entity or to cease operations, or has no realistic alternative but to do so.

GPO Box 707 CANBERRA ACT 2601
19 National Circuit BARTON ACT
Phone (02) 6203 7300 Fax (02) 6203 7777

Auditor's Responsibilities for the Audit of the Financial Statements

My objective is to obtain reasonable assurance about whether the financial report as a whole is 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 the entity's internal control;
- evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by the Trustee;
- conclude on the appropriateness of the Trustee'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 the entity'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 report 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 the entity to cease to continue as a going concern; and
- evaluate the overall presentation, structure and content of the financial report, including the disclosures, and whether the financial report represents the underlying transactions and events in a manner that achieves fair presentation.

I communicate with those charged with governance 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



Lesla Craswell
Acting Executive Director

Delegate of the Auditor-General

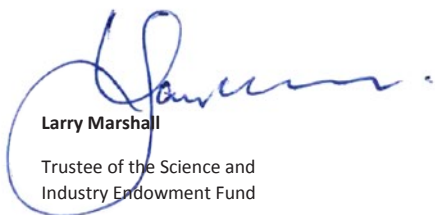
Canberra
14 August 2017

SCIENCE AND INDUSTRY ENDOWMENT FUND

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

In our opinion, the attached financial report for the year ended 30 June 2017 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 give a true and fair view of the financial position of the Science and Industry Endowment Fund as at 30 June 2017 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

14 August 2017



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

14 August 2017

SCIENCE AND INDUSTRY ENDOWMENT FUND

STATEMENT OF COMPREHENSIVE INCOME

For the period ended as at 30 June 2017

	Notes	2017 \$	2016 \$
EXPENSES			
Scientific research grants	1	17,672,851	14,833,647
Service fee under Services Agreement with CSIRO		525,718	424,789
Consulting fees		178,891	60,000
Audit fees		15,000	15,000
Advertising and approval fees	2	-	5,343
Other fees		6	35
Total expenses		18,392,466	15,338,814
LESS:			
REVENUE			
NSW Government Endowment contribution		25,000,000	-
Scientific grant program refunds		71,352	78,359
Interest	4	1,723,749	2,240,969
Resources received free of charge	2	-	5,343
Total revenue		26,795,101	2,324,671
Net profit/ (deficit)		8,402,635	(13,014,143)
Other comprehensive income		-	-
Total comprehensive profit/ (loss)		8,402,635	(13,014,143)

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

SCIENCE AND INDUSTRY ENDOWMENT FUND

STATEMENT OF FINANCIAL POSITION

For the period ended as at 30 June 2017

	Notes	2017 \$	2016 \$
ASSETS			
Cash	5	75,804,536	67,135,320
Interest receivable	6	439,736	450,752
GST receivable	6	152,119	412,589
Other receivables	6	14,223	40,480
Total Assets		76,410,614	68,039,141
LIABILITIES			
Payables			
Shared service fee payable		113,220	124,865
Accrued expenses	7	15,000	34,517
Total payables		128,220	159,382
Total liabilities		128,220	159,382
Net assets		76,282,394	67,879,759
EQUITY			
Contributed equity		200,000	200,000
Retained surplus		76,082,394	67,679,759
Total equity		76,282,394	67,879,759

SCIENCE AND INDUSTRY ENDOWMENT FUND

STATEMENT OF CHANGES IN EQUITY

For the period ended as at 30 June 2017

	Retained Surplus		Contributed Equity		Total Equity	
	2017 \$	2016 \$	2017 \$	2016 \$	2017 \$	2016 \$
Opening Balance	67,679,759	80,693,902	200,000	200,000	67,879,759	80,893,902
Net profit/ (deficit)	8,402,635	(13,014,143)	-	-	8,402,635	(13,014,143)
Closing Balance	76,082,394	67,679,759	200,000	200,000	76,282,394	67,879,759

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

SCIENCE AND INDUSTRY ENDOWMENT FUND

CASH FLOW STATEMENT

For the period ended as at 30 June 2017

	Notes	2017 \$	2016 \$
OPERATING ACTIVITIES			
Cash received			
Scientific research grant refunds		111,832	37,879
Interest received		1,734,764	2,537,673
NSW Government Endowment contribution		25,000,000	-
Net GST received		2,072,115	1,708,280
Total cash received		28,918,711	4,283,832
Cash used			
Payments to grantees		19,590,962	17,250,665
Other payments		658,529	522,603
Bank fees paid		4	35
Total cash used		20,249,495	17,773,303
Net cash provided/(used) by operating activities	8	8,669,216	(13,489,471)
Net increase/(decrease) in cash held		8,669,216	(13,489,471)
Cash at the beginning of the reporting period		67,135,320	80,624,791
Cash at the end of the reporting period		75,804,536	67,135,320

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 period ended as at 30 June 2017

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 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, 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. The maximum amount to be disbursed from the Gift Fund in any one financial year does not exceed \$25 million Goods and Services Tax (GST) exclusive. The total cash payments made in 2016-17 under the Deed of Gift was \$18,406,981.

In June 2017, the NSW STEM Foundation Initiatives' Program was created to establish and implement a program of 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.

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*. They have been prepared in accordance with Australian Accounting Standards, Australian Accounting Interpretations, and other authoritative pronouncements of the Australian Accounting Standards Board.

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.

Assets and liabilities are recognised in the Statement of Financial Position when, and only when, it is probable that future economic benefits will flow and the amounts of the assets or liabilities can be reliably measured.

