

EXECUTIVE SUMMARY

CEFC STATUTORY REVIEW 2017

Overview

Every week, individuals and businesses approach the CEFC with new and innovative ideas for clean energy – from using manure to power farms and warm animals at night to using solar power to grow fruit and vegetables in a dry and arid desert. Others have come to the CEFC seeking to turn energy from ocean waves into electricity or industrial and household rubbish into energy. There are big ideas that challenge the status quo: converting an old mine site into the heart of a new renewable project; powering a remote community, thousands of kilometres from anywhere, with energy from the sun and wind; or ensuring families on lowest incomes can live in homes designed to the highest energy efficiency standards.

The following paper shows the 76 transactions the CEFC has supported since inception and how each transaction is contributing to Australia's clean energy transition. The CEFC has been in operation for more than four years. In that time, it has committed more than \$4.3 billion in projects with a total value of \$11 billion. Through these projects, several observations can be made about the CEFC's role in the market.

1. CEFC's fundamental role in facilitating finance

During its inception in 2013, the CEFC's primary focus was to establish seed assets in the portfolio while at the same time avoid concentration risk and avoid any losses. Whilst the majority of projects the CEFC committed to proceeded as planned, a few faced barriers such as being unable to attract sufficient equity to meet financial close, or reached financial close but had a low take-up rate due to the complex design¹. These projects provided useful lessons, enabling the CEFC to modify the design of subsequent deals to overcome the barriers faced by earlier projects. As the organisation has grown, its expertise and experience has expanded enabling it to invest in a wider range of technologies using a wider range of financing mechanisms, including equity.

While it is not a requirement of CEFC finance, many clean energy project proponents nevertheless say that without CEFC's finance, their project would not go ahead.² Proponents appreciate not only access to the CEFC's finance, but the CEFC's support in helping them attract other financiers to their project.³ Private sector financiers likewise, consistently say that without the CEFC's participation they would not finance a project.⁴ Some financiers lack expertise in clean energy technologies and are unwilling to finance a project that doesn't have the CEFC's backing. In fact, during times where policy uncertainty was at a peak (such as during the Renewable Energy Target (RET) review), the CEFC was one of the only financiers in the clean energy market that provided finance to projects to enable them to proceed. During this period (Feb 2014-June 2015) when market activity was subdued, the CEFC was involved in nearly 90 per cent of large-scale renewable energy transactions, whereas outside of this time, where private sector financiers have been more active, the CEFC has only been involved in around 30 per cent of transactions financed.

¹ See for example: CBA energy efficient loan p1 and Quantum power bioenergy p13.

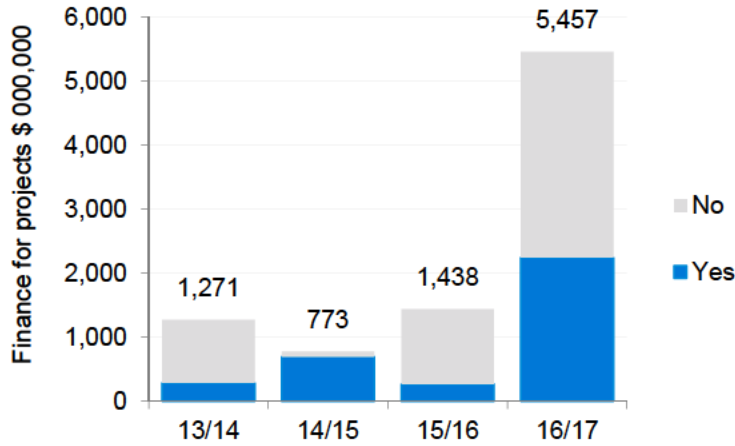
² See for example: Moree solar farm p11, Barcaldine solar farm p34 and GreenSync p47.

³ See for example: Taralga wind farm p3, Ararat wind farm p32 & Investa property group p65.

⁴ See for example: Sapphire wind farm p45.

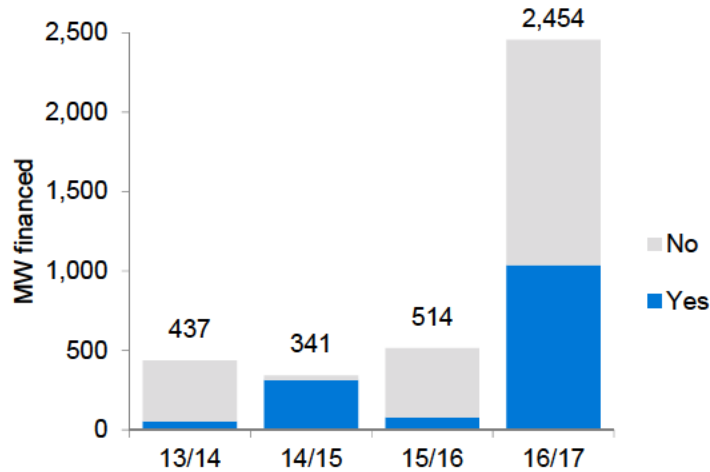
The below graph shows total financing commitments in the clean energy market from 2013/14-2016/17 and shows the proportion of transactions which the CEFC was involved in the transaction.⁵

Fig 1. CEFC involvement in clean energy transactions (\$)



The following graph shows total clean energy finance in terms of megawatts (MW) financed in the clean energy market from 2013/14-2016/17 and shows the proportion of transactions in which the CEFC was involved.⁶

Fig 2. CEFC involvement in clean energy transactions (MW)

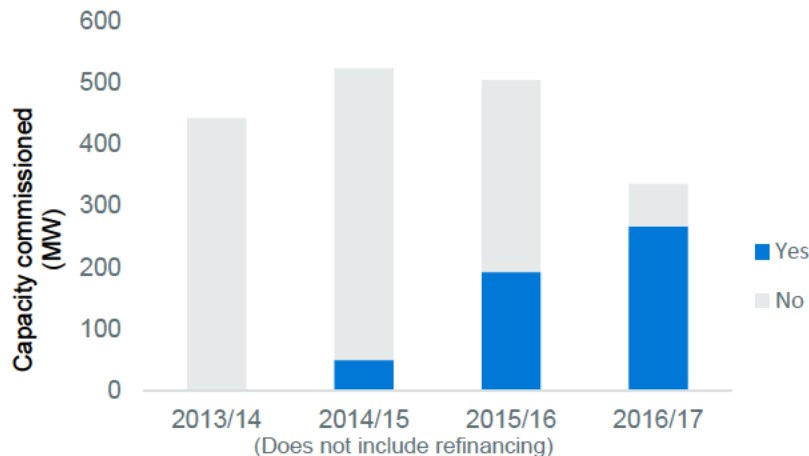


⁵ Source: Bloomberg Asset financing database 2017

⁶ Source: Bloomberg Asset financing database 2017

As it takes around 3-5 years from development to commissioning, most the large-scale projects the CEFC has financed are still under construction but some have already been commissioned. As shown in the graph below, CEFC has committed finance to a quarter of projects (10 of 40) that have come online since July 2013 or 510MW of the 1800MW that has come online.

Fig 3. CEFC's contribution to new renewable capacity commissioned



The CEFC's involvement in projects increases market confidence, helping to crowd in debt and equity⁷. In fact, in some cases, the CEFC commitment alone has proved valuable in enabling a project to proceed, build market confidence and attract other investors, to the extent that CEFC finance was not subsequently required.⁸

The CEFC almost never works alone, crowding other financiers into the projects it finances to help build capacity, experience and know-how in the Australian clean energy financing market. Across its portfolio, the CEFC is investing alongside more than 150 domestic and international co-financiers and investors, including all the major Australian banks, mobilising over \$7 billion in private sector finance.

2. Addressing market gaps

The CEFC operates to address market gaps in clean energy finance. It has financed projects that are smaller⁹, more complex¹⁰, require longer tenor¹¹ or are more exposed to policy/market uncertainty¹² than projects the private sector would usually finance. Many projects apply new technology that has never been used in Australia, or apply established clean energy technology in a new way, making it more challenging to attract private sector finance.

In these transactions, the CEFC is willing to take the time and invest the resources to learn and understand the technology and work with project proponents to understand their business, understand their sector's dynamics, and develop innovative financial structures¹³. The CEFC helps educate and build confidence to encourage other private sector financiers to be involved in the project, alongside the CEFC. The CEFC is also helping build market confidence to enable private sector financiers to be more comfortable with financing renewable energy projects with an element of merchant risk, something the private sector had previously been unwilling to do.¹⁴

⁷ See for example Greensync p47.

⁸ See for example Sundrop Farms p9 and Carnegie Wave Energy p14.

⁹ See for example Epuron's Uterne solar farm p16 and Ayers Rock resort 26.

¹⁰ See for example Sundrop Farms p9 and Carnegie Wave Energy p14.

¹¹ See for example St George Community Housing Sustainability Limited p33 and Hamilton solar farm p60.

¹² See for example Moree solar farm p11

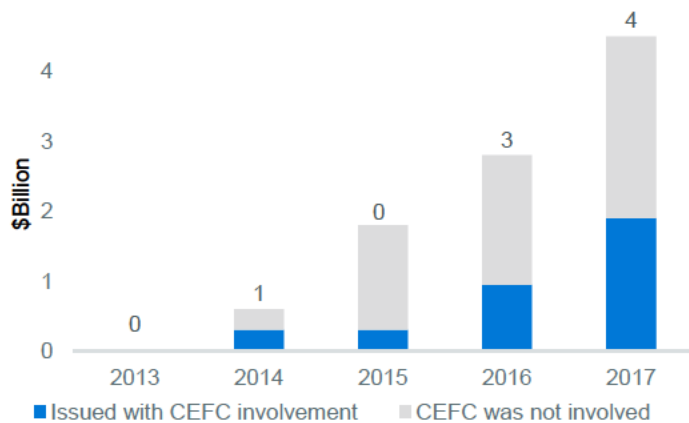
¹³ See for example Carnegie Wave Energy p14.

¹⁴ See for example Hamilton solar farm p60.

3. Bringing new clean energy finance products to the market

The CEFC develops and supports the development of a range of new financial products in the clean energy finance market. For example, innovative loan structures tailored to clean energy projects¹⁵, a cornerstone commitment to Australia's first Clean Energy Seed Fund to attract investment to support emerging businesses¹⁶, and new loan structures that overcome split incentives in tenanted property to incentivise building energy efficiency upgrades.¹⁷ The CEFC has also been a primary driver behind Australia's emerging Green Bond Market, which has grown from \$0 to more than \$4.5 billion since the CEFC began operating, unlocking a significant new source of institutional finance for clean energy developments. The graph below shows the CEFC was a cornerstone investor in 8 of the 14 issuances in Australia's Green Bond market to date.

Fig 4. CEFC's involvement in Australia's green bond market (cumulative issuance)



Not all the CEFC's financial innovations achieve market traction – for example, in some transactions, the CEFC makes a debt commitment subject to equity requirements, but the project proponent is unable to attract the required equity and therefore the loan is never drawn¹⁸, in other cases, the CEFC has made a commitment to a new fund but there was low market take-up so the loan was not used.¹⁹ The organisation does not view these as failures. No funds are lost and this type of experimentation to “crack” different subsectors is part of delivering the CEFC's mission. It adds to the stock of learning and assists in retargeting and refining the next offer to that sector.

4. Bringing new technologies to the market

The CEFC commits to a range of Australia-first and even world-first projects, demonstrating to the Australian market the bankability of such projects and paving the way for other financiers to follow. For example: the largest solar and battery project on a mine site; the first solar-powered sustainable greenhouse; innovative technology to improve vehicle efficiency and world-leading technology to improve wind forecasting for renewables. The CEFC's support is helping new clean energy technologies move from demonstration to commercial deployment.

The CEFC, in collaboration with ARENA, launched the Clean Energy Innovation Fund (CEIF) in 2016/17 to support emerging technologies make the leap from demonstration to commercial deployment. Whilst the venture capital market is well established in Australia, it is dominated by investments in the health, property and manufacturing. Venture capital transactions in the clean energy market were almost non-existent prior to the establishment of the CEIF. The CEIF was the single largest investor in the clean energy seed and venture capital market in 2016-17 and was involved in over 70 per cent of transactions in this market.

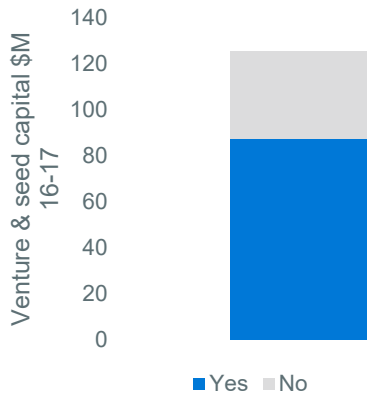
¹⁵ Carnegie Wave Energy p14.

¹⁶ Clean energy seed fund p59.

¹⁷ Eureka Funds Management p12.

¹⁸ s47G(1)(a)

Fig 4. CEFC involvement in clean energy seed and venture capital transactions in 2016-17 (\$M)



5. Creating positive change in the economy

The CEFC's work is having a significant impact on the ground. Already CEFC finance has enabled:

- The replacement of over **2,000 street lights with LED lighting**
- The installation for **solar and/or batteries on over 1,000 homes, farms, schools, community organisations and businesses**
- The purchase or lease of more than **1,500 new low-emissions cars, trucks and electric vehicles**
- The purchase or lease of more than **600 energy efficient harvesters, tractors, sprayers, irrigators, and other agricultural equipment.**
- Small businesses to undertake **2,000 small-scale energy efficiency projects**

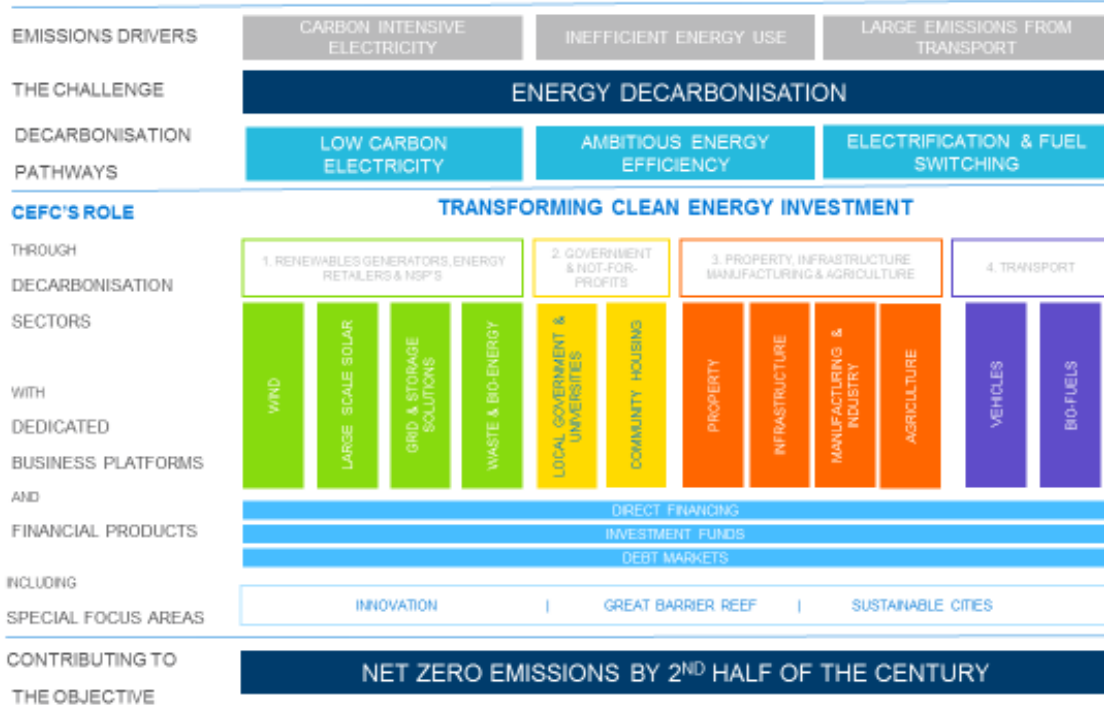
Once up and running, projects the CEFC has committed to will:

- Generate sufficient electricity to **power nearly 700,000 Australian homes**
- See **500 new energy efficient social and affordable houses** constructed and hundreds more refurbished that will assist low-income families to minimise their energy bills
- Abate nearly **7 million tonnes of CO₂-e per annum**
- Involve the creation of more than **11,000 new jobs**, plus thousands more in the supply chain
- See manufacturers, miners, farmers, universities, community organisations, households and local councils save tens of millions of dollars on their electricity.

6. Success of CEFC's organisational structure

One of the great strengths of the CEFC model is the combination of a public policy purpose overlaid with a commercial approach to investment. This adds a discipline to investing consistent with the objective of delivering a return above the Government's costs of funds. Many project proponents have already repaid loans in-full, creating a circle-of-finance that can now be on-lent to support new projects in the clean energy market. CEFC investments help businesses operate more profitably and achieve emissions reduction while delivering a return to taxpayers. The success of this model ensures the sustainability of the organisation over the long-term. The diagram below best summarises the strategic framework the organisation uses to target each sector of the economy.

STRATEGIC FRAMEWORK



The CEFC strategic framework is built on addressing emissions drivers contributing to energy emissions within the Australian economy, identifying pathways to decarbonise those energy-related emissions and then targeting specific sectors where CEFC can assist by providing direct and/or indirect finance to unlock the emissions reduction opportunities.

In **electricity**, the CEFC is contributing to financing the transition to a zero-carbon electricity system, helping to diversify renewable energy sources including wind, small and large-scale solar and bioenergy. It is also supporting enabling technologies, such as battery storage and demand management that will help ensure the reliability and security of the grid throughout the clean energy transition. For example, the CEFC's targeted finance round in the solar sector has helped bring the cost of large-scale solar down and bring forward additional investment in capacity. This program is the largest lending commitment to the large-scale solar sector in Australia to date and is designed to encourage greater participation by banks and other institutions, including in projects that have an element of merchant risk.

The CEFC is not just targeting large-scale renewable projects but is working with smaller organisations like sporting clubs, **universities, schools, and local councils** to finance energy efficiency upgrades and install onsite generation. This includes turning emissions from rubbish tips into energy and financing the upgrade of hundreds of **community houses**.

As well as not-for-profit organisations, the CEFC is helping **agribusiness, miners and manufacturers** cut energy costs and install on-site generation through the provision of financial incentives to switch to energy efficiency plant and equipment. Businesses have watched first-movers in their industry cut costs and improve productivity using CEFC finance and are now coming to the CEFC, seeking finance to do the same. In addition, the CEFC's investments are helping to grow capability and supply chain scale in the manufacturing sector, by using Australian manufactured inputs, like steel, pipelines, pumps, cables, and foundations in renewable projects.

In the built environment, the CEFC is working to lift the standards in the **property and infrastructure** sectors, working with developers and owners to finance design and construction to the highest possible energy efficiency standards and encouraging building owners to refurbish existing stock. The CEFC's commercial property investments are driving the adoption of new and higher energy

efficiency standards in Australia, providing an important demonstration effect for other developers, which is significant given the substantial emissions produced in the built environment.

Finally, in the **transport sector**, the CEFC is looking to use finance to aid the transition to electrification and fuel switching as well as providing incentives for purchasing vehicles with higher green star ratings.

The CEFC investments are impacting every sector of the economy, improving competitiveness, lowering operational costs, expanding the supply and diversity of Australia's electricity sector and encouraging innovation and commercial deployment of new technologies.

Portfolio Benchmark Return Target

The CEFC Portfolio Benchmark Return (PBR) target is a long-term target rate of return established by the CEFC Investment Mandate against which the performance of the CEFC's portfolio is measured.

When the CEFC's was first established, the 2013 Investment Mandate prescribed a PBR of the Australian Government Bond rate, measured *after* operating costs. This balanced the need for the CEFC to pursue its public policy goals while operating sustainably and ensuring that loans were repaid. However, the PBR has since increased significantly. The CEFC's current PBR target (as set out in the CEFC Investment Mandate No.2) is the five-year Australian Government bond rate plus three to four per cent per annum, measured *before* operating costs. There is also a separate rate of return for the Clean Energy Innovation fund which is the five-year Australian Government bond rate plus one per cent per annum. The Investment Mandate requires the CEFC to develop a portfolio that has an acceptable but not excessive level of risk. From inception through 30 June 2016, the PBR was 4.65% versus a PBR target of 5.95% to 6.95% (calculated in accordance with the CEFC Investment Mandate 2016 issued in May 2016).

In its formal response to the Clean Energy Finance Corporation Investment Mandate Direction 2016 (No.2), the board expressed the view that the current target is an unrealistically high return target for this market and does not reflect the CEFC's considered approach to risk and the composition of the current investment portfolio. Targeting such a high rate of return requires the CEFC to seek out-of-market returns which are difficult to achieve. The CEFC continues to employ a strong preference for senior debt investments as this enables the CEFC to pursue its public policy objective while participating in the lowest risk part of the capital structure.

The 2016 Annual report ([Appendix E](#)) provides a benchmark of the CEFC's operating costs and expenses against comparable entities (Green Investment Bank, Export Finance and Insurance Corporation and the Future Fund).

CEFC Investment Process

The CEFC is an investment institution with a legislative investment function that is governed by the CEFC Act, as well as an Investment Mandate from responsible Ministers. More about the CEFC's governance and organisational structure is explained [here](#).

A new project will first go to the CEFC's Executive Investment Committee (EIC) which screens new investments prior to presentation to the Board and closes out transactions after Board investment approval. The CEFC Board has statutory responsibility for decision-making and managing the CEFC's investments. It operates and makes its investment decisions independently, based on rigorous commercial assessments. Once a project is approved by the Board and reaches first-drawdown, the Asset Management Committee will then oversee the management and performance of investment. There is also an Executive Risk Committee provides CEFC-wide risk management. More detail on how the committees operate and the CEFC's approach to investment and risk management is explained [here](#). The CEFC invests responsibly and manages risk prudently. The CEFC carries out its investment activities while seeking to achieve a target performance in accordance with the Portfolio Benchmark Return and risk profile established in the Investment Mandate. More about the CEFC's investment policies is explained [here](#).



