Australian Government

Australian Renewable Energy Agency

ANNUAL REPORT 2013 2014

BUILDING TOMORROW'S ENERGY INFRASTRUCTURE

CREATING OPTIONS

KNOWLEDGE SHARING

ARENA

COMMERCIALISATION

WORLD FIRSTS

SKILLS FOR THE FUTURE

NEW JOBS

Australian Renewable Energy Agency

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LETTER OF TRANSMITTAL

Australian Government
Australian Renewable Energy Agency

ARENA

OFFICE OF THE CHAIR

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2 October 2014

The Hon Ian Macfarlane MP
Minister for Industry
PO Box 6022
Parliament House
CANBERRA ACT 2600

Dear Minister

I am pleased to present to you the annual report of the Australian Renewable Energy Agency (ARENA) for the financial year 2013–14, in accordance with the requirements of the *Australian Renewable Energy Agency Act 2011* and the *Commonwealth Authorities and Companies Act 1997* (CAC Act).

Under section 9 of the CAC Act, the agency's directors must prepare the annual report of operations in accordance with the Commonwealth Authorities (Annual Reporting) Orders 2011 (Finance Minister's Orders). I note that, from 1 July 2014, ARENA is subject to the *Public Governance, Performance and Accountability Act 2013*.

The ARENA Annual Report 2013-14 details how ARENA is achieving our objectives to improve the cost competitiveness of renewable energy technologies and supply of renewable energy in Australia. The report was approved by a resolution of ARENA's Board of Directors on 2 October 2014.

Yours sincerely,

Greg Bourne
Chair

2 October 2014

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REPORT FROM THE CHAIR

I am pleased to present ARENA's second Annual Report, covering the 2013–14 financial year.

ARENA continues to be focused on helping to catalyse change in Australia's energy landscape and advance world-leading renewable energy technologies.

The idea that renewable energy has an important part to play in the world's energy mix has gained traction over the past few decades. This shift has seen ARENA well positioned to invest in projects that help make renewable solutions more affordable and increase the amount of renewable energy used in Australia.

There is still much to be done to achieve the diversity of supply that will deliver Australians – on and off the electricity grid – with more affordable, reliable and secure power sources.

ARENA is focused on building the infrastructure that will deliver this future energy supply. The agency has a wealth of experience to draw upon in fostering the development of new renewable energy technologies, and a commercially-oriented Board that is also technically savvy.

Our role is to set up the pre-conditions needed for a cascade of change to occur. These include de-risking or making projects more attractive to investors by reducing their perceived risk. They also involve finding solutions for barriers to development so that the next generation of renewable energy technologies can be accelerated towards commercialisation.

ARENA uniquely supports projects along the commercialisation pathway, from the laboratory workbench through to pre-commercial deployment, and we know how important it is to progressively rebalance early-stage support with commercial arrangements as technologies move towards bankability.

Through our knowledge sharing activities ARENA has raised awareness and understanding of renewables as well as experience in developing projects that use these technologies, which in turn develops local capabilities and creates local jobs.

In short, we are creating jobs, skills and knowledge today while building the energy infrastructure of tomorrow.

I would like to take this opportunity to thank past and present Board members, our Chief Executive Officer and all ARENA staff, for contributing to the considerable achievements described in this report.

Together, we will continue to work assiduously to deliver Australians with affordable and reliable electricity from our nation's world-class reserves of renewable energy.

Greg Bourne
Chair

REPORT FROM THE CHIEF EXECUTIVE OFFICER

ARENA's second year of operation was one of consolidation and growth.

We are a young organisation, but ARENA nevertheless has incredible depth of expertise and experience and a long-term vision that involves establishing the technical and commercial foundations needed for Australia to benefit from its renewable energy resources.

Our work in delivering a more diverse and affordable energy future for Australia is built on the understanding that lasting and meaningful change takes time. The effective development of technology from research to commercialisation is a long, multi-decade process, during which it can be difficult to secure the required levels of investment from commercial investors.

ARENA is the only agency to invest along the commercialisation pathway from the laboratory to deployment in the field, and to take a long-term approach. This is essential in the energy industry, where projects take years to plan and execute, and operate for decades.

ARENA funding helps promising projects overcome additional costs incurred when doing something for the first few times, which manifest as higher finance, construction and labour costs. By taking a strong commercial focus in selecting projects for ARENA investment, we ensure that we receive the best value for taxpayer funds. In fact, our projects often have the potential to return funds to ARENA.

Over the course of 2013-14, ARENA continued to build upon the strong foundations established in the previous year. We assessed 384 applications for funding, mostly for programs launched in June 2013, and also for the Research and Development Program launched in January 2014. This resulted in 48 projects being approved for funding.

During the same period 11 projects reached completion including one terminated project. ARENA's workforce also grew from 56 to a peak of 83, in order to meet stakeholder expectations and minimise project-related risks. We expect agency staffing to drop in the upcoming year due to tight budgets.

At 30 June 2014 we were managing commitments of $1.2 billion in ARENA support for more than 200 projects, scholarships and fellowships, which have a total value of around $3.5 billion. This amounts to $1.90 in additional financial support from industry and other parties for every dollar managed by ARENA.

These projects stretch across the continent, from Daly River in the Northern Territory to King Island in Tasmania; from Townsville to Whyalla; from Broken Hill to Perth. In fact, more than 70 per cent of them are located in regional and remote Australia, creating local jobs, developing new skills and supply chains, and contributing to nearby communities.

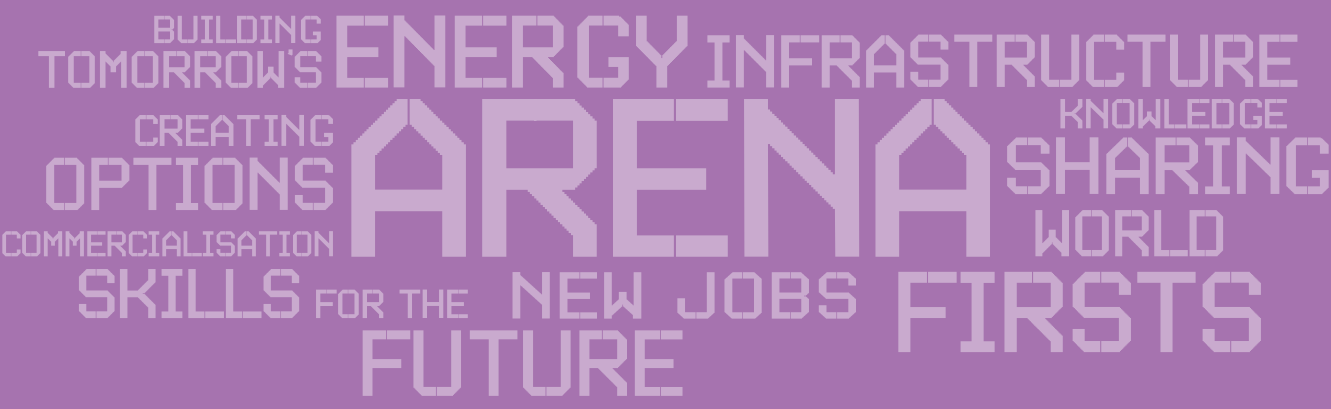
Developing local supply chains means reskilling local manufacturers, including those from the automotive parts and retooling industry, for the renewables sector.

In addition, several of the projects have delivered breakthrough achievements for Australia and the world, such as the world's first solar-created supercritical steam, reinforcing our nation's strong international reputation for renewable energy innovation and expertise.

This past year has confirmed ARENA's unique role in matching Australia's future energy needs with emerging renewable energy technologies, and supporting those with the best prospects to the brink of commercialisation.

Ivor Frischknecht
Chief Executive Officer

ARENA OVERVIEW



ARENA'S TWO YEARS OF ACHIEVEMENTS

In two years the Australian Renewable Energy Agency (ARENA) has built upon the strategic approach developed in 2012.

These two years of activity have resulted in:

- commitment of $1.2 billion in support of more than 200 projects, scholarships and fellowships with a total project value of around $3.5 billion
- attraction of $1.90 in additional financial support for every dollar invested by ARENA
- enabling of several world-first and Australia-first projects and achievements
- improved local knowledge and experience in the assessment and financing of renewable energy projects
- creation of local expertise and jobs predominantly in rural and regional Australia.

COMMITTED $1.2 BILLION IN SUPPORT OF MORE THAN 200 PROJECTS, SCHOLARSHIPS AND FELLOWSHIPS

BUILDING TOMORROW'S ENERGY INFRASTRUCTURE

April 2014 marked 60 years since the first solar cell was unveiled by Bell Laboratories. The commemoration of this breakthrough provided a timely reminder of how long it takes to bring a technology to market, how far renewable energy has progressed over that time, and the significance of the technological and economic changes underway today.

Renewable energy's share of global electricity generation continued to grow this past year, from 7.8 per cent in 2012 to 8.5 per cent in 2013[1]. This was mainly due to the significantly reduced cost of solar photovoltaic (PV) systems leading to a record 39 gigawatts of PV capacity being installed in 2013 (for less cost than the smaller 2012 total of 31 gigawatts).

Renewable energy technologies that are emerging will take renewables from niche to mainstream energy providers, thereby enhancing their benefits and extending their reach within the Australian community.

These technologies include more efficient solar PV and thermal systems, large-scale solar plants, energy storage systems, marine energy harvesters, biofuel production systems and better integration of renewables with fossil fuels. Each technology is at a different point along the commercialisation pathway, also known as the innovation chain.

Renewable energy has been brought to this point through vision, perseverance, and prudent investment to ensure success over the longer term.

The same qualities are also critical in bringing forward the renewable energy technologies, applications and infrastructure of tomorrow.

ARENA'S ROLE

ARENA was created in 2012 to increase the competitiveness and use of renewable energy technologies in Australia.

The agency's scope extends to 2022 and covers the entire commercialisation pathway, making ARENA unique in Australia.

Pre-existing renewable energy programs and projects were merged into ARENA at the time of its establishment to reduce the likelihood of overlapping roles and responsibilities.

ARENA's investments are made in research, development, demonstration, deployment and pre-commercial projects, as well as those which share knowledge and develop local skills and expertise.

To achieve its mandate, ARENA provides funding and knowledge support to help renewable energy projects secure financial backing from private investors.

ARENA supports demonstration and pre-commercial deployment projects to reduce the risk that commercial markets perceive in renewable energy projects.

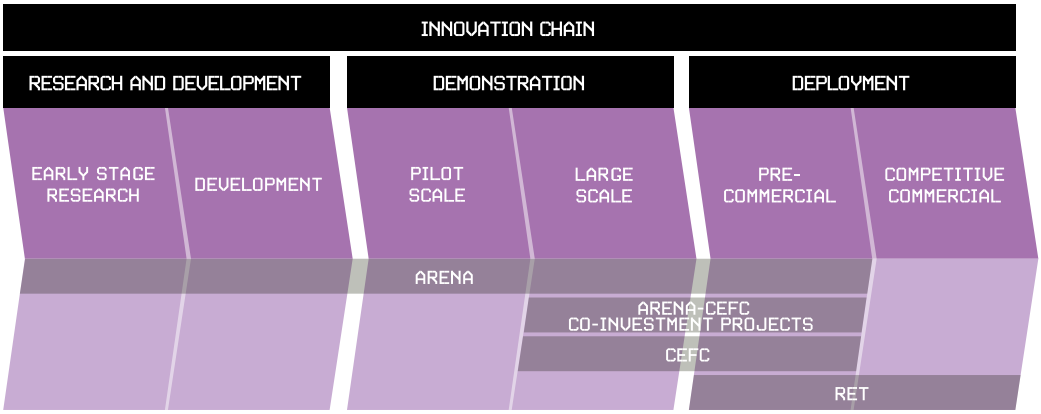
In supporting projects along the commercialisation pathway, ARENA takes on a greater proportion of project funding at the research and development stage, and then progressively substitutes this support with commercial arrangements as technologies move towards bankability.

The agency's investment strategy is commercially-focused and based on market opportunity, demand and commercial readiness.

Accordingly, ARENA's investment programs have also been developed to make renewable energy more available or more affordable, and every eligible project undergoes a rigorous assessment process.

1 Global trends in renewable energy investment 2014, Frankfurt School – UNEP Collaborating Centre for Climate & Sustainable Energy

FIGURE 1 ARENA'S RELATIONSHIP WITH THE RET AND CEFC



ARENA's relationship with the RET and CEFC

ARENA plays a complementary role to the Renewable Energy Target (RET) and Clean Energy Finance Corporation (CEFC).

While the RET drives the uptake of the cheapest mature renewables, and the CEFC provides finance to help bring near-commercial and commercial projects to reality, ARENA helps progress promising technologies along the innovation chain.

While ARENA typically provides funding to earlier stage solutions than the CEFC, ARENA also co-invests with the CEFC in later-stage projects that are not fully commercially competitive.

These projects are usually eligible for the RET, which reduces the amount of CEFC and ARENA funding required for a given project.

ARENA'S STRATEGY

The key elements of the strategic approach set by the ARENA Board are:

Vision

An Australian economy and society increasingly powered by competitive renewable energy.

Mission

Help catalyse the development and deployment of renewable energy in Australia.

Timeframe

ARENA's timeframe for delivering its objectives is 2022, with an intent to provide competitive energy solutions up to 2030-40.

This strategic approach is monitored and reviewed by the Board and management team, and adjusted if necessary in light of changes to the agency's operating environment and feedback received.

GOVERNANCE AND OPERATIONAL PERFORMANCE

GOVERNANCE AND OPERATIONAL PERFORMANCE

ENABLING LEGISLATION

On 10 July 2011, the Australian Government announced the establishment of the Australian Renewable Energy Agency (ARENA).

The *Australian Renewable Energy Agency Act 2011* (ARENA Act) received royal assent on 2 December 2011 and took effect on 1 July 2012, establishing ARENA as an independent statutory authority under the *Commonwealth Authorities and Companies Act 1997* (CAC Act).

The objectives of the ARENA Act are to improve the competitiveness of renewable energy technologies and increase the supply of renewable energy in Australia.

Upon establishment, ARENA became responsible for the administration of renewable energy projects of the former Australian Centre for Renewable Energy and former Department of Resources, Energy and Tourism. On 1 January 2013, ARENA became responsible for the projects of the former Australian Solar Institute. A total of 146 projects were transferred to ARENA from other agencies, many of which were subsequently varied following review by ARENA. This review also resulted in some projects being terminated.

ARENA's functions are to support improvements in the competitiveness of renewable energy and related technologies and the supply of renewable energy. It does this by administering financial assistance, developing analysis and advice, and sharing information and knowledge on renewable energy and related technologies.

The agency also provides advice to the portfolio Minister in relation to renewable energy and related technologies.

To ensure accountability and transparency for expenditure of a significant sum of public funds, the Australian Government has put in place safeguards that ARENA must follow when making funding decisions.

The ARENA Act requires the portfolio Minister to approve program guidelines that permit grants for projects in excess of $15 million. The Minister must also approve projects where grants in excess of $50 million are to be awarded.

During the financial year there were no amendments to ARENA's enabling legislation.

One determination was enacted during the year, enabling the General Funding Strategy (GFS) for 2013–14 to 2015–16:

- Australian Renewable Energy Agency Determination No. 1 of 2013

ARENA FUNDING

ARENA provides funding grants to develop technologies and improve investor confidence in renewable energy projects.

Under the ARENA Act, the agency has significant independence and flexibility in how it chooses to provide this financial support to the renewable energy sector, however the ARENA Act requires the portfolio Minister to approve significant program guidelines and projects (see above).

A budget of approximately $3.2 billion for the period to 2020 was initially allocated to ARENA. This funding included:

- $200 million from the Education Investment Fund (EIF) for large-scale solar projects
- $824 million from the then Department of Resources, Energy and Tourism, for ARENA to continue supporting projects from the former Australian Centre for Renewable Energy and Australian the Solar Institute, some of which was already spent.

Subsequent Australian Government announcements identified additional changes to ARENA's funding, which were to be enacted through the Clean Energy Legislation (Carbon Tax Repeal) Bill 2014 (see below). The Bill was not passed by the Parliament before the end of the reporting period.

These funding changes were not expected to affect projects that already had funding agreements in place with ARENA.

In addition, EIF funding was reduced to $40.9 million in the 2013-14 Federal Budget.

KEY GOVERNANCE EVENTS AND OTHER ACTIVITIES AFFECTING ARENA

The Government announced in the 2014-15 Budget its intention to abolish ARENA, consolidating its functions into the Department of Industry and return uncommitted funds to the budget. This will require the repealing of the *Australian Renewable Energy Agency Act 2011*.

To give effect to this announcement, the Australian Renewable Energy Agency (Repeal) Bill 2014 was tabled in the House of Representatives on 19 June 2014. On the same day, the Bill was referred to the Senate Economics Legislation Committee for report by 4 September 2014. If the repeal is successful, signed funding agreements, assets and liabilities at the time of repeal would transfer for management to the Department of Industry. The Bill was passed by the House on 1 September 2014. However, the Bill remains before the Senate and had not been considered at the date of this report, and as such ARENA continues to operate under the ARENA Act.

ARENA did not experience any 'significant events' (as defined in section 15 of the CAC Act) or 'material' matters disclosed in the financial statements (as defined in paragraph 12(1) of the Finance Minister's Orders for Financial Reporting (Incorporating Policy and Guidance) and the ministerial direction outlined in *Finance Circular 2008/05—Compliance Reporting*).

It is important to note that ARENA's funding schedule contained within subsection 64(1) of the ARENA Act was amended as part of the *Clean Energy Legislation (Carbon Tax Repeal) Act 2014*, which received royal assent on 17 July 2014. The amendment legislates and brings into effect:

- a 2013-14 Federal Budget measure to re-profile $370 million in funding for ARENA over the forward estimates (2014-15 to 2016-17) into later years (2019-20 to 2021-22);
- a reduction in funding for ARENA by $434.9 million over the forward estimates (2014-15 to 2016-17).

The table below summarises the impact on ARENA's funding, taking into account actual expenditure to 2013-14 and subsequent rollovers of unspent funding.

TABLE 1 AMENDMENTS TO ARENA ACT S64

FINANCIAL YEAR	ARENA ACT $'000	ARENA ACT (AS AMENDED) $'000
2012–13	$659,639[1]	$56,193[2]
2013–14	$344,904	$265,150[2]
2014–15	$436,640	$510,466[3]
2015–16	$321,810	$89,991
2016–17	$299,550	$56,950
2017–18	$221,000	$499,893
2018–19	$237,000	$237,000
2019–20	$368,340	$468,340
2020–21	–	$135,000
2021–22	–	$135,000

[1] For 2012–13 $278.9 million was added to ARENA's special appropriation in accordance with the ARENA Act Subsection 64(3) Determination (signed by the Minister for Finance on 25 June 2013), and a further $88.2 million added relating to ASI Limited's closing bank account balance in accordance with the ARENA Act Subsection 64(5).

[2] Actual amounts drawn down and spent in 2012-13 and 2013-14.

[3] Includes $316.1 million of unspent 2013-14 funding rolled over, in accordance with the ARENA Act Subsection 64(2). The rollover amount per Table 4 Agency Resource Statement of $683.2 million is prior to the amendments to the ARENA Act. The rollover amount is reduced due to the amendments, which reduces the carryover amount by taking off $88.2 million and $278.9 million from the 2013-14 year and re-profiles the amounts into 2015-16 and 2017-18 respectively.

RESPONSIBLE MINISTERS

The Ministers responsible for ARENA in 2013-14 were:

- the Hon Gary Gray MP, Minister for Resources and Energy, from 1 July 2013 to 17 September 2013
- the Hon Ian Macfarlane MP, Minister for Industry, from 18 September 2013 onwards.

Since its establishment, ARENA has worked with Ministers to keep them informed about the operations of ARENA by providing reports of each ARENA Board meeting, which outline key deliberations, meeting outcomes and significant correspondence. ARENA's approach has been guided by the *Review of Corporate Governance of Statutory Authorities and Office Holders* undertaken by Mr John Uhrig AC.

ARENA has outlined to successive Ministers its efforts to improve the competitiveness of renewable energy technologies and increase renewable energy supply in Australia over the longer term, consistent with the ARENA Act.

MINISTERIAL APPROVAL

During 2013–14 the ARENA Board gained ministerial approval for:

- guidelines on financial assistance in excess of $15 million for the Research and Development program (section 25 of the ARENA Act)
- 2013–14 ARENA Work Plan
- GFS for 2013–14 to 2015–16, which was subsequently enabled by the *Australian Renewable Energy Agency Determination No. 1 of 2013* (section 20 of the ARENA Act).

The guidelines and GFS were published on the ARENA website (arena.gov.au).

MINISTERIAL REQUESTS AND DIRECTIONS

No requests have been made by the Minister under section 11 for 2013-14

No ministerial directions were made under section 13 of the ARENA Act in respect of seeking advice in relation to renewable energy technologies.