Revenues and expenses are recognised in the Statement of Comprehensive Income when, and only when, the flow or consumption or loss of economic benefits has occurred and can be reliably measured.

The financial report is presented in Australian Dollars and values are rounded to the nearest dollar unless otherwise specified.

Significant Accounting Judgements and Estimates and New Accounting Standards

No accounting assumptions or estimates have been identified that have a significant impact on the amounts recorded in the financial statements.

The Fund has reviewed new standards, revised standards and interpretations/amending standards issued prior to the signing of the financial statements and has implemented the revised disclosure requirements under AASB 124 Related Parties Disclosures.

Events after the Reporting Period

At the time of completion of this note, the Trustee is not aware of any significant events occurring after the reporting date that could impact on the financial report.

Taxation

The Fund is exempt from all forms of taxation except the GST.

SCIENCE AND INDUSTRY ENDOWMENT FUND

NOTES TO AND FORMING PART OF THE FINANCIAL REPORT

For the period ended as at 30 June 2017

Note 1 Scientific research grants	2017	2016
	\$	\$
CREST Program awards	-	17,417
Macquarie University Joint Chair In Wireless Communication	288,347	277,256
Scholarships and Fellowships	6,068,600	1,436,630
Research Infrastructure Investment	5,706,000	3,325,000
Special Research Program	-	1,000,000
Research Project Grants	3,755,107	8,577,344
Experimental Development Program	1,854,797	200,000
Total	17,672,851	14,833,647

The Fund is a subsidiary entity of the Commonwealth Scientific and Industrial Research Organisation (CSIRO). For the 2016-17 financial year, the Fund has recognised \$12m in grant expenses as transferred directly to CSIRO to support scientific research and infrastructure projects within CSIRO and/or collaborative projects with external organisations (2015-16: \$6m).

Note 2 Estimated value of resources provided free of charge by CSIRO are as follows

Advertising and approval fees	-	5,343
Total	-	5,343

Resources received free of charge are recognised as gains when and only when a fair value can be reliably determined and the services would have been purchased if they had not been donated. Use of these resources is recognised as an expense.

Note 3 NSW Government Endowment contribution

In June 2017, the NSW Government acting through the NSW Department of Industry provided a \$25m endowment to SIEF. The contribution was recognised as income when SIEF gained control of the endowment. The endowment will be used on the NSW STEM Foundation Initiatives' Program in accordance with the deed of endowment. At the end of the financial year 2016-17, the entirety of the \$25m contribution remains unspent.

Note 4 Interest Revenue

Interest revenue is recognised using the effective interest method as set out in AASB 139 *Financial Instruments: Recognition and Measurement*.

Note 5 Cash

Cash at bank	25,578,861	4,166,070
Term deposits	50,225,675	62,969,250
Total	75,804,536	67,135,320

Cash and cash equivalents includes 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.

Note 6 Receivables

Interest receivable	439,736	450,752
GST Receivable	152,119	412,589
Other receivables	14,223	40,480
Total receivables	606,078	903,821

SCIENCE AND INDUSTRY ENDOWMENT FUND

NOTES TO AND FORMING PART OF THE FINANCIAL REPORT

For the period ended as at 30 June 2017

Note 7 Accrued expenses	2017	2016
	\$	\$
CREST Program awards	-	19,517
Audit fee	15,000	15,000
Total	15,000	34,517

Note 8 Cash flow reconciliation

Reconciliation of operating surplus to net cash from/(used by) operating activities:

Operating surplus/(deficit)	8,402,635	(13,014,143)
Changes in assets and liabilities		
(Increase)/decrease in receivables	297,743	445,042
Increase/(decrease) in payables	(31,162)	(920,370)
Net cash from/(used by) operating activities	8,669,216	(13,489,471)

Note 9 Schedule of commitments

The below table shows the monies SIEF is committed to pay on its executed grant funding agreements as at 30 June 2017, subject to grantees meeting funding milestones.

BY TYPE

Grants commitments payable	16,531,775	31,044,258
GST receivable on grants payable	(1,500,707)	(2,813,478)
Total net commitments by type	15,031,068	28,230,780

BY MATURITY

Grant commitments payable		
One year or less	14,223,434	17,814,547
From one to five years	2,308,341	13,229,712
Total grants payable	16,531,775	31,044,259
GST commitments receivable		
One year or less	(1,290,858)	(1,612,232)
From one to five years	(209,849)	(1,201,247)
Total commitments receivable	(1,500,707)	(2,813,479)
Net commitments by maturity	15,031,068	28,230,780

Note 10 Contingent assets and liabilities

No contingent assets or liabilities existed as at 30 June 2017 (2016: nil).

SCIENCE AND INDUSTRY ENDOWMENT FUND

NOTES TO AND FORMING PART OF THE FINANCIAL REPORT

For the period ended as at 30 June 2017

Note 11 Financial instruments

The Fund's financial assets are cash and interest receivable on cash. The net value is equivalent to the carrying amount. Financial liabilities are suppliers and grants payable. Due to the nature of SIEFs operations and its large cash holdings it is not exposed to credit risk, liquidity risk or market risk.

Interest rate risk

The Fund maintains an operating bank account and short term deposits which are subject to short term interest rates. Funds are maintained in term deposits for short periods. In 2016-17 the average return on cash and short term deposits was 2.90% (2016: 3.00%).

Note 12 Related Party Disclosures

The fund is a wholly controlled subsidiary of CSIRO. The trustee is the Chief Executive Officer 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. Given consideration to relationships with related entities, and transactions entered into during the reporting period by the entity, it has been determined that there are no related party transactions 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.