Energy efficient loans for manufacturers

Project	s47G(1)(a)		Borrower	Commonwealth Bank		Committed	27 June 2013		
Description	s47G(1)(a) was the first major partnership the CEFC established with a major bank with the aim of encouraging commercial lenders to offer concessional loans for businesses investing in energy efficient equipment. Under s47G(1)(a) CEFC and CBA co-finance energy efficiency and rooftop solar loans targeted at CBA small to medium sized manufacturing and agricultural customers.								
Facilitating finance	s47G(1)(a) provided important learnings for the CEFC and the Australian finance market about how to best target customers seeking small energy efficient loans in a simple and easy-to-access way. s47G(1)(a) approach required each individual loan to be approved by CEFC and CBA, making it time consuming for both the financier and the customer. As a result, the CEFC developed a new, simpler approach and rolled out three new energy-efficient loan programs with three of the four major lenders – CBA, Westpac and NAB. Under these programs, the CEFC sets guidelines and standards for qualifying investments which partner banks can use to determine whether the customer is eligible for a CEFC energy efficient loan at a concessional rate. This has significantly expanded the reach of the CEFC in targeting new customers who wish to make small investments in energy efficiency. The new approach has been successful in the market with NAB recently expanding its program by \$180m after the initial \$120m program was fully utilised.								
CEFC rationale	The project has benefited so many businesses across Australia. A few examples include: a label maker who installed energy efficient label-making presses that operate at twice the speed, using half the energy of previous equipment; a plastics manufacturer that installed energy efficient ovens that halve the company's oven energy use; an apple and chestnut grower who installed new refrigeration that reduces energy costs by ~40 per cent and an abattoir that installed a tri-generation plant to cut grid electricity use by one third.								
Financial metrics	Finance type	CEFC investment commitment	Total Project \$	Private sector investment commitment	s47G(1)(a)	5yr CGBR	s47G(1)(a)		
	Debt	\$50m	\$100m	\$50m		2.4%			
Concession details	The concessionality is passed directly onto CBA customers and is used to create an incentive to bring forward capital outlay in this space to take advantage of this opportunity. Energy efficiency awareness in the purchasing process is expected to increase as CBA's customers will have a financial benefit from making energy conscious purchases, driven by the CEFC's concessionality benefit.								
Quotes						Estimated lifetime abatement	~591,543 tCO ₂	Current status	Term (partially utilised/expired unutilised)



The largest wind farm in the southern hemisphere

Project	s47G(1)(a)		Borrower	Wind Macarthur Finco Pty Ltd	Committed	28 June 2013	
Description	The Macarthur Wind Farm in Victoria is the largest in the southern hemisphere. CEFC provided \$50m as part of a recapitalisation package of \$529m on the sale of Meridian's 50 per cent stake in the windfarm. Macarthur generates sufficient energy to power over 170,000 average Australian homes each year. Macarthur used the Vestas V112 3MW turbine model for the first time in the Australian market - the largest turbines in Australia at the time.						
Facilitating finance	The project was developed by a joint-venture between AGL Energy and Meridian Energy. Meridian retained Macquarie in 2013 to advise on the recapitalisation and sale of Meridian's interest. Macquarie invited CEFC to consider s47G(1)(a). The CEFC's participation in this refinancing transaction helped other banks to participate in the project ensuring that the financing was fully subscribed. Other syndicate members were ANZ, NAB, ING, Shinsei, ICBC and EKF. s47G(1)(a). This refinancing helped demonstrate a feasible exit strategy for companies which develop and invest in large-scale renewable energy projects in Australia.						
CEFC rationale	As one of the first CEFC transactions, this transaction allowed the CEFC to establish its credentials and begin to develop working relationships within the banking market. The transaction allowed the CEFC to test its organisational platform before moving onto more complex transactions and provided an attractive risk/return asset to build its portfolio from. CEFC support for the transaction allowed the sponsor to close a complex refinancing and demonstrated liquidity in the market for developers.						
Financial metrics	Finance type	CEFC investment commitment	Total project \$	Private sector investment commitment	s47G(1)(a)	5yr CGBR	s47G(1)(a)
	Debt	\$50m	\$547m	\$497m		3%	
Quotes	"The involvement of the CEFC in the refinancing of the Macarthur Wind Farm will facilitate our on-going activities in Australia and we look forward to the opportunity for further collaboration" Mr Binns, Chief Executive, Meridian Energy.			Estimated lifetime abatement	When originally built, Macarthur was estimated to avoid 1.7Mt a year. However, CEFC has reported no abatement against this project due to its role as a re-financier.	Current status	Term – Quarterly P&I

Taralga wind farm



Project	s47G(1)(a)	Borrower	Taralga Wind Farm Pty Limited		Committed	28 June 2013		
Description	The CEFC committed \$36m in senior debt finance for the construction and operation of the 107MW Taralga Wind Farm in NSW. It was fully commissioned in May 2015 and currently generates sufficient energy to power to ~51,000 homes p.a.							
Facilitating finance	<p>The CEFC participated in an international consortium that provided \$286m for the project. The CEFC's involvement assisted the sponsors in securing a financing solution s47G(1)(a)</p> <p>The other parties are EKF (the official export credit agency of Denmark) and the primary equity sponsor, Santander (a major international retail and commercial bank), along with CBD Energy. By providing finance as part of the consortium, the CEFC played a valuable commercial role to catalyse renewable energy investment in Australia. The project cashflows benefit from a long term PPA from Energy Australia. The project was successfully sold after construction to SPIC Pacific Hydro with the existing debt package retained.</p>							
CEFC rationale	The project utilised Australian manufactured towers made in Portland from BlueScope steel. Therefore, in addition to lowering emissions, this project had the added benefit of helping build and maintain the Australian wind tower manufacturing industry, with flow-through effects for the broader manufacturing and steel sectors.							
Financial metrics	Finance type	CEFC investment commitment	Total project \$	Private sector investment commitment	s47G(1)(a)	5yr CGBR	s47G(1)(a)	
	Debt	\$36m	\$286m	\$250m		3%		
Concession details	<p>The CEFC's concessionality was offered to match the sponsors' and suppliers' economic concessions. s47G(1)(a)</p> <p>The project was seeking to use domestic towers as the sponsor believes in local participation as a policy but prior to the imposition of dumping duties, the cost difference was prohibitive.</p>							
Quotes	"The Taralga wind farm project's decision to use Australian engineered and built towers is a major boost for the Australian wind engineering sector, helping it to maintain competitiveness and assisting it position for potential for growth in the coming years." Stephen Garner, General Manager, Keppel Prince Engineering.				Estimated lifetime abatement	~5.4 MtCO ₂	Current status	Term



Council saves on energy bills with lighting upgrade

Project	s47G(1)(a)	Borrower	Baw Baw Council		Committed	18 July 2013			
Description	Committed \$550,000 to Victoria's Baw Baw Shire Council to upgrade its street lighting. By 2015, over 2,600 mercury vapour street were upgraded to the most energy efficient lights.								
Facilitating finance	One of the barriers to street lighting upgrades is that there is a split incentive between the owners of the streetlight assets (energy distribution businesses) and the parties responsible for their energy and maintenance costs (Councils), similar to the landlord/tenant divide when it comes to energy efficiency of buildings and homes. The council required low-cost capital funds to accelerate the project. The CEFC was able to provide this finance which saw the project, together with a Federal Government grant, successfully proceed.								
CEFC rationale	The project saves the council more than \$160,000 a year and has cut its overall carbon emissions by 18 per cent. Street lighting is the single largest source of emissions for local governments, typically accounting for 30 - 60 per cent of emissions. Upgrading street lighting with energy efficient lights is also reducing energy and maintenance costs for the Council by approximately 70 per cent p.a. The energy savings associated with these changes means the Council has more money available to provide other services to the community. In addition, as a result of this project, the Council is installing energy efficient lighting in its new developments and is looking for opportunities to changeover to more energy efficient lighting whenever possible. This project demonstrates the benefits of streetlighting projects to councils and is an important case study for the local government sector and CEFC.								
Financial metrics	Finance type	CEFC investment commitment	Total Project \$	Private sector investment commitment	s47G(1)(a)	5yr CGBR	s47G(1)(a)		
	Debt	\$550,000	\$1.2m	Council committed \$200,000 + Aus Govt Community Energy Efficiency Program Grant of \$500,000		3.1%			
Concession details	The CEFC has tended to provide a small concession on loans to local councils, schools, community clubs and other not-for-profit organisations to incentivise investment in renewable energy and energy efficiency.								
Quotes	"Doing nothing would have cost our Council about \$450,000 by 2020, but by taking advantage of the grant funding and using finance to improve the lights, we'll be saving ratepayers' money and reducing our impact on the environment for years to come." Baw Baw Mayor, Murray Cook					Estimated lifetime abatement	6081 tCO ₂	Current status	Fully Drawn



Turning waste-coal mine gas into baseload energy

Project	s47G(1)(a)	Borrower	Energy Developments Limited		Committed	29 July 2013			
Description	CEFC committed \$75m to EDL (an international energy provider based in Qld) for new projects generating energy from waste coal mine gas and landfill gas as well as remote hybrid renewable projects. This included an expansion of the Moranbah waste-coal mine gas plant from 45MW to 63MW which was completed in July 2014 and the acquisition and material performance improvement of a number of other waste coal mine gas projects.								
Facilitating finance	EDL obtained \$445m in finance under a syndicated facility provided by several commercial banks including Macquarie, NAB and UBS. s47G(1)(a) EDL has a significant investment pipeline and can only capitalise on this with funding support. The additional \$75m in finance from CEFC means EDL can make faster progress implementing landfill and waste-coal mine projects and expanding its remote generation portfolio. The support of the CEFC funding for this group coincided with a rush of interest from others and an increase in their share value.								
CEFC rationale	Fugitive emissions from coal mines and landfill are potent greenhouse gases and using them to generate electricity significantly reduces emissions, with this project expected to abate 50MtCO ₂ over its lifetime. Waste coal mine gas is also a reliable source of base-load power that can be used to substitute for coal-fired power. It can also offer electricity distributors a solution to overcome constraints. EDL is the largest independent provider of remote energy in Australia and the CEFC's finance was also used to fund remote generation solutions involving hybrid technologies that use renewable sources. The project also provides a leading example for the mining sector of the advantages of utilising waste gas as a cost-effective energy source rather than just venting to atmosphere or flaring the gases.								
Financial metrics	Finance type	CEFC investment commitment	Total Project \$	Private sector investment commitment	s47G(1)(a)	5yr CGBR	s47G(1)(a)		
	Debt	\$75m	\$170m	\$95m		3.1%			
Quotes	EDL MD Greg Pritchard: "This additional finance on top of our bank loan facility means we can make faster progress on projects that take damaging greenhouse gases out of the atmosphere. The loan from CEFC will enable the faster implementation of new projects"					Estimated lifetime abatement	54.1 MtCO ₂	Current status	Closed (repaid)



Energy efficient loans for councils, schools and not-for-profits

Project	s47G(1)(a)	Borrower	Commonwealth Bank of Australia		Committed	1 August 2013		
Description	s47G(1)(a) is a partnership between the Commonwealth Bank of Australia and the CEFC to offer concessional loans to councils, schools, universities and not-for-profit organisations to invest in rooftop solar and energy efficient equipment.							
Facilitating finance	s47G(1)(a) approach was an important demonstration in the market and provided the foundation to roll out a number of energy efficient loan programs across the major banks, including Westpac, NAB and a new facility with CBA. The rollout of these programs, on the back of the CEFC's experience with s47G(1)(a) has significantly expanded CEFC's reach in targeting new customers, seeking smaller loans to invest in energy efficiency. Due to the CEFC's small size, without collaborating with major banks, it would be unable to reach these clients and support their energy efficiency endeavours.							
CEFC rationale	A number of organisations have taken advantage of CBA's Energy Efficient Loan at a concessional rate to make their organisation more sustainable and cut power costs. For example, Bankstown Sports Club in NSW, which is one of Australia's largest registered clubs, used the Energy Efficient Loan to invest \$2.2m in clean energy and energy efficiency improvements. This included a new air conditioning chiller system that is 50 per cent more efficient and an 85kW rooftop solar system. Through these investments, the club reduced energy cost by around \$600,000 p.a.							
Financial metrics	Finance type	CEFC investment commitment	Total Project \$	Private sector investment commitment	s47G(1)(a)	5yr CGBR	s47G(1)(a)	
	Debt	\$50m	\$100m	\$50m		2.4%		
Concession details	The concessionality is passed directly onto CBA customers and is used to create an incentive to bring forward capital outlay to take advantage of this opportunity. Energy efficiency awareness in the purchasing process is expected to increase as CBA's customers will have a financial benefit from making energy conscious purchases, driven by the CEFC's concessionality benefit							
Quotes	"This project is helping us save on our energy costs while showing our community that we place an importance on operating in the best interests of the environment. The Energy Efficient Loan is helping meet the upfront costs of this project" Mark Condi Bankstown Sports Club CEO (Energy Efficient Loan recipient)				Estimated lifetime abatement	~1.4 MtCO ₂	Current status	Availability period

Energy efficiency upgrades through innovative finance



Project	s47G(1)	Borrower	Origin		Committed	8 August 2013			
Description	CEFC committed \$7m to work with energy retailer Origin to provide on-bill finance for commercial and industrial businesses undertaking energy efficiency upgrades and installing solar PV. Origin installs energy saving equipment through accredited sub-contractors to improve its customers' facilities. The customer repays the cost of the improvements as an on-bill item as part of their regular energy billing. These repayments are tailored over a period of up to seven years, aligned with the reduction in energy costs, so the customer sees the benefit from the outset. Origin will finance and manage the implementation of projects, using funds provided by the CEFC.								
Facilitating finance	On-bill finance offers an innovative and tailored financing for businesses to undertake energy efficiency upgrades that help them overcome difficulties in accessing upfront capital. By partnering with an established energy company, the CEFC is able to use its funds to reach a much larger customer base (Origin has ~15,000 business customers) to target smaller, disaggregated energy efficiency opportunities (\$500,000-\$1m).								
CEFC rationale	This program helps commercial and industrial businesses and other organisations save on energy, improve competitiveness and build resilience to increasing energy prices without diverting valuable upfront capital away from other investments in the business. For example, leading packaging, paper and recycling company Visy cut lighting energy costs at its Smithfield paper mill in Sydney's west by about 50 per cent by undertaking a lighting upgrade using on-bill finance.								
Financial metrics	Finance type	CEFC investment commitment	Total Project \$	Private sector investment commitment	s47G(1)(a)	5yr CGBR	s47G(1)(a)		
	Debt	\$7m	\$8m	\$1m		3%			
Quotes	"We are addressing the barriers that can exist around implementing potential energy saving initiatives. We're here to help businesses reduce their energy consumption and realise the business benefits of energy efficiency" Origin Energy.					Estimated lifetime abatement	109,345 MtCO2	Current status	Term

Woodlawn wind farm



Project	s47G(1)(a)	Borrower	Infigen		Committed	9 August 2013			
Description	CEFC committed to provide up to \$42.5 in refinancing the Woodlawn Wind Farm at Bungendore in NSW								
Facilitating finance	s47G(1)(a) The Woodlawn wind Farm was the first project to be constructed and debt funded on a merchant basis. At the time, financiers saw a PPA as a pre-condition to accepting a project, thus the CEFC's refinancing has helped demonstrate that merchant plants can be refinanced and has helped to develop the banking market in Australia. The CEFC finance was equally matched by Westpac who provided \$42.5m. The CEFC's involvement encouraged Westpac to participate in the project, thus helping to crowd-in investment in the sector.								
CEFC rationale	Woodlawn generates around 25,000MWh per year, sufficient to power 25,000 homes. During construction, the project created more than 150 direct jobs and many more indirect jobs including the fabrication of towers, buildings, switchrooms and electrical equipment all within Australia.								
Financial metrics	Finance type	CEFC investment commitment	Total Project \$	Private sector investment commitment	s47G(1)(a)	5yr CGBR	s47G(1)(a)		
	Debt	Up to \$42.5m	\$125m	Up to \$100m		3%			
Quotes	Infigen media releases: "Infigen has provided on-site apprentices with valuable work experience and the wind farm has also benefited the local community through increased economic activity. The project has given impetus to young families to stay and work in the area. A local technician Andrew McDade working at the wind farm said, 'With this industry, I now think that there is more of a chance for my kids to stay in the area.'"					Estimated lifetime abatement	No abatement recorded as it is financing	Current status	Term

World-leading solar greenhouse



Project	s47G(1)(a)	Borrower	Sundrop Farms Pty Ltd		Committed	30 Aug 2013			
Description	The CEFC provided a cornerstone finance commitment of \$40m to Sundrop Farms, a world-leading greenhouse development near Port Augusta, South Australia. Sundrop uses state-of-the-art solar tower to produce fresh water, energy to power the plant-growing systems and to heat and cool the greenhouse. The farm produces over 15,000 tonnes of tomatoes each year.								
Facilitating finance	The Sundrop project is one of the best examples of how the CEFC is helping facilitate flows of finance in the clean energy market in Australia. Sundrop uses new technology and applied it in a never-been-seen before way. As with any new project or technology, financiers are reluctant to get behind it until it is proven and risk can be quantified. Most banks finance agricultural projects or renewable energy projects, whereas this straddled the middle making it hard to find willing financiers. Because of the CEFC's early involvement in the project in mid-2013 and the CEFC's commitment to underwrite up to \$40m in senior debt finance, Sundrop was able to progress plans to build their 20-hectare facility in 2013, start construction and secure private sector growth capital from global investment firm Kohlberg Kravis Roberts in 2014, replacing the need for the CEFC's finance. Construction was completed in 2016.								
CEFC rationale	The sustainable greenhouse is the first of its kind in the way they employ technology and the way they go about agriculture, that's why it was important for the CEFC to be involved. A conventional greenhouse uses groundwater for irrigation, gas for heating and electricity for cooling, whereas the Sundrop greenhouse turns seawater and sunlight into energy. Water for the farm comes from the Spencer Gulf and is desalinated using a cutting-edge thermal desalination plant. This means Sundrop can grow produce on degraded land in arid areas previously considered too barren for agriculture. s47G(1)(a)								
Financial metrics	Finance type	CEFC investment commitment	Total Project \$	Private sector investment commitment	s47G(1)(a)	5yr CGBR	s47G(1)(a)		
	Debt	\$40m	\$140m	\$100m		3.3%			
Quotes	"We have now completed a highly successful commercial trial of our system in Port Augusta and have received positive feedback from national customers. CEFC's finance provides an important foundation for the project, facilitating investment from other banks." Philipp Saumweber Founder and CEO, Sundrop Farms					Estimated lifetime abatement	~717,077 tCO ₂	Current status	Closed (Expired)

Portland Wind Energy Project



Project	s47G(1)(a)	Borrower	Pacific Hydro		Committed	2 September 2013			
Description	The CEFC committed \$70m to finance the construction of the fourth and final stage (47MW) of the Portland Wind Energy Project (179MW) in south-west Victoria and to refinance stages two and three. Stage four was completed in 2015.								
Facilitating finance	This project demonstrates the potential to build renewable energy capacity without relying on a PPA from the major utilities. s47G(1)(a) However, the CEFC's participation in this project encouraged other commercial lenders to take part. s47G(1)(a) This enabled the transaction to proceed and the fourth stage of the Portland Wind Energy Project to be built. The CEFC committed \$70m in debt financing to the Portland project, alongside a \$158 million consortium of domestic and international banks, towards the \$361m project. The financing was for the construction of stage four and the refinancing of stages two and three. The CEFC's finance was fully repaid early as part of the sale of the Pacific Hydro group to State Power Investment Corporation in Jan 2016.								
CEFC rationale	Pacific Hydro sourced towers from Australian manufacturers and local construction companies delivered electrical and civil works. Servion supplied and installed turbines. The construction phase created around 400 jobs most of which were sourced locally.								
Financial metrics (there were different metrics for each tranche)	Finance type	CEFC investment commitment	Total Project \$	Private sector investment commitment	s47G(1)(a)	5yr CGBR	s47G(1)(a)		
	Debt	\$70m	\$361m	\$291m		3.3%			
Quotes	"Support from a consortium of domestic and international banks, including the Clean Energy Finance Corporation (CEFC), has been pivotal in enabling the project to move forward." Pacific Hydro Media Release September 2013					Estimated lifetime abatement	2.3Mt CO ₂	Current Status	Closed (Repaid)



A New South Wales first – Moree Solar Farm

Project	s47G(1)(a)	Borrower	Fotowatio (FRV)		Committed	3 September 2013			
Description	Up to \$48m in finance for the 56MW Moree Solar Farm in NSW.								
Facilitating finance	<p>In 2014 when policy uncertainty was at its maximum the renewable energy market was frozen. To support achievement of the government's RET, the CEFC stepped into the market to actively push projects forward. s47G(1)(a) The CEFC had to underwrite 100 per cent of the senior debt and provided finance even with merchant power price risk when NAB (who was to provide 50% with the CEFC) pulled out s47G(1)(a)</p> <p>This demonstrated how innovative merchant energy based financing can be used to finance large-scale renewable energy projects in Australia. Moree Solar Farm was successful in obtaining an PPA offtake agreement with Origin Energy shortly after construction completion. The CEFC expects to be repaid if the asset is refinanced.</p>								
CEFC rationale	<p>Moree employed more than 150 people during construction and benefited up to 40 local businesses. Construction commenced in Nov 2014 and the solar farm was fully operational by March 2016. It currently generates around 140,000Wh into the grid each year, sufficient to power around 24,000 homes. Moree uses high efficiency polycrystalline panels as well as single-axis tracking technology that allows its panels to tilt to face the sun as the earth rotates, giving it the potential to produce 30 per cent more energy than a farm using fixed position panels. The adoption of this new technology paved the way for the development of a number of other single-axis tracking solar farms, including Barcaldine Solar Farm in Queensland.</p>								
Financial metrics	Finance type	CEFC investment commitment	Total project \$	Private sector investment commitment	s47G(1)(a)	5yr CGBR	s47G(1)(a)		
	Debt	Up to \$48m	\$166m	\$18m + ARENA grant \$102m		3.25%			
Quotes	<p>"The project would not be possible without the unwavering support of the local community, Moree Plains Shire Council, the Federal Members for Parkes, NSW state government, all the people who have dedicated many hours to development of the project and last but not least, the ARENA and the CEFC who have provided funding for the project. Thank you all for your passion and support for this project" Andrew Fontana, FRV Country Manager</p>					Estimated lifetime abatement	~2.6 MtCO ₂	Current status	Term



Finance to improve commercial building efficiency

Project	s47G(1)(a)	Sponsor/Manager	Eureka Funds Management		Committed	18 Feb 2014			
Description	CEFC committed up to \$20m in Environmental Upgrade Agreement (EUA) finance for retrofits to improve the performance of commercial buildings. The EUA financing is provided for eligible projects through The Australian Environmental Upgrade Fund (TAEUF), a partnership between CEFC, National Australia Bank and Eureka Funds Management (who act as trustee and program manager for the fund).								
Facilitating finance	The CEFC supports this innovative financing mechanism (the EUA model) because it is aimed at overcoming the market barrier of the split incentive in commercial properties between a building owner who incurs the costs of energy efficiency upgrades and the tenant who ultimately benefits. Under EUAs, building owners can share the cost of undertaking the upgrades with the tenants. The EUA is tied to the property rather than the owner, which allows capital to be accessed at a competitive rate for a longer term, improving the attractiveness of undertaking upgrades. Loan repayments are made as an agreed environmental upgrade charge, paid to the local council along with rates, and the council passes the repayments on to the finance providers. Due to the CEFC's commitment to this area (and before it, Low Carbon Australia), the availability and popularity of EUAs has spread, with state legislation enabling councils to levy EUA charges in much of NSW, Victoria and soon to be introduced in South Australia.								
CEFC rationale	Building owners who used EUA finance have reduced their base building energy costs by more than 30 per cent depending on equipment installed. For example, the landmark Readers Digest building in Sydney used \$1.2m in EUA finance to upgrade to LED lighting and install energy efficient chillers to replace 1960s chillers and produce air-conditioning energy savings of more than 60 per cent.								
Financial metrics	Finance type	CEFC investment commitment	Total Project \$	Private sector investment commitment	s47G(1)(a)	5yr CGBR	s47G(1)(a)		
	Debt	\$20m	\$40m	\$20m		3.4%			
Concession details	Small concessionality was offered to catalyse take up of EUAs. The concessionality was passed onto the customer in the form of a lower rate.								
Quotes	"The CEFC is a cornerstone investor within The Australian Environmental Upgrade Fund, a vehicle established to undertake the financing of eligible projects and support the evolution of this funding model." National Australia Bank					Estimated lifetime abatement	117,386 tCO ₂	Current Status	Availability Period



Waste-to-energy for agribusinesses and food processors

Project	s47G(1)(a)	Borrower	Quantum Power Limited		Committed	19 February 2014			
Description	CEFC committed up to \$20m debt for investment in Build Own Operate Maintain (BOOM) biogas projects involving Quantum Power. Under the BOOM model, the client business does not need to provide upfront finance for the facility, which is operated and maintained by Quantum. Quantum receives a guaranteed price from the client for the energy from the biogas project, which also helps protect the client business from the impact of rising electricity prices.								
Facilitating finance	Biogas projects in Australia using the BOOM model have experienced difficulty in readily obtaining finance due to their small scale and the lack of Australian finance sector experience in technology in this area. Through this commitment, the CEFC invested time and resources into trying to develop a workable investment structure within this industry that could be replicated by other financiers in the future. This financing structure could be used by other financiers to further develop Australia's biogas sector and support regional and rural communities. The CEFC commitment required Quantum to raise \$20m of matching equity s47G(1)(a) This experience was a driving factor behind the CEFC later establishing the Australian Bioenergy Fund to provide equity for bioenergy projects.								
CEFC rationale	Quantum's BOOM model allows food processors and other agribusinesses in regional and remote areas to turn waste into energy and reduce electricity and waste disposal costs. Generating on-site energy in such locations using renewable sources can also have the broader economic benefit of reducing the need for expensive network upgrades to meet demand. The potential for this technology is demonstrated in Quantum Power's construction of an anaerobic digester for Darling Downs Fresh Eggs in Queensland (which the CEFC co-financed). This project cut the egg producer's grid electricity usage by 60 per cent in the first year and saved the company more than \$250,000 a year. It also reduces emissions by up to 7,000 tonnes a year.								
Financial metrics	Finance type	CEFC investment commitment	Total Project \$	Private sector investment commitment	s47G(1)(a)	5yr CGBR	s47G(1)(a)		
	Debt	\$20m	\$40m	\$20m + ARENA grant \$7m		3.4%			
Quotes	"By building, owning and managing generators for farmers, meat and food processors, we're enabling businesses to benefit from recycling operational waste as an energy source, without having to operate and maintain generators themselves. Finance through the CEFC helps us make these projects happen sooner" Richard Brimblecombe CEO, Quantum Power					Estimated lifetime abatement	*1.2Mt CO ₂ ¹	Current status	Closed - expired

¹ *No abatement was recorded by the CEFC as the project did not proceed.