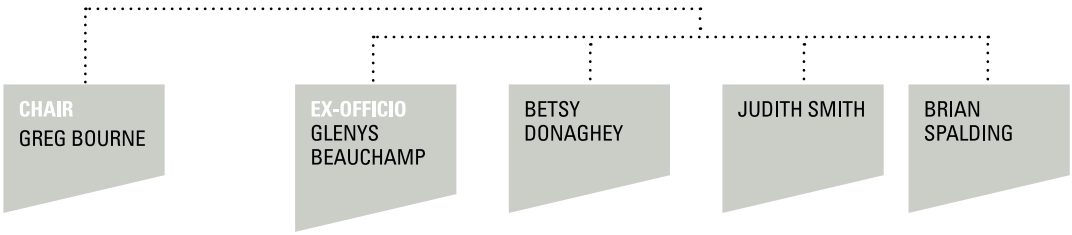
Under section 28 of the CAC Act, ARENA must comply with General Policy Orders (made by the Finance Minister) to the extent that they apply. One General Policy Order applied, in respect of the Parliamentary Budget Office, and was complied with.

ARENA BOARD

At 30 June 2014, the ARENA Board comprised Mr Greg Bourne (Chair), Ms Betsy Donaghey, Ms Judith Smith, Dr Brian Spalding, and Ms Glenys Beauchamp (ex-officio).

Meetings and the operation of the Board are conducted in accordance with the requirements of legislation applicable to ARENA. Further information on the Board is at Appendix 1.

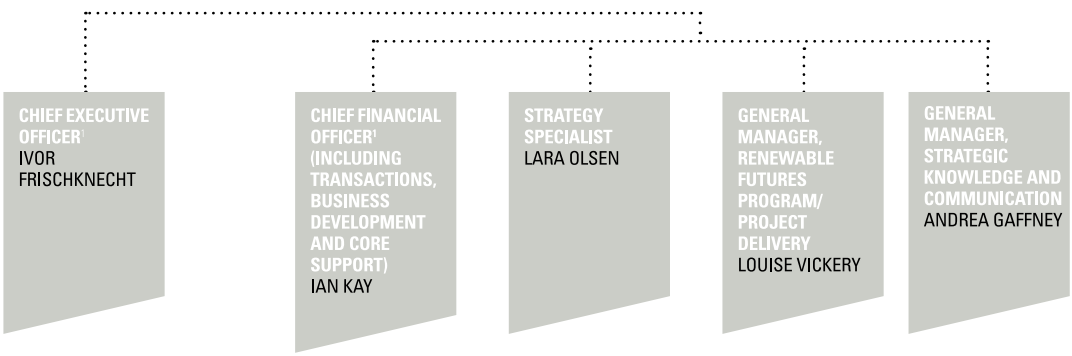
FIGURE 2 ARENA BOARD, 30 JUNE 2014



ARENA CHIEF EXECUTIVE OFFICER

At 30 June 2014, the ARENA CEO was Mr Ivor Frischknecht. Further information on the CEO is at Appendix 1. The CEO is supported by an executive team, including a Chief Financial Officer (CFO).

FIGURE 3 ARENA ORGANISATIONAL STRUCTURE, 30 JUNE 2014



[1] Appointments made under the ARENA Act.

ARENA ADVISORY PANEL

The ARENA Advisory Panel provides advice to support the development and selection of projects and initiatives for funding. The panel's roles include assessing program funding applications and providing expert specialist advice as required. A current list of advisory panel members is available on the ARENA website (arena.gov.au).

ABOVE ARENA Board and CEO as at 30 June 2014 (left to right): Ivor Frischknecht, Judith Smith, Greg Bourne, Betsy Donaghey, Brian Spalding. Not present: Glenys Beauchamp.

STAFF

At 30 June 2014, ARENA had two ARENA Staff (CEO and CFO), 72 departmental staff (70.54 FTE), including staff in non-ongoing positions and one staff member on a secondment out of ARENA, and a number of specialist consultants.

During 2013-14, the majority of staff were based in Canberra (Australian Capital Territory). Staff working in other locations included:

- one staff member (1.0FTE) in Sydney (New South Wales)
- one staff member (0.8FTE) in Albury (New South Wales)
- one staff member (0.67FTE) in Newcastle (New South Wales).

CULTURE

ARENA is an independent and dynamic agency comprising highly qualified and experienced people overseen by a Board that is commercially and technically astute.

The culture of ARENA emphasises a commercially-orientated and flexible attitude when dealing with stakeholders. ARENA aims to be an agile agency that responds quickly to changes in the operating environment.

OPERATING ENVIRONMENT

In 2013-14, ARENA's operating environment encompassed:

- the Board, CEO, CFO and financial assistance initiatives administered under the ARENA Act and the CAC Act
- departmental resources provided to ARENA and subject to the *Public Service Act 1999* and the *Financial Management and Accountability Act 1997*.

ARENA operates in compliance with a Board-approved governance framework that sets out the application of the differing requirements under these various Acts.

SERVICE LEVEL AGREEMENT

The department provides corporate support for ARENA's day-to-day operations. This relationship is managed by a service level agreement, which sets out the arrangements for the provision of services to the CEO and CFO and the arrangements relating to ARENA as a division of the department. The ARENA Core Support Team acts as the conduit to the department's Corporate Division, ensuring that ARENA's legislative requirements are met.

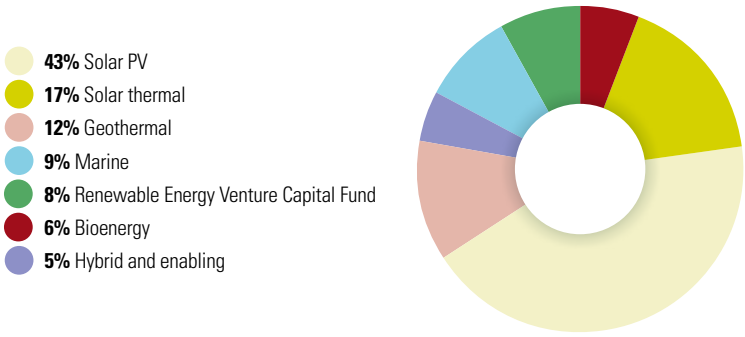
PLANNING AND REPORTING FRAMEWORK

ARENA uses the framework below to streamline its planning and reporting processes. See Table 2.

TABLE 2 PLANNING AND REPORTING FRAMEWORK, 2013-14

AUDIENCE	PLANNING	REPORTING
External	■ Portfolio budget statements, including additional estimates statements	■ Annual report ■ Senate estimates hearings
Board and Minister	■ General Funding Strategy ■ Investment Plan ■ Work Plan	■ Board meetings ■ CEO Reports to Board ■ Chair reports on Board meetings to Minister
Internal	■ Business Plan ■ Risk Management Plan ■ Fraud Control Plan ■ Business Continuity & Disaster Recovery Plans	■ Board and Risk & Audit Committee meetings ■ ARENA staff meetings

FIGURE 4 ARENA FUNDING BY TECHNOLOGY (AT 30 JUNE 2014)



OPERATIONAL PRIORITIES

ARENA's approach to funding support is set out in its GFS and IP. Refer to page 20 for more detail. The IP for 2013–14 to 2015–16 sets out how ARENA will measure its performance.

Table 3 shows ARENA's results against the performance measures set out for 2013–14 in the IP.

TABLE 3 RESULTS AGAINST ARENA PERFORMANCE MEASURES, 2013-14 (AT 30 JUNE 2014)

WHAT	HOW	MEASURE
Improve the competitiveness of renewable energy technologies	Improve the technical and commercial readiness of technologies within Australia from ARENA's actions.	See Program Performance on page 20
	Enter agreements to deliver two significant multi-participant knowledge-sharing products by December 2013.	International Geothermal Expert Group Report Integrating Renewables in the Grid Stocktake
	Fund a range of knowledge sharing projects by May 2014.	See Knowledge Bank at arena.gov.au/resources
	Maintain a diverse portfolio of technologies.	Ongoing. See Figure 4
Increase the supply of renewable energy in Australia	Increase the total amount of renewable energy within Australia from ARENA's actions.	Projects expected to install at least 613 MW capacity
	ARENA funding leverages additional funding and in-kind contributions from project partners.	Leverage ratio 1.9
	Finalise the assessments of one round of ARENA's Regional Australian Renewables Initiative by April 2014.	Complete
	Design and launch one new investment strategy (program) by June 2014.	R&D Program
Organisational effectiveness	Conduct a baseline stakeholder survey by April 2014.	Complete
	Increase the number of ARENA website visitors by at least 20 per cent from May 2013 to June 2014.	25 per cent increase
	Review the ARENA General Funding Strategy for 2014–15 to 2016–17 and submit to Minister by June 2014.	Submitted to Minister by 30 June 2014
	Develop the ARENA work plan for 2014–15 and submit to Minister by June 2014.	Submitted to Minister by 30 June 2014

FINANCIAL PERFORMANCE

ARENA reported a net operating surplus of $9.7 million for 2013–14. This was the result of accounting requirements to report a number of items funded through revenue on the Statement of Financial Position. The Government provided ARENA with $261.9 million in revenue for ARENA operations.

Agency resource statement

The agency resource statement reconciles the final usage of all resources in cash terms, by declaring the actual available appropriation for 2013–14, including carried forward cash balances and further adjustments, and comparing this to the actual payments made.

The agency resource statement in Table 4 is different to the Actual Available Appropriation disclosed in Table 1.1 in the ARENA Budget Statements for 2013-14[1].

The difference is due to the timing of the preparation of the 2013-14 Budget Statements and the estimates used at that time compared to the actual amount of unspent 2012-13 funds carried forward.

The difference between the payments made by the portfolio department of $265.2 million shown above and the actual expenses of $266.6 million disclosed in Table 5 below are accruals plus Resources Received Free of Charge from the portfolio department.

The balance remaining of $683.2 million is largely a result of the expenditure profile of ARENA differing from ARENA's standing appropriation.

Note: The standing appropriation in this table is prior to the amendments to the ARENA Act contained within the *Clean Energy Legislation (Carbon Tax Repeal) Act 2014* which did not receive royal assent until after the reporting period, on 17 July 2014. The impact of the amendments is discussed further on page 11.

Expenses by outcome

The total expenses for ARENA's outcome in Table 5 corresponds with Table 2.1 in the ARENA Budget Statements for 2013-14.

TABLE 4 AGENCY RESOURCE STATEMENT, 2013-14

	ACTUAL AVAILABLE APPROPRIATION FOR 2013–14 $'000 (A)	PAYMENTS MADE 2013–14 $'000 (B)	BALANCE REMAINING 2013–14 $'000 (A) – (B)
Opening balance/Reserves at bank	**221**	**195**	**26**
REVENUE FROM GOVERNMENT			
Payments from related entities[2]			
Amounts from portfolio department	948,350[3]	265,150	683,200
Total funds from government	**948,350**	**265,150**	**683,200**
Total net resourcing and payments for ARENA	**948,571**	**265,345**	**683,226**

[1] 2013-14 Portfolio Budget Statements, May 2013.
[2] Amount received from Department of Industry, which receives a Special Appropriation for the purposes of funding ARENA
[3] The actual available appropriation of $948.3 million is in accordance with the funding stated in section 64 of the ARENA Act (prior to amendments). It comprises $344.9 million for 2013-14 (s64(1)) and the rollover of unspent 2012-13 funding of $603.4 million (s64(2)). The rollover amount is based on $292.6 million for 2012-13 (s64(1) plus the transfer of $278.9 million from the Clean Energy Initiative Special Account (s64(3)) and $88.2 million from the Australian Solar Institute (s64(5)) less actual amounts expended of $56.2 million in 2012-13.

TABLE 5 EXPENSES BY OUTCOME, 2013-14

Outcome 1: Support improvements in the competitiveness of renewable energy and related technologies and the supply of renewable energy by administering financial assistance, developing analysis and advice about and sharing information and knowledge with regard to, renewable energy and related technologies.	BUDGET[1] 2013–14 $'000 (A)	ACTUAL EXPENSES 2013–14 $'000 (B)	VARIATION 2013–14 $'000 (A) – (B)
PROGRAM 1: SUPPORTING OUTCOME 1			
Revenue from government			
Payments from related entities	508,869	266,576	242,293
Total for Program 1	**508,869**	**266,576**	**242,293**
OUTCOME 1 TOTALS BY APPROPRIATION TYPE			
Revenue from government			
Payments from related entities	508,869	266,576	242,293
Total expenses for Outcome 1	**508,869**	**266,576**	**242,293**

	2012–13	2013–14	VARIATION
Average staffing level (number)[2]	**2**	**2**	**-**

[1] 2013-14 Portfolio Budget Statements, May 2013

[2] ARENA only has two employees, the CEO and CFO. Under section 62 of the *ARENA Act 2011* all other staff necessary to assist ARENA must be persons employed under the *Public Service Act 1999* who are employed by the portfolio department and made available to ARENA by the Secretary of the department.

The variation of $242.3 million arose from a number of project milestones being delayed and/or rescheduled.

The timing of milestones were changed for a wide range of reasons including: key project staff being absent for extended periods, projects having difficulty finalising international collaboration agreements, unanticipated technology or engineering challenges and late delivery by suppliers to the project.

The changes to the timing of project milestones meant payments associated with milestones were also delayed. Where applicable, funding agreements were varied to reflect changed circumstances to maximise the chances of project success.

BUILDING
TOMORROW'S
ENERGY
INFRASTRUCTURE
CREATING
OPTIONS
ARENA
KNOWLEDGE
SHARING
COMMERCIALISATION
WORLD
SKILLS
FOR THE
NEW JOBS
FIRSTS
FUTURE

PROGRAM PERFORMANCE

PROGRAM OVERVIEW

ARENA identifies and pursues opportunities that have the potential to significantly advance the development and deployment of renewable energy technologies in Australia.

This is in accordance with the ARENA Act and the outcome identified for ARENA in the 2013–14 Portfolio Budget Statements:

> Support improvements in the competitiveness of renewable energy and related technologies and the supply of renewable energy by administering financial assistance, developing analysis and advice about and sharing information and knowledge with regard to, renewable energy and related technologies.

STRATEGIC APPROACH TO INVESTMENT

ARENA's main focus is to make decisions that will foster the renewable energy market by making technologies more affordable and increasing local supply.

The way in which these decisions are made is critical to ensuring initiatives are focused on the most beneficial outcomes for the Australian public and industry.

Investing along the innovation chain

In order to support the development of lower cost renewables and accelerate their progress towards commercialisation, ARENA has developed a detailed understanding of the barriers to commercialisation and the most effective ways to unlock investment capital.

ARENA applies that knowledge not only to research and development projects but also to projects that have reached the critical demonstration and pre-commercial phases.

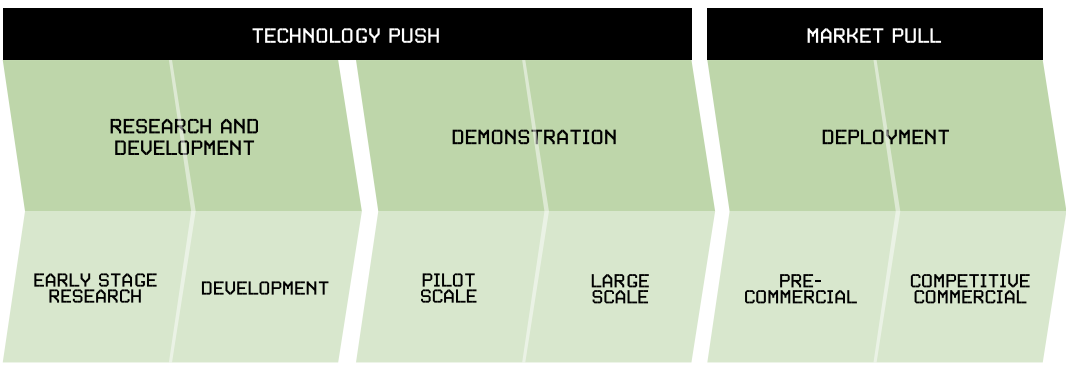
Paired with ARENA's long-term funding, this broad investment scope makes the agency uniquely positioned to help Australia's renewable energy technologies move along the commercialisation pathway, or innovation chain (see Figure 5), to the brink of commercialisation.

General Funding Strategy and Investment Plan

ARENA's approach to funding support is set out in its General Funding Strategy (GFS) and Investment Plan (IP).

The GFS outlines ARENA's principal objectives and priorities for the current and following two financial years, and is used to select which renewable energy projects will receive financial support. It is developed in consultation with renewable energy researchers and

FIGURE 5 INNOVATION CHAIN



developers, the broader energy industry, and stakeholders. The GFS is updated annually following approval by the portfolio Minister.

The IP details the initiatives that ARENA will focus on during the period of the GFS.

Investment priorities in 2013-14

Guided by the GFS, ARENA's activities during 2013-14 involved the exploration of opportunities in renewable energy generation and fuels in off-grid and fringe-of-grid areas, as well as promotion of the integration of renewable energy technologies into major grids. ARENA's activities also involved the identification of opportunities for integrating renewables with existing fossil fuel plants.

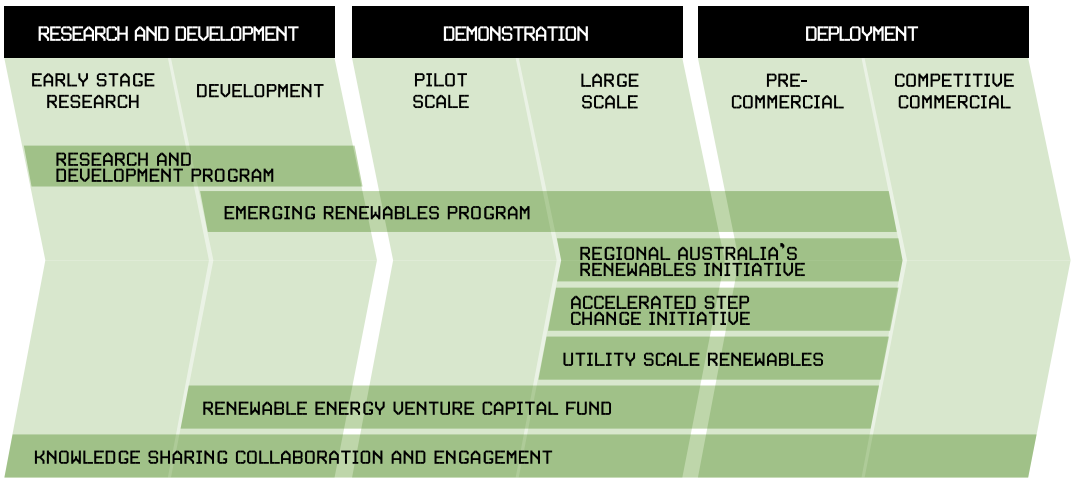
PROGRAMS AND INITIATIVES IN 2013-14

The programs and initiatives identified in the IP, which advanced ARENA's objectives in 2013–14 were:

- Deploying Utility Scale Renewable Energy (Big Solar), including utility scale solar projects
- Research and Development (R&D) Program, including ongoing projects, fellowships and scholarships from the former Australian Solar Institute
- Emerging Renewables Program (ERP)
- Regional Australia's Renewables (RAR) Initiative, including:
  - Regional Australia's Renewables Industry Program (I-RAR)
  - Regional Australia's Renewables Community and Regional Program (CARRE)
- Accelerated Step Change Initiative (ASCI)
- Supporting High-value Australian Renewable Energy Knowledge (SHARE)
- Renewable Energy Venture Capital Fund Program (Southern Cross Renewable Energy Fund)
- Advanced Biofuels Investment Readiness Program (ABIR) projects.

Figure 6 demonstrates where each of ARENA's programs and initiatives apply to projects across the innovation chain. Achievements made within these programs and initiatives are provided further later in this chapter.

FIGURE 6 ARENA PROGRAMS ACROSS THE INNOVATION CHAIN



TECHNICAL READINESS LEVEL AND COMMERCIAL READINESS INDEX

Technology Readiness Level

ARENA uses the Technical Readiness Level (TRL), based on an assessment tool developed by the National Aeronautics and Space Administration, to measure the technical readiness of renewable energy projects.

The TRL is the globally-accepted benchmarking tool for tracking a project's progress through the innovation chain, from blue sky research (TRL1) to actual system demonstration over the full range of expected conditions (TRL9).

Commercial Readiness Index

ARENA uses a Commercial Readiness Index (CRI) to assess the commercial viability of projects.

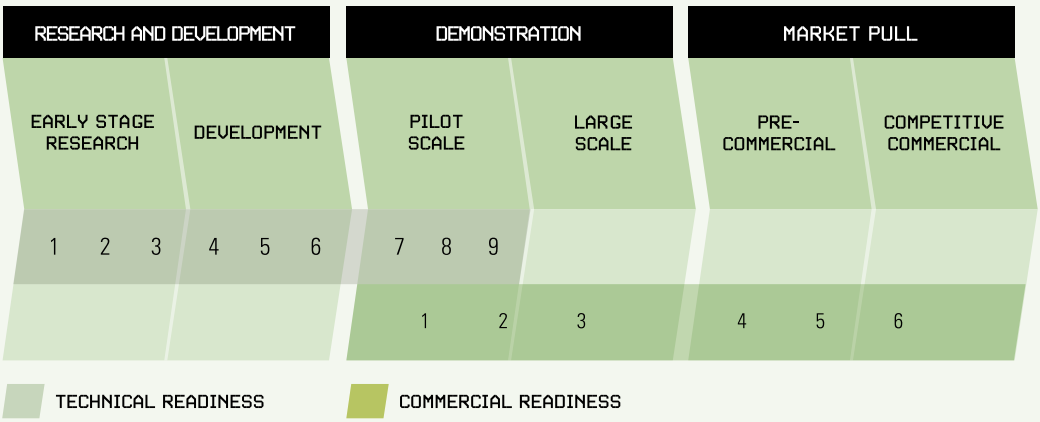
The CRI was developed by ARENA based on pre-existing academic research and extensive consultation with industry, and has been adopted for use by the National Renewable Energy Laboratory in the United States.