Carnegie Wave Energy



Project	s47G(1)(a)	Borrower	Carnegie Wave Energy		Committed	18 March 2014			
Description	In 2014, CEFC committed up to \$20m to Carnegie Wave Energy to help accelerate the penultimate stage of development of its wave power technology i.e. CETO 5. The technology converts ocean swell into clean energy and desalinated fresh water.								
Facilitating finance	Effective financial support is critical for wave energy to be pushed down the technology cost curve and be competitive with alternative technologies. However, the technology has still not achieved commercial readiness. This finance was to help Carnegie fund the final stages of developing its wave energy technology to move towards commercial deployment. The CEFC developed an innovative mechanism (hybrid corporate loan/project finance) specifically for Carnegie and not used in financial markets before. In essence, the CEFC were able to provide Carnegie with up-front debt funding secured by the potential stream of R&D rebates. Access to this significant amount of debt funding has major benefits for companies such as Carnegie seeking to raise matching capital in the equity markets and commercial bank markets. Whilst the product needed further refinement, it has potential application with other emerging energy technology projects with significant R&D expenditure and could be used by other financiers to accelerate development of renewable energy e.g. concentrated solar thermal. The CEFC's commitment to understanding the Carnegie technology and developing a unique, bankable finance structure, boosted market interest and confidence amongst financiers, ultimately leading CBA to offer Carnegie \$20m finance in 2015, removing the need for CEFC finance. This demonstrates how the CEFC has been able to build confidence and crowd-in finance as Carnegie CFO Aidan Flynn said: "Carnegie is enormously grateful to the CEFC for their invaluable support to date and in enabling this transition into the commercial banking sector."								
CEFC rationale	The CEFC supports the development of wave power as it has the advantage of being a relatively constant and predictable energy source, day and night, and throughout the year. In other words, it has base load potential. Increasing the technology and geographic diversity of renewables in the grid is beneficial in building a reliable & stable energy grid with a high volume of renewables. Australia has considerable wave energy resources close to users and wave energy could play a large part in the future energy mix with the CSIRO estimating it could provide up to 11 per cent of Australia's electricity by 2050.								
Financial metrics	Finance type	CEFC investment commitment	Total Project \$	Private sector investment commitment	s47G(1)(a)	5yr CGBR	s47G(1)(a)		
	Debt	\$20m	\$37m	\$17m		3.4%			
Quotes	"This innovative funding structure from CEFC will help Carnegie take a significant step forward in our development and commercialisation of the CETO technology and put us in a strong position to compete in the global, developing wave energy market." Dr Michael Ottaviano CEO and Managing Director, Carnegie Wave Energy Limited					Estimated lifetime abatement	15,348 tCO ₂	Current Status	Closed – expired



Project	s47G(1)(a)	Borrower	Balmain Corporation Limited		Committed	24 March 2014				
Description	Committed up to \$100m in finance for major building retrofit program through a co-financing partnership with one of Australia's leading non-bank commercial loan managers, Balmain Corporation. Balmain works with investment banks to offer financing to upgrade commercial buildings. Due to a change in market conditions, this program did not end up deploying funds.									
Facilitating finance	Under the agreement, Balmain was to seek additional debt financing from other co-financiers to complement the CEFC's finance. The CEFC's experience in project Basil and with Environmental Upgrade Agreements was that there were certain barriers that prevented take-up of the program. In particular, our experience was the non A-Grade property sector was not motivated to incur the capital expenditure necessary to improve energy efficiency in their buildings. It was also apparent that there is a significant lack of understanding of the positive economics underlying such initiatives and the practicalities of such a process including technology choices. The CEFC also learnt that using a debt product to influence the behaviour of owners of existing building stock was not effective. This led the CEFC to develop new financing models to address these barriers as exemplified in s47G(1)(a).									
CEFC rationale	The Balmain-CEFC agreement was intended to be used for major building retrofits to improve a property's energy efficiency, water usage, waste management and indoor environment quality impact by the equivalent of at least two NABERS stars. The CEFC sees a need to provide finance to improve building energy efficiency because progress in reducing energy intensity in buildings has been patchy and fragmented; around 10 per cent of large commercial buildings still have a 0 stars NABERS rating (consuming twice as much energy per square metre as market leaders); and because without further activity to reduce emissions, buildings emissions will increase by almost 19 per cent by 2019-20. Commercial and residential building sector accounts for over 20 per cent of Australia's emissions, representing a huge opportunity for abatement.									
Financial metrics	Finance type	CEFC investment commitment	Total Project \$	Private sector investment commitment	s47G(1)(a)	5yr CGBR	s47G(1)(a)			
	Debt	\$100m	\$200m	\$100m		2.6%				
Quotes	"This finance from the CEFC will help provide an incentive to invest in energy efficiency and improve sustainability, while cutting building operating and maintenance costs," CEO Balmain, Andrew Griffin					Estimated lifetime abatement	240,000t CO ₂ ²	Current Status	Expired unutilised	-

² *No abatement recorded against CEFC's totals for this project.

Remote solar plant for Alice Springs



Project	s47G(1)(a)	Borrower	Epuron		Committed	20 June 2014			
Description	<p>\$13m for Epuron to undertake a major expansion of the Uterne solar PV plant in Alice Springs to quadruple the current capacity s47G(1)(a) and refinance some small existing debt facilities on Uterne and solar projects at three remote Northern Territory communities at Tea Tree, Kalkarindji and Lake Nash. Uterne 2 was commissioned in August 2015.</p>								
Facilitating finance	<p>The CEFC's finance was critical for the Uterne expansion, as the project was too small to appeal to the commercial project finance market. It demonstrates the potential for structured project finance to be used in other similar smaller utility-scale projects.</p>								
CEFC rationale	<p>The CEFC finance has helped Alice Springs to continue to make its mark as a solar town. The commissioning of the project means Alice Springs now has one of the highest penetration levels of solar in Australia. The existing grid and off-grid electricity sources in the NT are relatively expensive and more emissions intensive, so using solar technology to take advantage of abundant sunshine makes sense both financially and environmentally. Epuron is an Australian renewable energy company so investing in this project helps grow the local market for owning and operating renewable energy plants in Australia. The CEFC was also eager to support the project due to the technology it uses - SunPower solar panels mounted on SunPower® T0 Trackers which position panels to follow the sun throughout the day, increasing energy production while minimizing land use.</p>								
Financial metrics	Finance type	CEFC investment commitment	Total Project \$	Private sector investment commitment	s47G(1)(a)	5yr CGBR	s47G(1)(a)		
	Debt	\$13m	\$15m	\$2m		3.2%			
Quotes	<p>Epuron Executive Director and Co-Founder Andrew Durrant said "The CEFC's finance has been critical for this expansion as the project was too small to appeal to the commercial project finance market. By quadrupling the capacity of our Uterne plant, Alice Springs can reduce its dependence on gas and diesel-fired generation and use a clean, renewable power source"</p>					Estimated lifetime abatement	106,643 tCO ₂	Current status	Term



Project	s47G(1)(a)	Borrower	Bindaree Beef		Committed	25 June 2014			
Description	Committed up to \$15m to transform organic waste into methane and create electricity at Bindaree Beef. The finance will enable Bindaree to install: a biodigester to produce biogas; an electricity generation facility using biogas as fuel; and a new, more energy efficient rendering plant to replace the existing coal-fired plant and eliminate the use of coal (Bindaree use around 7,000 tonnes of coal each year).								
Facilitating finance	The CEFC's investment in this project will further develop the biogas sector, which is still in its early development in Australia, although strongly established overseas and its demonstration will enable other financiers to become more familiar with the technology. Bindaree faced barriers to accessing finance given a lack of familiarity amongst private sector financiers with the technology. Any banks that have expressed interest, claimed that they will not fund the project without the CEFC due to their lack of knowledge in the biogas space.								
CEFC rationale	The project will allow Bindaree, one of Australia's largest meat processors, to cut its operating costs, increase its profits and better compete on the global market. The new equipment will halve the plant's power bills and reduces its annual carbon emissions by three quarters, due to reduced energy use, reduced methane emissions from effluent ponds and by replacing coal with renewable biogas. This also helps improve local air quality by eliminating emissions from burning coal. It will also create a new revenue stream through sales of organic fertiliser (a by-product of the energy conversion process).								
Financial metrics	Finance type	CEFC investment commitment	Total Project \$	Private sector investment commitment	s47G(1)(a)	5yr CGBR	s47G(1)(a)		
	Debt	\$15m	\$39m	\$5m + Aus Govt Clean Technology Investment Program Grant \$20m		3.1%			
Quotes	"The CEFC has been crucial in getting private sector finance for our project and making sure we could proceed. With the biodigester on site, we'll have increased our energy independence and have greater certainty about our energy costs. The company will be better able to compete on the global market and, in turn, able to pass on benefits to the community through increased job security for our employees." John Newton, Director, Bindaree Beef					Estimated lifetime abatement	~557,00 tCO ₂	Current Status	Not reached financial close

Waste-to-energy facilities in WA



Project	s47G(1)(a)	Borrower	New Energy Corporation		Committed	27 June 2014			
Description	<p>CEFC committed up to \$50m to finance the deployment of New Energy's innovative Entech low-temperature gasification technology for the first time in Australia. The technology is used to convert non-recyclable municipal s47G(1)(a)</p> <p>The CEFC's finance will be used to assist in constructing the Port Hedland project.</p>								
Facilitating finance	<p>This investment demonstrates how the CEFC's finance can be used to bring new technology to the Australian market. New Energy's innovative technology was developed in Australia and has been widely deployed in international markets (it has been deployed in 46 locations throughout Europe and Asia) but the CEFC's finance is now enabling this technology to be introduced in Australia.</p>								
CEFC rationale	<p>The New Energy waste-to-energy solution is also a strong example of the potential role of energy from waste and distributed energy in rural and remote Australia. The deployment of new technologies like Entech, as well as solar plus battery storage, offers regional communities and mining and agricultural operations, the ability to increasingly draw on local energy solutions. The technology has a range of benefits including improving recycling rates, reducing waste to landfill, reducing emissions and generating base load renewable power in remote locations. The Energy from Waste sector in Australia significantly lags Europe and the USA, with Australian commercial banks hesitant to be the first to bank a project despite the sector's proven track-record overseas.</p>								
Financial metrics	Finance type	CEFC investment commitment	Total Project \$	Private sector investment commitment	s47G(1)(a)	5yr CGBR	s47G(1)(a)		
	Debt	\$50m	\$200m	\$67		3.1%			
Quotes	<p>New Energy Chairman Enzo Gullotti said: "This finance from the CEFC is critical to New Energy's success and our future development of this clean energy technology to its full potential."</p>					Estimated lifetime abatement	~1.9 MtCO ₂	Current status	Not reached financial close



Attracting institutional investors into the clean energy market

Project	s47G(1) ³	Sponsor/Manager	Colonial First State Global Asset Management		Committed	27 June 2014			
Description	CEFC made a cornerstone commitment of \$80m to establish an unlisted clean energy direct infrastructure investment platform for institutional investors - Colonial First State Australian Clean Energy Infrastructure Fund. The Fund was to invest in renewable energy, energy efficiency or low emissions technology. Unfortunately, the time the fund was announced coincided with the RET review which led to market uncertainty and a halt in project development. This meant the fund was unable to source a pipeline of projects of sufficient scale to finance. This uncertainty over a long period resulted in the Manager re-directing resources to other investment opportunities. Thus, the CEFC commitment wasn't used and the fund didn't proceed.								
Facilitating finance	The equity market for clean energy in Australia is relatively immature compared with Europe/US, and high quality projects struggle to access finance. At the same time, there are many superannuation funds and fund members who want to invest in this sector but are unable to do so due to a lack of institutional grade investment product. The aim of this fund was to meet these needs and help overcome market barriers to equity financing. This was the CEFC's first commitment in the investment fund/mandate sector and whilst it ultimately didn't proceed, there were valuable lessons from the project that informed the way the CEFC's now approaches similar transactions. For example, it highlighted the importance of the fund manager, their experience and commitment to clean energy as well as their access to a pipeline of realistic opportunities and their ability to raise capital alongside the CEFC commitment. As a result of applying lessons learned from Ace, the CEFC committed to the new Palisade Renewable Energy Fund (see Portia) as well as a number of new funds in the property sector.								
CEFC rationale	Specialist clean energy investment platforms have been available in the UK, Europe and US for some time, however there are no such specialist platforms in Australia. The aim of the fund was to create a new opportunity for institutional investors to make renewable energy a part of their portfolio while contributing to meeting the goal to scale up renewable energy investment and deployment.								
Financial metrics	Finance type	CEFC investment commitment	Total Project \$	Private sector investment commitment	s47G(1)(a)	5yr CGBR	s47G(1)(a)		
	Equity	\$80m	\$240m	\$160m		3.1%			
Quotes	"Australian superannuation funds and other institutional investors have expressed interest in finding an attractive way to invest directly into low carbon energy infrastructure. The CEFC cornerstone investment is a first step in establishing a unique clean energy platform and working with those institutional investors in achieving their investment objectives" Perry Clausen Head of Direct Infrastructure, Colonial First State Global Asset Management					Estimated lifetime abatement	1.5 MtCO ₂ ³	Current status	Expired unutilised

³ *No abatement recorded against CEFC's totals for this project



New financing options for households and businesses to install solar

Project	s47G(1)(a)	Borrower	SunEdison		Committed	30 June 2014			
Description	The CEFC committed up to \$70m to SunEdison Australia, a global solar manufacturer and services provider, to offer customers solar leases or the option to sell power under a power purchase agreement (PPA). The finance was to be available to both residential and commercial customers. SunEdison Australia intended to work with local partners to originate, design, install, own, operate and maintain solar PV systems and depending on the individual contract, either lease them, or sell the power under a PPA, to customers. In April 2016 SunEdison filed for Chapter 11 bankruptcy protection in the United States and the CEFC terminated its facility commitment which remained undrawn at the time of termination.								
Facilitating finance	The financing model of using PPAs and leases can overcome the existing barriers that have held back take up of solar by the commercial sector. Customers do not pay for the upfront purchase and installation of the equipment and can achieve immediate savings on their energy bills. By removing the need for upfront capital and allowing the benefits to remain with the building occupants when a tenant moves, PPAs and leases have the potential to accelerate use of solar power across all sectors, including commercial and household rental properties. Whilst this project ultimately did not proceed due to company difficulties, the learnings from this project paved the way for the CEFC to enter into a similar, more successful project with Origin later.								
CEFC rationale	At the time the CEFC committed to this facility, the PPA product was untested in the Australian market. The CEFC was aiming to expand the financing options available for businesses wishing to install commercial size solar, through this investment structure. The SunEdison facility had the potential to offer solar at much lower cost than could be offered by alternative financing solutions. By supporting this structure, the CEFC was able to gain first hand practical experience in the business model and pricing structures for small scale solar.								
Financial metrics	Finance type	CEFC investment commitment	Total Project \$	Private sector investment commitment	s47G(1)(a)	5yr CGBR	s47G(1)(a)		
	Debt	\$70m	\$112m	\$42m		3.1%			
Quotes	"The relatively long pay back periods for rooftop solar have meant standard bank loan terms were not financially attractive to customers. With the CEFC's finance, SunEdison is able to introduce a number of financing models to Australia, using our global experience, that will provide an immediate cost saving to customers and expand the use of solar resources here." Pashupathy Gopalan. President, SunEdison Asia Pacific, Middle East and South Africa					Estimated lifetime abatement	*697,586 tCO ₂ ⁴	Current status	Closed – cancelled unutilised

⁴ *No abatement recorded against CEFC's totals for this project



Cornerstone investor for the first climate bond of its type

Project	s47G(1)(a)	Borrower	National Australia Bank (NAB) Ltd		Committed	4 December 2014			
Description	Committed a cornerstone investment of \$75m in the inaugural issue of the NAB Climate Bond. The NAB Climate Bond was made up of 17 utility-scale renewable energy projects (in operation or under construction) across Australia at the time of issuance.								
Facilitating finance	The NAB Climate Bond was the first Australian dollar denominated and Australian domestic asset-linked certified bond of its kind in the market. The cornerstone position of the CEFC assisted NAB in generating strong investor demand resulting in a total debt raising of \$300m despite the relatively long 7yr term of the bond. This had a strong demonstration effect and additional green bond issuances in the Australian market followed: ANZ, Flexi and Westpac in 2015-16 and the Victorian Govt, Queensland Govt and Flexi in 2016-17.								
CEFC rationale	The CEFC invested in this project as it demonstrated the potential in the Australian market for mobilising capital in renewable energy through a green bond and helped develop the capital market to support this new form of debt issuance.								
Financial metrics	Finance type	CEFC investment commitment	Total project \$	Private sector investment commitment	s47G(1)(a)	5yr CGBR	s47G(1)(a)		
	Debt	\$75m	\$300m	\$225		2.5%			
Quotes	NAB Group Executive for Product & Markets, Antony Cahill said: "This deal reinforces NAB's position as the largest debt financier of renewable energy in Australia, provides the sector with a new funding source, and highlights our market-leading environmental solutions credentials. The launch also demonstrates the key role debt markets play in supporting the growth of new markets and financing a low carbon economy, and raises the profile of the green bond asset class in Australia".				Estimated lifetime abatement	None reported by CEFC due to the bond issuance being placed to refinance renewable energy projects already in operation or under construction	Current status	Fully drawn	



Energy Efficient Bonus for agribusinesses

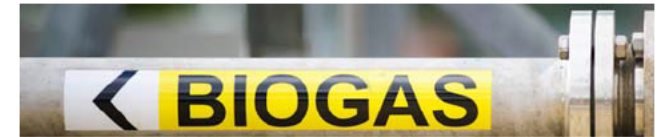
Project	s47G(1)(a)	Borrower	National Australia Bank (NAB)		Committed	22 May 2015	
Description	CEFC committed \$120m through National Australia Bank (NAB) for an energy efficient loan program to incentivize businesses to cut energy and operating costs and lift performance. By providing concessional loans to NAB customers, the program is designed to accelerate the switch to greener vehicles, as well as help businesses upgrade industrial and agricultural equipment and tractors and increase their uptake of solar. It is available to NAB customers, with a particular emphasis on agribusiness and regional Australia.						
Facilitating finance	The program aims to facilitate finance to improve energy efficiency by influencing customers' purchasing behaviour through lower cost finance. The simplicity of this structure enables NAB to fund smaller projects which the CEFC could not reach on a bilateral basis. It has had a strong demonstration effect in the market, with both Westpac and CBA offering similar programs to customers in 2016 (also in collaboration with the CEFC).						
CEFC rationale	Energy use is a major cost for the agricultural sector which is why this program specifically targets this sector. The program is designed to help businesses choose and invest in the right equipment to lower energy and operating costs, cut heating, cooling, lighting and fuel bills and even generate their own energy. The program focuses on equipment such as variable speed pumps in the irrigation sector and upgrades to industrial and commercial refrigeration as well as investments in biogas, bio-digesters, micro turbines, fuel switching equipment and processes and solar PV.						
Financial metrics	Finance type	CEFC investment commitment	Total Project \$	Private sector investment commitment	s47G(1)(a)	5yr CGBR	s47G(1)(a)
	Debt	\$120m	\$120m	-		2.3%	
Concession details	The concessionality is used to create an incentive for NAB customers to bring forward capital outlay in this space to take advantage of this opportunity. Energy efficiency awareness in the purchasing process is expected to increase as NAB's customers will have a financial benefit from making energy conscious purchases, driven by the CEFC's concessionality benefit						
Quotes	Robert White Associate Director at NAB "The benefits of the CEFC supported finance are flowing straight through to our customers, enabling us to help farmers and agribusinesses become more competitive while also reducing their emissions."				Estimated lifetime abatement	663,623 tCO ₂	Current Status



Boosting energy performance in commercial property

Project	s47G(1)(a)	Sponsor/Manager	EG Funds Management		Committed	28 May 2015			
Description	Committed up to \$125m as cornerstone equity in the High Income Sustainable Office Trust (HISOT), a new wholesale property fund focused on improving the energy performance of commercial office properties. Managed by leading real estate fund manager EG Funds Management (“EG”) HISOT will buy and refurbish office properties to significantly lift their energy and operating performance. s47G(1)(a)								
Facilitating finance	This investment will develop a new innovative green equity investment product in the Australian property sector (similar to green bonds on the debt side). This trust is the first of its kind and will provide a demonstration value of the financial benefits of improving energy efficiency ratings as a way to add value and upside to property investment. If successful, property developers, equity investors and financiers are likely to replicate the model, boosting energy efficiency investment in the property market.								
CEFC rationale	Commercial property is a key area where energy efficiency investment can have a substantial and beneficial cross-economy impact. Once acquired, the properties will undergo retrofits including the latest integrated building and HVAC management systems with real-time energy monitoring technologies and other building improvements to lift energy and operating performance. These projects are expected to achieve an increase of at least two stars under the National Australian Built Environment Rating System (NABERS) across the portfolio, with each property targeting an outcome of 4.5 stars post upgrade. The CEFC’s HISOT investment is part of its property focused program helping develop innovative new opportunities for greening the Australian property sector, investing to revitalise and rejuvenate older commercial properties through energy efficient technology upgrades and the installation of renewable energy technologies. Energy efficient buildings have lower operating costs and have the potential to provide higher net operating income and have lower vacancy rates, providing clear benefits to building owners, investors and tenants								
Financial metrics	Finance type	CEFC investment commitment	Total Project \$	Private sector investment commitment	s47G(1)(a)	5yr CGBR	s47G(1)(a)		
	Equity	\$125m	\$253m	\$128m		2.3%			
Quotes	“At EG we’re experienced in identifying, acquiring, managing and developing assets with urban renewal potential. The CEFC’s cornerstone finance for the High Income Sustainable Office Trust will help us accelerate further opportunities for investors who are seeking returns from greener office space.” Adam Geha CEO, EG					Estimated lifetime abatement	124,361 tCO ₂	Current Status	Investment Period

Turning waste emissions into local energy source



Project	s47G(1)(a)	Borrower	Landfill Gas Industries		Committed	29 June 2015			
Description	CEFC committed up to \$10m in finance to support Queensland-based Landfill Gas Industries (LGI) expand its waste-to-energy operations. This will facilitate the installation of 6MW of biogas-fired generation at six council landfill sites across Southern and Central Queensland. LGI was a successful bidder in the first round of the Emissions Reduction Fund (ERF).								
Facilitating finance	The CEFC's finance, is helping Landfill Gas Industries expand their business to enable more councils reduce emissions and produce energy from waste. The ERF incentivises businesses to expand their emissions reduction opportunities. However, ERF income/revenue is only available once abatement has been delivered and many project proponents, like LGI, need up-front funding to carry out the project. The CEFC's finance works hand-in-hand with the ERF to support successful bidders by providing up-front tailored finance to accelerate project implementation. This involved the negotiation of a financier tripartite agreement with Clean Energy Regulator as a template to assist other financiers to lend to sponsors to deliver ERF projects.								
CEFC rationale	The waste sector produces around 13 Mt of emissions each year. Using landfill gas to generate energy at these six sites will both help reduce emissions and power some 5,000 homes. Small transactions of this nature find it very hard to secure competitive finance.								
Financial metrics	Finance type	CEFC investment commitment	Total project \$	Private sector investment commitment	s47G(1)(a)	5yr CGBR	s47G(1)(a)		
	Debt	\$10m	\$14.6m	\$4.6m		2.3%			
Quotes	"Landfill tends to be the biggest source of greenhouse gas emissions for Australian councils, accounting for the majority of the smaller, regional councils' total carbon footprint. With the CEFC's finance aiding our expansion, we'll be in a position to help councils tackle that issue." Adam Bloomer, Managing Director, LGI					Estimated lifetime abatement	~805,012 tCO ₂	Current status	Availability



Asset finance for cleaner cars and clean tech

Project	s47G(1)(a)	Borrower	Firstmac Limited		Committed	30 June 2015			
Description	Firstmac is a leading Australian non-bank lender. The CEFC is providing up to \$50m to Firstmac to on-lend to its customers to enable them to lease or purchase clean energy assets for example, solar and batteries; green vehicles and refrigeration, variable speed drives or lighting. It can be used for commercial vehicles as well (e.g. delivery vans, garbage trucks, forklifts and vehicles used in warehouses and logistics). Customers are incentivised to choose clean cars at the top of the Green Vehicle guide over regular cars through a small discount in their loan, made possible by the CEFC's finance.								
Facilitating finance	This commitment enables an established finance provider (with a network of 25,000 existing commercial and residential customers) to provide a new finance option to its customers who want to purchase or lease clean energy assets or equipment. It thus broadens the range of finance options available for the purchase or lease of cleaner cars or cleaner technology without tying up capital. The objective for this program is that it will help pave the way for the introduction of the energy efficiency asset class to the wider capital markets as it will help to establish a properly documented and audited performance history for these types of receivables. This is a critical pre-cursor to successfully re-financing these types of assets in capital markets. Most importantly, successful entry into the securitisation market will drive down the cost of capital, thereby increasing the take-up of the assets.								
CEFC rationale	This finance will help businesses cut their energy costs while lowering carbon emissions. The program provides customers who choose green vehicles over regular vehicles with a small discount on their finance, thus helping accelerate the adoption of vehicles listed at the top of the Government's Green Vehicle Guide.								
Financial metrics	Finance type	CEFC investment commitment	Total Project \$	Private sector investment commitment	s47G(1)(a)	5yr CGBR	s47G(1)(a)		
	Debt	\$25m committed (\$25m uncommitted)	\$59m	\$9m		2.1%			
Concession details	The concessional element is directed at the green vehicles loans and Firstmac are required to pass that benefit through to the end customer.								
Quotes	"This is great news for anyone who wants to drive a new-generation low emission vehicle, or save on energy costs by installing solar. Firstmac is very pleased to be working with CEFC to deliver this initiative which will save customers money and result in reduced carbon emissions." Kim Cannon, Managing Director, Firstmac					Estimated lifetime abatement	~969,48 tCO ₂	Current status	Not reached financial close