The CRI is used from the stage where a technology can be trialled and demonstrated in the field (for example, TRL7), up to the stage where the technology is being commercially deployed and has become a bankable asset class (CRI6).

The index provides a rigorous structure for evaluating where one or more industry sectors are facing barriers, and enables ARENA to structure funding support to best reduce risks and barriers at the various stages of the pathway to commercialisation.

Both the TRL and CRI are publicly available on the ARENA website (arena.gov.au) for applicants to use when considering their projects and developing funding applications for ARENA consideration.

FIGURE 7 TECHNICAL READINESS LEVEL AND COMMERCIAL READINESS INDEX ON THE INNOVATION CHAIN



PROJECT SELECTION PROCESS

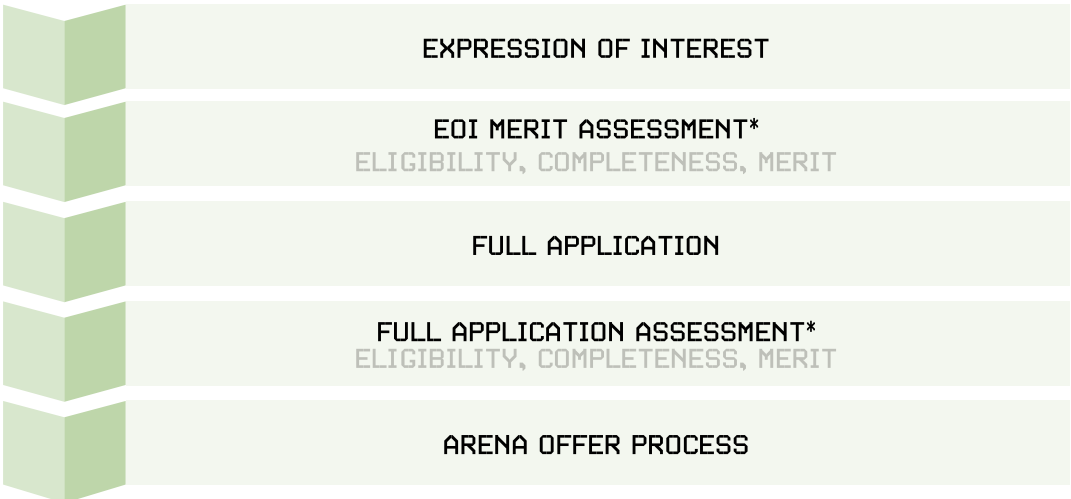
ARENA's principal objectives – decreasing the cost and increasing the supply of renewable energy – have driven the development and use of tools to objectively assess projects.

Among these, the TRL and CRI (see previous page) help to demonstrate a project's progress across the innovation chain.

For programs other than the R&D Program, which is assessed via competitive rounds, ARENA works collaboratively with proponents and undertakes due diligence on proposals, where required, to maximise the capacity of projects to deliver value for money and meet ARENA objectives. For large or complex projects, this may include the use of specialist technical and financial advice to ensure returns are appropriate and projects are rigorously managed.

Figure 8 indicates the process used by ARENA to assess funding applications. It may differ between programs. Specific details are provided in the program guidelines or information manual for the relevant initiative of program.

FIGURE 8 INDICATIVE ARENA APPLICATION ASSESSMENT PROCESS



Note: May differ between programs. *Involves staff, ARENA Advisory Panel and ARENA Board

PROGRAM OUTCOMES

Over the course of 2013-14, ARENA consolidated and built upon the foundations established during the previous year:

- one new program was launched
- 384 applications for funding were assessed
- 48 projects were approved for funding
- 11 projects reached completion including one terminated project.

From ARENA's commencement until 30 June 2014, $1.2 billion in support had been provided or committed by the agency for more than 200 projects with a total project value of around $3.5 billion. For every dollar invested ARENA attracted $1.90 in additional financial support for projects, and $1.60 for studies and R&D activities.

Projects and measures for which ARENA provided financial assistance in 2013-14 are listed in Appendix 2 of this report. Summary details and project profiles are also published on the ARENA website arena.gov.au.

Figure 9 shows how ARENA funding supports renewable energy projects across the innovation chain.

Deploying Utility Scale Renewable Energy

ARENA supports a number of large-scale, grid-connected, pre-commercial renewable energy deployment projects.

In 2012-13 ARENA finalised a $166.7 million funding agreement with AGL to build Australia's biggest solar energy plant.

The $440 million, 155 megawatt solar project is located over two sites at Nyngan and Broken Hill in western NSW. A majority of the project funds are being spent on the Australian supply chain with benefits flowing to the region and beyond.

During the reporting period, the project made good progress and was expected to install the first of 1.35 million advanced thin-film solar photovoltaics modules in July 2014 at the project's 102 megawatt solar farm at Nyngan in NSW.

FIGURE 9 ARENA FUNDING ACROSS THE INNOVATION CHAIN*

ARENA supports renewable energy projects across the innovation chain to help de-risk investment and hasten commercialisation.

	RESEARCH AND DEVELOPMENT		DEMONSTRATION		DEPLOYMENT	
	EARLY STAGE RESEARCH	DEVELOPMENT	PILOT SCALE	LARGE SCALE	PRE-COMMERCIAL	COMPETITIVE COMMERCIAL
PROJECTS	185		40		6	
TOTAL VALUE	$592M		$1604M		$1328M	
ARENA FUNDING	$230M		$491M		$495M	

*Committed/Board approved projects up to 30 June 2014 (including unannounced).

The rest of the project's solar panels will be installed progressively with construction expected to be complete at Nyngan in June 2015 and at Broken Hill in November 2015.

Research and Development Program – solar excellence

In January 2014 ARENA launched the R&D Program to support projects where Australian research improves the competitiveness of renewable energy technologies or that address specific Australian requirements.

Round 1 of the program focused on solar research excellence projects. A total of 110 applications were received and short-listed to 25 full applications that sought a total of $41 million from ARENA. Following a rigorous vetting and ranking process, 12 were approved by the Board for funding of $21.5 million.

The R&D Program complements the existing portfolio of solar research projects that were transferred to ARENA from the former Australian Solar Institute. During 2013-14 this existing R&D portfolio consisted of two Strategic Research Initiatives, 63 projects, 48 research fellowships and 33 PhD scholarships. These projects (including those approved but not yet announced) have a combined value of around $230 million.

RESEARCH AND DEVELOPMENT PROGRAM

R&D | DEMONSTRATION | DEPLOYMENT | KNOWLEDGE MANAGEMENT

Tiny devices make a big solar impact

Researchers at the Australian National University helped commercialise an innovative way of using a technology called plasmonics, which increase the amount of solar energy collected by a solar cell using microscopic metal devices.

Want to know more?

The researchers used nanoparticles – devices so small that 50 of them could fit on the width of a human hair – to develop solar cells that generate more electrical current than the traditional thin-film version. In a plasmonic solar cell the nanoscale metal particles on the surface act like tiny antennas, collecting the solar radiation and directing it into the cell.

The project team included experts in plasmonics and solar cell technology who had already demonstrated that plasmonic solar cells can increase the amount of energy harvested from the sun. This project built on that knowledge by identifying the most effective plasmonic structures, fabrication techniques and solar cell integration for a number of important solar cell technologies, which were used to produce a map of opportunities for the use of plasmonic solar cells.

Plasmonics for solar cells are a promising way of increasing efficiencies and reducing costs in thin solar cells, which makes up the most rapidly growing section of the solar cell market.

ARENA contributed $1.6 million to the $5.8 million project.

Further detail A full profile of this project, *Plasmonics for high efficiency solar cells*, is available on the ARENA website (arena.gov.au/projects).

Game-changing supercritical steam breakthrough

Australian researchers at CSIRO and Abengoa Solar have achieved a world-first, generating the hottest pressurised "supercritical" steam ever produced using energy from the sun.

This accomplishment moves solar thermal energy a step closer to being able to compete with fossil fuels.

Want to know more?

Researchers working on this project showed it is possible for steam to reach temperatures of up to 570 degrees Celsius and pressure of 23.5 megapascals.

Steam at this temperature and pressure can drive a modern, highly efficient steam turbine, like those used in a new coal-fired power station. Making use of best-in-class commercial technologies drives down the cost of solar power.

ARENA contributed $2.8 million to this $5.7 million project.

Further detail A full profile of the project, *Advanced steam generating receivers for high concentration solar collectors*, is available on the ARENA website (arena.gov.au/projects).

Emerging Renewables Program

ERP aims to support projects that drive innovation in renewable energy technologies, and reduce or remove roadblocks the industry faces.

Over the past year, ARENA supported through ERP a broad range of feasibility studies, as well as development, demonstration and early-stage deployment projects that have the potential to lower the cost and increase the use of renewable energy technologies in Australia.

During the period nine new funding agreements were entered into, representing $20.9 million in ARENA funding and $45.1 million in partner co-contributions.

At 30 June 2014 ARENA was managing 18 projects under the ERP.

EMERGING RENEWABLES PROGRAM

R&D | **DEMONSTRATION** | DEPLOYMENT | KNOWLEDGE MANAGEMENT

Transportable solar farm for remote Australia

Global construction company Laing O'Rourke 's ground-breaking project involves manufacturing, setting up and packing down a fully redeployable large-scale solar/diesel hybrid power plant.

Want to know more?

The project was developed to overcome the challenge of fixed-frame solar installations in off-grid locations, which are unsuitable for mining operations and other short-and medium-term ventures because of their permanent nature.

It involves the construction of a pilot-scale version of a fully redeployable hybrid solar/diesel power plant at Laing O'Rourke's 350-bed Combabula accommodation village in regional Queensland, which will house workers during the construction phase of a major resource project.

The 1 megawatt plant with 134 kilowatts of solar photovoltaics will consist of transport-friendly container-sized modules, including a control centre and inverters with external, pre-wired connections to allow fast, easy setup and pack down.

The modules are manufactured off-site, transported, and safely assembled on-site, and at the end of the project the solar farm can easily be packed up and taken to the next deployment.

A semi-portable hybrid system like this carries enormous potential, providing industries and communities in regional and remote locations with a viable renewable energy alternative that could also be used to assist in international relief efforts.

ARENA contributed $450,000 to the $1.4 million project.

Further detail A full profile of this project, *Redeployable hybrid power*, is available on the ARENA website (arena.gov.au/projects).

Harvesting the ocean's power

The Perth Wave Energy Project is aiming to be the world's first wave energy array that is connected to the grid and has the ability to produce desalinated water. It will also deliver Carnegie's first power revenues through the sale of green electricity to the Department of Defence for HMAS Stirling, Australia's largest naval base located on Garden Island in Western Australia.

Want to know more?

The project uses Carnegie's CETO wave energy technology.

The CETO unit consists of a fully submerged buoy called a Buoyant Actuator (BA) tethered to a pump on the seabed. The BA oscillates in harmony with the ocean's waves, transferring energy through a tether, which causes the pump to extend and contract. The pump's action pressurises fluid that is then sent onshore through a subsea pipeline and which, once onshore, is used to operate an off-the-shelf hydroelectric power plant. The resulting low-pressure water is then returned offshore in a closed loop system. In addition to producing zero-emission power, the CETO technology is capable of producing direct desalinated water. The high-pressure water created by the CETO units can be used to supply a reverse osmosis desalination plant, replacing or reducing reliance on electrically-driven pumps usually required for such plants.

Once commissioned, the Perth Wave Energy Project will be the world's first grid-connected commercial-scale demonstration of Carnegie's CETO technology.

This will be an important step towards unlocking the vast potential of wave energy in Australia and internationally.

ARENA contributed $13 million to the $32 million project.

Further detail A full profile of this project, *Perth Wave Energy Project*, is available on the ARENA website (arena.gov.au/projects).

Regional Australia's Renewables

The RAR initiative supports trials of renewable energy solutions in remote off-grid or fringe-of-grid locations, primarily where it is able to displace existing diesel generation. It is anticipated these projects will lower the risks associated with future investment and advance the prospect for future deployment without subsidy.

I-RAR aims to build a portfolio of renewable energy solutions in regional and remote Australia, focusing on hybrid and integrated systems in off-grid and fringe-of-grid communities. It will also contribute to knowledge sharing and skills development, especially in regional and remote areas.

CARRE aims to demonstrate viability and reliability of renewable energy systems for small communities and islands, grow supporting technologies, show commercial viability and contribute to knowledge sharing.

RAR also includes a focus on removing roadblocks to regional and remote deployment, including system integration, output variability, storage and technology demonstration and testing facilities.

In response to the launch of RAR in late 2013, 72 expressions of interest for funding were received. Ten of these were for the community stream, with the other 62 expressions of interest being for the Industry stream.

Proposals were received from numerous industry sectors, including 28 mining, 19 community/town/regions, eight agriculture, three tourism, two airports, one defence and one food processing.

ARENA worked with a wide range of the applicants to develop the proposals for ARENA assessment.

RAR Industry Program

During 2013-14 one I-RAR proposal proceeded through to the execution of a funding agreement and public announcement. This $11.3 million agreement with First Solar (Australia) Pty Ltd, is to construct a solar PV facility at Rio Tinto Alcan's Weipa Bauxite Mine (see next page).

ARENA also undertook a number of other project assessments that were expected to be completed shortly after the reporting period.

Australia's first renewable-powered mine, township and port

Located in far north Queensland, this ground-breaking project will supply renewable energy to Weipa's bauxite mine, township and port. It will be the first off-grid solar farm of this size for the mining sector in a remote location where there is no access to Australia's National Electricity Market.

Want to know more?

In addition to lowering energy costs and improving Weipa's energy security by reducing the use of costly diesel transport and consumption, this project will increase the mining sector's experience in planning, building and operating renewable energy systems on remote off-grid mine sites.

ARENA is providing $3.5 million for the first phase of the project, which involves the installation of 18,000 solar photovoltaic (PV) panels representing 1.7 megawatts of off-grid power. This will allow up to 20 per cent of daytime electricity demand to be met with renewables.

Once the initial phase of the Weipa project has been successfully constructed and operated, ARENA will provide up to $7.8 million for the second phase. This will involve the installation of an additional 5 megawatt solar PV system and battery storage that is capable of meeting up to 100 per cent of Weipa's daytime power needs. The solar plant will connect to Rio Tinto Alcan's (RTA) existing mini-grid at Weipa and be integrated with existing diesel generation. This will reduce RTA's exposure to future fluctuations in diesel fuel prices.

The information generated by this project will be captured and transferred through a knowledge sharing plan negotiated with ARENA and will improve the quality of information available to the mining sector about the construction and operation of off-grid renewable energy systems.

ARENA is contributing $11.3 million to the $23.4 million million project.

Further detail A full profile of this project, *Weipa Solar Farm*, is available on the ARENA website (arena.gov.au/projects).

Community and Regional Renewable Energy Program

ARENA received proposals for CARRE projects from five distributors, covering 50 remote Indigenous communities in the Northern Territory and Queensland; 10 outback towns in Queensland, Western Australia, South Australia and the Northern Territory; and two off-grid islands.

ARENA expects several of these projects will proceed to the funding agreement stage and will assist electricity distributors to address the challenges of providing energy in off-grid locations.

Accelerated Step Change Initiative

ARENA launched ASCI in June 2013 to place the agency in a position to flexibly respond to unforeseen, significant opportunities that arise and are not captured under other initiatives. At 30 June, no financial assistance had been provided or committed to projects under this program.

Supporting High-value Australian Renewable Energy Knowledge

The SHARE Initiative is the first stage in ARENA's knowledge sharing function and focuses on collecting information of value to industry.

During 2013-14 this involved engaging with industry and other shareholders to better understand their needs and then publishing ARENA's knowledge priorities in a High-value Knowledge List (see page 33).

Through SHARE, ARENA collects knowledge in three main ways:

1. ARENA funded projects

All projects funded by ARENA are required to have knowledge sharing plans that specify the knowledge (including data) the project will generate and how it will be shared with the industry and public. During 2013-14, ARENA negotiated approximately $4.1 million of knowledge sharing commitments through these plans.

2. Directly commissioned work

ARENA directly commissioned strategic studies in a number of areas including:

- Hybridisation of renewable energy with existing fossil fuel generators
- Integrating renewables into the grid
- International expert review of Australia's geothermal sector and potential pathways for commercialisation.

3. Other research

ARENA encouraged industry to apply for funding under the Emerging Renewables Program to undertake studies or create knowledge products that align with the agency's priorities as set out in the High-value Knowledge List.

Roadmap to unlocking Australia's geothermal potential

ARENA's International Geothermal Expert Group investigated and reported on the prospects for commercial development of geothermal energy in Australia in 2020 and 2030, without long-term subsidy. The report provided options on how ARENA's Board may wish to allocate and prioritise its funding for geothermal energy projects.

The Expert Group, its work and its findings

The Expert Group was chaired by Professor Quentin Grafton, a distinguished energy economist and former Director of the Australian Government Bureau of Resources and Energy Economics. The other members were Professor Roland Horne, Ms Susan Petty, Dr Bill Livesay and Professor Michal Moore – all internationally recognised experts with practical experience in geothermal drilling, reservoirs, geology and energy economics

In keeping with ARENA's focus on industry relevance, the Expert Group placed great importance on stakeholder engagement. It met individually with geothermal energy and allied technology companies, research groups, peak bodies, the investment community, regulators and government agencies in Brisbane, Adelaide and Sydney. In November 2013 the Expert Group accepted written submissions and in February 2014 it presented its preliminary findings to stakeholders in Brisbane and Sydney. Written comments were also invited on the preliminary findings.

The Expert Group reviewed recent studies and lessons learned, and critically evaluated the prospects for either enhanced geothermal systems or hot sedimentary aquifer geothermal energy to deliver cost competitive energy to Australia without long-term subsidy.

It concluded that utility-scale power generation from geothermal energy is not cost competitive in 2014 and unlikely to be so in 2020, but found there are plausible commercialisation pathways for geothermal energy in supplying off-grid electricity and direct use heat for gas processing.

The report identified the need for significant cost reductions in the critical areas of finding and flowing heat, and proposed that re-designed support mechanisms focus on data collection, collaboration with the oil and gas sector and engagement with international geothermal projects.

A copy of the report (including a summary version) is available from the Knowledge Bank on the ARENA website (arena.gov.au/resources).

Renewable Energy Venture Capital Fund Program (Southern Cross Renewable Energy Fund)

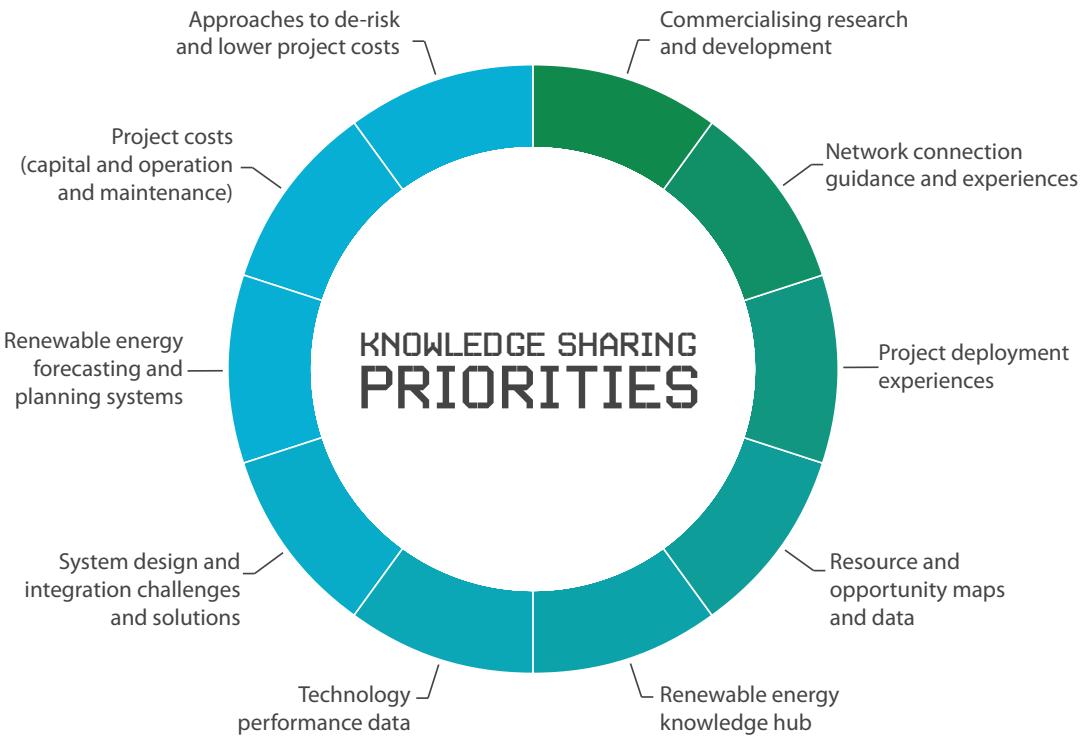
ARENA's Renewable Energy Venture Capital (REVC) Fund Program was created to foster skills and management capability and provide funding confidence to renewable energy projects to strengthen their chance of success. ARENA's $100 million investment commitment has been matched dollar for dollar by Softbank China Venture Capital creating the $200 million Southern Cross Renewable Energy Fund which is managed by Southern Cross Venture Partners Pty Ltd. Information about investments made by Southern Cross Renewable Energy Fund is available on the ARENA website (arena.gov.au).