Solar at Ayers Rock Resort



Project	s47G(1)(a)	Borrower	Epuron		Committed	30 June 2015			
Description	CEFC committed up to \$4.7m in finance for a 1.8MW solar PV system spread across five ground and roof mounted locations around the Voyages Ayers Rock Resort in the Northern Territory. The Resort is situated 20km from Uluru and consists of several hotels (one 5-star), apartments, a camping ground, and various other facilities.								
Facilitating finance	The CEFC's finance for this project is encouraging additional private sector investment in renewable energy and helping to build Australia's technical experience in remote-area solar installation and maintenance. The Ayers Rock Resort project is part of the CEFC's growing program of solar installation in remote areas and provides a scalable and replicable model for other financiers in future solar rollouts.								
CEFC rationale	The system was commissioned in April 2016 and supplies approximately 30 per cent of the Resort's peak daytime use (equivalent to powering around 1,500 homes), reducing the need for trucked-in fuel, including emissions-intensive diesel. This project builds on Eva 1 (Epuron's expansion of the Uterne solar power station and other remote solar projects) and is a good demonstration of how the CEFC can assist smaller developers like Epuron to grow a portfolio of successful renewable transactions which will establish a precedent and pave the way for the rollout of similar facilities.								
Financial metrics	Finance type	CEFC investment commitment	Total Project \$	Private sector investment commitment	s47G(1)(a)	5yr CGBR	s47G(1)(a)		
	Debt	\$4.7m	\$7.2m	\$2.6m		2.1%			
Quotes	"There couldn't be a better location for a solar field harnessing the energy of the sun than in the heart of Australia's Red Centre. As Uluru becomes ever more popular as a holiday destination, energy demands at the Resort are also growing and the Tjintu project will ensure we manage the growth of the resort in an environmentally sustainable way" Voyages CEO Andrew Williams					Estimated lifetime abatement	~45,877t CO ₂	Current Status	Term



Making solar and batteries more accessible for homes and businesses

Project	s47G(1)(a)	Borrower	Origin		Committed	30 June 2015			
Description	CEFC committed up to \$60m in finance to major energy retailer Origin to assist in its rollout of solar PV and batteries for households and business. Origin's rooftop solar power purchase agreement (PPA) offering – Solar as a Service – eliminates the need for business and residential customers to cover upfront solar PV system costs, while allowing them to enjoy the benefits of solar energy. With Solar as a Service, Origin owns, installs and maintains the rooftop solar systems, and eligible residential and business customers are able to buy the solar energy generated at a lower rate than average retail electricity tariffs.								
Facilitating finance	s47G(1)(a) The PPA enables household and business customers to buy solar-generated energy for an agreed period and at an agreed price. PPAs are an innovative way of driving further uptake of solar and have proven effective in overseas markets, with solar customers purchasing the energy generated from their panels, rather than having to purchase the panels themselves. The CEFC has worked on a number of projects similar to this (e.g. SunEdison) which, for various reasons, have not proceeded. However, the CEFC applied learnings from previous attempts to design a better product which is now proving successful in the marketplace - already 700 homes and businesses across Australia have installed solar and/or batteries under this program.								
CEFC rationale	This project should further support for the roll-out of distributed solar with pricing benefits for consumers, increased renewable energy penetration and the opportunity to lift solar standards within the industry by pre-approving equipment and installers. Origin has already piloted this program with successful results and this finance will enable Origin to roll it out on a wider scale.								
Financial metrics	Finance type	CEFC investment commitment	Total Project \$	Private sector investment commitment	s47G(1)(a)	5yr CGBR	s47G(1)(a)		
	Debt	\$60m	\$100m	-		2.1%			
Quotes	Origin General Manager Solar and Emerging Businesses, Phil Mackey said "Solar as a Service is already proving an attractive proposition to customers since it was launched earlier this year, and the CEFC finance will be used in expanding the offering, so more Australians can enjoy the benefits of solar"					Estimated lifetime abatement	649,631 tCO ₂	Current status	Availability Period



Australia’s largest off-grid solar and storage facility

Project	s47G(1)(a)	Borrower	Neoen		Committed	7 July 2015			
Description	10.6MW solar PV array with 6MW of battery storage integrated with existing diesel generator at DeGrussa Copper Mine, Western Australia. Construction began in December 2015 and it was successfully commissioned in June 2016 and at the time, was the largest integrated off-grid solar and battery storage in Australia, and potentially the world.								
Facilitating finance	The CEFC finance enabled Sandfire to demonstrate the potential for solar and batteries to provide an alternative to diesel in remote area mining. For major financiers to support projects that use innovative technology in a new way, there needs to first be a proof of concept and demonstration project. This often requires finance from the CEFC for the project to progress, and once the demonstration project is financed and up and running, it will improve confidence and opens up further and larger scale financing opportunities for the private sector. Given the teething problems experienced by the project it demonstrates why commercial risks are inclined to avoid projects that try to implement leading edge technology.								
CEFC rationale	Remote area mines represent a significant and growing opportunity for solar and battery storage to provide a complementary power source. The project is one of the first and largest integrated off-grid solar and battery storage facilities, consisting of over 34,000 solar panels. It will provide some 40% of the mine’s daytime electricity requirements, offsetting approximately 5m litres of emissions-intensive diesel fuel each year. The development of such projects demonstrates the reliability and cost-effectiveness of combined solar generation and storage, particularly in mining, as well as in rural and remote areas.								
Financial metrics	Finance type	CEFC investment commitment	Total Project \$	Private sector investment commitment	s47G(1)(a)	5yr CGBR	s47G(1)(a)		
	Debt	Up to \$15m	\$44m	\$8m		2.3%			
Quotes	“We identified some time ago that solar power presented an exciting opportunity for us to participate in a low-risk renewable energy initiative at DeGrussa, and we have no doubt that this project has the potential to be an Australian and possibly a world first – establishing DeGrussa as a reference site for the use of off-grid solar and battery storage technology in the mining industry” Sandfire Managing Director, Karl Simich					Established Lifetime abatement	~363,504 tCO ₂	Current Status	Term

Finance to lower vehicle emissions



Project	s47G(1)(a)	Borrower	Eclipx Group Limited		Committed	30 September 2015			
Description	The CEFC committed \$50m in finance to Eclipx, Australia's largest independent fleet vehicle finance company, to promote the increased uptake of low emissions vehicles. The \$50m package will provide Eclipx corporate, government and not-for-profit fleet buyers with access to favourable loan interest rates when choosing eligible low emissions passenger and light commercial vehicles. To be eligible for favourable rates, vehicles must meet an emissions threshold that is 20 per cent below the most recently published Australian averages for new passenger and new light commercial vehicles. As at July 2017, 1026 vehicles have been financed under this program.								
Facilitating finance	CEFC finance will be available through an Eclipx sponsored, publicly-rated securitisation warehouse, providing a significant demonstration of the potential of alternative funding structures to finance low-emissions technologies. The program will enable the CEFC to access a range of corporate and SME customers, through Eclipx's customer base, that the CEFC would not otherwise be able to reach by itself. This program could also drive competitors to consider similar programs to maintain competitive neutrality, expanding finance options for low emission technologies.								
CEFC rationale	More efficient fleets will reduce emissions as well as reduce operating costs, achieve productivity and environmental gains. Light vehicles represent 10 per cent of Australia's emissions, the largest share within the transport sector. This is an area that requires action and, by focusing on fleet buyers, the CEFC is hoping to see an accelerated uptake of low emissions vehicles. The Climate Change Authority found that improving the emissions efficiency of light vehicles is one of the lowest cost emissions reductions opportunities in the economy.								
Financial metrics	Finance type	CEFC investment commitment	Total project \$	Private sector investment commitment	s47G(1)(a)	5yr CGBR	s47G(1)(a)		
	Debt	\$50m	\$52.5m	\$2.5m		2.2%			
Concession details	The s47G(1)(a) concessionality provided to Eclipx is to be passed through to the Eclipx customers entirely to encourage them to choose low emissions vehicles.								
Quotes	"Eclipx is committed to supporting the reduction of carbon emissions through the increased use of energy efficient vehicles. Many of our customers, including publicly listed companies, government and not-for-profit entities, are acutely aware and concerned about reducing their carbon footprint." Doc Klotz CEO, Eclipx					Estimated lifetime abatement	~90,000 tCO ₂	Current status	Availability Period



Making our shopping centres more energy efficient

Project	s47G(1)(a)	Counterparty	LaSalle Australia Core Plus Fund		Committed	30 September 2015			
Description	CEFC made a cornerstone equity investment commitment of \$50m to LaSalle Australia Core Plus Fund to increase the sustainability of its retail shopping centre and commercial office portfolio. The CEFC's commitment supported a targeted \$150m capital raise by the fund manager and involved a sustainability policy to be rolled out across \$650m in existing properties as well as new assets. The sustainability policy was a condition of CEFC's equity commitment.								
Facilitating finance	The CEFC's experience in the market is that institutional investors are looking for ways to invest in clean energy and energy efficiency and need more mechanisms for doing so that involve low-risk, high quality products. This is one of the reasons why the CEFC is committing to new mechanisms such as energy efficient property funds, green bonds and institutional renewable energy funds, to help expand the range of investment products and therefore crowd-in private sector finance to the sector.								
CEFC rationale	<p>The CEFC made a commitment to LaSalle Australia Core Plus Fund as part of the CEFC's growing focus on transforming the operations of major retail building stock through improving its energy efficiency. The CEFC's commitment was cancelled as, immediately prior to when the CEFC was due to invest, because the existing investors commenced a process to change the fund manager (LaSalle Investment Management). However, the CEFC's 12-month involvement working with the Fund was still influential. By making a commitment to invest in the fund, the CEFC was able to influence the fund's sustainability policy s47G(1)(a)</p> <p>Properties in the portfolio include Big Top Market Fresh shopping centre at Maroochydore in Queensland, Forest Lake Shopping Centre in Queensland and 555 Lonsdale Street Melbourne in Victoria. The structure of the transaction also provided a template for later property equity investments in s47G(1)(a)</p>								
Financial metrics	Finance type	CEFC investment commitment	Total Project \$	Private sector investment commitment	s47G(1)(a)	5yr CGBR	s47G(1)(a)		
	Equity	\$50m	\$150m	\$100m		2.2%			
Quotes						Estimated lifetime abatement	~*235,636 tCO ₂ ⁵	Current Status	Closed expired

⁵ *No abatement recorded against CEFC's totals for this project



City of Melbourne accelerates sustainability initiatives

Project	s47G(1)(a)	Borrower	Melbourne City Council		Committed	9 October 2015			
Description	<p>\$30m in finance to City of Melbourne (CoM) to undertake a program of clean energy initiatives to help it reach its goal of zero net emissions by 2020. This includes the installation of energy efficient LED public lighting, the installation of rooftop solar on council and community facilities as well as other sustainable initiatives, including other CoM's building upgrades and to increase Environmental Upgrade Agreements (EUAs) across Victoria. By December 2016, over 300kW Solar PV had been installed in the North Melbourne Football Club (Kangaroos), Community Hub at The Dock and Fitzroy Gardens, together with the upgrade of over 1,300 street lights over the City.</p>								
Facilitating finance	<p>This loan provides the upfront capital for CoM to undertake the streetlighting upgrades, which deliver significant reductions in energy usage and therefore electricity costs for the CoM and also expands the EUA finance available through Sustainable Melbourne Fund (SMF) to establish and deliver EUAs. Providing finance for SMF will help build capacity and address a gap in financing building energy efficiency upgrades in regional areas. As at December, ten Councils had signed up for the EUAs and \$2.5m is scheduled to be deployed by March 2017.</p>								
CEFC rationale	<p>The City of Melbourne is internationally recognised for its leadership in sustainability and has a target to achieve zero net emissions by 2020. This project will help progress Melbourne's target. The Council also expects to save around \$1m p.a. on electricity through the lighting upgrades alone. The annual emissions saved through the lighting and solar is equivalent to taking ~2,800 cars off the road. The Kangaroos now have one of the largest solar systems among the 18 AFL teams, setting an example for the rest of the AFL. This loan provided a strong demonstration to the local govt sector of initiatives that can be implemented to reduce energy and the CEFC announced the Local Govt Finance Program shortly after this transaction.</p>								
Financial metrics	Finance type	CEFC investment commitment	Total Project \$	Private sector investment commitment	s47G(1)(a)	5yr CGBR	s47G(1)(a)		
	Debt	\$30m	\$30m	-		2.1%			
Quotes	<p>"North Melbourne Football Club is one of the world's oldest sporting clubs. This project is a great example of how an iconic sporting club can work with government to reduce carbon emissions, promote clean energy jobs, and help the environment" said Chair of the City of Melbourne's Environment Portfolio, Councillor Arron Wood</p>					Estimated lifetime abatement	~233,858 tCO ₂	Current status	Interest Period



Project	s47G(1)(a)	Borrower	Ararat Wind Farm		Committed	17 November 2015			
Description	Commitment of \$67m for the 240MW Ararat Wind Farm in Victoria. The wind farm is expected to produce enough energy to power 120,000 homes. The first turbines arrived onsite in June 2016 and began generating power in August 2016. The wind farm is already generating around 1GWh each day and expected to be fully commissioned by May 2017. The project was the first wind farm contracted following agreement on the revised Renewable Energy Target (RET) in June 2015.								
Facilitating finance	The Ararat Wind Farm benefits from a Power Purchase Agreement (PPA) from the ACT government for around one-third of the energy the farm produces. Project sponsors sought finance for this project during a period when the RET was under review. Consequently, given the project has a high degree of merchant energy risk exposure, most banks were reluctant to provide finance and those that were, would only do so with significant caveats. In this context of RET uncertainty, the participation of the CEFC was critical to the success of Project Ryan. The CEFC's investment in wind projects encourages the participation of co-investors, creating additional market liquidity to lift overall investment in the sector. Financing certainty can reduce the cost of capital, which in turn contributes to efficient market pricing and has a positive impact on the final cost of energy. As part of this transaction, the CEFC's participation helped attract international capital into the Australian clean energy market including Partners Group, OPTrust, General Electric, RES along with co-financiers Sumitomo Mitsui Banking Corporation (SMBC) and Export Development Canada (Canada's Export Credit Agency).								
CEFC rationale	Ararat will be the third largest wind farm in Australia. The project will have a positive impact on the local economy, directly employing around 165 workers during construction and another 120 indirectly. It is expected to inject up to \$8m into the local economy over two years. The wind farm is using transformers manufactured by Victorian-based Wilson Transformers and 35 turbine towers manufactured at Keppel Prince in Portland, Victoria.								
Financial metrics	Finance type	CEFC investment commitment	Total Project \$	Private sector investment commitment	s47G(1)(a)	5yr CGBR	s47G(1)(a)		
	Debt	\$67m	\$513m	\$446m		2.3%			
Quotes	"Debt support from Export Development Canada and the CEFC was an important part of the debt financing package. Agencies such as EDC and CEFC are playing a significant role in assisting the private sector invest in clean energy developments such as the Ararat Wind Farm." Ararat Wind Farm					Estimated lifetime abatement	~12.3Mt CO ₂	Current status	Availability Period



Project	s47G(1)(a)	Borrower	St George Community Housing Sustainability Limited (SGCH)		Committed	19 Nov 2015		
Description	Committed up to \$60m to community housing provider SGCH Sustainability for the construction of ~200 new energy efficient homes and undertake upgrades of their existing portfolio mainly in Sydney's south to a weighted average of a 7-star Nationwide House Energy Rating Scheme (NatHERS) rating. As at Jan 17, over 50 homes had been built and tenants had started moving in.							
Facilitating finance	Australia has some 88,000 community housing dwellings and the sector is expected to experience strong growth. This transaction helped bridge a funding gap in the community housing sector where private sector finance tends to be short term, thereby mismatching the typically long lived housing assets. The concession provided by CEFC (see below) encouraged the not-for-profit sector (SGCH) to invest in energy efficiency programs.							
CEFC rationale	Low income households tend to live in buildings with poor energy efficiency, leading to higher energy costs. This can have a significant financial and health impact on households. CEFC's loan facilitated the design and construct of new dwellings which are well above the regulatory minimum that NSW social and affordable housing are usually built to (outcomes vary based on design and geography, but there are social and affordable dwellings in NSW with as low as 3.5-star NatHERS rating).							
Financial metrics	Finance type	CEFC investment commitment	Total project \$	Private sector investment commitment	s47G(1)(a)	5yr CGBR	s47G(1)(a)	
	Debt	\$40m (plus \$20m uncommitted)	\$128m	\$68m		2.3%		
Concession details	Provided a concession of s47G(1)(a) and secured an undertaking by the Borrower to contribute this amount to fund tenancy sustainability initiatives, such as smart meters, energy usage reporting and other applications approved by the CEFC in the existing portfolio of over 4,000 owned and managed properties.							
Quotes	SGCH Acting CEO, "CEFC's long term finance will enable SGCH to build new affordable homes at well above minimum standards in Australia. In addition, it will also improve the lives of social and affordable housing tenants and, at the same time, reduce SGCH's operating costs. The more cost savings, the more we can reinvest into housing for those most in need."				Estimated lifetime abatement	~94,000 tCO ₂	Current status	Availability period



A Queensland first - Barcaldine solar farm

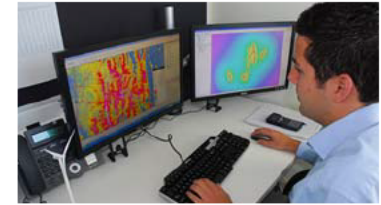
Project	s47G(1)(a)	Borrower	Barcaldine Remote Community Solar Farm Pty Ltd		Committed	19 Nov 2015			
Description	CEFC committed up to \$20m to the 20MW AC solar farm in Barcaldine, Central Qld. The solar farm uses single-axis tracking to maximise the effectiveness of the PV as they follow the sun. In December 2016, Barcaldine started feeding electricity into the grid and is expected to be fully operational in Q12017. It is Queensland's largest operational utility scale solar farm to date and was also one of the first solar farms in Queensland.								
Facilitating finance	Without the CEFC's support and preparedness to take market/merchant risk during the period while the RET review outcome was unknown and incumbent retailers were reluctant to write PPAs, the project would not have received debt funding by the deadline for the ARENA grant expiry, and the sponsor may not have proceeded with the project. Following construction, a number of other solar projects in Qld have secured finance to go ahead, some with the help of CEFC/ARENA but all involving significant contributions by equity investors, a vote of confidence for the growing market. Barcaldine solar farm was successfully sold to two investors in 1Q2017.								
CEFC rationale	When fully operational, the solar farm is expected to power around 5,300 households p.a. It is on the fringe of the grid and so will significantly reduce network losses experienced by current transmission feed from Clermont (660 km east) and provide additional stability in the local grid. It will also demonstrate how building new capacity around the grid can lead to significant savings in grid expansion and upgrade costs. The project employed 175 people during peak construction. Construction of this solar farm in a fringe-of-grid location will provide useful learnings for other off-grid remote area solar PV projects and demonstrate how a large-scale solar farm can provide a competitively-priced renewable energy alternative.								
Financial metrics	Finance type	CEFC investment commitment	Total Project \$	Private sector investment commitment	s47G(1)(a)	5yr CGBR	s47G(1)(a)		
	Debt	\$20m	\$69m	\$26m [and Arena grant \$23m]		2.2%			
Quotes	"The support from the CEFC and ARENA has been essential for getting the project to this stage, to support the future energy supply of the Barcaldine, Blackall and Longreach communities" Elecnor spokesman Francisco Garcia Valverde					Estimated lifetime abatement	~835,810 tCO ₂	Current Status	Construction Period



Project	s47G(1)(a)	Counterparty	Foresight Group		Committed	20 Nov 2015			
Description	The Australian Bioenergy Fund is a new equity fund for bioenergy and energy-from-waste, targeting local government, mining, forestry and agriculture. The CEFC is providing a cornerstone equity commitment of \$100m to the Fund, managed by Foresight Group, a leading European bioenergy infrastructure and private equity investment manager that bring significant relevant skills and experience to the Australian market.								
Facilitating finance	Much of the opportunity in the sector consists of small-scale operations that have found it difficult to attract institutional investors. The fund is targeting investments in projects from \$2 million to \$100 million, ranging from small-scale anaerobic digestion to mid-scale energy-from-waste developments.								
CEFC rationale	The Fund is expected to play an important role in accelerating and widening market uptake of bioenergy and energy-from-waste technologies that have a proven track-record overseas. These technologies are not yet widely deployed in Australia despite our strong agricultural and waste industries. Foresight has built a strong project pipeline and is in the process of raising the matching equity for these projects. The CEFC has identified some 800MW of potential new generation capacity in bioenergy in Australia, requiring as much as \$5 billion in new investment. Lower waste and energy costs, energy security in remote areas and reducing dependence on natural gas and diesel are some of the potential benefits of pursuing bioenergy projects in Australia.								
Financial metrics	Finance type	CEFC investment commitment	Total Project \$	Private sector investment commitment	s47G(1)(a)	5yr CGBR	s47G(1)(a)		
	Equity	\$100m	\$202m	\$102m		2.3%			
Quotes	"For Foresight, the Australia Bioenergy Fund presents the perfect opportunity to develop a presence in the Australian market. We very much look forward to working in partnership with CEFC to develop these projects over the coming years and to unlocking the potential of renewable energy in the Australian landscape". Foresight Group Partner, Nigel Aitchison					Estimated lifetime abatement	~5.3 MtCO ₂	Current Status	Pre-financial close



Project	s47G(1)(a)	Borrower	University of Melbourne		Committed	18 December 2015			
Description	Committed up to \$9.1m to accelerate initiatives at the University of Melbourne that will help improve its sustainability and push towards carbon neutral operations by 2030. This includes: the installation of voltage optimisation; upgrading outdated freezers at its medical and science facilities, installation of solar PV and solar thermal; installation of three micro turbines.								
Facilitating finance	This was the CEFC's first project with a university and has led to a lot of interest from the university sector and already seen another university follow suit, with more likely to follow. Universities typically have high energy consumption and strong sustainability agendas. The CEFC finance allows universities to access longer term, fixed rate debt for a program of works through a committed finance package. The loan can support the university to implement a range of clean energy initiatives over multiple years with budget certainty. Some universities will access capital markets funding, but generally, a loan is more flexible and easier to establish than bond issuance, providing universities with a viable financing option. .								
CEFC rationale	The University of Melbourne's projects involve a range of energy efficient technologies and innovative renewable technologies which are expected to reduce grid electricity use by about 8 per cent (and save ~9,000 tonnes of CO2 p.a.) while demonstrating the potential to create more sustainable universities. CEFC investment will result in significant positive scalability (sector demonstration value) to the broader university sector. In particular, the micro-wind turbines are unique as these have not been utilised in Australian tertiary institutions. Australian Campuses Towards Sustainability (ACTS) invited CEFC and the University of Melbourne to present via webinar (April 2016) on the project to build awareness of the clean energy opportunities and finance available from the CEFC for the university sector in Australia and New Zealand.								
Financial metrics	Finance type	CEFC investment commitment	Total Project \$	Private sector investment commitment	s47G(1)(a)	5yr CGBR	s47G(1)(a)		
	Debt	\$9m	\$9m	-		2.3			
Quotes	University Vice-Principal, Administration & Finance, and Chief Financial Officer, Allan Tait said "As a public-spirited university, Melbourne is committed to promoting sustainability through our operations, as well as in our research and education programs, particularly as the University has an obligation to show leadership in critical global issues such as those relating to climate change and sustainability"					Estimated lifetime abatement	~93,753 tCO ₂	Current Status	Availability Period



Australian renewable developer commercialising CSIRO research

Project	s47G(1)(a)	Borrower	Windlab Limited		Committed	24 March 2016			
Description	CEFC committed up to \$8m subordinated high yield debt finance to innovative Australian company, Windlab. Windlab is a Canberra-based global wind energy development company and was established to commercialise world leading atmospheric modelling and wind energy assessment technology developed by the CSIRO. Windlab owns and exclusively uses this suite of wind energy prospecting and assessment tools to identify and develop high quality wind farm sites in its chosen markets, with greater certainty and less risk. Windlab will use the finance to expand its business.								
Facilitating finance	s47G(1)(a) The CEFC brought together a finance structure to actively support Windlab in securing the next phase in its business strategy and provide Windlab with additional working capital it needs to expand and unlock the value of its pipeline of renewable projects. It is anticipated that this financing will have demonstration value, providing a much-needed financing solution for companies, including project developers, who have not yet progressed from the venture capital phase and are looking to transition to a long-term owner and operator.								
CEFC rationale	Windlab has a development portfolio of over 50 projects totalling some 7,000MW of potential capacity, including 10 projects in Australia. This finance will enable Windlab to continue its expansion from project development to investment and asset management, an important part of its growth plans. It will help support an Australian company that is successfully commercialising Australian innovation, both locally and in export markets. Without CEFC finance, Windlab's project development activities would proceed at a much slower pace.								
Financial metrics	Finance type	CEFC investment commitment	Total Project \$	Private sector investment commitment	s47G(1)(a)	5yr CGBR	s47G(1)(a)		
	Debt	Up to \$8m	\$27m	\$21m		2.2%			
Quotes	Windlab CEO Roger Price: "We are delighted to receive the support of the CEFC. While market conditions over the past three years have been difficult, Windlab has continued to grow. The timing of this funding is ideal. We will be able to leverage the additional working capital to accelerate our growth to meet the increased demand generated by more favourable market conditions."					Estimated lifetime abatement	506,725 tCO ₂	Current Status	Availability Period - Partially Drawn