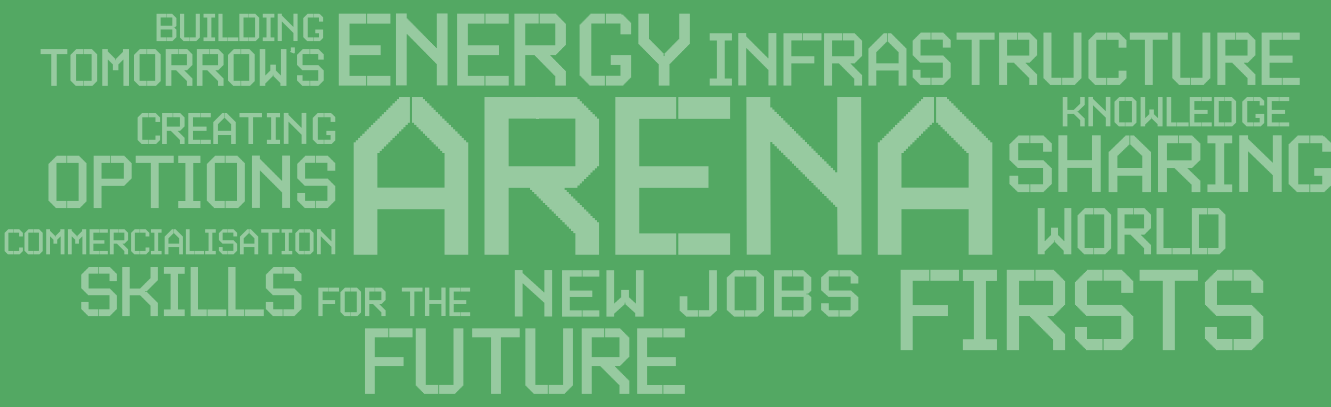
Advanced biofuels

These projects support the development of advanced biofuel technologies by seeking to progress the deployment of pre-commercial demonstration projects for the production of drop-in biofuels in Australia.

Almost $10 million is committed to the advanced biofuels projects under the program, which is now closed.

ARENA's High-value Knowledge List




BUILDING
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FIRSTS
FUTURE

OTHER REPORTABLE MATTERS

CONSULTANCIES

The Board has voluntarily adopted key principles of the *Commonwealth Procurement Rules* for ARENA procurements. Section 63 of the ARENA Act states that consultants may be engaged by ARENA to provide technical and specialist advisory services to assist ARENA in the performance of its functions. ARENA must not engage consultants to perform operations or administrative duties of a kind that are performed, or are capable of being performed, by departmental staff made available to ARENA.

During 2013-14, 45 new consultancies were entered into, involving total actual expenditure of $3,293,822. In addition, 35 ongoing consultancies were active during the 2013-14 year, involving total actual expenditure of $2,989,411.

ECOLOGICALLY SUSTAINABLE DEVELOPMENT

Table 6 sets out ARENA's report against section 516A of the *Environment Protection and Biodiversity Conservation Act 1999.*

TABLE 6 CONTRIBUTION TO ECOLOGICALLY SUSTAINABLE DEVELOPMENT, 2013-14

REPORTING CRITERIA	PERFORMANCE
Accordance with and contribution to ecologically sustainable development (ESD), including the development and implementation of policies, plans, programs and legislation.	ARENA is specifically tasked with facilitating research, development, demonstration and deployment of renewable energy technologies with a view to driving the commercialisation and reducing the cost of renewable energy. ARENA's policies, plans and programs all accord with and contribute to the ESD principles by: ■ helping to foster the long-term sustainability of Australia's energy sector while promoting the reduction of energy-related greenhouse gas emissions ■ taking into account economic, environmental and social considerations when developing renewable energy measures. Information on ARENA's measures and programs is provided on page 21.
Environmental performance, including the impact of the agency's activities on the natural environment, how any impacts are mitigated and how they will be managed.	ARENA's accommodation and facilities arrangements are supported by the portfolio Department of Industry. The department operates under the Energy Efficiency in Government Operations policy. Its purpose is to reduce the energy consumption of government operations, with particular emphasis on the energy efficiency of buildings. The department also aims to improve its environmental management practices, reduce the impacts of its operations, and foster greater efficiencies and operational costs savings consistent with legislative, regulatory and policy requirements such as the Australian National Audit Office's Public Sector Environmental Management Better Practice Guide of April 2012. For more information, please refer to the Department of Industry's Annual Report 2013-14. For the duration of 2013-14, ARENA's Canberra offices were located in the NewActon Nishi Building. The Nishi Building offices have a 6 star Green Star Design rating, while the Nishi apartments have an 8-star rating (under the Nationwide House Energy Rating Scheme). NewActon Nishi is considered to be Canberra's most sustainable mixed-use building complex.

CORPORATE GOVERNANCE

ARENA places considerable emphasis on strong governance arrangements.

ETHICS AND RISK MANAGEMENT

In 2013-14, the ARENA Board continued to implement the conflicts of interest policy which was adopted in 2012-13. The policy describes:

- the duties and obligations in respect of potential conflicts for all ARENA personnel, including
  - members of the Board
  - members of the Risk and Audit Committee (RAC) (and any other subcommittee of the Board)
  - the Chief Executive Officer and the Chief Financial Officer
  - all ARENA staff, including employees and contractors of the Department who are made available to ARENA
  - consultants engaged by ARENA, including probity advisers, expert due diligence advisers and other independent technical advisers
  - members of ARENA assessment advisory committees
- how individuals are to discharge their duties under the policy
- how declarations are managed.

ARENA is committed to integrating risk management practices into all processes and operations. ARENA can thereby deliver consistent, effective and accountable action, decision making and management practice.

ARENA manages risk commensurate with ISO 31000:2009, Risk management – Principles and guidelines. Accountability and responsibility for ARENA's performance lies with the Board. This includes accountability for ARENA's management of risk. While the Board and ARENA executive are ultimately accountable for risk management, it is the responsibility of all ARENA personnel to manage risk.

ARENA's RAC provide independent assurance and advice to the Board on ARENA's risk management. In 2013-14, the RAC was provided with information on ARENA's approach to managing ARENA's major risks including those associated with individual programs, projects and significant procurements.

BUSINESS CONTINUITY AND DISASTER RECOVERY PLANS

ARENA in consultation with the portfolio department is committed to ensuring that, where possible, provisions are in place to support business continuity arrangements.

In addition to having a plan that interfaces with the department's business continuity arrangements, ARENA also has its own Business Continuity and Disaster Recovery Plans. These ensure that ARENA has identified its critical business functions, maximum tolerable period of disruption and alternative process support recovery.

ARENA is critically dependent on the Department of Industry for other key parts of Business Continuity Management such as the emergency and critical incident plans and policies.

ARENA reviewed its Business Continuity Plan in 2013–14, along with the associated Disaster Recovery Plan and a Business Impact Analysis. The purpose of the review was to ensure that, in light of ARENA's recent restructure and work practice changes, both the Business Continuity Plan and the Disaster Recovery Plan continued to meet ARENA's critical business requirements and ARENA would maintain its ability to function.

ARENA SERVICE CHARTER

ARENA aims to provide a high standard of service to all our stakeholders. ARENA focuses on achieving honest and ethical relationships with stakeholders, underpinned by genuine consultation and feedback.

ARENA provides high quality, evidence-based advice and decisions through informed judgment and prudent risk management. ARENA staff are bound by the Australian Public Service Values and Code of Conduct.

As ARENA continues to help drive the development and deployment of renewable energy in Australia, we anticipate an increase in the volume of contact we have with our stakeholders. We aim to continue to deliver professional and timely services to an expanded customer base.

COMPLAINTS HANDLING

ARENA has an established internal complaints and review process, which allows reviews about ARENA decisions and complaints about service quality to be resolved fairly and simply.

In 2013–14 ARENA received one complaint, which was satisfactorily resolved. Information on the complaints and review process is available on the ARENA website.

PUBLIC GOVERNANCE, PERFORMANCE AND ACCOUNTABILITY ACT 2013

On 1 July 2014, Commonwealth government authorities currently administered under the *Commonwealth Authorities and Companies Act 1997* and the *Financial Management and Accountability Act 1997* become 'corporate Commonwealth entities' under the *Public Governance, Performance and Accountability Act 2013* (PGPA Act). Board Directors and staff of corporate Commonwealth entities have a range of new duties under the PGPA Act.

The changes that the PGPA Act introduces highlight the importance for all Commonwealth entities to have in place robust governance arrangements. The PGPA Act seeks to implement a form of governance and accountability through a uniform set of duties and reporting framework.

To prepare for the impending changes from the implementation of the PGPA Act, ARENA has been:

- considering the new sources of authority in the PGPA Act and has been reviewing and updating internal controls and internal delegations
- considering opportunities to reform internal processes
- informing staff about the new legislative framework.

TRAINING AND DEVELOPMENT

ARENA's commitment to quality, innovation and professionalism are core elements of the organisation's competitive advantage and underpin ARENA as an employer of choice.

ARENA continued to invest in the training and development of its workforce throughout 2013-14.

All new employees go through an induction program. New ARENA employees meet

members of the Executive and learn more about current activities in ARENA. The following topics are included in ARENA's induction:

- Introduction to ARENA
- Overview of business functions including strategy, business development and contract negotiations, project management, strategic communication and knowledge management and business support functions
- Code of Conduct
- Conflict of interest
- Work health and safety
- Governance and compliance in ARENA
- Employment, learning and development and other mandatory departmental procedures.

PUBLIC INTEREST DISCLOSURE

The Public Interest Disclosure Scheme ('PID scheme') was established by the *Public Interest Disclosure Act 2013* ('PID Act') which came into effect on 15 January 2014. For the purposes of the PID Act, ARENA is a Commonwealth agency compelled to comply with the legislation.

Pursuant to Section 74 of the PID Act the Ombudsman has introduced PID rules and PID standards which individuals and Commonwealth agencies must also comply with when dealing with public interest disclosures.

The purpose of the PID Act is "to facilitate disclosure and investigation of wrongdoing and maladministration in the Commonwealth public sector.....".

The new Act makes significant changes to the way in which most Commonwealth agencies (including ARENA) will deal with disclosures of misconduct by public officials, including reports of alleged breaches of the APS Code of Conduct.

FRAUD CONTROL

ARENA's Fraud Control Plan is based on the framework prescribed in the Commonwealth Fraud Control Guidelines 2011 (CFCG) as a matter of good practice. A Fraud Risk Assessment was completed in December 2013 and a revised Fraud Control Plan was released in March 2014.

The current ARENA Fraud Control Plan 2014-16 was approved by the Board in March 2014 and implementation continues. The plan outlines the organisation's key activities to ensure fraudulent activity is minimised.

ARENA participated in the annual fraud survey conducted by the Attorney-General's Department, which reports fraud data to the Australian Institute of Criminology. There were no cases of fraud in ARENA during the year.

All of ARENA's new employees are provided with fraud awareness training during their induction. Fraud awareness refresher training was also provided to staff during the year via a mandatory online training module.

FREEDOM OF INFORMATION AND INFORMATION PUBLICATION SCHEME

Australian Government entities that are subject to the *Freedom of Information Act 1982* (FOI Act) are required to publish information to the public as part of the Information Publication Scheme.

ARENA's publications covered by the scheme are accessible through the ARENA website at www.arena.gov.au. Consistent with its knowledge management agenda, ARENA publishes information relating to the renewable energy sector, including information from financial assistance recipients.

Information on how to make a request under the FOI Act is available on the Department of Industry's website. Contact details are:

FOI Coordinator
Legal Branch
Department of Industry
GPO Box 9839
CANBERRA ACT 2601

Email: FOI@innovation.gov.au

Phone: +61 2 6102 8104

No requests for information under the FOI Act were received by ARENA in 2013–14.

INDEMNITIES AND INSURANCE PREMIUMS OF OFFICERS

ARENA is required by the Australian Government to use Comcover for its insurance needs. ARENA provides insurance cover to Board members and other officers in line with the CAC Act. Comcover's relevant insurance policy covers legal liability (including legal costs) for Board members and employees. The premium paid for this insurance for 2013–14 was $267,691 (excluding GST).

INTERNAL AUDIT AND QUALITY ASSURANCE

The ARENA Risk and Audit Committee provides independent advice to the Board on ARENA's risk, control and compliance framework, as well as its external accountability responsibilities. The committee also provides a forum for communication between senior management and the internal auditor (Synergy) and the external auditor (Australian National Audit Office).

JUDICIAL DECISIONS AND REVIEWS BY OUTSIDE BODIES

In 2013–14, ARENA was not affected by judicial decisions or reviews by administrative tribunals, the Auditor-General, parliamentary committees, the Commonwealth Ombudsman or the Office of the Australian Information Commissioner.

ARENA received an unqualified audit report on its financial statements for 2013–14. The Auditor-General's independent report is presented in the financial statements section of this annual report.

KEY ACTIVITIES AND CHANGES AFFECTING ARENA

See page 11 for key activities and changes affecting ARENA including the Government's announcement in the 2014-15 Budget to abolish ARENA.

LEGAL EXPENDITURE

During 2013-14, ARENA incurred $1,599,245 (excluding GST) in external legal service expenditure, in accordance with legal procurement rules and ARENA's procurement policy.

ARENA has reported the expenditure to the Office of Legal Services Coordination as required under the Legal Services Directions 2005.

RELATED ENTITY TRANSACTIONS

Details of related entity transactions are covered in Note 13 of the financial statements section of this report.

SUBSIDIARIES

ARENA did not have any subsidiaries during 2013–14.

WORK HEALTH AND SAFETY

The *Work Health and Safety Act 2011* (WHS Act) aims to secure the health and safety of workers and workplaces by eliminating or minimising risks. ARENA personnel have a personal and proactive duty to exercise due diligence to ensure that ARENA complies with its obligations under the WHS legislation. To raise the level of awareness of obligations under WHS legislation, all ARENA personnel were encouraged to complete an on-line training module – 'WHS compliance – Apply knowledge of WHS legislation in the workplace' during 2013-14.

ARENA is committed to taking active steps to protect the health and safety of all employees, contractors, visitors and third parties.

In June 2013, the ARENA Board adopted the Work Health and Safety (WHS) ARENA Officers Manual and Due Diligence Framework and during 2013-14, ARENA has implemented the following aspects of the manual and framework:

- conducted safety discussions
- considered WHS at Executive and staff meetings
- informed funding recipients of their (and ARENA's) WHS obligations
- incorporated WHS clauses in ARENA Funding Agreements
- standing item on Board agenda
- reviewed WHS compliance in projects and measures funded by ARENA.

ARENA is supported in protecting the health and safety of its staff during its day-to-day operations by arrangements put in place by the department. Those arrangements incorporate:

- agreed responsibilities in maintaining a safe and healthy working environment for workers
- agreed WHS frameworks and consultative forums
- systems for identifying hazards and effectively managing risk
- measures for monitoring, evaluating and striving for continual improvement in WHS performance
- procedures for the reporting and resolution of WHS issues.

In respect of ARENA, no investigations were conducted nor notifiable incidents reported during 2013-14. Reporting in respect of departmental staff made available to ARENA is covered in the Department of Industry's Annual Report 2013-14.


BUILDING
TOMORROW'S
ENERGY
INFRASTRUCTURE
CREATING
OPTIONS
ARENA
KNOWLEDGE
SHARING
COMMERCIALISATION
WORLD
SKILLS
FOR THE
NEW JOBS
FIRSTS
FUTURE

APPENDIX 1 ARENA APPOINTMENTS

ARENA BOARD

Section 17 of the *Australian Renewable Energy Agency Act 2011* (ARENA Act) provides that there is to be a Board of ARENA.

Responsibilities

The ARENA Board is a skills-based board. The functions of the Board involve:

- developing general funding strategies, financial assistance guidelines and work plans (Division 2 of Part 3 of the ARENA Act)
- determining other strategies, objectives and policies to be followed by ARENA
- ensuring that ARENA complies with the ARENA Act.

Pursuant to sections 71(1) and 72(1) of the ARENA Act, ARENA may delegate to the CEO the performance of certain specified powers and the exercise of certain specified functions, subject to any directions specified by the Board from time to time and any applicable ARENA policies and legislation.

Membership

Section 29 of the ARENA Act provides that the Board consists of:

- up to six members, appointed on a part-time basis by the Minister for Resources and Energy (now the Minister for Industry)
- the Secretary of the Department.

A person is eligible for appointment if the Minister is satisfied that the person has experience or knowledge in at least one of the following fields:

- renewable energy technology
- commercialisation
- business investment
- corporate governance.

A Board member is initially appointed for a term of up to two years, and may be reappointed for a total of up to six continuous years.

FIGURE 10 ARENA BOARD MEMBERSHIP, 2013-14

Greg Bourne **Chair** *Non-executive director* Appointed: July 2012 Term expiring: July 2015	Mr Bourne studied chemistry at the University of Western Australia via a scholarship from BP Refinery (Kwinana). After graduating with honours in 1971, he carried out research into refinery processes before joining BP Exploration. As a drilling engineer, he worked and lived in the United Kingdom, North America, South America, the Middle East, China and Australia. In 1988, Mr Bourne was seconded to the Prime Minister's Policy Unit in the United Kingdom, where he was the Special Adviser on Energy and Transport. Mr Bourne returned to Australia in 1992 to be in charge of BP Exploration's activities in Australia's North West Shelf region and Papua New Guinea. After working overseas as Director, BP Scotland, and then Regional Director, Latin America, based in Caracas, he returned to Australia in 1999 to become Regional President, BP Australasia, the position from which he retired from BP in 2003. In 2004, Mr Bourne was appointed Chief Executive Officer of WWF Australia, a position he held until 2010. Mr Bourne is a member of a number of government and business advisory groups primarily concerned with energy, climate change and sustainability. He was awarded the Centenary Medal for services to the environment and an Honorary Doctorate from the University of Western Australia for services to international business.
Glenys Beauchamp **Ex-officio director** Commenced: September 2013	Ms Beauchamp was appointed Secretary of the Department of Industry on 18 September 2013. She has had an extensive career in the Australian Public Service at senior levels, with responsibility for a number of significant government programs. Ms Beauchamp has more than 25 years' experience in the public sector and began her career as a graduate in the Industry Commission. Prior to her current role, Glenys was Secretary of the Department of Regional Australia, Local Government, Arts and Sport. She has served as Deputy Secretary of the Department of the Prime Minister and Cabinet, and the Department of Families, Housing, Community Services and Indigenous Affairs. Ms Beauchamp has held a number of executive positions in the Australian Capital Territory Government, including Deputy Chief Executive of the Department of Disability, Housing and Community Services, and Deputy Chief Executive Officer of the Department of Health. In 2010, Ms Beauchamp was awarded a Public Service Medal for coordinating Australian Government support during the 2009 Victorian bushfires. Ms Beauchamp has an economics degree from the Australian National University and an MBA from the University of Canberra.

Blair Comley
Ex-officio director

Commenced:
March 2013

Term ended:
September 2013

Mr Comley was Secretary of the Department of Resources, Energy and Tourism from March to September 2013. Prior to this appointment, he was Secretary of the Department of Climate Change and Energy Efficiency (DCCEE).

Mr Comley's previous roles included Deputy Secretary of DCCEE, with executive oversight of climate change strategy and market instruments, international climate change policy, and issues related to the land sector. He has also held senior positions in the Treasury, including General Manager of the Business Tax Division, Indirect Tax Division, Macroeconomic Policy Division and Debt Management Review Team.

Mr Comley represented Australia for three years on economic matters at the Organisation for Economic Co-operation and Development and was the Acting Chief Executive Officer of the Australian Office of Financial Management, with responsibility for managing the Australian Government's debt and related derivative portfolio. He has previously worked on competition policy, environment policy and welfare reform.

Mr Comley holds a Bachelor of Economics (Honours) and a Master of Economics from Monash University as well as a Graduate Diploma in Legal Studies from the Australian National University. He was awarded a Public Service Medal in 2012 for his outstanding contribution in the development of public policy.

Betsy Donaghey
Non-executive director

Appointed:
July 2012

Resigned:
June 2014

Ms Donaghey is currently a Director of Imdex, a company that provides drilling fluids and instrumentation to the mining, oil and gas, water well, and civil engineering industries. She is also a Director of St Barbara, a gold production and exploration company.

Ms Donaghey was a Solar Flagships Council member.

From 2000 until 2009, Ms Donaghey worked for Woodside Petroleum in various senior roles, including Senior Vice President of the Australian Business Unit and Executive Vice President of the Browse Business Unit. Prior to joining Woodside Petroleum, she worked for BHP Billiton for 19 years.