World first innovative securitisation

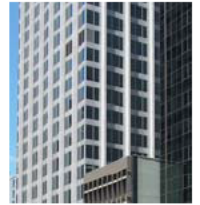


Project	s47G(1)(a)	Borrower	Perpetual Corporate Trust Ltd as trustee of Flexi ABS Trust 2016-1		Committed	21 April 2016			
Description	CEFC made a \$20m cornerstone investment in \$50m certified green bond issued by a securitisation trust sponsored by financial services company, FlexiGroup, linked to solar PV assets.								
Facilitating finance	The CEFC's cornerstone investment assisted in catalysing other private sources of capital in the first securitisation of its kind in Australia. In a market first, the green tranche achieved a better price than the comparable uncertified tranche, which should encourage other issuers to include green tranches in their securitisations in the future. The success of this issuance has already led to a second green issuance (\$50m) by Flexigroup in 2017 and it is hoped will catalyse future securitisation structures to include a green bond certified tranche, unlocking extra sources of funding for the clean energy market and further developing this investor base. The unique proposition of having the Climate Bonds Initiative certify one of the tranches opens up the investor base to a wider class of investors (e.g. socially responsible investors).								
CEFC rationale	The transaction represents Australia's first asset backed green bond note and the world's first "Climate Bond Certified" asset backed security transaction. The CEFC has identified climate bonds as an important source of investment growth for the clean energy sector and is working with investors and issuers to grow this market in Australia. The FlexiGroup bond represents a significant innovation in the engagement of the capital markets with the renewables sector and demonstrates increased capacity for financial markets to support the further origination of small-scale renewable assets such as solar and battery storage.								
Financial metrics	Finance type	CEFC investment commitment	Total Project \$	Private sector investment commitment	s47G(1)(a)	5yr CGBR	s47G(1)(a)		
	Debt	\$20m	\$50m	\$30m		2.1%			
Quotes	"Flexigroup's green ABS deal indicates a pricing benefit arising from the green label – this is exciting news for the market and potential issuers out there ... and could well be a sign of things to come for green solar bonds." Sean Kidney, CEO, Climate Bonds Initiative.					Estimated lifetime abatement	0 MtCO ₂	Current Status	P&I Repayment

Helping businesses take control of energy costs



Project	s47G(1)(a)	Borrower	Westpac Banking Corporation		Committed	5 May 2016			
Description	CEFC provide up to \$200m (\$50m initially) to allow Westpac to provide finance leases, commercial loans, commercial hire purchases and operating leases to customers for qualifying renewable energy projects, energy efficiency equipment and efficient vehicles. The program is called the Westpac Energy Efficient Finance Program.								
Facilitating finance	The program aims to facilitate finance to improve energy efficiency by influencing customers' purchasing behaviour through lower cost finance. The simplicity of this structure will enable Westpac to fund smaller projects (>\$15,000) which the CEFC could not reach on a bilateral basis. The establishment of similar programs with three of the four major Australian banks s47G(1)(a) ensures parity across the banking market, and leverages these banking networks to encourage earlier investment and uptake of more energy efficient technologies for a wide range of customers and business, which CEFC could not contract with individually. Importantly, at a branch level, finance teams are now discussing with clients the benefits of selecting high performance equipment over low performance alternatives.								
CEFC rationale	The concessional rate will fund a (0.7%) discount offered to customers who purchase the approved efficiency equipment. This is intended to encourage investment earlier and to encourage switching to highest efficiency equipment. The program aims to raise efficiency as a consideration at the time of purchase.								
Financial metrics	Finance type	CEFC investment commitment	Total project \$	Private sector investment commitment	s47G(1)(a)	5yr CGBR	s47G(1)(a)		
	Debt	\$50m (\$150m uncommitted)	\$50m	-		2.2%			
Concession details	The concessional interest rate is used to create an incentive to bring forward capital outlay in this space to take advantage of this opportunity. Energy efficiency awareness in the purchasing process is expected to increase as Westpac's customers will have a financial benefit from making energy conscious purchases, driven by the CEFC's concessionality benefit.								
Quotes	Westpac General Manager, Commercial, Alastair Welsh: "This is an opportunity for our customers to improve their use of energy and also help lower energy costs, as well as access discounted lending rates supported by the CEFC's financing commitment."					Estimated lifetime abatement	~1.1 MtCO ₂	Current status	Availability period



Project	s47G(1)(a)		Borrower	Westpac Banking Corporation		Committed	25 May 2016	
Description	Committed \$90m as a cornerstone investor in Westpac's first climate bond issuance. The \$500m Westpac Climate Bond has been certified by the Climate Bonds Initiative, and will finance a \$1 billion Australian-based clean energy portfolio, including low carbon commercial buildings.							
Facilitating finance	The CEFC's commitment as a cornerstone investor will catalyse further investment in climate bonds and create continued momentum in growing a green investment class in capital markets. The Australian market for certified climate bonds (which includes energy efficient buildings) is in its infancy. However, there is growing investor appetite for these types of products. This bond will provide further demonstration of the climate bond market in Australia, which should encourage additional issuance from other institutions. It has already been followed by the Monash Climate Bond (Dec 2016), Treasury Corporation of Victoria (July 2016) and the Queensland Treasury Corporation (March 2017).							
CEFC rationale	The CEFC's involvement in growing the domestic climate bond market (acting as an investor in four green bond issuances) is helping to unlock new investment in the clean energy sector, by attracting significant private sector finance into the clean energy market. This is part of the CEFC's strategy to work collaboratively with co-financiers and project proponents to secure financing solutions to help Australia improve the energy efficiency of its cities and the built environment as well as to make the underlying investments required to meet the Renewable Energy Target. The Westpac bond is of particular importance as it is only the second Climate Bonds Standard certified bond in Australia to include green buildings in the portfolio, aligning very strongly with the CEFC focus on improving the sustainability of our cities and built environment.							
Financial metrics	Finance type	CEFC investment commitment	Total Project \$	Private sector investment commitment	s47G(1)(a)	5yr CGBR	s47G(1)(a)	
	Debt	\$90m	\$500m	\$410m		1.8%		
Quotes	"The strong response to the Westpac Climate Bond reflects the continuing growth we're seeing in investors' and customers' appetite for products that have a positive impact on the economy and the environment," Westpac Group Head of Sustainability, Siobhan Toohill.				Estimated lifetime abatement	Conservatively assumed 0. While the bonds will lead to emissions reduction, quantum can't be quantified at this time.	Current Status	Fully drawn



Clean energy makeover for historic Geelong Landmark

Project	s47G(1)(a)	Borrower	Quintessential Equity		Committed	24 June 2016			
Description	Finance for the redevelopment of the historic Dalgety & Co building (new HQ of WorkSafe Victoria) into a landmark property that will be the first multi-storey Victorian commercial office building outside the Melbourne CBD to achieve a market leading 5.5 stars under the National Australian Built Environment Rating System (NABERS). The CEFC provided \$68m to unlisted property fund manager Quintessential Equity to 'stretch' the design of the commercial office tower to a market leading 5.5 star. Construction commenced in 2016 and is expected to be completed by Dec 2017.								
Facilitating finance	The CEFC's finance ensured the building is constructed to a higher environmental standard than otherwise planned. Through this project, the CEFC is using finance to accelerate the transition towards market leading 'greener buildings'.								
CEFC rationale	This project is a demonstration of how clean energy solutions can work to give an historic landmark a new lease on life as a low carbon building. The new landmark property will showcase the attractions of low emissions employee-friendly office spaces, in a drive towards zero carbon buildings in energy productive, competitive Australian cities. Through CEFC supporting this project it will expand the sector skills and capacity which will assist to shift the development industry to a higher threshold, particularly in non-CBD locations.								
Financial metrics	Finance type	CEFC investment commitment	Total Project \$	Private sector investment commitment	s47G(1)(a)	5yr CGBR	s47G(1)(a)		
	Debt	\$68m	\$93m	\$24.5m		1.7%			
Concession details	The CEFC concessionality was used to fund part of the additional capital costs required to increase the NABERS Energy rating from the planned 5 stars to 5.5 stars, providing an additional 25 per cent reduction in the building's energy consumption.								
Quotes	"Through the support of CEFC we are in a position to improve the building's energy efficiency from 5 star to a 5.5 star NABERS base building energy rating. This will provide an opportunity to achieve an additional 25 per cent reduction in the building's energy consumption and provide additional cost savings for all tenants." Guy French-Wright, Quintessential Equity Head of Development					Estimated lifetime abatement	~3354 tCO ₂	Current Status	Availability period



Energy efficient asset finance program for businesses

Project	s47G(1)(a)	Borrower	Commonwealth Bank of Australia		Committed	2 Sept 2016			
Description	A program financed by the CEFC and offered through the Commonwealth Bank to provide up to \$100 million of Energy Efficient Equipment Finance loan and lease asseets. The program will provide Australian businesses and not-for-profits with lower cost finance for a wide range of assets that meet certain energy efficiency standards. The program supports business investment in energy efficiency and clean energy technologies by offering a 0.7 per cent discount eligible loans. Eligible investments include energy efficient and lower emissions vehicles, energy efficient lighting and fittings, farm machinery and other equipment, and rooftop solar.								
Facilitating finance	In 2013, the CEFC announced its first aggregation program with CBA. This was designed to encourage energy efficient investment earlier and to encourage switching of investment decisions in equipment towards highest efficiency technologies. It was a powerful demonstration. Over time, the aggregation program financing structure has been refined and agreed with three of the four major Australian banks, including CBA.								
CEFC rationale	The program incentivises businesses to benefit from reduced energy and fuel costs, while lowering their carbon emissions. The CEFC is a small organisation and does not have the resources to provide small individual loans to clients. By partnering with existing banks like the CBA, the CEFC can use the existing client network to reach thousands of potential clients and provide small loans (as low as \$10,000) and access a range of untapped opportunities for investment in clean energy. As at Jan 2017, CBA clients have used the loans to purchase 30 lower emissions cars and other vehicles; make 20 energy efficiency equipment purchases or upgrades and install 14 renewable energy systems.								
Financial metrics	Finance type	CEFC investment commitment	Total project \$	Private sector investment commitment	s47G(1)(a)	5yr CGBR	s47G(1)(a)		
	Debt	Up to \$100m	\$100m	Nil		1.5%			
Concession details	s47G(1)(a) The concessional interest rate is used to create an incentive to bring forward capital outlay in this space to take advantage of this opportunity. Energy efficiency awareness in the purchasing process is expected to increase as CBA's customers will have a financial benefit from making energy conscious purchases, driven by the CEFC's concessionality benefit								
Quotes	Commonwealth Bank Group Executive for Institutional Banking and Markets Kelly Bayer Rosmarin said "This program forms a part of our commitment to proactively seek innovative ways to work with our business and corporate customers towards a sustainable, lower-carbon future and economy."					Estimated lifetime abatement	~573,667 tCO ₂	Current status	Availability period



Energy efficiency for commercial properties

Project	s47G(1)(a)	Sponsor/Manager	Investa Commercial Property Fund		Committed	26 Sep 2016			
Description	This project is an equity investment of \$110m into the existing Investa Commercial Property Fund (“ICPF”), the unlisted core wholesale office fund with \$4.1bn of assets under management.								
Facilitating finance	The investment establishes a landmark co-operation agreement that will promote the increased uptake of energy efficiency design principles and technologies in the built environment. The project has strong demonstration value and has already been replicated in the market after the CEFC invested in top-tier commercial fund manager, AMP Capital Wholesale Office Fund in December 2016.								
CEFC rationale	The CEFC’s investment will support the development of a landmark energy efficient building at 60 Martin Place, Sydney, which is expected to be Australia’s smartest office building in terms of digital engineering and is being designed to achieve a 6-Star Green Star rating as well as the equivalent of a targeted 5.8-Star NABERS. The transaction also represents CEFC’s commitment to a fund and the agreement of a fund manager that it will seek to lead the industry in adopting a Carbon Net Zero target across its portfolio by 2040. With the support of the CEFC, Investa will create an online resource that will outline its approach and the economics behind the development of energy efficiency in buildings. It will be available to the wider property community, supporting the CEFC’s goal of encouraging Australia’s property sector to transition to higher levels of building sustainability.								
Financial metrics	Finance type	CEFC investment commitment	Total project \$	Private sector investment commitment	s47G(1)(a)	5yr CGBR	s47G(1)(a)		
	Equity	\$110m	\$400m	\$290m		1.8%			
Quotes	Nina James – Investa GM, Corporate Sustainability, “The CEFC agreement provides Investa with an unprecedented opportunity to further advance our market leading position by once again being first mover in the identification of emerging technology that can be incorporated into the way we, and the industry as a whole, manage office buildings”.					Estimated lifetime abatement	~48,000 tCO ₂	Current status	Fully Invested



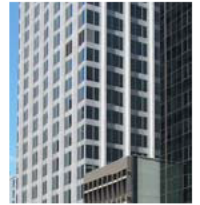
Expanding clean energy investment products for investors

Project	s47G(1)(a)		Sponsor/Manager	Lighthouse Solar Fund		Committed	28 October 2016		
Description	In 2016, the CEFC made a conditional equity commitment of up to \$15m into the Lighthouse Solar Fund, a dedicated solar fund being established by Lighthouse Solar Investments Pty Ltd (a Melbourne based fund manager). The fund is to invest in utility scale and commercial rooftop solar.								
Facilitating finance	The CEFC's involvement will assist a new green investment product come into the market. The CEFC's commitment is designed to help the Lighthouse Solar Fund have a successful First Close with a key institutional investor. s22 s47G(1)(a) The CEFC has made this conditional commitment of up to \$15m. s47G(1)(a)								
CEFC rationale	The CEFC saw value in dedicating time and resources to this project to encourage the participation of the s22 in the solar sector; to foster the creation of the first dedicated solar renewables fund; and to ensure a successful First Close of the fund thereby attracting at least \$60m of new institutional capital into the clean energy sector.								
Financial metrics	Finance type	CEFC investment commitment	Total Project \$	Private sector investment commitment	s47G(1)(a)	5yr CGBR	s47G(1)(a)		
	Equity	Up to \$15m	\$80m	\$65m + ARENA \$5m		1.9%			
Quotes	"Investors will, in addition to earning commercial returns, powerfully apply their capital to achieve long term environmental and social benefits, accelerating Australia's transition towards a lower carbon society" Managing Director, Mitch King					Estimated lifetime abatement	1.2Mt CO ₂	Current Status	Satisfaction of CPs by no later than 30/6/2017

Sapphire Wind Farm



Project	s47G(1)(a)	Borrower	CWP Renewables and Partners Group		Committed	8 December 2016			
Description	CEFC committed up to \$120m in the \$588m 270MW Sapphire Wind Farm, NSW. The wind farm is expected to power ~110,000 homes. It has a 20-year feed-in-tariff from the ACT Govt for 100MW and will trade the remainder of the project's output on a merchant basis. The project is currently under construction.								
Facilitating finance	<p>In order to meet the RET, there needs to be accelerated development of renewable projects. This means financiers are increasingly required to support projects which have an element of merchant risk. Project financiers for large-scale greenfield renewable assets have generally been reluctant to take on price or merchant energy risk. s47G(1)(a)</p> <p>When sponsors approached the CEFC, the CEFC indicated a strong preference to have Australian lender participation (to help build experience and grow the Australian renewable energy finance market). With our participation, the sponsors organised a finance package together Australia's CBA, Sumitomo Mitsui Bank and EKF, Denmark's export credit agency. This transaction aims to demonstrate the bankability of such projects and to increase the confidence of other developers seeking finance for projects which have an element of merchant risk.</p>								
CEFC rationale	The wind farm will contribute to a stronger wind industry, through local employment in the construction phase and with the use of high performing technology solutions. This project is also helping to build industry capability and advance improvements in technologies as the wind farm's transformers are being manufactured by the Wilson Transformer Company, Australia's largest manufacturer of power transformers. The project will also be the first in Australia to use the new Vestas V126 3.6MW turbine, which has one of the best available rates of energy production per turbine. CEFC's substantial financing commitment allowed the sponsors to maximise the size of the project, which is critical in the context of Australia's RET target. The absence of CEFC participation would likely have resulted in a smaller merchant plant being constructed.								
Financial metrics	Finance type	CEFC investment commitment	Total project \$	Private sector investment commitment	s47G(1)(a)	5yr CGBR	s47G(1)(a)		
	Debt	\$119m	\$588m	\$468m		2.3%			
Quotes	CWP Renewables Managing Director Alex Hewitt said: "We are excited to see our second wind farm project in NSW proceed to construction. The commencement of this landmark project reinforces our track record of delivering excellent wind farm projects, following the successful delivery of both Boco Rock Wind Farm in southern NSW and Fantanele Wind Farm, the largest onshore project in Europe at the time of construction."					Estimated lifetime abatement	~15.4 MtCO ₂	Current status	Under construction



Improving energy efficiency in the commercial property sector

Project	s47G(1)(a)	Sponsor/Manager	AMP Capital		Committed	8 December 2016			
Description	Equity investment of \$100m in the AMP Capital Wholesale Office Fund (AWOF) focused on prime CBD property. AWOF has assets under management of over \$4bn. The CEFC's commitment will partially fund the development of Quay Quarter Tower (5.5 star NABERS development) and the wider Quay Quarter Precinct- construction expected to begin in 2018. In addition, the CEFC and AWOF have entered into an Investor Side Agreement in order to facilitate a number of other agreed sustainability initiatives.								
Facilitating finance	Entering into an Investor Side Agreement with AWOF is significant for the reason that the CEFC have negotiated an outcome where it is influencing the management of over \$4bn of commercial real estate from an energy efficiency perspective and helping provide access to the wider property and technology market to the learnings from those buildings. This is the CEFC's second sustainability partnership with a top tier commercial property fund manager, which should assist in influencing of the Australian commercial property market.								
CEFC rationale	The construction of the (5.5 NABERS rated) Quay Quarter Tower will replace the AMP Centre (4.5 star NABERS) at 50 Bridge Street in Sydney. The Tower is a critical milestone in the sustainable redevelopment of Quay Quarter Precinct and the Sydney CBD. For instance, the Tower and the Sydney Rail Link are expected to be commissioned broadly at the same time in 2020. s47G(1)(a) a target of net zero emissions in the portfolio by 2030; policies to engage tenants on energy efficiency; as well as an agreement to disseminate information into the wider property market regarding how to optimise energy performance in AWOF's properties.								
Financial metrics	Finance type	CEFC investment commitment	Total Project \$	Private sector investment commitment	s47G(1)(a)	5yr CGBR	s47G(1)(a)		
	Equity	\$100m	\$650-\$700m	\$550m-\$600m		2.2%			
Quotes						Estimated lifetime abatement	281,382t CO ₂	Current Status	Fully Drawn



Expansion of smart technology business to transform energy use

Project	s47G(1)(a)	Investee	GreenSync Pty Ltd		Committed	15 December 2016			
Description	<p>Providing \$5m in equity to help GreenSync, a company which specialises in technology for better energy management, expand its operations. The highly innovative clean technology company uses a mixture of software and hardware to manage network constraints, distributed generation assets, storage resources and controlled power loads such as supermarkets and distribution centres. Under the Clean Energy Innovation Fund, the CEFC has committed equity as part of an \$11.5m capital raise by GreenSync.</p>								
Facilitating finance	<p>s47G(1)(a)</p> <p>However, once the CEFC indicated a willingness to lead the transaction, several interested parties took the transaction to their investment committees. So the leadership of the CEFC in this transaction had a galvanising effect on the private market. There is a lack of sophisticated private clean energy investors in Australia, something the Clean Energy Innovation Fund is aimed at addressing. The CEFC's role is not only to provide finance but to invest alongside other financiers to help build confidence and grow the market, particularly in early stage equity. s47G(1)(a)</p>								
CEFC rationale	<p>GreenSync is an electricity control platform that will enhance the stability and security of the grid in a world of increasing renewable energy penetration. Through smart controls and coordination, more renewable resources and battery storage systems can be integrated into the grid, extending the benefits to more businesses and consumers. GreenSync's platform also lowers the capital cost associated with the grid, improving long term energy affordability. To avoid double counting, the CEFC has not recorded any carbon abatement against this project. This is because it is an enabling technology that will indirectly lead to abatement through enabling greater integration of renewables and better demand management. It also enhances the security and stability of the grid.</p>								
Financial metrics	Finance type	CEFC investment commitment	Total Project \$	Private sector investment commitment	s47G(1)(a)	5yr CGBR	s47G(1)(a)		
	Equity	\$5m	\$11.5m	\$6.5m		2.2%			
Quotes	<p>GreenSync Founder and CEO Phil Blythe said: " We're aiming to optimise electricity grids to enable a supply that contains more than 80 per cent renewable energy. We're looking to be a global leader in integrating the new energy economy of renewable resources, battery storage and internet enabled devices into electricity markets around the world."</p>					Estimated lifetime abatement	-	Current Status	\$5m invested in Series B Preference Shares



Cornerstone investment in world-first university climate bond

Project	s47G(1)(a)	Borrower	Monash University	Committed	16 December 2016			
Description	CEFC made a \$20m cornerstone investment in the world's first university-issued certified climate bond, by Monash University. Monash will use the bond to fund a portfolio of projects that achieve certification under the standards of the Climate Bonds Initiative. This includes a major new 5-star learning and teaching building; a library redevelopment; solar installation and external LED lighting project. Capital raised must be spent on projects that achieve measurable sustainability outcomes in line with the global Net Zero Emissions by 2050 target.							
Facilitating finance	This is the first certified climate bond from the university sector globally and represents a significant step for the green bond market which is why the CEFC supported it, reflecting its role as a catalyst for clean energy investment. Monash raised AUD\$218m for the climate bond which creates an important new asset class for financing clean energy projects in the university sector. The CEFC has invested in four climate bonds to support Australia's fledgling green bond market that is now starting to grow quickly, both in the scale of capital raisings and the diversity of the underlying assets. This project has strong demonstration value for the University sector globally, as a world first. While increasing the level of finance for clean energy projects, the Monash climate bond also has the added benefit of providing institutional investors with clean energy and climate-related investment options, which are an increasingly important element in delivering on their ESG commitments.							
CEFC rationale	Through this climate bond, Monash is providing a powerful example to the university sector that is likely to be followed in other markets. The CEFC estimates universities are paying as much as \$700m in energy costs p.a., producing annual emissions of more than 1MtCO ₂ -e. Energy consumption is increasing because of rising student numbers and the high energy intensity of technologically-sophisticated laboratories and research facilities. Clean energy technologies on campus can help reduce energy bills, decrease emissions and demonstrate leadership in research and innovation.							
Financial metrics	Finance type	CEFC investment commitment	Total Project \$	Private sector investment commitment	s47G(1)(a)	5yr CGBR	s47G(1)(a)	
	Debt	\$20m	\$218m	\$198		2.2%		
Quotes	The President and Vice-Chancellor of Monash, Professor Margaret Gardner AO, said: "As a truly international university, Monash has a responsibility to provide strong and visionary leadership on sustainable development. We want our campus network to be exemplars of environmental, social and economic best practice."				Estimated lifetime abatement	Conservatively assumed 0. Whilst solar, refurbishment and LED will reduce emissions, the quantum can't be quantified at this stage of project.	Current Status	Fully drawn



New finance for medium-scale solar farms

Project	s47G(1)(a)	Borrower	Impact Investment Group Solar Income Fund		Committed	16 December 2016			
Description	CEFC committed up to \$50m to a \$100m Australian solar fund (Impact Investment Group's Solar Income Fund) to increase financing options for developers of medium-scale solar farms. The Fund acquires solar projects at the completion of construction and is expected to deliver investors stable, long-term cash returns by investing in solar farms secured by long term off-take arrangements to high credit quality counterparties.								
Facilitating finance	The CEFC's debt finance at a fund level has helped the solar fund attract equity funding from a wider investor base (over 100 co-investors have joined the fund). The Fund targets a particular segment of the equity funding market, including high net worth individuals, smaller institutional investors and foundations, which until recently have had limited opportunity to invest in renewable energy assets. This transaction will expand the clean energy investor base and broaden the finance available for the renewable sector. The CEFC is aiming to encourage the development of this kind of equity fund to unlock investment on a more cost effective basis for both smaller grid-connected and larger commercial-scale solar projects.								
CEFC rationale	This fund aims to provide attractive and stable returns to investors with positive social and environmental benefits and will be one of Australia's first unlisted wholesale funds focused on investing in a diversified portfolio of new solar infrastructure assets. The fund has a project pipeline that includes the 11MW Williamsdale Solar Farm (ACT), the 2.3MW Mt Majura Solar Farm (ACT) and 1 MW Karratha Solar Farm (WA). Assets within the Solar Income Fund are expected to generate enough electricity to power the equivalent of 9,000 homes. By providing an additional source of equity capital, this transaction will help accelerate the delivery of solar projects into the market, with consequential impact on the development of more mature national and regional solar supply chains and engineering, procurement and contracting delivery capability.								
Financial metrics	Finance type	CEFC investment commitment	Total Project \$	Private sector investment commitment	s47G(1)(a)	5yr CGBR	s47G(1)(a)		
	Debt	\$50m	\$100m	\$50m		2.2%			
Quotes	IIG Solar Income Fund Chair Ross Garnaut said: "This fund aims to provide attractive and stable returns to investors with positive social and environmental benefits. The IIG Solar Income Fund comes at a crucial time for the renewables sector. Bold steps by investors like IIG will support Australia's utilization of its opportunity to be a superpower of the low carbon world economy."					Estimated lifetime abatement	~990,608 tCO ₂	Current Status	CPs to Financial Close