Ms Donaghey holds a Bachelor of Science (Civil Engineering) from Texas A&M University and a Master of Science (Operations Research) from the University of Houston. She has also completed the Advanced Management Program at Harvard Business School.

Judith Smith
Non-executive director

Appointed:
July 2012

Term expiring:
July 2015

Until 2013, Ms Smith was the Head of Private Equity, Industry Funds Management (IFM) (now known as IFM Investors), and Chair of the IFM Risk Committee. She was also Deputy Chair of the IFM Investments and Strategy Committee, a role she retains post-retirement from the firm.

Prior to joining IFM, Ms Smith held various investment management roles. During more than a decade at National Mutual Funds Management, she managed Australian equity portfolios (including large capitalisation portfolios, specialist small company portfolios and private equity investments) and Australian equity research and strategy.

Ms Smith has been involved with private equity in the Australian market since 1990. She was a board member of Australian Private Equity and Venture Capital Association Limited and participated on a number of fund advisory boards. Ms Smith is on the board of the Acorn Capital Investment Fund.

Ms Smith holds a Master of Applied Finance from the University of Melbourne and a Bachelor of Economics (Honours) from Monash University. She is a Fellow of the Financial Services Institute of Australasia and Graduate of the Australian Institute of Company Directors.

Brian Spalding **Non-executive director** Appointed: May 2012 Term expired: June 2014	Dr Spalding is a Commissioner at the Australian Energy Market Commission and was a Board member of the former Australian Centre for Renewable Energy. Dr Spalding has had more than 30 years' experience in power system operations. He played a key role in the implementation and operation of electricity markets, in New South Wales and nationally, from the early 1990s. In 2008, Dr Spalding became Chief Executive Officer of National Electricity Market Management Company and was responsible for the day-to-day operations of the National Electricity Market and the electricity power system for southern and eastern Australia. In 2009, he became Executive General Manager, Operations, of the Australian Energy Market Operator. Dr Spalding holds a Bachelor of Science, a Bachelor of Engineering (Electrical Honours Class 1) and University Medal, and a Doctor of Philosophy in power system analysis from the University of New South Wales.
Mark Twidell **Non-executive director** Appointed: July 2012 Resigned: October 2013	From 2009 until 2012, Mr Twidell was the Executive Director of the Australian Solar Institute. He was also a Solar Flagships Council member. Mr Twidell has over 20 years' experience in the Australian renewable energy sector. From 1988 until 2009, he held senior roles with BP Solar in Australia, America and Asia. Between 2006 and 2009, he was the BP Solar Performance Unit Leader based in India. In this role, he was responsible for all activity outside of Europe and the United States. Prior to this role, he was the BP Solar Australia Regional Director, Australia–Asia. Mr Twidell holds a Bachelor of Science in Electrical and Electronic Engineering (Honours) from the University of Edinburgh and a Master of Business Administration from the Graduate School of Business, Sydney University.
Jane Sargison **Non-executive director** Appointed: July 2012 Resigned: August 2013	Dr Sargison BE (Hons), DPhil, GAICD, CPEng, FIEAust is a mechanical engineer with a background in energy industry research and development. She is Director of her business, JSA Consulting Engineers. Dr Sargison is a director of the board of TasWater and the Executive Director of Rainbow Bee Eater Pty Ltd, a technology start-up company which develops straw-to-energy power stations with carbon sequestration via biochar across the West Australian wheat belt. Dr Sargison was a Rhodes Scholar and was named the Tasmanian and National Professional Engineer of the Year for 2011 by Engineers Australia.

Meetings

The Board formally met 10 times in 2013-14.

TABLE 7 ARENA BOARD MEETINGS, 2013-14

DATE	MEETING	LOCATION	ATTENDANCE (IN PERSON AND VIA TELECONFERENCE)
7 August 2013	13th Board meeting	Canberra, ACT	All Board members
25 September 2013	14th Board meeting	Canberra, ACT	All Board members Secretary's alternate: Ms Helen Bennett
23 October 2013	15th Board meeting	Canberra, ACT	All Board members Secretary's alternate: Ms Helen Bennett
14 November 2013	16th Board meeting	Teleconference	All Board members Secretary's alternate: Mr Subho Banerjee
28 November 2013	17th Board meeting	Perth, WA	All Board members Secretary's alternate: Mr Subho Banerjee
11 December 2013	18th Board meeting	Canberra, ACT	All Board members Secretary's alternate for different parts of meeting: Mr Subho Banerjee, Ms Helen Bennett
26 February 2014	19th Board meeting	Canberra, ACT	All Board members Secretary's alternate for different parts of meeting: Mr Martin Hoffman, Ms Helen Bennett
26 March 2014	20th Board meeting	Canberra, ACT	All Board members Secretary's alternate for part of meeting: Ms Helen Bennett (Secretary attended part meeting)
21 May 2014	21st Board meeting	Canberra, ACT	All Board members Secretary's alternate for part of meeting: Ms Helen Bennett (Secretary attended part meeting)
18-19 June 2014	22nd Board meeting	Canberra, ACT	Greg Bourne, Betsy Donaghey, Judith Smith Secretary's alternate for different parts of meeting: Mr Martin Hoffman, Mr Greg Divall Apology: Brian Spalding

Reporting

Following each Board meeting, the Chair provided the Minister with a report on the key outcomes of that meeting.

Subcommittees

In 2012-13, the Board established a Risk and Audit Committee (RAC), in compliance with section 32 of the *Commonwealth Authorities and Companies Act 1997* (CAC Act) and Regulation 6A of the Commonwealth Authorities and Companies Regulations 1997 (CAC Regulations), and as authorised by section 48 of the ARENA Act. More information on the RAC is available on page 50.

ARENA CHIEF EXECUTIVE OFFICER

Section 50 of the ARENA Act provides that there is to be a Chief Executive Officer (CEO) of ARENA. Under section 52 of the ARENA Act, the CEO is appointed on a full-time basis by the Minister (on the recommendation of the Board) for a period of up to three years.

The CEO has responsibility for the day-to-day business of ARENA, including:

- executing directions of the Board
- overseeing administration of existing projects
- supporting the Board to develop and execute its funding strategy, forward work plan and initiatives
- representing ARENA at public events and managing stakeholder engagement
- analysing and sharing knowledge and information about renewable energy technologies
- developing advice to the Minister on renewable energy technology innovation.

Mr Ivor Frischknecht continued as CEO of ARENA for 2013-14.

FIGURE 11 ARENA CHIEF EXECUTIVE OFFICER, 2013-14

Ivor Frischknecht

Appointed:
6 August 2012

Term expiring:
5 August 2015

Mr Frischknecht is a former Investment Director of Starfish Ventures Pty Ltd, a venture capital firm that manages $400 million, primarily on behalf of Australian superannuation funds. His key activities included responsibility for the firm's clean tech investment activities in areas such as energy, water and environmental technologies.

Mr Frischknecht was previously Director, New Ventures, of Idealab, a company involved in developing and investing in technology start-up companies, including renewable energy companies. He was also previously the CEO of H2OnSite, a company involved in the commercialisation of clean energy generation technology, and a senior executive and adviser to a range of venture capital and energy companies.

Mr Frischknecht holds a Bachelor of Laws and Bachelor of Economics (Honours) from the University of Sydney, and a Master of Business Administration and Public Management Certificate from the Stanford University Graduate School of Business.

ARENA CHIEF FINANCIAL OFFICER

Section 61 of the ARENA Act provides that ARENA may employ a person to perform Chief Financial Officer (CFO) functions. The CFO for 2013-14 was Mr Ian Kay.

ARENA RISK AND AUDIT COMMITTEE

The RAC provides independent assurance and advice to the Board on ARENA's risk, control and compliance framework, governance arrangements and financial statement responsibilities.

The Board has authorised the RAC, within the scope of its responsibilities, to:

- obtain any information that it requires from any employee or external party (subject to any legal obligation to protect information)
- discuss any matters with the external auditor or other external parties (subject to confidentiality considerations)
- request the attendance of any Board member or ARENA staff member, including the CEO, at RAC meetings
- obtain legal or other professional advice, as considered necessary to meet its responsibilities, at ARENA's expense (to a pre-approved limit of $100,000 in any financial year and in excess of that amount with approval of the Chair).

Responsibilities

RAC members are expected to understand and observe the legal requirements of the CAC Act and CAC Regulations. Members are also expected to:

- act in the interests of ARENA
- apply good analytical skills, objectivity and good judgment
- express opinions constructively and openly
- raise issues that relate to the committee's responsibilities and pursue independent lines of enquiry.

Membership

RAC members in 2013–14 were:

- Ms Judith Smith (RAC Chair and Board member)
- Ms Betsy Donaghey (Board member)
- Ms Jenny Morison
- Mr Peter Thomas.

Meetings

The RAC formally met four times in 2013–14.

Reporting

Following each RAC meeting, the RAC Chair provided the Board with a report on the key outcomes of that meeting.

Subcommittees

No subcommittees were established under the RAC.

TABLE 8 ARENA RISK AND AUDIT COMMITTEE MEETINGS, 2013-14

DATE	MEETING	LOCATION	ATTENDANCE (IN PERSON AND VIA TELECONFERENCE)
26 August 2013	5th RAC meeting	Canberra, ACT	All members
28 October 2013	6th RAC meeting	Canberra, ACT	Judith Smith, Betsy Donaghey, Peter Thomas Apology: Jenny Morison
12 March 2014	7th RAC meeting	Canberra, ACT	All members
12 May 2014	8th RAC meeting	Canberra, ACT	All members

APPENDIX 2 FINANCIAL ASSISTANCE

Section 70(c) of the ARENA Act requires ARENA to publish details of financial assistance agreements and progress. In addition, section 28 of the *Australian Renewable Energy Agency (Consequential Amendments and Transitional Provisions) Act 2011* requires ARENA to report details of people to whom financial assistance is provided under a transferred Commonwealth funding agreement or ASI Limited agreement.

TABLE 9 FINANCIAL ASSISTANCE, 2013-14

*Funds committed to ongoing projects or total funds paid to complete or discontinued projects.

RESEARCH AND DEVELOPMENT					
Project name	**Description**	**Location**	***Funding provided/ committed (GST exclusive)**	**Technology**	**Assessment of progress/ expected progress 2013-14**
Alinta Energy	Port Augusta Solar Thermal Generation Measure	SA	$1,000,000	Hybrid	On track
ANU 1-A039	1-A039 Plasmonics for high efficiency solar cells	ACT	$1,573,137	Solar PV	Complete
ANU 1-A041	Next generation SLIVER solar cells	ACT	$4,953,473	Solar PV	On track
ANU 1-GER006	Local doping using Laser Chemical Processing (LCP)	ACT	$352,365	Solar PV	On track
ANU 1-UFA006	Improved High-Temperature Receivers for Dish Concentrators	ACT	$1,436,210	Solar Thermal	On track
ANU 1-USO012	Machine-learning-based forecasting of distributed solar energy	ACT	$799,522	Solar Enabling	On track
ANU 2-A008	Industry Ready n-type Silicon Solar Cells	ACT	$3,335,254	Solar PV	On track
ANU 2-A017	Roof mounted hybrid CST system for distributed generation	ACT	$3,235,710	Solar Thermal	On track
ANU 3-GER002	High quality laser doping for solar cells through improved characterisation	ACT	$446,582	Solar PV	On track
AUSTELA	Potential Network Benefits of Solar Thermal Generation in the NEM	NSW	$179,965	Solar Enabling	Complete
AUSTELA	Improving accessibility of System Advisor Model	NSW	$73,500	Solar Enabling	Complete
Australian PV Institute	Active Participation in Distributed Energy Market	NSW	$173,550	Solar Enabling	Complete
Australian PV Institute	Climate-based PV Module Rating Scheme	NSW	$268,320	Enabling	On track
Australian PV Institute	Development of an interactive Australian Solar Map	NSW	$436,478	Enabling	On track
Barbara Hardy Institute 3-A019	Development of high temp phase change storage syst & test facility	SA	$689,500	Solar Thermal	On track
Bluescope Steel Ltd	Develop a prototype Building Integrated PV product	NSW	$2,284,800	Solar PV	On track
Bluescope Steel Ltd 1-GER005	Expanding the Value Proposition for BIPV	NSW	$477,320	Solar PV	On track

RESEARCH AND DEVELOPMENT

Project name	Description	Location	*Funding provided/ committed (GST exclusive)	Technology	Assessment of progress/ expected progress 2013-14
Bureau of Sugar Expmtl Stations	Cane2Fuel: a biomass input system for producing second generation biofuels	QLD	$1,326,000	Bioenergy	Complete
C2K	Feasibility study for an off-grid renewable energy island in the Pilbara	WA	$300,000	Bioenergy	On track
CAT Projects 3-A009	Analysis of instantaneous weather effects across the Geographic Boundaries of an Electricity Grid	NT	$242,625	Solar Enabling	On track
Clean Energy Council	Future Proofing Australia's Electricity Industry - Stage 1	VIC	$452,850	Enabling	On track
CSIRO	Solar Thermal Research Hub	NSW	$5,000,000	Solar Thermal	On track
CSIRO 1-A073A	Advanced solar thermal energy storage	NSW	$3,538,846	Solar Thermal	On track
CSIRO 1-A077A	Advanced steam-generating receivers	NSW	$2,821,978	Solar Thermal	On track
CSIRO 1-SRI002	Australian Solar Thermal Research Initiative (ASTRI)	NSW	$35,000,000	Solar Thermal	On track
CSIRO 1-UFA004	Solar-driven Supercritical CO2 Brayton Cycle	NSW	$2,496,835	Solar Thermal	On track
CSIRO 1-UFA005	Improving translation models for predicting energy yield of PV	NSW	$1,318,722	Enabling	On track
CSIRO 1-UFA007	Integrated Solar Radiation Data Sources over Australia	ACT	$712,581	Enabling	On track
CSIRO 1-USO006	Australian Solar Energy Forecasting System (ASEFS)– Phase 1	ACT	$3,089,000	Enabling	On track
CSIRO 1-USO031	Optimisation of central receivers for advanced power cycles	NSW	$1,150,879	Solar Thermal	On track
CSIRO 1-USO032	Plug and Play Solar Power: Integration of Solar in Hybrids	NSW	$1,292,725	Enabling	On track
CSIRO 1-USO033	Development of Combined Cycle using solar reformed gas	NSW	$351,453	Solar Thermal	On track
CSIRO 2-A015	A Novel Thermoelectric Topping Cycle Receiver for CST Applications	NSW	$2,200,912	Solar Thermal	On track
CSIRO 2-A021	Solar Powered Air Turbine Systems	NSW	$3,055,000	Solar Thermal	On track
CSIRO 3-A006	Evaluation and demonstration of hybridisation of CST with CCS	NSW	$667,500	Solar Thermal	On track
CSIRO 3-A012A	Hybrid CST Systems for Large Scale Applications	VIC	$520,011	Solar Thermal	On track
CSIRO 3-A018	Solar Hybrid Fuels	NSW	$1,585,853	Solar Thermal	On track
CSIRO 3-A020	Solar Energy Management (SEM) System for Utilities	QLD	$225,715	Solar Enabling	On track
Ipsos Institute	Social License to Operate Large-Scale Solar	NSW	$153,388	Solar Enabling	On track

RESEARCH AND DEVELOPMENT

Project name	Description	Location	*Funding provided/ committed (GST exclusive)	Technology	Assessment of progress/ expected progress 2013-14
Laing O'Rourke Australia Pty Ltd	Redeployable Hybrid Power Generation Feasibility Study	NSW	$410,309	Hybrid	On track
Licella P/L	Biomass to Bio-Crude: Producing Advanced Drop-in Fuels for Australia	NSW	$5,423,155	Bioenergy	On track
MOR	Community owned solar	SA	$15,000	Solar Enabling	Complete
National ICT Aust	Data fusion and machine learning for Geo Exploration and Characterisation	NSW	$1,901,980	Geothermal	On track
Newcastle Uni 1-A065	Fabrication of thermionic devices	NSW	$515,359	Solar Thermal	On track
Power and Water Corp	Daly River Load Optmisation	NT	$462,357	Enabling	Complete
Qantas Airways Ltd	Alt Aviation Fuel Feasibility study re Aust Feedstock & Refining Capacity	NSW	$575,000	Bioenergy	Complete
RATCH-Aust Corp Ltd	Feasibility of converting Collinsville Coal Power Station to Solar Thermal	QLD	$2,500,000	Solar Thermal	On track
RayGen Resources 3-A004	Central Receiver CPV Pilot Project – Stage 2	VIC	$1,750,000	Solar PV	On track
RMIT 1-USOMUSIC	1-USOMUSIC: Micro-urban solar integrated concentrators	VIC	$4,521,191	Solar Thermal	On track
Solar Systems 3-A010	High-Efficiency Multi-Junction Solar Cells on Low-Cost, Large-Area	NSW	$2,000,000	Solar PV	On track
Suntech 3-GER003	Novel Texture Processes for the Latest Industrial Wafer	NSW	$495,000	Solar PV	On track
Syd Uni 2-A023	Upconversion of the solar spectrum for improved PV energy conversion	NSW	$487,584	Solar PV	On track
Uni NSW/ Suntech 2-A014A	Next Generation Crystalline Silicon on Glass	NSW	$1,178,000	Solar PV	On track
Uni of Adelaide	Reservoir Quality in Sedimentary Geothermal Resources	SA	$1,250,000	Geothermal	On track
Uni of Melb	Achieving cost-effective abatement from Australian electricity generation	VIC	$931,207	Enabling	On track
Uni of Melb 1-GER001	Enhancing Efficiencies in Printed Solar Cells	VIC	$500,000	Solar PV	On track
Uni of Melb 2-A018	Printing Solar Cells – A manufacturing proposition for Australia	VIC	$1,762,500	Solar PV	On track
Uni of NSW 1-A060	Develop & commercialise high efficiency silicon solar cell tech	NSW	$3,972,980	Solar PV	On track
Uni of NSW 1-A082	Overcoming performance limitations of commercial solar cells	NSW	$4,400,000	Solar PV	On track
Uni of NSW 1-GER003	Si nanocrystals embedded in silicon oxide and nitride	NSW	$500,000	Solar PV	On track
Uni of NSW 1-GER010	Time-and spectrally resolved Photoluminescents for Silicon Solar	NSW	$490,166	Solar PV	On track

RESEARCH AND DEVELOPMENT

Project name	Description	Location	*Funding provided/ committed (GST exclusive)	Technology	Assessment of progress/ expected progress 2013-14
Uni of NSW 1-SRI001	Australia-US Institute for Advanced Photovoltaics	NSW	$33,100,000	Solar PV	On track
Uni of NSW 1-UFA001	Cost-effective GaAsP top solar cell on high performance	NSW	$2,480,000	Solar PV	On track
Uni of NSW 1-UFA002	Multi-Junction c-Si Solar Cells Based on Virtual Ge Substrates	NSW	$1,265,000	Solar PV	On track
Uni of NSW 1-UFA003	Towards a practical Hot Carrier Solar Cell	NSW	$2,278,343	Solar PV	On track
Uni of NSW 1-USO028	Low-cost, high-efficiency Copper-Zinc-Tin-Sulphide (CZTS) silicon	NSW	$1,511,828	Solar PV	On track
Uni of NSW 1-USO034	Tools for design and scale-up of solar thermo-chemical reactors	NSW	$1,083,320	Solar Thermal	On track
Uni of NSW 2-A001	Tandem Quantum Dot Solar Cells	NSW	$1,375,000	Solar PV	On track
Uni of NSW 2-A002	40% Efficient Photovoltaic "Power Cube" Power Tower Receiver	NSW	$550,000	Solar PV	On track
Uni of NSW 2-A004	Forecasting & Characterising Grid Connected Solar Energy	NSW	$470,284	Enabling	On track
Uni of NSW 2-A005	The Hot Carrier Solar Cell	NSW	$563,906	Solar PV	On track
Uni of Qld 1-A086	New Materials and architectures for organic solar cells	QLD	$945,817	Solar PV	Complete
Uni of Sth Aust 3-GER001	New photocathodes for solar hydrogen production	SA	$500,000	Solar Thermal	On track
University of Technology Sydney (UTS)	Community Energy Strategy: Catalysing Community Renewables in Australia	NSW	$165,280	Enabling	On track
Vast Solar P/L	Vast solar 6MWth grid connected multi-module CST plant with thermal storage	NSW	$4,996,960	Solar Thermal	On track
Visy Industries Australia Pty Ltd	Visy Clean Energy Project	NSW	$2,114,820	Bioenergy	On track
Waratah Power P/L	Developing fish friendly design criteria for small hydro facilities	NSW	$613,377	Hydro	On track
Total	**77**		**$179,274,282**		