Ross River Solar Farm



Project	s47G(1)(a)	Sponsor/Manager	Palisade Investment Partners and ESCO Pacific		Committed	16 December 2016			
Description	The CEFC is investing up to \$21m in the 135MW DC Ross River Solar Farm near Townsville. The project has secured a 13-year power purchase agreement (PPA) with EnergyAustralia covering 80 per cent of the output, which is understood to be the largest single solar PPA in Australia to date. Construction began in 2017. It will use 450,000 solar panels and utilize horizontal tracking technology to best harness the sun's energy.								
Facilitating finance	This is the first time the CEFC has taken an equity stake in a solar farm, sending an important signal to institutional investors about the commercial potential of greenfield clean energy developments. The development of utility scale renewable energy projects is being delayed due to the lack of equity at the late development/greenfield stage. The equity support of the project is helping fill a financing gap that exists in the later stages of a project's development approval process where traditionally financial investors (particularly Australian institutions) have not been willing to participate. To date, most equity stakeholders in the Australian renewable sector are offshore investors. To our knowledge, there is no Australian institutional equity i.e. superfunds, in Australian solar. However, in this project, the CEFC will be joined by HESTA, Vic Super and Palisade Investment Partners as equity co-investors. By investing equity in the early stage of such projects, the CEFC is looking to unlock much needed capital to support an accelerated growth path. This means renewable energy projects can be built more quickly and begin generating power sooner.								
CEFC rationale	The project is expected to generate around 150 construction jobs and power around 65,000 homes. This will provide an economic boost to the North Queensland region and accelerate the development of Australia's biggest solar farm, in an area that faces power constraints. Queensland has an excellent natural environment for the development of large-scale solar, and North Queensland, in particular, needs further generation capacity, so this will help speed up the delivery of renewable energy in the region.								
Financial metrics	Finance type	CEFC investment commitment	Total Project \$	Private sector investment commitment	s47G(1)(a)	5yr CGBR	s47G(1)(a)		
	Equity	\$21m	\$225m	\$196m		2.2%			
Quotes	"Providing reliable, affordable and cleaner supplies of energy has never been more important than it is today...For us, that means broadening Australia's energy mix by finding and supporting quality renewable projects, like the Ross River Solar Farm, on behalf of our customers." Energy Australia managing director Catherine Tanna					Estimated lifetime abatement	~4.7Mtc O ₂	Current Status	



Expansion of an Australian-owned advanced manufacturer

Project	s47G(1)(a)	Investee	Carbon Revolution Pty Ltd		Committed	21 December 2016			
Description	Committed \$10m equity to Geelong-based company, Carbon Revolution, that has developed world-leading technology to tackle carbon emissions from light vehicles. Carbon Revolution produces the world's only mass produced one-piece carbon fibre car wheel. The \$10m will contribute to Carbon Revolution's \$50m capital raising to help the company expand its output from <6,000 wheels a year to >100,000 p.a. by 2021. This investment is part of the CEFC's Clean Energy Innovation Fund. Carbon Revolution is co-located within the Australian Future Fibres Research and Innovation Centre, a collaboration between Deakin University and CSIRO Materials Science & Engineering.								
Facilitating finance	This finance will support an early stage Australian industrial company that can produce enabling technology to reduce emissions. As with all the CEFC's investments, the CEFC's role is not only to provide finance but to invest alongside other financiers to help build confidence and grow the clean energy financing market in Australia. In this deal, the CEFC will invest alongside Swiss wheel manufacturer Ronal AG, Deakin University, and Acorn Capital Investment Fund as well as other investors.								
CEFC rationale	Carbon Revolution's unique wheels are as much as 45 per cent lighter than aluminium wheels, reducing vehicle weight, fuel consumption and emissions by 2-6 per cent. The wheels also use a less energy intensive production process than the aluminium smelting required to produce alloy wheels. Supporting Carbon Revolution's expansion will see a threefold increase in their highly-skilled employee base (from ~100 to ~300 by 2021), providing a significant boost to Geelong's high-tech advanced vehicle manufacturing capabilities. Carbon Revolution is an important example of how innovative businesses can contribute to practical clean energy solutions, while, at the same time, jump starting an advanced manufacturing hub in Geelong								
Financial metrics	Finance type	CEFC investment commitment	Total Project \$	Private sector investment commitment	s47G(1)(a)	5yr CGBR	s47G(1)(a)		
	Equity	\$10m	\$50m	\$40m		2.2%			
Quotes	Carbon Revolution Chairman James Douglas: "We are delighted with the support that we have received from existing as well as new shareholders, particularly the Clean Energy Innovation Fund. It demonstrates the increasing support for innovation and advanced manufacturing in Australia."					Estimated lifetime abatement	~16,750t CO ₂	Current Status	Invested \$10m in Fully Paid Ordinary Shares



Palisade Renewable Energy Fund

Project	s47G(1)(a)	Sponsor/Manager	Palisade Investment Partners		Committed	22 December 2016			
Description	Providing a \$75m cornerstone commitment to a new specialist Palisade Renewable Energy Fund (PREF) managed by Palisade Investment Partners. The fund is looking to inject as much as \$500m in new investment to accelerate the development of a pipeline of clean energy projects, with a focus on late stage development, greenfield construction, and brownfield renewable assets.								
Facilitating finance	The development of utility scale renewable energy projects is being delayed due to the lack of equity capital at the late development/greenfield stage. Institutional investors have a growing appetite for sustainable investment opportunities which can diversify their portfolios and meet the needs of their members but have not been willing to invest in projects that are not yet operating. They don't like development or contractor risk. There has been a distinct lack of investment product designed to attract Australian institutional investment into the early stage developments. Together with Palisades we have developed a new fund is specifically designed to meet these needs and, at the same time, accelerate new investment in clean energy.								
CEFC rationale	The PREF is aimed at mid-tier investors, who currently find it difficult to access and assess renewable energy investment opportunities as they lack the scale to be direct investors. The establishment of the fund as a dedicated green fund should catalyse the introduction of a new investor base being mid-tier institutional investors. Once other investors are secured, the CEFC commitment will assist in delivering an increased number of renewable energy projects into the sector providing capital to early stage and development projects.								
Financial metrics	Finance type	CEFC investment commitment	Total project \$	Private sector investment commitment	s47G(1)(a)	5yr CGBR	s47G(1)(a)		
	Equity	\$75m	\$500m	\$375m		2.2%			
Quotes	Palisade CEO Roger Lloyd said: "The CEFC's existing and now extended commitment through the PREF will support Palisade's renewable energy strategy. It will also attract further institutional capital to an existing diverse portfolio of renewable energy assets and match the tremendous pipeline of opportunities we are currently working on, including the Ross River Solar Farm."					Estimated lifetime abatement	~27.2Mt CO ₂	Current status	Pending Financial Close



Project	s47G(1)(a)	Borrower	Neoen		Committed	22 December 2016			
Description	A 30MW large-scale solar farm, south-east of Griffith, NSW consisting of about 112,000 solar panels. It will be developed by Neoen and features single-axis tracking technology which is more efficient in capturing the sun's energy than fixed solar PV.								
Facilitating finance	The project also received funding from ARENA as part of its Large-Scale Solar Funding Round. The combined CEFC/ARENA solar program, has driven a significant reduction in the cost of solar to the point where it is very competitive with other forms of electricity. The program has seen a huge increase in total investment in solar. The CEFC large-scale solar financing program offers sponsors a product that's not currently being offered by other lenders (i.e. senior debt that accommodates full merchant risk) and it is hoped that this will be a demonstration for other lenders in the market s47G(1)(a)								
CEFC rationale	The project will provide a boost to solar capacity in NSW and further diversify the state's energy mix. It is also expected to generate enough energy to power ~11,500 homes. It will bring local employment benefits, with 90 jobs to be created during construction as well as help develop the Australian market engineering, manufacturing, services sector, and other supply chain inputs to utility scale solar in Australia.								
Financial metrics	Finance type	CEFC investment commitment	Total Project \$	Private sector investment commitment	s47G(1)(a)	5yr CGBR	s47G(1)(a)		
	Debt	\$41m	\$63m	\$18m + ARENA grant \$4.5m		2.2%			
Concession details	No concessionality is present in the margin, only a notional s47G(1)(a) for providing fixed rate financing without a swap margin.								
Quotes	Neoen Australia Managing Director Franck Voitiez: "With long-term debt finance from the CEFC, and the support from ARENA, Neoen continues to invest in the future of the Australian energy mix, and deliver on its promises of building sustainable, competitive and renewable electricity."					Estimated lifetime abatement	1.3Mt CO ₂	Current Status	Awaiting first draw



Project	s47G(1)(a)	Borrower	Neoen		Committed	22 December 2016			
Description	A 25MW large-scale solar farm, over two sites, one east of Dubbo and one north of Narromine, developed by Neoen and featuring single-axis tracking technology which is more efficient in capturing the sun's energy than fixed solar PV.								
Facilitating finance	This is one of the first projects to receive debt finance under the CEFC's large-scale solar financing program. The project also received funding from ARENA as part of its Large-Scale Solar Funding Round. The combined CEFC/ARENA solar program has driven a significant reduction in solar costs to the point where it is very competitive with other forms of electricity. The program has also seen a huge increase in total investment in solar. The CEFC large-scale solar financing program offers sponsors a product that's not currently being offered by other lenders (i.e. senior debt that accommodates full merchant risk) and it is hoped that this will be a demonstration for other lenders in the market in future. The Dubbo solar hub, along with three other solar projects being developed by Neoen and financed by the CEFC, will bring significant equity investment into Australia's solar market. The four projects are also bringing Neoen, an experienced offshore sponsor, into the Australian solar market along with Neoen's significant expertise in large-scale solar in Europe, Central America, Africa and the Middle East.								
CEFC rationale	The project will provide a boost to solar capacity in NSW and further diversify the state's energy mix. It is also expected to generate (61,000MWh p.a.) enough power for about 9,500 homes. This project is expected to generate 60 jobs during construction as well as help develop the Australian market engineering, manufacturing, services sector, and other supply chain inputs to utility scale solar.								
Financial metrics	Finance type	CEFC investment commitment	Total Project \$	Private sector investment commitment	s47G(1)(a)	5yr CGBR	s47G(1)(a)		
	Debt	\$28.4m	\$52m	\$19m		2.2%			
Concession details	No concessionality is present in the margin, only a notional s47G(1)(a) for providing fixed rate financing without a swap margin.								
Quotes	Neoen Australia Managing Director Franck Woitiez said: "With long-term debt finance from the CEFC, and the support from ARENA, Neoen continues to invest in the future of the Australian energy mix, and deliver on its promises of building sustainable, competitive and renewable electricity."					Estimated lifetime abatement	1MtCO ₂	Current Status	Awaiting first draw

Parkes Solar Farm

Project	s47G(1)(a)	Borrower	Neoen		Committed	22 December 2016			
Description	A 55MW large-scale solar farm, 10km west of Parkes consisting of over 200,000 solar panels. It will be developed by Neoen and features single-axis tracking technology which is more efficient in capturing the sun's energy than fixed solar PV.								
Facilitating finance	This is one of the first projects to receive debt finance under the CEFC's large-scale solar financing program, which, when fully deployed, will represent the largest lending commitment to the sector to date. The project also received funding from ARENA. The Parkes Solar Farm, along with three others solar projects being developed by Neoen and financed by the CEFC, will bring significant equity investment into Australia's solar market. Neoen has experience in developing and operating energy projects in Europe, Central America, Africa and the Middle East and will now contribute that expertise to the Australian solar market. s47G(1)(a)								
CEFC rationale	The project will increase solar capacity in NSW and further diversify the state's energy mix, generating (138GWh) enough power for about 20,500 homes. There is good community support for the project as the local community have been early adopters of solar. The Parkes Council has installed a significant number of solar panels on its buildings and there has been strong take up of a bulk purchasing scheme for solar on residential homes throughout the Parkes Shire. This project will help bring local employment benefits to regional NSW, generating 120 jobs during construction and help develop the Australian market engineering, manufacturing, services sector and other supply chain inputs to utility scale solar.								
Financial metrics	Finance type	CEFC investment commitment	Total Project \$	Private sector investment commitment	s47G(1)(a)	5yr CGBR	s47G(1)(a)		
	Debt	\$80m	\$115m	\$29m		2.2%			
Concession details	No concessionality is present in the margin, only a notional s47G(1)(a) for providing fixed rate financing without a swap margin.								
Quotes	Neoen Australia MD Franck Woitiez said: "With long-term debt finance from the CEFC, the support from ARENA, Neoen continues to invest in the future of the Australian energy mix, and deliver on its promises of building sustainable, competitive and renewable electricity."					Estimated lifetime abatement	~2.4MtC O ₂	Current Status	Awaiting first draw



Energy efficiency for community housing

Project	s47G(1)(a)	Borrower	SGCH Sustainability		Committed	20 January 2017			
Description	Building on the success of s47G(1)(a) CEFC committed a further \$130m to community housing provider, SGCH Sustainability to build a further 300 energy efficient dwellings in Sydney as part of the NSW Govt Social and Affordable Housing Fund ("SAHF"). CEFC finance enables SGCH to build its homes to a higher energy efficiency standard. The new dwellings will be built to an average 7-Star Nationwide House Energy Rating Scheme rating and are likely to include improved insulation, LED lighting, energy efficient appliances, smart meters and/or solar. SGCH will build a mix of social and affordable housing units in south/south-western Sydney, delivering more sustainable, affordable housing for low to moderate income families.								
Facilitating finance	The CEFC's combined commitment to SGCH of up to \$170m is the CEFC's largest financial investment in a community housing provider to date, supporting the development of approximately 500 energy efficient homes for low income families. This transaction helped bridge a funding gap in the community housing sector where private sector finance tends to be short term, thereby mismatching the typically long lived housing assets.								
CEFC rationale	This forms part of the CEFC's investment under the Sustainable Cities Fund. It is a great example of the CEFC assisting the not-for-profit sector to work with state govt to achieve outcomes that have significant social benefits whilst lowering emissions. This project will see homes built sustainably for the future, with energy efficiency and livability benefits designed into the homes before construction. The marginal additional cost of the energy efficiency investment will have long term benefits for the tenants, particularly through lower energy bills.								
Financial metrics	Finance type	CEFC investment commitment	Total Project \$	Private sector investment commitment	s47G(1)(a)	5yr CGBR	s47G(1)(a)		
	Debt	\$130m	\$163m	\$33m		2.2%			
Concession details	Provided a concession and secured an undertaking by the Borrower to contribute this amount to fund tenancy sustainability initiatives, such as energy efficiency retrofits, LED lighting, solar installations, smart meters, energy usage reporting and other applications approved by the CEFC.								
Quotes	SGCH CEO Scott Langford said: "This finance is a game changer. Our tenants will be able to manage their electricity costs using the latest clean energy solutions, while living in well-located, sustainable and affordable housing. The finance we've arranged with the CEFC enables us to build beyond the minimum building standard required and deliver energy efficient housing that is sustainable and reduces energy costs for the tenants."					Estimated lifetime abatement	72,941 tCO ₂	Current Status	Availability Period



Conversion of mine into renewable energy hub

Project	s47G(1)(a)	Borrower	Genex Power		Committed	10 Feb 2017					
Description	CEFC has committed up to \$54m in finance for an innovative large-scale solar development in Nth Qld that also has the potential to spearhead a new pumped hydro storage project. Finance will be used for phase one of the 50MW large-scale solar farm at its Kidston Renewable Energy Hub, 270km north west of Townsville. Phase two of the project, involves the development of a pumped hydro storage project on the same site. Genex estimates the 250MW pumped hydro storage project will support 1,500MWh of continuous power in a single 6-hr generation cycle. The project is based around the former Kidston gold mine. Construction of phase one is underway.										
Facilitating finance	The CEFC offered tailored finance to help accelerate the construction and delivery s47G(1)(a) The project received finance under the CEFC's large-scale solar financing program, which, when fully deployed, will represent the largest lending commitment to the sector to date. The project also received funding from ARENA as part of its Large-Scale Solar Funding Round.										
CEFC rationale	The project will be the first of its kind in Australia to co-locate a large-scale solar farm with a large-scale pumped hydro storage project, creating a combined generation and storage model that can be used elsewhere. By using clean energy to extend the life of the disused mine site, the Kidston project also creates a potential model for other disused mine sites around Australia. The solar farm will produce enough energy to power ~26,500 homes. Phase two (pumped hydro) is an important next step as storage developments will help increase the stability and reliability of the grid.										
Financial metrics	Finance type	CEFC investment commitment	Total Project \$	Private sector investment commitment	s47G(1)(a)	5yr CGBR	SCR	s47G(1)(a)			
	Debt	\$54m	\$147m	\$84m		2.2%	BBB-				
Quotes	Genex Managing Director Michael Addison said: "We are pleased to partner with the CEFC to develop this project. The development of the Kidston Renewable Energy Hub is an important step in the transition of the Australian economy to a clean, low carbon economy."					Estimated lifetime abatement	2.5Mt CO ₂	Current Status	Awaiting first draw		



Demonstrating the value of Green bond certification

Project	s47G(1)(a)	Borrower	Perpetual Corporate Trust Ltd as trustee of Flexi ABS Trust 2017-1		Committed	14 Feb 2017			
Description	CEFC provided a \$20m investment in a Climate Bonds Initiative-certified AAA tranche within a ~\$265m securitisation sponsored by FlexiGroup. This is the CEFC's second investment in a "green securitisation" with FlexiGroup. The underlying assets supporting the green tranche are receivables from residential solar PV systems.								
Facilitating finance	The green tranche (\$50m of the \$265m bond) pricing achieved 0.03 per cent below equivalent non-certified bonds. This shows the high demand for green investments and shows investors are willing to pay a premium for exposure to environmentally friendly assets. Experience in the Australian green bond market to-date showed that by creating and certifying a green tranche, issuers would attract a wider pool of investors, however the Flexi issuances have demonstrated that there is also a potential financial benefit to be obtained as well. This is an important development in the Australian green bond market and is likely to encourage issuers to become more active in this market and attract further flows of finance into clean energy in Australia.								
CEFC rationale	The CEFC's commitment is important in helping to further support the development of a more varied and flexible green bond market in Australia and helps to pave the way for the rollout of similar transactions. The second Australian example of a securitisation Climate Bond should encourage other issues of a similar product. This is a new financial product in the clean energy financing sector, with the first ever issuance (globally) by Flexi in 2016 (which also had the CEFC's support). The CEFC's sees continued support of benchmark certified green bond issuers as a valuable role for it to play in the market to help facilitate finance.								
Financial metrics	Finance type	CEFC investment commitment	Total Project \$	Private sector investment commitment	s47G(1)(a)	5yr CGBR	s47G(1)(a)		
	Debt	\$20m	\$50m	\$30m		2.2%			
Quotes						Estimated lifetime abatement	0 tCO ₂	Current Status	Interest Period



Australia's first clean energy seed fund

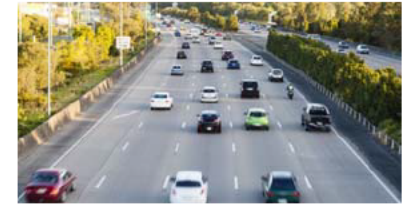
Project	s47G(1)(a)	Equity	Clean energy seed fund		Committed	1 March 2017		
Description	The CEFC (through the Clean Energy Innovation Fund which is a CEFC/ARENA partnership) made a cornerstone commitment of up to \$10m towards Australia's first Clean Energy Seed Fund, managed by Artesian Venture Partners. The \$26m seed fund will focus on unearthing and financing emerging innovations and startups in clean energy. The seed fund will look to invest in 30-50 start-ups focusing on innovative new clean energy technologies like storage, transport, biofuels, bioplastics and systems control.							
Facilitating finance	This fund is the first of its kind in Australia and has been designed to open up opportunities for corporate, institutional, high net worth individuals and impact investors to diversify their exposure and invest in Australian clean energy startups. The fund aims to encourage greater investment and participation in the early stage clean tech sector and co-investment from a wide range of investors. The co-investment fund model employed by Artesian Venture Partners encourages collaboration between a wide range of accelerators, incubators, angel groups and university programs along with the strategic and financial inputs of high net worth individuals, corporate, institutional and impact investors.							
CEFC rationale	This investment forms part of Australia's \$1 billion Clean Energy Innovation Fund. The fund will aim to increase the supply of clean energy startups in Australia and is set to play an important role in building a vibrant and sustainable early stage clean energy venture pipeline in Australia.							
Financial metrics	Finance type	CEFC investment commitment	Total Project \$	Private sector investment commitment	s47G(1)(a)	5yr CGBR	s47G(1)(a)	
	Equity	\$10m	\$26m	\$16m		2.2%		
Quotes	Artesian Managing Partner Jeremy Colless: "The Clean Energy Seed Fund will target scalable, high growth potential startups, fuelling innovation and creating opportunities in the development of clean technology. It will look across sectors such as the internet of things, energy storage, biofuels, alternative energy generation (solar, wave, geothermal, wind), metering and control, green building and biomaterials, transport technologies, water and waste".				Estimated lifetime abatement	Conservatively assumed 0. While the fund will lead to emissions reduction, quantum can't be quantified at this time.	Current Status	Awaiting financial close and first draw in April 2017.