RESEARCH AND DEVELOPMENT: POSTGRADUATE SCHOLARSHIPS AND FELLOWSHIPS

University/ Institution	Scholar	Type of funding	*Funding provided/ committed (GST exclusive)	Technology	Assessment of progress/expected progress 2013-14
ANU	Thomas Ratcliff	Scholarship	$21,759	Solar	Ongoing
ANU	James Bullock	Scholarship	$65,679	Solar	Ongoing
ANU	Jaret Lee	Scholarship	$30,445	Solar	Ongoing
ANU	Niraj Lal	Fellowship	$251,630	Solar	Ongoing
ANU	Fiacre Rougieux	Fellowship	$225,353	Solar	Ongoing
ANU	Andrew Thomson	Fellowship	$347,054	Solar	Ongoing
ANU	Elizabeth Thomsen	Fellowship	$250,000	Solar	Ongoing
ANU	Ngwe Soe Josh Zin	Fellowship	$250,000	Solar	Ongoing
ANU	Andreas Fell	Fellowship	$359,490	Solar	Ongoing
ANU	Thomas Allen	Scholarship	$204,511	Solar	Ongoing
ANU	Da Wang	Scholarship	$215,525	Solar	Ongoing
ANU	Nicholas Grant	Fellowship	$364,120	Solar	Ongoing
ANU	Jose Zapata	Fellowship	$331,057	Solar	Ongoing
ANU	Xinbo Yang	Fellowship	$356,446	Solar	Ongoing
ANU	Qunyu Bi	Fellowship	$356,749	Solar	Ongoing
ANU	Katherine Booker	Fellowship	$371,993	Solar	Ongoing
ANU	Keith Sue	Scholarship	$120,000	Solar	Ongoing
Charles Darwin	Wai Kean Yap	Fellowship	$233,412	Solar	Ongoing
CSIRO	Kallista Sears	Fellowship	$236,478	Solar	Ongoing
CSIRO	Krishna Feron	Fellowship	$230,446	Solar	Ongoing
CSIRO	Hasitha Weerasinghe	Fellowship	$332,039	Solar	Ongoing
CSIRO	Tianshi Qin	Fellowship	$329,231	Solar	Ongoing
CSIRO	Timothy Jones	Fellowship	$329,231	Solar	Ongoing
Monash	Alex Pascoe	Scholarship	$48,816	Solar	Ongoing
Murdoch	Tobias Prosin	Scholarship	$120,000	Solar	Ongoing
RMIT	Ahmad Mojiri	Scholarship	$39,815	Solar	Ongoing
Swinburne University	Wensheng Yan	Fellowship	$335,391	Solar	Ongoing
Swinburne University	Ben Ekman	Scholarship	$130,093	Solar	Ongoing
Swinburne University	Benjamin Mashford	Fellowship	$337,516	Solar	Ongoing
Sydney University	Bjorn Sturmberg	Scholarship	$48,815	Solar	Ongoing
Sydney University	Miroslav Dvorak	Fellowship	$339,112	Solar	Ongoing
Sydney University	Alexandre La Fontaine	Scholarship	$119,600	Solar	Ongoing
University of Adelaide	Philip van Eyk	Fellowship	$273,856	Solar	Ongoing

RESEARCH AND DEVELOPMENT: POSTGRADUATE SCHOLARSHIPS AND FELLOWSHIPS

University/ Institution	Scholar	Type of funding	*Funding provided/ committed (GST exclusive)	Technology	Assessment of progress/expected progress 2013-14
University of Adelaide	Martin Belusko	Fellowship	$394,585	Solar	Ongoing
University of Melbourne	Wallace Wing Ho Wong	Fellowship	$324,515	Solar	Ongoing
University of Melbourne	Shuhua Peng	Fellowship	$336,612	Solar	Ongoing
University of Melbourne	Viktoras Dryza	Fellowship	$325,928	Solar	Ongoing
University of Melbourne	Kyra Schwarz	Scholarship	$72,336	Solar	Ongoing
University of Newcastle	Natalie Holmes	Scholarship	$38,013	Solar	Ongoing
University of Newcastle	Dylan Cuskelly	Scholarship	$154,268	Solar	Ongoing
University of Newcastle	Mitchell Wilson	Scholarship	$75,333	Solar	Ongoing
University of Newcastle	Anthony Rawson	Scholarship	$163,479	Solar	Ongoing
University of Queensland	Ajay K Pandey	Fellowship	$445,254	Solar	Ongoing
University of Queensland	Yuan Fang	Fellowship	$382,764	Solar	Ongoing
University of South Australia	Shane Sheoran	Scholarship	$120,000	Solar	Ongoing
University of South Australia	Ming Liu	Fellowship	$278,136	Solar	Ongoing
University of South Australia	Nguan Hwee Steven Tay	Fellowship	$318,796	Solar	Ongoing
University of Western Sydney	Guodong Du	Fellowship	$321,768	Solar	Discontinued
University of Western Sydney	Wenxian Li	Fellowship	$200,357	Solar	Ongoing
University of Wollongong	Andrew Nattestad	Fellowship	$396,321	Solar	Ongoing
University of Wollongong	Joesph Giorgio	Scholarship	$43,305	Solar	Ongoing
UNSW	Andrew Danos	Scholarship	$190,471	Solar	Ongoing
UNSW	Tom Keevers	Scholarship	$31,129	Solar	Ongoing
UNSW	Xiaojing Hao	Fellowship	$315,015	Solar	Ongoing
UNSW	Nicholas Boerema	Scholarship	$19,678	Solar	Ongoing
UNSW	Jonathon Dore	Scholarship	$20,418	Solar	Ongoing
UNSW	Jae Sung Yun	Scholarship	$84,901	Solar	Ongoing
UNSW	Simon Heslop	Scholarship	$121,321	Solar	Ongoing
UNSW	Thilini Ishwara	Fellowship	$363,772	Solar	Ongoing
UNSW	Clare Disney	Scholarship	$106,668	Solar	Ongoing
UNSW	Robert Patterson	Fellowship	$322,383	Solar	Ongoing
UNSW	Supriya Pillai	Fellowship	$370,288	Solar	Ongoing
UNSW	Jianshu Han/Allen Barnett	Scholarship	$234,554	Solar	Ongoing
UNSW	Henner Kampwerth	Fellowship	$432,249	Solar	Ongoing
UNSW	Chao Shen	Scholarship	$174,419	Solar	Ongoing
UNSW	Adrian Shi	Scholarship	$196,838	Solar	Ongoing

RESEARCH AND DEVELOPMENT: POSTGRADUATE SCHOLARSHIPS AND FELLOWSHIPS

University/ Institution	Scholar	Type of funding	*Funding provided/ committed (GST exclusive)	Technology	Assessment of progress/expected progress 2013-14
UNSW	Vincent Allen	Scholarship	$233,864	Solar	Ongoing
UNSW	Matthew Edwards	Fellowship	$289,089	Solar	Ongoing
UNSW	Xi Wang	Fellowship	$382,148	Solar	Ongoing
UNSW	Sammy Lee	Fellowship	$330,195	Solar	Ongoing
UNSW	Binesh Puthen Veettil	Fellowship	$330,195	Solar	Ongoing
UNSW	Gough Lui	Scholarship	$27,816	Solar	Ongoing
UNSW	Edward Law	Scholarship	$45,888	Solar	Ongoing
UNSW	Alexander To	Scholarship	$45,888	Solar	Ongoing
UNSW	Simon Chung	Scholarship	$40,544	Solar	Ongoing
UNSW	Sisi Wang	Scholarship	$31,041	Solar	Ongoing
UNSW	Yang Yang	Fellowship	$330,195	Solar	Ongoing
UNSW	Peerapat Vithayasrichareon	Fellowship	$396,843	Solar	Ongoing
UNSW	Zi Ouyang	Fellowship	$391,717	Solar	Ongoing
UNSW	Bernard Mitchell	Fellowship	$330,195	Solar	Ongoing
UNSW	Hangtao Cui Bi	Fellowship	$330,195	Solar	Ongoing
UNSW	Murad Tayebjee	Fellowship	$330,195	Solar	Ongoing
UNSW	Craig Johnson	Fellowship	$216,241	Solar	Ongoing
Total		**83**	**$19,063,784**		

DEPLOYMENT

Project name	Description	Location	*Funding provided/ committed (GST exclusive)	Technology	Assessment of progress/ expected progress 2013-14
AGL	Fixed angle PV power stations at Broken Hill (53MW) and Nyngan (102MW)	NSW	$166,700,000	Solar PV	On track
CS Energy Ltd	44MW Solar Thermal Demonstration	QLD	$34,900,000	Solar Thermal	On track
Infigen	Design, construction and build Capital Solar Farm c30MW PV	NSW	$50,000,000	Solar PV	On track
Moree Solar Farm	Design, construction and build 56MWAC PV	NSW	$101,700,000	Solar PV	On track
Solar Systems Ltd	100MW large-scale solar concentrating power station at Mildura	VIC	$75,000,000	Solar PV	Project outcomes at risk
Victorian Wave Partners P/L	Portland Wave Energy Project	VIC	$66,465,000	Ocean	Project outcomes at risk
Total		**6**	**$494,765,000**		

DEMONSTRATION

Project name	Description	Location	*Funding provided/ committed (GST exclusive)	Technology	Assessment of progress/ expected progress 2013-14
Abengoa Solar Power Australia Pty Ltd	Perenjori Dispatchable Solar Thermal Power Project	WA	$449,718	Solar Thermal	On track
BioPower Systems P/L	bioWAVE Ocean Pilot at Port Fairy	VIC	$11,000,000	Ocean	On track
Brisbane Materials Technology 1-USO018	A pilot-scale plant for the production of solar anti-reflection	QLD	$1,262,000	Solar PV	On track
BT Imaging - 1-A007	1-A007 Inline inspection tools for photovoltaic manufacturing	NSW	$2,250,000	Solar PV	On track
Carnegie Wave Energy Ltd	Perth Wave Energy Project	WA	$13,095,381	Ocean	On track
Carnegie Wave Energy Ltd	CETO6 PWEP Expansion	WA	$13,000,000	Ocean	On track
Chromasun 3-A013	Lowest LCOE: Australian pilot of rooftop CST and CPV-T micro concentrator systems	VIC	$3,461,677	Solar Thermal	On track
First Solar	Weipa Solar PV Project	QLD	$11,300,000	Solar PV	On track
Geodynamics Ltd	Construction of a 25MW EGS hot fractured rock demonstration plant	SA	$90,000,000	Geothermal	On track
Granite Power 3-A017	Solar Supercritical Organic Rankine Cycle for Power & Indust Heat	NSW	$812,000	Solar Thermal	On track
Hydro Tasmania	Hydro Tasmania King Island Renewable Energy Integration	TAS	$6,083,000	Hybrid	On track
James Cook Uni	High Energy Algal Fuels project	QLD	$5,000,000	Bioenergy	On track
MNGI Pty Ltd (t/as Petratherm)	Paralana Engineered Geothermal Systems Project	SA	$12,997,300	Geothermal	Project outcomes at risk
MNGI/Petratherm	Construction of a 7MW EGS hot fractured rock demonstration plant	SA	$24,520,833	Geothermal	Project outcomes at risk
Muradel P/L	Advancing established marine microalgae biofuel to commercialisation	SA	$4,398,000	Bioenergy	On track
Oceanlinx Ltd	Oceanlinx 1MW Commercial Wave Energy Demonstrator	NT	$3,970,000	Ocean	Discontinued
Renergi P/L	Advanced Biomass Gasification Technology	WA	$3,624,253	Bioenergy	On track
Smart Storage P/L (Ecoult)	UltraBattery Distributed Solar PV Support and UltraBattery for RAPS	NSW	$553,780	Enabling	On track
Southern Cross Venture Partners	REVC	-	$100,000,000	REVC	On track
Vast Solar P/L 3-A003	Validation of performance modelling for 1.2MWth solar array	NSW	$437,243	Solar Thermal	On track
Total	**20**		**$308,215,185**		

KNOWLEDGE MANAGEMENT

Project name	Description	Location	*Funding provided/ committed (GST exclusive)	Technology	Assessment of progress/ expected progress 2013-14
Geoscience Australia	Produce solar resource data to be used by solar researchers and the Australian solar power industry.	Multiple sites	$5,000,000	Solar	Complete
Australian Energy Technology Assessment (2013 Update)	Review the O&M cost estimates for renewable energy technologies in the 2013 AETA and update the AETA model to account for any changes to parameters since the release of the 2013 AETA.	Multiple sites	$133,737	Electricity generation	On-track
Australian Liquid Fuel Technology Assessment (ALFTA)	Production of inaugural bottom up cost analysis of a range of liquid fuel technologies including development of free to use spreadsheet model.	Multiple sites	$437,176	Liquid transport fuels	On-track
International Geothermal Expert Group	Investigate and report on the prospects for the commercial development of geothermal energy in Australia	Multiple sites	$486,349	Geothermal	On-track
Total		**4**	**$6,057,262**		

INTERNATIONAL RESEARCH EXCHANGES

University/ Institution	Scholar	Type of funding	*Funding provided/ committed (GST exclusive)	Technology	Assessment of progress/expected progress 2013-14
AECOM	Jennifer Riesz	International Research Exchange	$7,130	Solar	Complete
CSIRO	Benjamin Duck	International Research Exchange	$109,081	Solar	On-track
CSIRO	Jacek Jasieniak	International Research Exchange	$83,512	Solar	Complete
University of South Australia	Ming Liu	International Research Exchange	$10,548	Solar	Complete


BUILDING
TOMORROW'S
ENERGY
INFRASTRUCTURE
CREATING
OPTIONS
ARENA
KNOWLEDGE
SHARING
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COMMERCIALISATION
SKILLS
FOR THE
NEW JOBS
FIRSTS
FUTURE

INDEPENDENT AUDITOR'S REPORT

To the Minister for Industry

I have audited the accompanying financial statements of the Australian Renewable Energy Agency for the year ended 30 June 2014, which comprise: a Statement by the Chair of the Board, Chief Executive Officer and Chief Financial Officer; the Statement of Comprehensive Income; Statement of Financial Position; Statement of Changes in Equity; Cash Flow Statement; Schedule of Commitments; Schedule of Contingencies; and Notes comprising a Summary of Significant Accounting Policies and other explanatory information.

Directors' Responsibility for the Financial Statements

The directors of the Australian Renewable Energy Agency are responsible for the preparation of the financial statements that give a true and fair view in accordance with the Finance Minister's Orders made under the *Commonwealth Authorities and Companies Act 1997*, including the Australian Accounting Standards, and for such internal control as is necessary to enable the preparation of financial statements that give a true and fair view and are free from material misstatement, whether due to fraud or error.

Auditor's Responsibility

My responsibility is to express an opinion on the financial statements based on my audit. I have conducted my audit in accordance with the Australian National Audit Office Auditing Standards, which incorporate the Australian Auditing Standards. These auditing standards require that I comply with relevant ethical requirements relating to audit engagements and plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditor's judgement, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the Australian Renewable Energy Agency's preparation of the financial statements that give a true and fair view 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 Australian Renewable Energy Agency's internal control. An audit also includes evaluating the appropriateness of the accounting policies used and the reasonableness of accounting estimates made by the directors, as well as evaluating the overall presentation of the financial statements.

I believe that the audit evidence I have obtained is sufficient and appropriate to provide a basis for my audit opinion.

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

Independence

In conducting my audit, I have followed the independence requirements of the Australian National Audit Office, which incorporate the requirements of the Australian accounting profession.

Opinion

In my opinion, the financial statements of the Australian Renewable Energy Agency:

(a) have been prepared in accordance with the Finance Minister's Orders made under the *Commonwealth Authorities and Companies Act 1997*, including the Australian Accounting Standards; and

(b) give a true and fair view of the matters required by the Finance Minister's Orders including the Australian Renewable Energy Agency's financial position as at 30 June 2014 and its financial performance and cash flows for the year then ended.

Australian National Audit Office

Kristian Gage
Acting Executive Director

Delegate of the Auditor-General

Canberra

23 September 2014

Australian Renewable Energy Agency

STATEMENT BY THE CHAIR OF THE BOARD, CHIEF EXECUTIVE OFFICER AND CHIEF FINANCIAL OFFICER

In our opinion, the attached financial statements for the year ended 30 June 2014 are based on properly maintained financial records and give a true and fair view of the matters required by the Finance Minister's Orders made under the *Commonwealth Authorities and Companies Act 1997*, as amended.

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

This statement is made in accordance with a resolution of the directors.

Signed	Signed	Signed
		
Greg Bourne Chair 23 September 2014	**Ivor Frischknecht** Chief Executive Officer 23 September 2014	**Ian Kay** Chief Financial Officer 23 September 2014

STATEMENT OF COMPREHENSIVE INCOME

for the period ended 30 June 2014

	Notes	**2014 $'000**	2013 $'000
NET COST OF SERVICES			
Expenses			
Employee benefits	3A	**884**	850
Suppliers	3B	**24,375**	12,315
Grants	3C	**239,339**	50,924
Depreciation and amortisation	3D	**54**	-
Write down and impairment of assets	3E	**9**	-
Other expenses	3F	**1,915**	1,751
Total expenses		**266,576**	65,840
Own-source income			
Own-source revenue			
Interest	4A	**25**	2
Total own-source revenue		**25**	2
Gains			
Other gains	4B	**14,282**	8,555
Total gains		**14,282**	8,555
Total own-source income		**14,307**	8,557
Net cost of services		**252,269**	57,283
Revenue from Government	4C	**261,942**	59,580
Surplus on continuing operations		**9,673**	2,297
Total comprehensive income		**9,673**	2,297
Surplus attributable to the Australian Government		**9,673**	2,297

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

STATEMENT OF FINANCIAL POSITION

as at 30 June 2014

	Notes	**2014 $'000**	2013 $'000
ASSETS			
Financial assets			
Cash and cash equivalents	6A	**26**	221
Trade and other receivables	6B	**6,407**	5,751
Other investments	6C	**11,131**	1,926
Total financial assets		**17,564**	7,898
Non-financial assets			
Property, plant and equipment	7A,B	**6**	-
Intangibles	7C,D	**798**	368
Other non-financial assets	7E	**36**	-
Total non-financial assets		**840**	368
Total assets		**18,404**	8,266
LIABILITIES			
Payables			
Suppliers	8A	**2,114**	1,276
Grants	8B	**4,197**	4,545
Other payables	8C	**49**	114
Total payables		**6,360**	5,935
Provisions			
Employee provisions	9A	**74**	34
Total provisions		**74**	34
Total liabilities		**6,434**	5,969
Net assets		**11,970**	2,297
EQUITY			
Retained surplus		**11,970**	2,297
Total equity		**11,970**	2,297

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

STATEMENT OF CHANGES IN EQUITY

for the period ended 30 June 2014

	Retained earnings		Total equity	
	2014 $'000	2013 $'000	**2014 $'000**	2013 $'000
Opening balance				
Balance carried forward from previous period	**2,297**	-	**2,297**	-
Opening balance	**2,297**	-	**2,297**	-
Comprehensive income				
Surplus for the period	**9,673**	2,297	**9,673**	2,297
Total comprehensive income	**9,673**	2,297	**9,673**	2,297
Closing balance as at 30 June	**11,970**	2,297	**11,970**	2,297

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

CASH FLOW STATEMENT

for the period ended 30 June 2014

	Notes	**2014 $'000**	2013 $'000
OPERATING ACTIVITIES			
Cash received			
Receipts from Government		**265,150**	56,194
Interest		**25**	2
Net GST received		**19,284**	2,596
Total cash received		**284,459**	58,792
Cash used			
Employees		**(912)**	(702)
Suppliers		**(8,821)**	(3,725)
Grants		**(263,306)**	(50,096)
Total cash used		**(273,039)**	(54,523)
Net cash received by operating activities	10	**11,420**	4,269
INVESTING ACTIVITIES			
Cash used			
Purchase of property, plant and equipment		**(18)**	-
Purchase of intangibles		**(481)**	(368)
Investments		**(11,120)**	(3,677)
Total cash used		**(11,619)**	(4,045)
Net cash used by investing activities		**(11,619)**	(4,045)
FINANCING ACTIVITIES			
Cash received			
Refund of deposits held		**3**	-
Total cash received		**3**	-
Cash used			
Deposits held		**-**	(3)
Total cash used		**-**	(3)
Net cash received by financing activities		**3**	(3)
Net increase /(decrease) in cash held		**(195)**	221
Cash and cash equivalents at the beginning of the reporting period		**221**	-
Cash and cash equivalents at the end of the reporting period	6A	**26**	221

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

SCHEDULE OF COMMITMENTS

as at 30 June 2014

	2014 $'000	2013 $'000
BY TYPE		
Commitments receivable		
Net GST recoverable on commitments[1]	**(49,427)**	(65,164)
Total commitments receivable	**(49,427)**	(65,164)
Commitments payable		
Other commitments		
Project commitments[2]	**518,984**	670,923
Research and development commitments[2]	**104,359**	151,998
Other commitments	**16,352**	12,955
Total commitments payable	**639,695**	835,876
Net commitments by type	**590,268**	770,712
BY MATURITY		
Commitments receivable		
GST recoverable on commitments[1]		
One year or less	**(33,075)**	(47,430)
From one to five years	**(14,970)**	(15,519)
Over five years	**(1,382)**	(2,215)
Total commitments receivable	**(49,427)**	(65,164)
Commitments payable		
Project commitments[2]		
One year or less	**337,647**	496,931
From one to five years	**172,337**	161,900
Over five years	**9,000**	12,092
Total project commitments	**518,984**	670,923
Research and development commitments[2]		
One year or less	**44,088**	69,685
From one to five years	**45,069**	58,036
Over five years	**15,202**	24,277
Total research and development commitments	**104,359**	151,998
Other commitments		
One year or less	**8,075**	7,895
From one to five years	**7,967**	4,440
Over five years	**310**	620
Total other commitments	**16,352**	12,955
Total commitments payable	**639,695**	835,876
Net commitments by maturity	**590,268**	770,712

Note: 1. Commitments were GST inclusive where relevant.

2. The Australian Renewable Energy Agency is currently providing financial assistance to a broad portfolio of projects and measures across the various stages of renewable energy commercialisation. Project commitments and fellowships are in accordance with signed funding agreements, as varied, or in the case of scholarships, in accordance with the grant offer letter.

SCHEDULE OF CONTINGENCIES

as at 30 June 2014

	2014 $'000	2013 $'000
CONTINGENT LIABILITIES		
Claims for damages or costs	**500**	-
Total contingent liabilities	**500**	-

Details of each class of contingent liabilities and contingent assets listed above are disclosed in Note 11, along with information on significant remote contingencies and contingencies that cannot be quantified.

No contingent assets were identified as at 30 June 2014.

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

LIST OF NOTES TO AND FORMING PART OF THE FINANCIAL STATEMENTS

NOTE 1: SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

1.1 Objectives of the Australian Renewable Energy Agency

The Australian Renewable Energy Agency (ARENA) is an Australian Government controlled entity operating under the following legislation:

- *Australian Renewable Energy Agency Act 2011*;
- *Australian Renewable Energy Agency (Consequential Amendments and Transitional Provisions) Act 2011*
- *Australian Renewable Energy Agency Determination No 1 of 2013*.

ARENA is governed by an independent, decision-making Board. The members of the Board draw together skills in renewable energy technology, commercialisation, business investment and corporate governance to provide independent and expert administration of ARENA funds.

ARENA is a not-for-profit entity. The objective of ARENA is to improve the competitiveness of renewable energy technologies and increase the supply of renewable energy in Australia.

ARENA is structured to meet the following outcome in accordance with its Act:

> **Outcome 1:** Support improvements in the competitiveness of renewable energy and related technologies and the supply of renewable energy by administering financial assistance, developing analysis and advice about and sharing information and knowledge with regard to, renewable energy and related technologies.

ARENA became a portfolio agency of the Department of Industry ('Industry') on 18 September 2013, prior to this ARENA was a portfolio agency of the former Department of Resources, Energy and Tourism. Under the *Australian Renewable Energy Agency Act 2011* the Secretary of the portfolio department is required to make staff available to ARENA and pay associated costs.

The continued existence of ARENA in its present form and with its present programs is dependent on:

- Government policy and the continuation of its act;
- continued funding under the legislation for the ARENA's administration and programs; and
- the Secretary of the portfolio department making sufficient staff available.

The Government has declared, in the 2014-15 Budget Measures, its intention to abolish the Australian Renewable Energy Agency. This will require the repealing of the *Australian Renewable Energy Agency Act 2011*. If the repeal is successful, signed funding agreements, assets and liabilities at the time of repeal would transfer to the Department of Industry.

On the 19th of June 2014, the Australian Government tabled the Australian Renewable Energy Agency (Repeal) Bill 2014, this Bill, if passed would abolish ARENA. The Bill passed through the House of Representatives on the 1st of September 2014, however, at the date of signing these financial statements debate on the Bill has not occurred in the Senate.

1.2 Basis of preparation of the financial statements

The financial statements are general purpose financial statements and are required by clause 1(b) of Schedule 1 to the CAC Act.

The financial statements have been prepared in accordance with:

a) Finance Minister's Orders (FMOs) for reporting periods ending on or after 1 July 2011; and
b) Australian Accounting Standards and Interpretations 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 in accordance with the historical cost convention, except for certain assets and liabilities at fair value. Except where stated, no allowance is made for the effect of changing prices on the results or the financial position.

NOTE 1: SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

The financial statements are presented in Australian dollars and values are rounded to the nearest thousand dollars unless otherwise specified.

Unless an alternative treatment is specifically required by an accounting standard or the FMOs, assets and liabilities are recognised in the balance sheet when and only when it is probable that future economic benefits will flow to the entity or a future sacrifice of economic benefits will be required and the amounts of the assets or liabilities can be reliably measured. However, assets and liabilities arising under executory contracts are not recognised unless required by an accounting standard. Liabilities and assets that are unrecognised are reported in the schedule of commitments or the schedule of contingencies.

Unless alternative treatment is specifically required by an accounting standard, income and expenses are recognised in the Statement of Comprehensive Income when and only when the flow, consumption or loss of economic benefits has occurred and can be reliably measured.

1.3 Significant accounting judgements and estimates

No accounting assumptions and estimates have been identified that have a significant risk of causing a material adjustment to the carrying amounts of assets and liabilities within the next reporting period.

1.4 New Australian accounting standard

Adoption of new Australian accounting standard requirements

No accounting standard has been adopted earlier than the application date as stated in the standard.

A number of new standards (including reissued standards) and interpretations that were issued prior to the signing of the financial statements by the Chief Executive and Chief Financial Officer and are applicable to the current reporting period did not have a material financial impact, and are not expected to have a future material financial impact on ARENA.

Future Australian accounting standard requirements

The following new standards/revised standards/interpretations/amending standards were issued by the Australian Accounting Standards Board prior to the sign-off date, which are expected to have a financial impact on ARENA for future reporting periods:

- AASB 1031 Materiality;
- AASB 2014-1 Amendments to Australian Accounting Standards [Part C Materiality]; and
- AASB 1055 Budgetary Reporting.

All other new standards/revised standards/interpretations/amending standards that were issued prior to the sign-off date and are applicable to the future reporting period are not expected to have a future financial impact on ARENA.

1.5 Revenue

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

Revenue from Government

Funding received or receivable from the Department of Industry and the former Department of Resources, Energy and Tourism (appropriated to the agency as a CAC Act body payment item for payment to ARENA) is recognised as Revenue from Government unless the funding is in the nature of an equity injection or a loan.

1.6 Gains

Resources received free of charge

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

Resources received free of charge are recorded as either revenue or gains depending on their nature.

NOTE 1: SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

1.7 Employee benefits

Liabilities for 'short-term employee benefits' (as defined in AASB 119 *Employee Benefits*) and termination benefits due within twelve months of the end of reporting period are measured at their nominal amounts.

The nominal amount is calculated with regard to the rates expected to be paid on settlement of the liability.

Other long-term employee benefits are measured as net total of the present value of the defined benefit obligation at the end of the reporting period minus the fair value at the end of the reporting period of plan assets (if any) out of which the obligations are to be settled directly.

Leave

The liability for employee benefits includes provision for annual leave and long service leave. No provision has been made for sick leave as all sick leave is non-vesting and the average sick leave taken in future years by employees of ARENA is estimated to be less than the annual entitlement for sick leave.

The leave liabilities are calculated on the basis of employees' remuneration at the estimated salary rates that will be applied at the time the leave is taken, including ARENA's employer superannuation contribution rates to the extent that the leave is likely to be taken during service rather than paid out on termination.

The liability for long service leave has been determined by reference to the Short Hand Method as per the FMOs. The estimate of the present value of the liability takes into account attrition rates and pay increases through promotion and inflation.

Superannuation

ARENA's staff are members of defined contribution schemes.

The liability for superannuation recognised as at 30 June represents outstanding contributions.

1.8 Leases

Operating lease payments are expensed on a straight-line basis which is representative of the pattern of benefits derived from the leased assets.

1.9 Fair value measurement

ARENA deems transfers between levels of the fair value hierarchy to have occurred at the end of the reporting period.

1.10 Cash

Cash is recognised at its nominal amount. Cash and cash equivalents includes:

a) cash on hand
b) demand deposits in bank accounts with an original maturity of 3 months or less that are readily convertible to known amounts of cash and subject to insignificant risk of changes in value.

1.11 Financial assets

ARENA classifies its financial assets in the following categories:

a) available-for-sale financial assets
b) loans and receivables.

The classification depends on the nature and purpose of the financial assets and is determined at the time of initial recognition. Financial assets are recognised and derecognised upon trade date.

NOTE 1: SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

Effective interest method

The effective interest method is a method of calculating the amortised cost of a financial asset and of allocating interest income over the relevant period. The effective interest rate is the rate that exactly discounts estimated future cash receipts through the expected life of the financial asset, or, where appropriate, a shorter period.

Income is recognised on an effective interest rate basis except for financial assets that are recognised at fair value through profit or loss.

Available-for-sale financial assets

Available-for-sale financial assets are non-derivatives that are either designated in this category or not classified in any of the other categories.

Available-for-sale financial assets are recorded at fair value. Gains and losses arising from changes in fair value are recognised directly in reserves (equity) with the exception of impairment losses. Interest is calculated using the effective interest method and foreign exchange gains and losses on monetary assets are recognised directly in profit or loss. Where the asset is disposed of or is determined to be impaired, part (or all) of the cumulative gain or loss previously recognised in the reserve is included in surplus and deficit for the period.

Where a reliable fair value cannot be established for unlisted investments in equity instruments, these instruments are valued at cost.

Loans and receivables

Trade receivables and other receivables that have fixed or determinable payments that are not quoted in an active market are classified as 'loans and receivables'. Loans and receivables are measured at amortised cost using the effective interest method less impairment. Interest is recognised by applying the effective interest rate.

Impairment of financial assets

Financial assets are assessed for impairment at the end of each reporting period.

Available for sale financial assets. If there is objective evidence that an impairment loss on an available-for-sale financial asset has been incurred, the amount of the difference between its cost, less principal repayments and amortisation, and its current fair value, less any impairment loss previously recognised in expenses, is transferred from equity to the Statement of Comprehensive Income.

Financial assets held at cost. If there is objective evidence that an impairment loss has been incurred, the amount of the impairment loss is the difference between the carrying amount of the asset and the present value of the estimated future cash flows discounted at the current market rate for similar assets.

1.12 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 fair value through profit or loss

Financial liabilities at fair value through profit or loss are initially measured at fair value. Subsequent fair value adjustments are recognised in profit or loss. The net gain or loss recognised in profit or loss incorporates any interest paid on the financial liability.

Other financial liabilities

Other financial liabilities 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 yield basis.

NOTE 1: SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

The effective interest method is a method of calculating the amortised cost of a financial liability and of allocating interest expense over the relevant period. The effective interest rate is the rate that exactly discounts estimated future cash payments through the expected life of the financial liability, or, where appropriate, a shorter period.

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).

1.13 Contingent liabilities and contingent assets

Contingent liabilities and contingent assets are not recognised in the Statement of Financial Position but are reported in the relevant schedules and notes. They may arise from uncertainty as to the existence of a liability or asset or represent an asset or liability in respect of which the amount cannot be reliably measured. Contingent assets are disclosed when settlement is probable but not virtually certain and contingent liabilities are disclosed when settlement is greater than remote.

1.14 Acquisition of assets

Assets are recorded at cost on acquisition except as stated below. The cost of acquisition includes the fair value of assets transferred in exchange and liabilities undertaken. Financial assets are initially measured at their fair value plus transaction costs where appropriate.

Assets acquired at no cost, or for nominal consideration, are initially recognised as assets and income at their fair value at the date of acquisition, unless acquired as a consequence of restructuring of administrative arrangements. In the latter case, assets are initially recognised as contributions by owners at the amounts at which they were recognised in the transferor's accounts immediately prior to the restructuring.

1.15 Property, plant and equipment

Asset recognition threshold

Purchases of property, plant and equipment are recognised initially at cost in the balance sheet, except for purchases costing less than $5,000, which are expensed in the year of acquisition (other than where they form part of a group of similar items which are significant in total).

The initial cost of an asset includes an estimate of the cost of dismantling and removing the item and restoring the site on which it is located.

Revaluations

Following initial recognition at cost, property, plant and equipment were carried at fair value less subsequent accumulated depreciation and accumulated impairment losses. Valuations were conducted with sufficient frequency to ensure that the carrying amounts of assets did not differ materially from the assets' fair values as at the reporting date. The regularity of independent valuations depended upon the volatility of movements in market values for the relevant assets.

Revaluation adjustments were made on a class basis. Any revaluation increment was credited to equity under the heading of asset revaluation reserve except to the extent that it reversed a previous revaluation decrement of the same asset class that was previously recognised in the surplus/deficit. Revaluation decrements for a class of assets were recognised directly in the surplus/deficit except to the extent that they reversed a previous revaluation increment for that class.

Any accumulated depreciation as at the revaluation date is eliminated against the gross carrying amount of the asset and the asset restated to the revalued amount.

NOTE 1: SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

Depreciation

Depreciable property, plant and equipment assets are written-off to their estimated residual values over their estimated useful lives to the entity using, in all cases, the straight-line method of depreciation.

Depreciation rates (useful lives), residual values and methods are reviewed at each reporting date and necessary adjustments are recognised in the current, or current and future reporting periods, as appropriate.

Depreciation rates applying to each class of depreciable asset are based on the following useful lives:

	2014	2013
Plant and equipment	3 to 10 years	3 to 10 years

Impairment

All assets were assessed for impairment at 30 June 2014. Where indications of impairment exist, the asset's recoverable amount is estimated and an impairment adjustment made if the asset's recoverable amount is less than its carrying amount.

The recoverable amount of an asset is the higher of its fair value less costs of disposal and its value in use. Value in use is the present value of the future cash flows expected to be derived from the asset. Where the future economic benefit of an asset is not primarily dependent on the asset's ability to generate future cash flows, and the asset would be replaced if the entity were deprived of the asset, its value in use is taken to be its depreciated replacement cost.

Derecognition

An item of property, plant and equipment is derecognised upon disposal or when no further future economic benefits are expected from its use or disposal.

1.16 Intangibles

ARENA's intangibles comprise internally developed software for internal use. These assets are carried at cost less accumulated amortisation and accumulated impairment losses. The threshold for the recognition is $5,000 for purchased software and $200,000 for internally developed software.

Software is amortised on a straight-line basis over its anticipated useful life. The useful lives of ARENA's software is 3 to 10 years (2012-13: 3 to 10 years).

All software assets were assessed for indications of impairment as at 30 June 2014.

1.17 Taxation

ARENA is exempt from all forms of taxation except Fringe Benefits Tax (FBT) and the Goods and Services Tax (GST).

Revenues, expenses and assets are recognised net of GST except:

a) where the amount of GST incurred is not recoverable from the Australian Taxation Office

b) for receivables and payables.

NOTE 2: EVENTS AFTER THE REPORTING PERIOD

Apart from the disclosure made in Note 1.1 regarding the Government's intentions, there was no subsequent event that had the potential to significantly affect the ongoing structure and financial activities of ARENA.

NOTE 3: EXPENSES

	2014 $'000	2013 $'000
Note 3A: Employee benefits		
Board sitting fees	**137**	214
Wages and salaries	**540**	504
Superannuation:		
Defined contribution plans	**111**	68
Leave and other entitlements	**96**	64
Total employee benefits	**884**	850
Note 3B: Suppliers		
Goods and services supplied or rendered		
Audit fees	**90**	114
Consultants	**6,283**	1,845
Insurance	**268**	205
Travel	**260**	139
Legal fees	**1,599**	803
Service level agreement	**192**	237
Department support costs (resources received free of charge)[1]	**14,282**	8,555
Other	**1,235**	392
Total goods and services supplied or rendered	**24,209**	12,290
Goods supplied in connection with		
Related parties	**2**	-
External parties	**96**	24
Total goods supplied	**98**	24
Services rendered in connection with		
Related parties	**15,913**	9,191
External parties	**8,198**	3,075
Total services rendered	**24,111**	12,266
Total goods and services supplied or rendered	**24,209**	12,290
Other suppliers		
Operating lease rentals in connection with		
Operating lease rentals – external parties:		
Minimum lease payments	**157**	21
Workers compensation expenses	**9**	4
Total other suppliers	**166**	25
Total suppliers	**24,375**	12,315

1. Department support costs represents the cost of staff and associated costs made available by the Secretary of the portfolio department (also refer to Note 4B).

NOTE 3: EXPENSES (CONTINUED)

	2014 $'000	2013 $'000
Note 3C: Grants		
Public sector		
Australian Government entities (related entities)	**14,388**	4,506
State and territory governments	**187**	75
Private sector		
Australian private companies	**27,883**	4,993
Australian public companies	**158,793**	32,193
Individual/sole traders	**3**	19
International organisations[2]	**1,105**	1,433
Other incorporated entities	**36,980**	7,705
Total grants	**239,339**	50,924

2. This represents the Australian Government's contribution to the Clean Energy Solutions Center and the International Renewable Energy Agency.

Note 3D: Depreciation and amortisation		
Depreciation		
Property, plant and equipment	**3**	-
Total depreciation	**3**	-
Amortisation		
Intangibles	**51**	-
Total amortisation	**51**	-
Total depreciation and amortisation	**54**	-
Note 3E: Write down and impairment of assets		
Property, plant and equipment		
Carrying value of assets written off	**9**	-
Total losses from write down and impairment of assets	**9**	-
Note 3F: Other expenses		
Change in the value of investment[3]	**1,915**	1,751
Total other expenses	**1,915**	1,751

3. This represents the change in value of the Renewable Energy Venture Capital (REVC) Fund Commonwealth Participation Trust, the investment is shown in the Statement of Financial Position (refer to Note 6C).

NOTE 4: OWN-SOURCE INCOME

	2014 $'000	2013 $'000
OWN-SOURCE REVENUE		
Note 4A: Interest		
Deposits	**25**	2
Total interest	**25**	2
GAINS		
Note 4B: Other gains		
Resources received free of charge - services	**14,282**	8,555
Total other gains	**14,282**	8,555
REVENUE FROM GOVERNMENT		
Note 4C: Revenue from Government		
Portfolio department		
CAC Act body payment item	**261,942**	59,580
Total revenue from Government	**261,942**	59,580

NOTE 5: FAIR VALUE MEASUREMENTS

The following tables provide an analysis of assets and liabilities that are measured at fair value. The different levels of the fair value hierarchy are defined below.

Level 1: Quoted prices (unadjusted) in active markets for identical assets or liabilities that the entity can access at measurement date.
Level 2: Inputs other than quoted prices included within Level 1 that are observable for the asset or liability, either directly or indirectly.
Level 3: Unobservable inputs for the asset or liability.

Note 5A: Fair value measurements

Fair value measurements at the end of the reporting period by hierarchy for assets and liabilities in 2014

		Fair value measurements at the end of the reporting period using		
	Fair value	Level 1 inputs	Level 2 inputs	Level 3 inputs
	$'000	$'000	$'000	$'000
Financial assets				
Other investments	**11,131**	-	-	**11,131**
Total financial assets	**11,131**	-	-	**11,131**
Non-financial assets				
Other property, plant and equipment	**6**	-	-	**6**
Total non-financial assets	**6**	-	-	**6**
Total fair value measurements of assets in the statement of financial position	**11,137**	-	-	**11,137**

Note 5B: Valuation technique and inputs for level 2 and level 3 fair value measurements

Level 2 and 3 fair value measurements - valuation technique and the inputs used for assets and liabilities in 2014

	Category (Level 2 or Level 3)	Fair value $'000	Valuation technique(s)[1]	Inputs used	Range (weighted average)[2]
Financial assets					
Other investments	Level 3	11,131	Cost approach	Net assets of Southern Cross REVC Fund Commonwealth Participation Trust at the end of the financial year	
Non-financial assets					
Other property, plant and equipment	Level 3	6	Cost approach	Internal review	

1. No change in valuation technique occurred during the period.

2. Significant unobservable inputs only. Not applicable for assets or liabilities in the Level 2 category.

NOTE 5: FAIR VALUE MEASUREMENTS (CONTINUED)

Recurring and non-recurring level 3 fair value measurements - valuation processes

The valuation of Other investments as at 30 June 2014, being ARENA's holding in the Southern Cross REVC Commonwealth Participation Trust, is based on the annual audited financial statements of the co-investment arrangement. The co-investment financial statements are relied upon in the absence of an active market to determine a fair value. This approach provides an accurate and reasonable valuation as the financial statements are prepared in accordance with the Australian accounting standards and are independently audited to ensure the statements are a true and fair representation.

The fair values presented in the Other property, plant and equipment category are based on an internal review of the cost and life of the assets.

Recurring level 3 fair value measurements - sensitivity of inputs

The significant unobservable inputs used in the fair value measurement of ARENA's Other investments are the cost of the investments disclosed in the co-investment arrangement's audited financial statements. The cost of these investments is the basis of the fair valuation. Significant increases (decreases) in any of those inputs in isolation would result in a significantly higher (lower) fair value measurement. Generally, a change in the assumption used for the cost of investments within the co-investment arrangement's audited financial statements is accompanied by a directionally similar change in the calculation of net assets of the co-investment arrangement.

The unobservable input used in the fair value measurement of the Other property, plant and equipment are the cost base and elapsed life of the asset. Any change to the input would not significantly affect the fair value measurement.

Recurring level 3 fair value measurements - sensitivity analysis for financial assets and liabilities

The use of alternative valuation methodologies for Other investments and Other property, plant and equipment will not significantly impact the fair value.