Large-scale solar for Victoria and Queensland

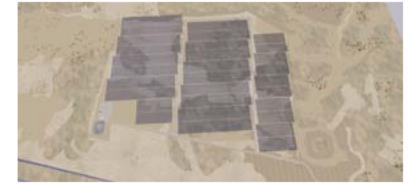
Project	s47G(1)(a)	Borrower	Edify Energy Pty Ltd and Wirsol Energy Limited		Committed	13 March 2017			
Description	CEFC committed \$77m to three large-scale solar projects in Queensland and Victoria. The projects are expected to be operational by the start of 2018 and are being developed by Australia's Edify Energy, alongside leading international renewable energy investor, Wirsol. They include: 57.5MW (AC) Whitsunday Solar Farm and 57.5MW (AC) Hamilton Solar Farm (both north of Collinsville, Qld) and the 50MW (AC) Gannawarra Solar Farm, west of Kerang in Vic.								
Facilitating finance	<p>At the time of financing, this transaction was Australia's largest single solar project financing deal. The CEFC worked alongside domestic and international financiers (Commonwealth Bank and Germany's NORD/LB) to arrange a syndicated senior debt facility (over a long tenor of 15 years) to support the three projects. Edify Energy and Wirsol are providing equity. s47G(1)(a)</p> <p>Through the CEFC's large-scale solar financing program, the CEFC is providing tailored finance to accelerate large-scale solar projects in Australia at the lowest possible cost. The program has had a very strong level of interest (s47G(1)(a)) and is helping to build confidence in the sector. Through the program, there is now a growing appetite from investors to support both contracted solar projects and to take some level of merchant energy price risk. Whilst the Whitsunday and Gannawarra solar farms have PPAs, the Hamilton solar farm's energy will be sold into the grid on a predominantly uncontracted or merchant basis, which often means it is more difficult to attract private sector debt finance.</p>								
CEFC rationale	The combined 165MW (AC) of new capacity will produce enough energy to power an estimated 87,000 homes. The projects will lead to 300 jobs during construction. Gannawarra is also Victoria's first large-scale solar farm, representing the achievement of an important new milestone in the state's renewable energy transition. This will help expand the technological and geographic diversity of renewable generation in Australia, which, in-turn, helps improve the stability and reliability of the grid.								
Financial metrics	Finance type	CEFC investment commitment	Total Project \$	Private sector investment commitment	s47G(1)(a)	5yr CGBR	s47G(1)(a)		
	Debt	\$77m	\$385m	\$304m		2.24%			
Quotes	Edify Energy Chief Executive John Cole: "We applaud the work of the CEFC in lending to large-scale solar projects, in this case, side-by-side with both domestic and international commercial lenders. This diverse lenders' group is testament to the quality of the three projects"					Estimated lifetime abatement	7Mt CO ₂	Current Status	Awaiting first draw

Commonwealth Bank Climate Bond



Project	s47G(1)(a)	Borrower	Commonwealth Bank		Committed	28 March 2017			
Description	CEFC was a cornerstone investor in the Commonwealth Bank's inaugural certified Climate Bond which will be used to fund 12 Australian projects, including energy efficient buildings, wind and low carbon transport. This is the biggest climate bond issued to date by a private sector issuer.								
Facilitating finance	CBA sought the involvement of the CEFC as a cornerstone investor to allow them to have more confidence in building an investor book for the transaction. The CEFC has been active in driving the establishment of Australia's emerging green bond market as part of its role in helping expand and deepen the clean energy investor market in Australia. Investing in this transaction should catalyse further investment in the green bond market from co-investors and will continue the momentum of growth of a green investment class in the Australian capital markets.								
CEFC rationale	The CEFC supported this green bond as public issuances of green bonds create an opportunity for investors to increasingly incorporate environmental factors into their investment analysis. It is important for the CEFC to be leading the way in new financial products in the clean energy sector, such as the emerging green bond market. CEFC involvement has also helped support industry acceptance of the desirability to commit to certification under the climate bond initiative, as this assists investor confidence and standard setting in this important market. Another reason the CEFC invested in this bond is that it was the first certified bond in Australia to include low carbon transport in the portfolio, at issue date.								
Financial metrics	Finance type	CEFC investment commitment	Total project \$	Private sector investment commitment	s47G(1)(a)	5yr CGBR	s47G(1)(a)		
	Senior debt	\$100m	\$650m	\$550m		2.3%			
Quotes	Commonwealth Bank Managing Director Debt Markets, Simon Ling, said: "We're pleased to have the CEFC as a cornerstone investor in our first climate bond, recognising the important role it plays in nurturing the growth of climate bonds to support the development of the clean energy sector in Australia."				Estimated lifetime abatement	Conservatively assumed 0. While the bonds will lead to emissions reduction, quantum can't be quantified at this time.		Current status	Fully drawn

Longreach solar farm



Project	s47G(1)(a)	Borrower	Canadian Solar (Australia) Pty Ltd		Committed	29 March 2017			
Description	CEFC committed \$12m for the construction of the 15MW Longreach Solar PV plant, which is expected to provide power to around 5,000 Queensland homes. The plant uses single-axis tracking which maximises the amount of generation achieved, by enabling the panels to capture sunlight for a longer period each day than fixed panels. Construction has begun and the plant is expected to reach commercial operations in the first quarter of 2018. Canadian Solar has secured a 20-year offtake agreement for the power generated with the Queensland Government								
Facilitating finance	When CEFC first agreed to work with Canadian Solar to provide finance for the Longreach solar farm, the project was subject to merchant price risk, meaning it was very hard to attract finance from commercial lenders necessitating the involvement of the CEFC. The CEFC's flexibility to take some merchant risk on a project, if necessary, allowed Canadian solar to bid with confidence into the ARENA solar program knowing that the CEFC would support them, even if they were unable to secure a PPA. Without the CEFC's support, and acknowledging that most solar projects will not be successful in attracting a PPA until after they have received a grant (as the grant makes solar more competitive with wind in terms of PPA pricing), neither ARENA nor Canadian Solar would have any certainty that the project could actually get built with the grant amount requested. With the CEFC's commitment and with a grant from ARENA, the project was subsequently successful in winning a 20-year Queensland Government Solar 150 PPA, which made it attractive to commercial lenders. However, Canadian Solar decided to still proceed with finance from the CEFC, as it had been involved from such an early stage as well as from Bank of Tokyo-Mitsubishi UFJ (for 50% of the project).								
CEFC rationale	Solar is an increasingly cost-effective energy solution in areas like Longreach which has a high level of solar irradiation. The project also represents a significant injection into the Queensland economy, that will create new jobs in regional Queensland during construction and drive further growth, expertise and diversity in the renewable energy sector. Another important benefit is that the land owners will generate a long-term leasing income from hosting the solar panels which will help diversify farmers income and help protect against times of drought.								
Financial metrics	Finance type	CEFC investment commitment	Total project \$	Private sector investment commitment	s47G(1)(a)	5yr CGBR	s47G(1)(a)		
	Senior debt	\$12m	\$29m (\$1m ARENA grant)	\$17m		2.3%			
Concession details	No concessionality is present in the margin, only a notional s47G(1)(a) for providing fixed rate financing without a swap margin.								
Quotes	Canadian Solar General manager Daniel Ruoss said: "We expect the Longreach Solar Farm, with its 54,600 panels across 86 hectares, to generate enough solar to power around 5,000 Queensland homes".					Estimated lifetime abatement	681,130 tCO ₂	Current status	Availability period

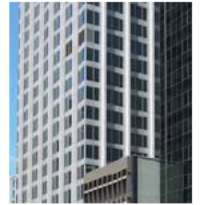


Project	s47G(1)(a)	Borrower	Canadian Solar (Australia) Pty Ltd		Committed	30 March 2017			
Description	The CEFC committed \$19.5m to the 25 MW utility scale solar farm in Oakey, west of Toowoomba (Oakey 1) in Queensland. The solar farm is expected to provide power to ~7,000 homes and the project proponents are now planning for a 55MW expansion to the project (Oakey 2), once the stage 1 is constructed. The plant uses single-axis tracking which maximises the amount of generation achieved, by enabling the panels to capture sunlight for a longer period each day. Canadian Solar secured a 20-year offtake agreement with the Queensland Government for stage 1. Construction began in June 2017 and stage 1 is expected to be operation in 2018.								
Facilitating finance	When CEFC first agreed to work with Canadian Solar to provide finance for the Oakey solar farm, the project was subject to merchant price risk, meaning it was very hard to attract finance from commercial lenders necessitating the involvement of the CEFC. The CEFC's flexibility to take some merchant risk on a project if necessary allowed Canadian solar to bid with confidence into the ARENA solar program knowing that the CEFC would support them, even if they were unable to secure a PPA. Without the CEFC's support for this project, and acknowledging that most solar projects will not be successful in attracting a PPA until after they have received a grant offer (as the ARENA grant makes solar more competitive with wind in terms of Power Purchase Agreement pricing), neither ARENA nor Canadian Solar would have had any certainty that the project would actually be built with the grant amount requested. With the CEFC's commitment and with a grant from ARENA, the project was subsequently successful in winning a 20-year Queensland Government Solar 150 PPA which made it attractive to commercial lenders. However, Canadian Solar decided to still proceed with finance from the CEFC, as it had been involved from such an early stage as well as from Bank of Tokyo-Mitsubishi UFJ (for 50% of the project). The 55MW Oakey 2 project (adjacent to Oakey, and based on the same EPC/ O&M agreements as Oakey; also has common connection asset) is likely to have up to 100% merchant exposure and Canadian Solar are eager to have CEFC involvement in this project too due to the CEFC's ability to consider merchant exposure and the value of a long term CEFC-Canadian Solar partnership.								
CEFC rationale	Solar is an increasingly cost-effective energy solution in areas like Oakey which has a high level of solar irradiation. The project also represents a significant injection into the Queensland economy, that will create new jobs in regional Queensland during construction and drive further growth, expertise and diversity in the renewable energy sector. Another important benefit is that the land owners will generate a long-term leasing income from hosting the solar panels which will help diversify farm income and protect against times of drought.								
Financial metrics	Finance type	CEFC investment commitment	Total project \$	Private sector investment commitment	s47G(1)(a)	5yr CGBR	s47G(1)(a)		
	Senior debt	\$19m	\$56m (\$2m ARENA)	\$35m		2.3%			
Concession details	No concessionality is present in the margin, only a notional s47G(1)(a) for providing fixed rate financing without a swap margin.								
Quotes	Canadian Solar General manager Daniel Ruoss said: "The Oakey Solar Farm, with its 93,600 panels across 60 hectares, is expected to generate enough power for around 7,000 homes. We're already planning for a 55MW expansion to the Oakey project, once the first stage is constructed."					Estimated lifetime abatement	1MtCO ₂	Current status	Awaiting first draw

Bodangora Wind Farm in NSW



Project	s47G(1)(a)	Borrower	Infigen Energy		Committed	30 March 2017			
Description	CEFC committed \$81m to the 113MW Bodangora Wind Farm near Wellington in NSW which is expected to produce enough energy to meet the needs of over 49,000 homes. EnergyAustralia has agreed to purchase 60 per cent of Bodangora Wind Farm's electricity and LGC output to 2030. The wind farm will include 33 General Electric 3.43MW turbines and it is targeted to be fully operational in the second half of 2018.								
Facilitating finance	<p>Whilst a number of financiers are becoming more comfortable with financing wind and solar farms in Australia, they tend to only do so where there is a PPA attached for 100% of the output and offer financing over shorter tenors (up to 7 years). s47G(1)(a)</p> <p>With limited options, the Sponsors requested the CEFC's participation alongside German investment bank NordLB. This will be NordLB's first wind financing in Australia. By supporting projects such as Bodangora Wind Farm with the partial contracting of merchant price risk, the CEFC are delivering a tailored financing model that supports the developer's needs as well as mitigates risk to the lender. CEFC involvement will also help facilitate long dated debt capital into the Australian wind market for a project that has a degree of merchant exposure. In addition, the entry of NORB/LB to the Australian renewable energy market will help create an additional source of finance for large-scale renewable energy projects.</p>								
CEFC rationale	This project is helping regional New South Wales capitalise on its natural strength in renewable energy and together with finance the CEFC has provided to other NSW renewable energy projects, will contribute to a substantial increase in the state's clean energy capacity. It will also deliver regional employment opportunities with around 120 jobs created during construction.								
Financial metrics	Finance type	CEFC investment commitment	Total project \$	Private sector investment commitment	s47G(1)(a)	5yr CGBR	s47G(1)(a)		
	Senior debt	\$81m	\$236m	\$155m		2.3%			
Quotes	Infigen Energy's Managing Director Ross Rolfe said: "We have been delighted to work with our partners in bringing this project to fruition. Critical to our success has been the role played by the Clean Energy Finance Corporation and NORD/LB, in providing Infigen with debt facilities."					Estimated lifetime abatement	6MtCO ₂	Current status	Availability Period



Investa Office Fund Green Bond for low carbon buildings

Project	s47G(1)(a)	Borrower	Investa Property Group		Committed	30 March 2017			
Description	The CEFC committed \$20m to the inaugural Investa Office Fund \$150m Green Bond, certified by the Climate Bonds Initiative. Proceeds of the bond will be allocated against a portfolio of low carbon buildings.								
Facilitating finance	The CEFC committed to being a cornerstone investor and the CEFC's participation supported Investa's decision to issue the bond and assisted Investa to attract capital from other capital market participants. This transaction provides a model for the broader property sector in seeking new sources of finance for energy efficient projects. It demonstrates the potential for different issuers to access the green bond market and strengthens the case for investors to expand their mandates for investment in green bonds. This transaction also helps support the development of a more varied and flexible green bond market, in particular, in the property sector. It can now be replicated by others in the property sector and will have demonstration value within the sector.								
CEFC rationale	This was the first AUD green bond issuance by a non-financial corporate and the first certified issuance by an Australian property entity in any jurisdiction. As such, the transaction is important as it expands the types of financial instruments and sets a precedent deal for the property sector when considering investment options. In addition, CEFC participation in this bond enabled the CEFC to access data on the profile of investors in this bond which is essential to monitor the sector and act as leader in this space.								
Financial metrics	Finance type	CEFC investment commitment	Total project \$	Private sector investment commitment	s47G(1)(a)	5yr CGBR	s47G(1)(a)		
	Senior debt	\$20m	\$150m	\$130m		2.3%			
Quotes	Penny Ransom, Investa Office Funds's Fund Manager said: "We are very pleased to issue our first green bond. It highlights the Fund's strong sustainability credentials and demonstrates our commitment to a low carbon economy."				Estimated lifetime abatement	Conservatively assumed 0. While the bonds will lead to emissions reduction, quantum can't be quantified at this time.	Current status	Fully drawn.	

Sydney plant that turns waste into fuel



Project	s47G(1)(a)	Borrower	ResourceCo Pty Ltd		Committed	13 April 2017			
Description	CEFC committed \$30m to ResourceCo to fund the construction of two alternative fuel plants. The plants will transform selected non-recyclable waste streams into solid fuel, known as Processed Engineered Fuel (PEF). The first plant will be built at Wetherill Park in Sydney and the second plant is yet to be announced s47G(1)(a). When operational, the Wetherill Park plant will process around 150,000 tonnes of waste a year to produce approximately 100,000 tonnes of PEF and recover other commodities such as metal, clean timber, and inert materials.								
Facilitating finance	The CEFC finance will enable ResourceCo to accelerate the development of the Wetherill Park plant, and proceed with another similar facility when they determine the location for the second plant.								
CEFC rationale	ResourceCo may have been able to source debt for a single project from commercial banks, but CEFC's financing structure provides a commitment to enable ResourceCo to fund multiple projects, thus accelerating project delivery. Processed Engineered Fuel (PEF) is used in cement kilns, reducing the reliance on coal and other fossil fuels, greatly reducing carbon emissions. PEF demonstrates the incredible potential to transform waste, that would otherwise go into landfill, into a baseload energy source. The project demonstrates how latest energy from waste technology can deliver clean energy in Australia. When fully operational, these projects combined will reduce reliance on landfill (by ~300,000 tonnes p.a.) and fossil fuels, thus reducing greenhouse gas emissions (~8Mt over the lifetime of the equipment) and avoid potential soil and water contamination. The projects will also help develop the waste to energy fuel supply chain in Australia which can provide feedstock for future energy from waste electricity generation projects.								
Financial metrics	Finance type	CEFC investment commitment	Total project \$	Private sector investment commitment	s47G(1)(a)	5yr CGBR	s47G(1)(a)		
	Senior debt	\$30m	\$35m (incl \$5m grant)	\$0m		2.1%			
Quotes	ResourceCo Managing Director Simon Brown said: "At ResourceCo we are committed to playing a key role in helping to achieve Federal Government environmental targets, including waste reduction and carbon emission avoidance. With critical finance support from the CEFC, the opening of the NSW alternative fuel plant will work to achieve just that"					Estimated lifetime abatement	8MtCO ₂	Current status	Availability Period



Expansion of the NAB Energy efficient bonus program

Project	s47G(1)(a)		Borrower	National Australia Bank		Committed	13 April 2017		
Description	The CEFC committed an additional \$180 million in finance to the NAB Energy Efficient Bonus program, following its success in helping Australian businesses transform their energy use. The new finance means the CEFC has now committed \$300 million to the NAB Energy Efficient Bonus program, which was launched in 2015 with an initial \$120 million commitment from the CEFC. The program provides customers with a 0.7 per cent discount on NAB's standard equipment finance rate for loans for eligible clean energy investments, such as vehicles, energy efficient irrigation systems, solar PV, building upgrades, lighting upgrades, processing line improvements and refrigeration.								
Facilitating finance	The program aims to facilitate finance to improve energy efficiency by influencing customers' purchasing behaviour through lower cost finance. The simplicity of this structure enables NAB to fund smaller projects which the CEFC could not finance on a bilateral basis. NAB deployed all of the funding available under the original program but was keen to continue its program. This expansion will make further finance available for more businesses to tap into the benefits of energy efficient, renewable energy and low emissions technologies.								
CEFC rationale	The program has already provided finance for more than 1,000 clean energy assets across Australia. The additional finance will help accelerate the uptake of clean technologies, help businesses reduce their grid energy costs, lower their carbon emissions and improve productivity through more efficient operating practices. This program is particularly beneficial to agricultural customers, of the initial \$120m program, 87% was used by NAB agribusiness and rural customers.								
Financial metrics	Finance type	CEFC investment commitment	Total project \$	Private sector investment commitment	s47G(1)(a)	5yr CGBR	s47G(1)(a)		
	Senior debt	\$180m	\$180m	0		2.1%			
Concession details	The concessionality is used to create an incentive for NAB customers to bring forward capital outlay in this space to take advantage of this opportunity. Energy efficiency awareness in the purchasing process is expected to increase as NAB's customers will have a financial benefit from making energy conscious purchases, driven by the CEFC's concessionality benefit								
Quotes	Khan Home, General Manager NAB Agribusiness said: "After surveying 5,000 of our farmers for two consecutive years, 85 per cent told us they saw energy costs as a significant business risk. So, we're helping our customers transition to more sustainable business models and, particularly for intensive agriculture, significantly reducing their energy and water bills"					Estimated lifetime abatement	1MtCO ₂	Current status	Availability period



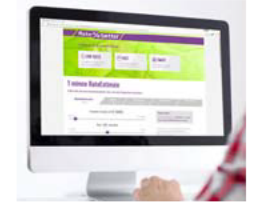
Green bond dedicated to low carbon buildings

Project	s47G(1)(a)	Borrower	Investa		Committed	21 April 2017		
Description	The CEFC committed \$19 million to Investa Commercial Property Fund's (ICPF) first Green Bond - a \$100 million Australian dollar issuance, certified by the Climate Bonds Initiative. The bond will be allocated against a portfolio of low carbon buildings, located in the CBD of major Australian capital cities.							
Facilitating finance	Participation in green bonds that meet the CEFC mandate continues the CEFC's role as a central pillar of this market. This is the second issuance by a Real Estate Investment Manager in the Australian Green Bond market following the successful issuance of the Investa Office Fund green bond earlier in 2017. With a tenor of 10 years, this will be the longest accredited green bond issued to date in the property sector. It represents an important step in the development of the Australian green bond market, demonstrating different types of issuers which can come to market and for different tenors. It is likely that this transaction will be replicated by others in the property sector and will have demonstration value within the sector, showing how green bonds can be an alternative way to raise funds against energy efficient commercial buildings.							
CEFC rationale	Investa is the first Australian property company to commit to a science based target of net zero emissions by 2040 supported by a work plan of carbon reduction programs. By continuing to be active and invest in new green bond issuances, the CEFC is able to tap into information and better understand the evolution of investors profiles and appetite. The issuance of green bonds is a new financing tool for the property sector, in particular in Australian dollars, as the investor base for green bonds continues to increase. This assists the case for capital market investors to develop mandates for green bonds as it demonstrates the diversity of potential issuers of green bonds.							
Financial metrics	Finance type	CEFC investment commitment	Total project \$	Private sector investment commitment	s47G(1)(a)	5yr CGBR	s47G(1)(a)	
	Senior debt	\$19m	\$100m	\$81m		2.1%		
Quotes	Nina James, Investa's General Manager, Corporate Sustainability said: "The critical factor in ICPF's Green Bond issuance is the use of the proceeds. Given Investa's carbon reduction strategy and leadership in sustainable office building management and re-positioning, we plan to apply ICPF's Green Bond proceeds to low carbon building projects that meet the criteria set out in the Climate Bonds Standard"				Estimated lifetime abatement	Conservatively assumed 0. While the bonds will lead to emissions reduction, quantum can't be quantified at this time.	Current status	Fully drawn

Coal to solar in North Queensland



Project	s47G(1)(a)	Borrower	RATCH-Australia		Committed	5 May 2017		
Description	The CEFC committed \$60m to the 42.5MW (AC) Collinsville solar PV plant near Bowen in North Queensland on the old site of the Collinsville coal power station. The plant is expected to generate sufficient energy to power 15,000 homes. s47G(1)(a)							
Facilitating finance	The project also received funding from ARENA as part of its Large-Scale Solar Funding Round. The combined CEFC/ARENA solar program, has driven a significant reduction in the cost of solar to the point where it is very competitive with other forms of electricity. The program has seen a strong influx of developers into the sector and an increasing investment appetite from a widening base of institutional investors. CEFC finance has helped developers secure the backing they need and has helped investors find the right level of comfort to invest so that projects can be constructed sooner. s47G(1)(a)							
CEFC rationale	This project showcases how old fossil fuel power station sites can be repurposed as new renewable energy bases, benefiting from existing infrastructure and transmission lines, while helping to transform Australia's energy mix. The project will generate around 70 regional jobs during construction.							
Financial metrics	Finance type	CEFC investment commitment	Total project \$	Private sector investment commitment	s47G(1)(a)	5yr CGBR	s47G(1)(a)	
	Senior debt	\$60m	\$107m (incl \$10m grant)	\$38m		2.1%		
Quotes	RATCH-Australia Corporation Executive General Manager Business Development Anthony Yeates said: "We have been working on redevelopment options for the site for a really long time and it is great to finally see one of these options come to life. The finance from the CEFC and ARENA's funding have helped us repurpose a disused site which receives optimal sunshine, and can take advantage of existing infrastructure to feed its solar output into the grid".					Estimated lifetime abatement	1.6Mt CO ₂	Current status



Australia's first peer-to-peer green lending

Project	s47G(1)(a)	Borrower	Ratesetter Australia		Committed	12 May 2017			
Description	<p>CEFC's committed \$20m to Australia's first peer-to-peer green lending platform, RateSetter's Green Loan marketplace. The innovative online platform brings together investors, borrowers and clean energy product providers who have a shared interest in low emissions, energy efficiency and renewable energy projects. It allows investors to lend directly to creditworthy borrowers to buy or install approved "green" products. Investors can nominate the amount they wish to invest, the interest rate they are prepared to accept, and their request can then be matched to approved borrowers. Borrowers can access finance to invest in eligible clean energy assets. Eligible assets include: solar and storage equipment – such as solar panels and inverters for rooftop installation, solar thermal, including solar hot water and batteries that form part of a solar installation as well as energy efficient and low emission equipment – such as power factor correction, voltage optimisation, LED lighting, heating, ventilation and air conditioning.</p>								
Facilitating finance	<p>The CEFC's commitment to this new platform will increase the flow of finance into the clean energy sector through RateSetter's retail lender base. The facility will also create a real opportunity for retail investors to have access to a regulated 'green loan' product for the first time in the Australian market. The platform may pave the way for a rollout of similar 'green' platforms. As the CEFC's key role is to facilitate finance in the clean energy sector, it is always looking to support the rollout of new and innovative clean energy finance approaches to expand options available to borrowers as well as investors. This platform fits squarely within that purpose, representing a new funding channel for borrowers that are seeking a more positive customer experience than conventional financing options specifically targeted at green assets. RateSetter also has a significant investor base of self-managed superannuation funds. Together with the CEFC's aggregation partnerships with the major banks, Ratesetter also enables the CEFC to expand its reach and target customers seeking smaller loans to invest in clean energy. Due to the CEFC's small size, without collaborating with major banks and platforms such as Ratesetter, it would be unable to reach thousands of customers and support their energy efficiency endeavours.</p>								
CEFC rationale	<p>This facility offers the potential to improve the marketability of green assets, by bringing purchasers, installers and manufacturers closer together. There have been green loans before, and there has been peer-to-peer lending, but combining the two into one platform is an Australian first. It is intended that the CEFC investment will be a catalyst to encourage borrowers to increase their investment in clean energy projects, reducing their energy consumption and lowering their carbon emissions.</p>								
Financial metrics	Finance type	CEFC investment commitment	Total project \$	Private sector investment commitment	s47G(1)(a)	5yr CGBR	s47G(1)(a)		
	Senior debt	\$20m	\$20m	0		2.1%			
Quotes	<p>RateSetter CEO Daniel Foggo said: "We are delighted to have the support of the CEFC to develop this initiative to support the uptake of clean energy in the home, on the road and in the running of Australian businesses".</p>					Estimated lifetime abatement	134,228 tCO ₂	Current status	Availability period

Electric vehicle manufacturing for commercial vans and trucks



Project	s47G(1)(a)	Borrower	SEA Automotive Pty Ltd		Committed	8 June 2017			
Description	A \$5 million CEFC facility to SEA Automotive Pty Ltd to finance components to support the assembly of 100% electric commercial vans and medium duty trucks. SEA has developed three electric drive system models that can be fitted to commercial vehicles to allow them to be converted to 100 per cent electric operation. The vehicles have a 200km range and around a 6-hour battery charge. This commitment is part of the Clean Energy Innovation Fund.								
Facilitating finance	This project uses a unique facility structured as an inventory financing facility with a borrowing base test and is the first time CEFC has lent on this basis. The transaction provides a precedent for other projects in the clean energy sector that may suit this type of working capital facility, particularly in manufacturing.								
CEFC rationale	This fleet of vehicles have no tailpipe exhaust emissions and are quieter, thus reducing transport emissions (including nitrous oxide, particulate matter, and carbon emissions) as well as noise pollution. The electric trucks will replace diesel medium-duty commercial vehicles. Emissions from light vehicles make up to 10 per cent of Australia's total emissions, with overall transport activity expected to continue to grow in the future so the development of cost-effective ways to transition commercial vehicles to lower emissions technologies is paramount for cutting national carbon emissions. As battery prices decrease, the commercial case for these vehicles becomes more compelling. To date electric vehicles have had limited success in Australia, and in particular commercial and heavy-duty trucks have had few electric vehicle options. CEFC finance was necessary to support the Borrower move from prototype phase to completing orders and allow them to scale their business. This project will also help to support a new manufacturing sector in Australia as they are assembled in Dandenong, Victoria s47G(1)(a), with parts sourced locally and from overseas. The increased presence of electric vehicles on the road will also support the commercial case for increased electric vehicle charging infrastructure.								
Financial metrics	Finance type	CEFC investment commitment	Total project \$	Private sector investment commitment	s47G(1)(a)	5yr CGBR	s47G(1)(a)		
	Senior debt	Up to \$5m	Up to \$8m (incl \$0.5m grant)	\$2.5m		2%			
Quotes	SEA Executive Chairman Tony Fairweather said: "Australia has the potential to become a global leader in the rapidly emerging electric vehicle industry, and this finance will help SEA Electric be part of that revolution"					Estimated lifetime abatement	11,869 tCO ₂	Current status	Availability Period, \$1.23m drawn.