Note 5C: Reconciliation for recurring level 3 fair value measurements

Recurring level 3 fair value measurements - reconciliation for assets

	Financial assets		Non-financial assets	
	Other investments	Total	Other property, plant and equipment	Total
	2014 $'000	2014 $'000	2014 $'000	2014 $'000
Opening balance	**1,926**	**1,926**	-	-
Total gains/(losses) recognised in net cost of services[1]	(1,915)	(1,915)	-	-
Purchases	11,120	11,120	18	18
Impairment	-	-	(9)	(9)
Depreciation charge	-	-	3	3
Closing balance	**11,131**	**11,131**	**12**	**12**

1. These gains/(losses) are presented in the Statement of Comprehensive Income under 'Other expenses' (Note 3F).

The entity's policy for determining when transfers between levels are deemed to have occurred can be found in Note 1.

NOTE 6: FINANCIAL ASSETS

	2014 $'000	2013 $'000
Note 6A: Cash and cash equivalents		
Cash on hand or on deposit	**26**	221
Total cash and cash equivalents	**26**	221
Note 6B: Trade and other receivables		
Portfolio Department		
Receivable	**178**	3,387
Total receivable from the portfolio department	**178**	3,387
Other receivables:		
GST receivable from the Australian Taxation Office	**6,225**	1,044
Bond deposits	**-**	3
Other	**4**	1,317
Total other receivables	**6,229**	2,364
Total trade and other receivables (gross)	**6,407**	5,751
Receivables are expected to be recovered in		
No more than 12 months	**6,407**	5,751
Total trade and other receivables (net)	**6,407**	5,751
Receivables are aged as follows		
Not overdue	**6,403**	4,431
Overdue by:		
0 to 30 days	**4**	1,320
Total receivables (gross)	**6,407**	5,751
Note 6C: Other investments		
Other[1]	**11,131**	1,926
Total other investments	**11,131**	1,926
Total other investments are expected to be recovered		
More than 12 months	**11,131**	1,926
Total other investments	**11,131**	1,926

1. REVC Fund Commonwealth Participation Trust

ARENA holds 15,767,998 (2013: 4,639,502) fully paid "A" class units in the REVC Fund Commonwealth Participation Trust (Trust). The fair value of this investment is ARENA's share of the net assets of the audited Trust. The change in the value of the investment is shown in the Statement of Comprehensive Income (refer to Note 3F).

The principal activity of the Trust is to invest in early stage renewable energy companies.

ARENA's return from the Trust is initially limited to the capital committed plus interest at the long term bond rate. Any return from the Trust above that amount is split amongst the unit holders, including ARENA, on an agreed basis.

NOTE 7: NON-FINANCIAL ASSETS

	2014 $'000	2013 $'000
Note 7A: Property, plant and equipment		
Other property, plant and equipment		
Fair value	**6**	-
Accumulated depreciation	**-**	-
Total other property, plant and equipment	**6**	-
Total property, plant and equipment	**6**	-

Note 7B: Reconciliation of the opening and closing balances of property, plant and equipment

Reconciliation of the opening and closing balances of property, plant and equipment for 2014

	Other property, plant and equipment $'000	Total property, plant and equipment $'000
Additions		
Purchase or internally developed	**18**	**18**
Depreciation	**(3)**	**(3)**
Other movements		
Assets written off	**(9)**	**(9)**
Total as at 30 June 2014	**6**	**6**
Total as at 30 June 2014 represented by		
Gross book value	**6**	**6**
Accumulated depreciation and impairment	**-**	**-**
Total as at 30 June 2014	**6**	**6**

	2014 $'000	2013 $'000
Note 7C: Intangibles		
Computer software		
Internally developed – in progress	**22**	368
Internally developed – in use[1]	**827**	-
Accumulated amortisation	**(51)**	-
Total computer software	**798**	368
Total intangibles	**798**	368

1. Includes transfer of $368,000 for 'Internally developed – in progress' to 'Internally developed – in use.'

No indicators of impairment were found for intangibles.

No intangibles are expected to be sold or disposed of within the next 12 months.

NOTE 7: NON-FINANCIAL ASSETS (CONTINUED)

Note 7D: Reconciliation of the opening and closing balances of intangibles

Reconciliation of the opening and closing balances of intangibles for 2014

	Computer software internally developed $'000	Total $'000
As at 1 July 2013		
Gross book value	**368**	**368**
Accumulated depreciation and impairment	**-**	**-**
Total as at 1 July 2013	**368**	**368**
Additions		
Internally developed	**481**	**481**
Amortisation	**(51)**	**(51)**
Total as at 30 June 2014	**798**	**798**
Total as at 30 June 2014 represented by		
Gross book value	**849**	**849**
Accumulated depreciation and impairment	**(51)**	**(51)**
Total as at 30 June 2014	**798**	**798**

Reconciliation of the opening and closing balances of intangibles for 2013

	Computer software internally developed $'000	Total $'000
Additions		
Internally developed	368	368
Total as at 30 June 2013	368	368
Total as at 30 June 2013 represented by		
Gross book value	368	368
Accumulated depreciation and impairment	-	-
Total as at 30 June 2013	368	368

Note 7E: Other non-financial assets

Prepayments	36	-
Total other non-financial assets	36	-

NOTE 8: PAYABLES

	2014 $'000	2013 $'000
Note 8A: Suppliers		
Trade creditors and accruals	**2,114**	1,276
Total suppliers	**2,114**	1,276
Supplier payables expected to be settled		
No more than 12 months	**2,114**	1,276
Total suppliers	**2,114**	1,276
Suppliers in connection with		
Related entities	**999**	729
External parties	**1,115**	547
Total suppliers	**2,114**	1,276

Settlement is usually made within 30 days.

Note 8B: Grants		
Public sector		
Australian Government entities (related entities)	**779**	3,221
Private sector		
Australian private companies	**2,727**	91
Australian public companies	**-**	978
Other unincorporated entities	**-**	107
Other incorporated entities[1]	**692**	148
Total grant payables	**4,197**	4,545

1. Relates mainly to funding provided by ARENA to Australian universities for scholarships and fellowships.

Grant payables expected to be settled		
No more than 12 months	**4,197**	4,545
Total grant payables	**4,197**	4,545
Grant payables in connection with		
Related entities	**779**	3,221
External parties	**3,418**	1,324
Total grant payables	**4,197**	4,545

Settlement is usually made within 30 days.

Note 8C: Other payables		
Wages and salaries	**44**	106
Superannuation	**2**	2
Fringe benefits tax payable	**-**	6
Deferred rent payable	**3**	-
Total other payables	**49**	114
Other payables are expected to be settled		
No more than 12 months	**48**	114
More than 12 months	**1**	-
Total other payables	**49**	114

NOTE 9: PROVISIONS

	2014 $'000	2013 $'000
Note 9A: Employee provisions		
Leave	**74**	34
Total employee provisions	**74**	34
Employee provisions are expected to be settled		
No more than 12 months	**59**	29
More than 12 months	**15**	5
Total employee provisions	**74**	34

NOTE 10: CASH FLOW RECONCILIATION

	2014 $'000	2013 $'000
Reconciliation of cash and cash equivalents as per Statement of Financial Position to Cash Flow Statement		
Cash and cash equivalents as per		
Cash Flow Statement	**26**	221
Statement of Financial Position	**26**	221
Discrepancy	**-**	-
Reconciliation of net cost of services to net cash from operating activities		
Net cost of services	**(252,269)**	(57,283)
Add revenue from Government	**261,942**	59,580
Adjustments for non-cash items		
Change in value of investment	**1,915**	1,751
Depreciation	**54**	-
Net write down of non-financial assets	**9**	-
Changes in assets / liabilities		
(Increase) / decrease in net receivables	**(660)**	(5,748)
(Increase) / decrease in prepayments	**(36)**	-
Increase / (decrease) in employee provisions	**40**	34
Increase / (decrease) in supplier payables	**838**	1,276
Increase / (decrease) in grants payable	**(348)**	4,545
Increase / (decrease) in other payable	**(65)**	114
Net cash from operating activities	**11,420**	4,269

NOTE 11: CONTINGENT ASSETS AND LIABILITIES

	CLAIMS FOR DAMAGES OR COSTS		TOTAL	
	2014 $'000	2013 $'000	**2014 $'000**	2013 $'000
Contingent liabilities				
New contingent liabilities recognised	**500**	-	**500**	-
Total contingent liabilities	**(500)**	-	**(500)**	-
Net contingent assets/(liabilities)	**(500)**	-	**(500)**	-

No contingent assets were identified as at 30 June 2014.

Quantifiable Contingencies

The Schedule of Contingencies contains $500,000 of contingent liabilities in respect of a letter of demand received in relation to an ARENA project (2013: Nil).

Unquantifiable Contingencies

As at 30 June 2014, ARENA does not have any unquantifiable contingencies.

Significant Remote Contingencies

As at 30 June 2014, ARENA does not have any significant remote contingencies.

ARENA did not have any contingent assets or liabilities in 2013.

NOTE 12: DIRECTORS REMUNERATION

	2014 No.	2013 No.
Note 12A: Non-executive directors' remuneration		
The number of non-executive directors of the entity included in these figures are shown below in the relevant remuneration bands		
$0 to $29,999	**6**	3
$30,000 to $59,999	**1**	3
$60,000 to $89,999	**-**	1
Total number of non-executive directors	**7**	7

	$	$
Total remuneration received or due and receivable by directors of ARENA	**141,591**	214,182

The Board consists of up to 6 appointed members and the Secretary of the portfolio department. Only appointed members are remunerated.

NOTE 13: RELATED PARTY DISCLOSURES

	2014 $'000	2013 $'000
Other Transactions with directors or director-related entities		
Payments to directors/director-related entities	**32**	77

ARENA had a contract for the provision of services in place with SolarFuture Pty Ltd a director-related entity of Mark Twidell. The contract was to provide high-level advice to assist ARENA to prepare and implement its strategy; manage relationships with key stakeholders; integration of programs and improving business processes.

NOTE 14: SENIOR EXECUTIVE REMUNERATION

	2014 $	2013 $
Note 14A: Senior executive remuneration expenses for the reporting period		
Short-term employee benefits		
Salary	**595,042**	292,280
Other allowances	**-**	37,148
Total short-term employee benefits	**595,042**	329,428
Post-employment benefits		
Superannuation	**69,440**	24,150
Total post-employment benefits	**69,440**	24,150
Other long-term employee benefits		
Annual leave accrued	**29,813**	27,373
Long-service leave	**9,886**	4,942
Total other long-term employee benefits	**39,699**	32,315
Total senior executive remuneration expenses	**704,181**	385,893

1. Note 14A is prepared on an accrual basis.

2. Note 14A excludes acting arrangements and part-year service where total remuneration expensed as a senior executive was less than $195,000.

NOTE 14: SENIOR EXECUTIVE REMUNERATION (CONTINUED)

Note 14B: Average annual reportable remuneration paid to substantive senior executives during the reporting period

Average annual reportable remuneration paid to substantive senior executives in 2014

Average annual reportable remuneration[1]	Substantive senior executives	Reportable salary[2]	Contributed superannuation[3]	Reportable allowances[4]	Total reportable remuneration
	No.	$	$	$	$
Total reportable remuneration (including part-time arrangements):					
$315,000 - $344,999	2	299,580	34,693	-	334,273
Total number of substantive senior executives	2				

Average annual reportable remuneration paid to substantive senior executives in 2013

Average annual reportable remuneration[1]	Substantive senior executives	Reportable salary[2]	Contributed superannuation[3]	Reportable allowances[4]	Total reportable remuneration
	No.	$	$	$	$
Total reportable remuneration (including part-time arrangements):					
less than $195,000	3	71,982	10,724	1,679	84,385
$285,000 to $314,999	1	274,984	22,106	-	297,090
Total number of substantive senior executives	4				

Note 14B is prepared on a cash basis.

1. This table reports substantive senior executives who received remuneration during the reporting period. Each row is an averaged figure based on headcount for individuals in the band.
2. 'Reportable salary' includes the following:
   a) gross payments;
   b) reportable fringe benefits (at the net amount prior to 'grossing up' for tax purposes);
   c) reportable employer superannuation contributions; and
   d) exempt foreign employment income.
3. The 'contributed superannuation' amount is the average cost to the entity for the provision of superannuation benefits to substantive senior executives in that reportable remuneration band during the reporting period.
4. 'Reportable allowances' are the average actual allowances paid as per the 'total allowances' line on individuals' payment summaries.

Note 14C: Average annual reportable remuneration paid to other highly paid staff during the reporting period

No other staff were paid above the threshold of $195,000 during the reporting period.

NOTE 15: REMUNERATION OF AUDITORS

	2014 $'000	2013 $'000
The auditor of ARENA is the Australian National Audit Office (ANAO).		
Amounts received or due and receivable by the ANAO for		
Financial statement audit services for ASI[1]	**-**	24
Financial statement audit services for ARENA	**90**	90
Total	**90**	114

1. The Australian Solar Institute (ASI) ceased operation on 31 December 2012 and the entity's functions were transferred to ARENA. As a result ARENA paid the amount of $24,164 for the ANAO audit of ASI financial statements for the period ended 31 December 2012.

No other services were provided by the ANAO.

NOTE 16: FINANCIAL INSTRUMENTS

	2014 $'000	2013 $'000
Note 16A: Categories of financial instruments		
Financial assets		
Loans and receivables		
Cash and cash equivalents	**26**	221
Trade and other receivables	**4**	1,320
Total loans and receivables	**30**	1,541
Available-for-sale financial assets		
Investments	**11,131**	1,926
Total available-for-sale financial assets	**11,131**	1,926
Total financial assets	**11,161**	3,467
Financial liabilities		
Financial liabilities measured at amortised cost		
Trade creditors	**2,114**	1,276
Grants payables	**4,197**	4,545
Total financial liabilities measured at amortised cost	**6,311**	5,821
Total financial liabilities	**6,311**	5,821
Note 16B: Net gains or losses on financial assets		
Loans and receivables		
Interest revenue	**25**	2
Net gains/(losses) on loans and receivables	**25**	2
Available-for-sale financial assets		
Fair value changes	**(1,915)**	(1,751)
Net gains/(losses) on available-for-sale financial assets	**(1,915)**	(1,751)
Net gains/(losses) on financial assets	**(1,890)**	(1,749)

NOTE 16: FINANCIAL INSTRUMENTS (CONTINUED)

Note 16C: Fair value of financial instruments

	Carrying amount 2014 $'000	**Fair value 2014 $'000**	Carrying amount 2013 $'000	Fair value 2013 $'000
Financial assets				
Loans and receivables:				
Cash and cash equivalents	**26**	**26**	221	221
Trade and other receivables	**4**	**4**	1,320	1,320
Available for sale:				
Investments	**11,131**	**11,131**	1,926	1,926
Total financial assets	**11,161**	**11,161**	3,467	3,467
Financial liabilities				
At amortised cost:				
Trade creditors	**2,114**	**2,114**	1,276	1,276
Grants payable	**4,197**	**4,197**	4,545	4,545
Total financial liabilities	**6,311**	**6,311**	5,821	5,821

Note 16D: Credit risk

ARENA was exposed to minimal credit risk as loans and receivables were cash and trade receivables. The maximum exposure to credit risk was the risk that arises from potential default of a debtor. This amount was equal to the total amount of other receivables.

The entity held no collateral to mitigate against credit risk.

Maximum exposure to credit risk (excluding any collateral or credit enhancements)

	2014 $'000	2013 $'000
Financial assets carried at amount not best representing maximum exposure to credit risk		
Trade and other receivables	**4**	1,320
Total financial assets carried at amount not best representing maximum exposure to credit risk	**4**	1,320

Credit quality of financial assets not past due or individually determined as impaired

	Not past due nor impaired 2014 $'000	Not past due nor impaired 2013 $'000	**Past due or impaired 2014 $'000**	Past due or impaired 2013 $'000
Receivables for goods and services	**4**	1,320	-	-
Total	**4**	1,320	-	-

NOTE 16: FINANCIAL INSTRUMENTS (CONTINUED)

Note 16D: Credit risk (continued)

Ageing of financial assets that were past due but not impaired in 2014

	0 to 30 days $'000	31 to 60 days $'000	61 to 90 days $'000	90+ days $'000	Total $'000
Receivables for goods and services	**4**	**-**	**-**	**-**	**4**
Total	**4**	**-**	**-**	**-**	**4**

Ageing of financial assets that were past due but not impaired in 2013

	0 to 30 days $'000	31 to 60 days $'000	61 to 90 days $'000	90+ days $'000	Total $'000
Receivables for goods and services	1,320	-	-	-	1,320
Total	1,320	-	-	-	1,320

Note 16E: Liquidity risk

ARENA's financial liabilities were payables. The exposure to liquidity risk was based on the notion that ARENA will encounter difficulty in meeting its obligations associated with financial liabilities. This was highly unlikely due to government funding mechanisms available to ARENA and internal policies and procedures in place to ensure there were appropriate resources to meet its financial obligations.

Maturities for non-derivative financial liabilities in 2014

	On demand $'000	within 1 year $'000	between 1 to 2 years $'000	between 2 to 5 years $'000	more than 5 years $'000	Total $'000
Trade creditors	**2,114**	**-**	**-**	**-**	**-**	**2,114**
Grants payable	**4,197**	**-**	**-**	**-**	**-**	**4,197**
Total	**6,311**	**-**	**-**	**-**	**-**	**6,311**

Maturities for non-derivative financial liabilities in 2013

	On demand $'000	within 1 year $'000	between 1 to 2 years $'000	between 2 to 5 years $'000	more than 5 years $'000	Total $'000
Trade creditors	1,276	-	-	-	-	1,276
Grants payable	4,545	-	-	-	-	4,545
Total	5,821	-	-	-	-	5,821

Note 16F: Market risk

ARENA held basic financial instruments that did not expose the entity to certain market risks, such as 'Currency risk' and 'Other price risk'.

NOTE 17: FINANCIAL ASSETS RECONCILIATION

	Notes	**2014 $'000**	2013 $'000
Financial assets			
Total financial assets as per Statement of Financial Position		**17,564**	7,898
Less: non-financial instrument components			
Statutory receivables	6B	**(6,225)**	(1,044)
Receivable from portfolio department	6B	**(178)**	(3,387)
Total non-financial instrument components		**(6,403)**	(4,431)
Total financial assets as per financial instruments Note 16		**11,161**	3,467

NOTE 18: COMPENSATION AND DEBT RELIEF

Compensation and debt relief

No 'Act of Grace payments' were expensed during the reporting period (2013: nil).

No waivers of amounts owing to the Australian Government were made pursuant to subsection 34(1) of the *Financial Management and Accountability Act 1997* (2013: nil).

No payments were provided under the Compensation for Detriment caused by Defective Administration (CDDA) Scheme during the reporting period (2013: nil).

No ex-gratia payments were provided for during the reporting period (2013: nil).

No payments were provided in special circumstances relating to APS employment pursuant to section 73 of the *Public Service Act 1999* (PS Act) during the reporting period (2013: nil).

NOTE 19: REPORTING OF OUTCOMES

Note 19A: Net cost of outcome delivery

	Outcome 1		Total	
	2014 $'000	2013 $'000	**2014 $'000**	2013 $'000
Departmental				
Expenses	**266,576**	65,840	**266,576**	65,840
Own-source income	**(14,307)**	(8,557)	**(14,307)**	(8,557)
Net cost of outcome delivery	**252,269**	57,283	**252,269**	57,283

Outcome 1 is described in Note 1.1. Net costs shown included intra-government costs that were eliminated in calculating the actual Budget Outcome. Refer to Outcome 1 Resourcing Table of this Annual Report.

The face statements of these financial statements represent the major classes of departmental expense, income, assets and liabilities by outcome and as such they are not repeated in Note 19.


BUILDING
TOMORROW'S
ENERGY
INFRASTRUCTURE
CREATING
OPTIONS
ARENA
KNOWLEDGE
SHARING
WORLD
COMMERCIALISATION
SKILLS
FOR THE
FUTURE
NEW JOBS
FIRSTS

ACRONYMS AND INITIALISMS

ABIR	Advanced Biofuels Investment Readiness
ANAO	Australian National Audit Office
ARENA	Australian Renewable Energy Agency
ASCI	Accelerated Step Change Initiative
ASI	Australian Solar Institute
CARRE	Community and Regional Renewable Energy Program
CEFC	Clean Energy Finance Corporation
CEO	Chief Executive Officer
CFO	Chief Financial Officer
CRI	Commercial Readiness Index
CSP	concentrated solar power
EIF	Education Investment Fund
ERP	Emerging Renewables Program
EOI	expression of interest
FTE	full-time equivalent
GFS	General Funding Strategy
GST	goods and services tax
GW	gigawatt
I-RAR	Regional Australia's Renewables Industry Program
IP	Investment Plan
MW	megawatt
PBS	Portfolio Budget Statement
PGPA	*Public Governance, Performance and Accountability*
PV	Photovoltaic
RAC	Risk and Audit Committee
RAR	Regional Australia's Renewables
RET	Renewable Energy Target
REVC	Renewable Energy Venture Capital
SHARE	Supporting High-value Australian Renewable Energy Knowledge
TRL	Technical Readiness Level
WHS	work health and safety

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