Lithium project to boost supply chain for electric vehicles and storage

Project	s47G(1)(a)	Borrower	Pilbara Minerals Limited		Committed	12 June 2017			
Description	CEFC invested \$15m USD (c. \$20m AUD) in a bond issued by Pilgangoora Operations (wholly owned subsidiary of Pilbara Minerals Limited) to finance the development of a new mine in the Pilbara region of WA. The mine will produce 2 million tonnes per annum (tpa) of lithium ore, which is processed into around 300,000 tpa of spodumene concentrate at site. The spodumene concentrate is then used to produce lithium ion batteries. The mine will also produce a small amount of tantalite concentrates, which are used in consumer electronics.								
Facilitating finance	This is the first time the CEFC has participated in a US denominated bond issuance, reflecting its role in creating new sources of finance to support the clean energy market, and demonstrating the potential of various debt instruments to finance greenfield projects. The CEFC was a cornerstone investor and the only Australian investor in the bond, which attracted a number of institutional investors from Asia, Europe and the US. The investment demonstrates to other Australian investors that a senior secured bond (with project finance characteristics) is a viable debt instrument for a greenfield project with construction risk that would typically be financed by traditional project finance bank debt.								
CEFC rationale	The CEFC supported this project as it is important for the development of the renewables sector. It is the first clean energy resources and lithium project the CEFC has invested in. Globally, there is increasing demand for lithium batteries due to increased demand for electric vehicles and storage. To support this demand, the supply of lithium ore is crucial and Australia has the fourth largest lithium reserves in the world. The lithium concentrate supplies to be produced by this project will help build Australia's capacity to supply much needed resources for clean energy technologies. It will help underpin a new lithium resource extraction company in Western Australia as well as generate ~300 jobs in the region.								
Financial metrics	Finance type	CEFC investment commitment	Total project \$	Private sector investment commitment	s47G(1)(a)	5yr CGBR	s47G(1)(a)		
	Senior debt	\$15m USD c. \$20m AUD	\$340m	\$320m		1.9%			
Quotes	Pilbara Minerals Managing Director and CEO, Ken Brinsden, said: "We are delighted to welcome CEFC as a cornerstone investor in our funding package for the Pilgangoora Project, which is set to become one of the most important new sources of hard rock lithium supply to meet burgeoning global demand for lithium raw materials over the coming decades."					Estimated lifetime abatement	0 tCO ₂	Current status	Fully Drawn.



Moorebank Logistics Park to cut transport emissions

Project	s47G(1)(a)	Borrower	Qube Holdings		Committed	19 June 2017			
Description	The CEFC committed \$150m to the Moorebank Logistics Park, a major intermodal terminal in south-western Sydney. The project includes an import-export terminal, an interstate terminal, 850,000 sqm of warehousing and a new rail line. Qube Holdings is developing the Park which will take trucks off the road by switching to rail to distribute freight to and from Port Botany. The project will also incorporate renewable energy and energy efficient equipment onsite. The terminal is targeting full capacity in 2030. This is part of the CEFC's Sustainable Cities Investment Program and is the first transport infrastructure transaction for CEFC.								
Facilitating finance	Whilst Qube did not have a barrier to accessing finance for the project, they had limited options for loans with s47G(1)(a) The CEFC was able to provide s47G(1)(a) in exchange for Qube's commitment to undertake additional sustainability initiatives as part of the project. The CEFC used its role as financier to influence decisions relating to the project's engineering, construction, and design to maximise energy efficiency and reduce emissions. This was achieved by a combination of an initial sustainability report prepared by Qube and reviewing, in detail, environmental impact statements that Qube submitted as part of their development approvals. These statements contain information about what the developer could potentially do to mitigate environmental impacts however, the developer is generally not obligated to implement these options to obtain project approval. However, CEFC and Qube reached an agreement which includes a comprehensive list of feasible sustainability initiatives that Qube has committed to undertake as part of the project as well as a list of new innovative solutions which Qube will endeavour to incorporate to retain CEFC financing. This includes commitments to: "Excellent" Design, As Built and Operations ISCA rating certification, the adoption of low embodied energy construction methods; installation of up to 60MW of solar generation capacity on warehousing roof space; establishment of embedded electricity network to accommodate renewable energy, future provisioning for precinct power storage; and automation and electrification of terminal operations.								
CEFC rationale	The project will reduce urban congestion and switch the movement of 1.55 million freight containers from road to rail, saving more than 110,000 tCO ₂ e p.a. The switch will cut a ~3,000 truck journeys a day on Sydney's roads, particularly the M5. It is expected to employ over 1,300 during construction & ~ 6,800 when operating.								
Financial metrics	Finance type	CEFC investment commitment	Total project \$	Private sector investment commitment	s47G(1)(a)	5yr CGBR	s47G(1)(a)		
	Senior debt	\$150m	\$2,000m	\$1,850m		2%			
Concession details	Small concessionality was proposed via both s47G(1)(a) in exchange for Qube's commitments to undertake extensive additional sustainability initiatives as part of the project.								
Quotes	Qube Holdings Managing Director Maurice James said: "We are extremely proud to be the first transport infrastructure project which the CEFC has chosen to support in this way. Being able to deliver a faster and more reliable supply chain that creates savings for our customers, as well as remove thousands of truck trips from our roads at the same time as delivering very significant environmental benefits is a great trifecta."					Estimated lifetime abatement	4.9 MtCO ₂	Current status	Fully drawn



Energy efficient student accommodation

Project	s47G(1)(a)	Borrower	Excel RE Pty Ltd atf Waymouth Street Property Trust (an entity owned by a 50:50 JV comprising Blue Sky Alternative Investments Limited and Goldman Sachs)			Committed	19 June 2017		
Description	The CEFC committed \$32m in senior debt finance to drive the development of an innovative new 428-bed student accommodation project in Adelaide. It is an off-campus, purpose-built student apartment complex and is a joint venture investment between Blue Sky Private Real Estate (BSPRE) and Goldman Sachs, expected to open in February 2018. The complex is in Adelaide's CBD and is within walking distance of the University of South Australia and the University of Adelaide. This is part of CEFC's Sustainable Cities Investment Program.								
Facilitating finance	Early in the development, the CEFC asked Blue Sky to think about how they could improve energy efficiency in their design beyond what they had originally planned. Blue Sky looked at a number of options, and after further discussions with their Environmentally Sustainable Development consultant, found that with some changes in lighting, air-conditioning, hot water and the installation of solar PV, they could achieve a minimum 25% improvement in energy efficiency. These design changes resulted in a small increase in upfront capital expenditure (<1% of total construction costs) but will be more than offset by lower operational costs (i.e. energy cost savings) leading to an increased property valuation. On this basis, the CEFC agreed to provide up to \$32m in senior debt finance to support the project.								
CEFC rationale	In 2017, the CEFC commissioned a report which identified student accommodation as an area that could unlock substantial and ongoing energy savings from increased energy efficiency. Student accommodation developers have so far had a limited focus on energy efficiency, tending to build to minimum standards under the National Construction Code, which is typically the lowest cost option. However, this complex will be fitted with energy efficient heating, ventilation and air conditioning, energy efficient equipment, LED lighting, centralised gas water heating, water efficient taps and a 25kW rooftop solar photovoltaic system which will deliver a significant reduction in the building's carbon intensity, as well as lower ongoing energy costs. This complex will thus set a new benchmark for energy efficient design and demonstrate the benefits of market-leading building standards. It will demonstrate to property developers, owners and managers that constructing the next generation of energy efficient student accommodation can be rewarded with long-term operational savings and an improved amenity, which makes a strong business case for the additional upfront investment.								
Financial metrics	Finance type	CEFC investment commitment	Total project \$	Private sector investment commitment	s47G(1)(a)	5yr CGBR	s47G(1)(a)		
	Senior debt	\$32m	\$56m	\$24m		2%			
Quotes	Blue Sky Private Real Estate Investment Director Nick Singleton said: "While liveability and sustainability are key considerations for today's students, we also expect to create benefits through reduced operating costs by integrating technologies that significantly lower base building energy usage"					Estimated lifetime abatement	5152 tCO ₂	Current status	Availability Period



New clean energy benchmark for housing developments

Project	s47G(1)(a)	Borrower	Mirvac	Committed	29 June 2017				
Description	The CEFC committed \$60m in finance to Mirvac's master planned community, Moorebank Cove, where homes are built with battery storage, solar and energy saving technologies. Mirvac's 179-lot housing estate in Sydney's west will be developed with efficiency and sustainability measures that reduce household energy costs by up to 90 per cent. This is part of the CEFC's Sustainable Cities Investment Program.								
Facilitating finance	Whilst Mirvac could have accessed finance for development elsewhere, the solar/battery storage and energy efficiency design were not included in their plans for the development. Given Moorebank Cove's location and price point, Mirvac's market research found that the typical Moorebank Cove purchaser does not have the financial capacity or willingness to pay for solar and battery systems or sustainable design features. Therefore, the CEFC offered \$60m in finance to incentivise Mirvac to improve the design and energy efficiency of their development. This finance included a small concession to offset most of the incremental cost of the solar and battery system for each house base-build. s47G(1)(a), in additional costs for the other sustainable design initiatives such as high-grade insulation, smart air exchange and solar hot water systems. It is a condition of the loan that the CEFC concession be passed onto homeowners directly, in full (i.e. that Mirvac not increase home sale prices on account of the added clean energy and sustainability initiatives).								
CEFC rationale	This is the CEFC's first investment in the private housing sector and it is aimed at setting a new clean energy benchmark for housing developments by demonstrating the value of using available technologies in homes for first homebuyers and cost-conscious families. The Project is expected to provide strong demonstration value, representing a market first in terms of the installation of these initiatives across an entire development. Another condition of the CEFC's finance is that Mirvac use its best endeavours to incorporate clean energy technologies adopted in its Moorebank Cove development to its future residential developments s47G(1)(a). It was also a condition that Mirvac commit to an extensive information sharing program including preparing case studies, presenting at conferences, participating in relevant research and communicating at investor days. This information sharing obligation will influence peer residential developers as well as help Australian home-owners understand the availability and benefits of solar and battery systems.								
Financial metrics	Finance type	CEFC investment commitment	Total project \$	Private sector investment commitment	s47G(1)(a)	5yr CGBR	s47G(1)(a)		
	Senior debt	\$60m	\$60m	\$0		2%			
Concession details	A small concession was offered to offset most of the incremental cost of the solar and battery system for each house and is directly passed onto homeowners.								
Quotes						Estimated lifetime abatement	24,145 tCO ₂ e	Current status	Awaiting first draw



Helping shopping centres throughout Australia target net-zero

Project	s47G(1)(a)	Borrower	QIC Shopping Centre Fund		Committed	30 June 2017			
Description	CEFC committed up to \$200m to Queensland Investment Corporation (QIC) Shopping Centre Fund (QSCF) to drive enhanced clean energy and energy efficiency standards across 11 shopping centres in which it holds ownership interests s47G(1)(a). This financing will assist QSCF be used to increase the NABERS Energy ratings across its portfolio to a minimum of 4 Stars over the next six years, contributing to emissions savings of up to 40%.								
Facilitating finance	While CEFC financing is only being provided to the QSCF, QSCF has influenced the holder of the remaining equity in the shopping centres, being QIC Property Fund (which currently has \$9bn in funds under management and ~20 investors), to support the proposed clean energy and energy efficiency outcome, catalysing focus and expenditure across both funds. QSCF and QIC Property Fund are both predominantly owned by Australian super funds and the CEFC expect this financing to spread awareness and appreciation of the benefits of enhanced energy efficiency and clean energy standards across a broad base of institutional investors active in the property sector.								
CEFC rationale	As part of the CEFC financing, QSCF has agreed to a range of thought leadership and information sharing initiatives clean energy initiatives s47G(1)(a) working with both tenants and also retail centre customers in terms of to communicate the improved emissions outcomes, incorporating of electric vehicle charging, and the communicating of key learnings and outcomes from improving standards across their entire portfolio with wider industry participants to drive change in the sector. Shopping centres, which account for nearly half over 20% of the commercial property sector's energy consumption, are a relatively untapped opportunity to transform energy use and reduce carbon emissions. Shopping centres have substantial energy needs as their large floor space means requirements for air-conditioning and lighting are considerable. These are areas where there are current technologies available that can make big reductions in energy use. Through this financing, the CEFC is not only able to drive change in QIC's portfolio, the investment will provide a range of case studies and applications of readily available technology to demonstrate ways to reduce emissions and save energy for both asset owners and their tenants.								
Financial metrics	Finance type	CEFC investment commitment	Total project \$	Private sector investment commitment	s47G(1)(a)	5yr CGBR	s47G(1)(a)		
	-Senior debt	\$200m	\$1bn	\$800m		2%			
Concession details	A small concession was offered to incentivize QIC's Shopping centre fund to accelerate its clean energy program								
Quotes						Estimated lifetime abatement	438,767 tCO ₂	Current status	Awaiting first draw

s47G(1)(a)

	Progress
AMP	Reviewed
ACE	Reviewed
Clean Energy Seed Fund	Reviewed
Quantum	Reviewed
Balmain	Reviewed
Baw Baw	Reviewed
Origin STS	Reviewed
Bindaree	Reviewed
EG Funds	Reviewed
Uterne	Reviewed
Yulara	Reviewed
Carbon Revolution	Reviewed
CBA 1 (Commercial/Industrial)	Reviewed
CBA 2 (Not for profit/Councils)	Reviewed
CBA EE	Reviewed
Sapphire	Reviewed
SunEdison	Reviewed
EDL	Reviewed
Flexi climate bond	Reviewed
Flexi climate bond	Reviewed
Foresight Bioenergy	Reviewed
Firstmac	Reviewed
Eclix	Reviewed
Genex	Reviewed
St George Housing	Reviewed
St George Housing	Reviewed
Greensync	Reviewed
Griffith	Reviewed
Woodlawn WF & SF	Reviewed
Investa	Reviewed
Impact Investment Group	Reviewed
LaSalle	Reviewed
Degrussa	Reviewed
Lighthouse Solar Fund	Reviewed
LGI	Reviewed
Moree	Reviewed
Macarthur	Reviewed
Melbourne University	Reviewed
City of Melbourne	Reviewed
Monash Uni	Reviewed
Dubbo	Reviewed
NAB Climate Bond	Reviewed
NAB EE	Reviewed
New Energy	Reviewed
Origin	Reviewed
Portland	Reviewed
Parkes	Reviewed
Palisade PREF	Reviewed
Quintessential	Reviewed
Ross River	Reviewed
Ararat	Reviewed
Sundrop	Reviewed
Barcaldine	Reviewed
Camegie	Reviewed
TAUEF Extension	Reviewed
Taralga (p19)	Reviewed
Edify & Wirsol	Reviewed
Windlab	Reviewed
Westpac Climate Bond	Reviewed

s22

Review process	Information needed
	d)
	ed Sent reminder to s22 (17 March)
	d)
	wed)
	o s22 on 13 March)

s22

s47G(1)(a)

	Progress		Review process	Information needed
Westpac EE	Reviewed		Sent re	
QIC Shopping Centre Fund	Reviewed		so didn't se Sent re	
Blue sky student accomodation	Reviewed		Sent re	
Pilbara lithium bond	Reviewed		Sent re	
Ratesetter	Reviewed		Sent re	
Investa Commercial Property Fund	Reviewed		Sent re	d)
ResourceCo	Reviewed		Sent re	
CBA Green Bond	Reviewed		Sent re	
Oakey Solar Farm	Reviewed		Sent re	
Mirvac	Reviewed		o haven't s Sent to	
Qube Moorebank Intermodal terminal	Reviewed		Sent to	s reviewed)
SEA Automotive	Reviewed		Sent re	
Collinsville Solar Plant	Sent to reviewers		Sent re	
NAB Energy Efficient Bonus	Reviewed		Sent re	
Investa Office Fund Green Bond	Reviewed		Sent re	
Infigen Energy Bodangara Wind Farm	Reviewed		Sent re	
Longreach Solar Farm	Reviewed		Sent re	

	Current update	Monday
Complete and reviewed	75	64
Sent to reviewers	1	8
Complete	0	0
Partially Complete	0	4
Not Started	0	0
Total	76	76

QUICK FACTS ABOUT CEFC

Portfolio Commitment SIZE as at 31 st December 2017	More than \$5.7Bn in cumulative <u>commitments</u> since 2013 (against projects worth > \$16bn) Over \$4.7Bn current portfolio of commitments ~ \$282.2M repaid investments		
Number of PROJECTS	Since inception to 31 December 2017, the CEFC and our associated programs, has provided commitments to over 85 direct investments , including 9 co-finance partnerships that have delivered almost 4,000 smaller projects across Australia .		
Innovation Fund	At 31 st December 2017, 8 projects, CEFC Investment Commitments of \$49.2m (Greensync \$5m, Carbon Revolution \$10m, Artesian \$10m, SEA Automotive \$5m, Wattwatchers \$2m, Thinxtra \$10m, Relectrify \$0.75m, Redback Technologies \$6.4m)		
Performance Against BENCHMARK	2016 Investment Mandate (No.2) Benchmark <i>Effective 11/01/2017</i>	CORE PORTFOLIO <i>(Cumulative) through 31/12/17</i>	INNOVATION FUND <i>(Cumulative) through 31/12/17</i>
	PBR Benchmark	5.62% – 6.62% <i>(2.62% + 3% to 4%)</i>	3.20% <i>(2.20% + 1%)</i>
	Return (cumulative from inception to 31/12/17)	4.51%	Nil Innovation Fund investments are typically equity - no change in valuation or liquidity event subsequently – return therefore Nil to date
	Return (Cumulative Reported at 30 June each year)	2013/14: 4.75% (3.12% 5yrGBR) 2014/15: 4.79% (3.11% 5yrGBR) 2015/16: 4.65% (2.95% 5yrGBR) 2016/17: 4.50% (2.74% 5yrGBR)	
	Return (Annualised)	2013/14: 4.76% (3.12% 5yrGBR) 2014/15: 4.81% (3.10% 5yrGBR) 2015/16: 4.44% (2.74% 5yrGBR) 2016/17: 4.25% (2.35% 5yrGBR)	
Portfolio LEVERAGE	More than \$2.079 of private sector leverage for every \$1 of CEFC investment [based on current CEFC portfolio of \$4.8Bn, Private Sector Funds (debt and equity) \$9.9Bn and Grants \$118.9M, giving a Total Project Value of \$114.8Bn to 31 st December 2017]		
Portfolio RISK	SCR of BBB- based on portfolio of debt commitments to 31 st December 2017		

STAFF	Headcount of 95 staff filling 93 FTE positions (at 31/12/17). ASL through 31/12/17: 94 (incl. 1.4 for Board). ASL forecast through 30/06/18: 101 (incl. 1.4 for Board).					
FINANCIAL RESULTS		12mths 30/06/15 ACTUAL	12mths 30/06/16 ACTUAL	12mths 30-6-17 ACTUAL	12mths 30-6-18 BUDGET	6mths 31-12-17 ACTUAL
	Revenue (own source income)	\$54.6m	\$51.0m	\$64.6m	\$85.0m	\$57.2m
	Operating Expenses	\$19.7m	\$23.0m	\$28.4m	\$40.0m	\$16.9m
	Concession Charge	\$1.4m	\$6.9m	\$11.4m	\$27.8m	\$5.1m
	Impairment Reserve	\$2.4m	-	\$2.5m	\$7.4m	\$4.3m
	Share of Assoc's & JVs	-	-	\$0.6m	\$0.5m	\$0.2m
		-----	-----	-----	-----	-----
	Surplus	\$31.1m	\$21.1m	\$21.7m	\$9.3m	\$30.7m
	Retained Surplus	\$62.6m	\$83.7m	\$105.4m	\$114.7m	\$136.1m
	Operating Cash Flow	\$32.2m	\$24.9m	\$40.3m	\$46.0m	\$42.8m
RETAINED SURPLUS	Retained surplus to 31 December 2017: \$136.1M					
CONCESSIONALITY (through 31/12/17)	Cumulative charge since inception: ~\$36.3M Charge net of unwind since inception: ~\$26.7M (less than 30 basis points on average over the portfolio)					
		Charge	Unwind	Net		
	2017-18 (half year)	\$5.1m	\$2.2m	\$2.9m		
	2016-17	\$11.4m	\$2.4m	\$9.0m		
	2015-16	\$6.9m	\$2.0m	\$4.9m		
	2014-15	\$1.4m	\$1.5m	(\$0.1m)		
	2013-14	\$5.6m	\$1.5m	\$4.1m		
	2012-13	\$5.9m	-	\$5.9m		
	Cumulative	\$36.3m	\$9.6m	\$26.7m		
CEFC SPECIAL ACCOUNT	\$6.879bn available at 31 December 2017					
		Credited	Drawn	Returned	Balance	
	At 30/12/17	\$10.0bn	(\$3,562.8m)	\$441.8m	\$6,879m	

CURRENT 5-YR GOVERNMENT BOND RATE	2.435% Source: RBA, as at 16 February 2018 (Note: This is up from the low of 1.6% we saw in September 2016)																		
Current PIPELINE	<ul style="list-style-type: none"> The CEFC is currently examining over 120 proposals seeking over \$8.5Bn in funding for projects worth over \$52Bn <p>(Since inception, more than 400 proposals seeking over \$12Bn in funding for projects worth over \$55Bn)</p>																		
Reef Funding Program (all information is commitments or small projects since 20/06/2016)	<ul style="list-style-type: none"> Total CEFC commitments of over \$345m can attributed to the Reef Funding Program \$320m is in large scale investments (Ross River, Whitsunday and Hamilton Solar Farms, Collinsville, Daydream and Hayman Solar Farms, and Clermont Solar Farm), and over \$24m in over 280 small projects through aggregation partners at 31/12/2017 6 projects with a total value of \$1.1 million specifically targeting on-farm irrigation equipment which has a positive co-benefit for water quality 																		
Cities Funding Program (all information is commitments or small projects since 20/06/2016)	<p><i>The Cities figures has been provided based on postcode data from the Department</i></p> <p>ESTIMATE – over \$1.2b large scale investments - conservative</p> <p>ESTIMATE over \$230m through over 2,000 in small projects through aggregation partners.</p> <p>CITY Deal areas ACTUAL figures:</p> <ul style="list-style-type: none"> Townsville City Deal – \$24m in Ross River Solar Farm + over 80 small projects with over \$2m in value Western Sydney City Deal – \$30m ResourceCo + \$130m SGCH which covers Western Sydney + over 110 small projects with just over \$26m in value Launceston City Deal – 28 projects with over \$5m in value 																		
PORTFOLIO OF COMMITMENTS BY ESTIMATED TECHNOLOGY SPLIT	<p>Note: Excludes contingent commitments, therefore less than \$4.8bn</p> <table border="1"> <thead> <tr> <th></th> <th colspan="2">At 31st December 2017</th> </tr> <tr> <th>BY TECHNOLOGY BAND</th> <th>Total CEFC Amount (\$m)</th> <th>% CEFC \$</th> </tr> </thead> <tbody> <tr> <td>Renewable energy</td> <td>\$2.3B</td> <td>54.1%</td> </tr> <tr> <td>Energy efficiency</td> <td>\$1.81.8bn</td> <td>42.8%</td> </tr> <tr> <td>Low emission</td> <td>\$132.5m</td> <td>3.1%</td> </tr> <tr> <td>Grand Total</td> <td>\$4.3bn</td> <td>100%</td> </tr> </tbody> </table>		At 31 st December 2017		BY TECHNOLOGY BAND	Total CEFC Amount (\$m)	% CEFC \$	Renewable energy	\$2.3B	54.1%	Energy efficiency	\$1.81.8bn	42.8%	Low emission	\$132.5m	3.1%	Grand Total	\$4.3bn	100%
	At 31 st December 2017																		
BY TECHNOLOGY BAND	Total CEFC Amount (\$m)	% CEFC \$																	
Renewable energy	\$2.3B	54.1%																	
Energy efficiency	\$1.81.8bn	42.8%																	
Low emission	\$132.5m	3.1%																	
Grand Total	\$4.3bn	100%																	

PORTFOLIO OF COMMITMENTS AND PIPELINE BREAKDOWN BY ESTIMATED TECHNOLOGY SPLIT		At 31 st December 2017		Pipeline																																																																			
	Estimated Technology Split	Total CEFC Amount	% of CEFC \$	Total CEFC Amount	% of CEFC \$																																																																		
	Solar PV	\$1,533.6M	32.1%	\$2,050.6M	23.9%																																																																		
	Wind	\$790.6M	16.6%	\$1,852.8M	21.6%																																																																		
	Other	\$657.4M	13.8%	\$1,458.9M	17.0%																																																																		
	HVAC, Monitoring Systems	\$384.2M	8.1%	\$599.9M	7.0%																																																																		
	Lighting	\$362.0M	7.6%	\$741.9M	8.6%																																																																		
	Vehicles	\$358.8M	7.5%	\$81.0M	0.9%																																																																		
	Industrial Process Improvement	\$234.3M	4.9%	\$165.5M	1.9%																																																																		
	Cogen	\$162.8M	3.4%	\$90.0M	1.0%																																																																		
Bioenergy	\$151.2M	3.2%	\$692.0M	8.1%																																																																			
Storage	\$53.9M	1.1%	\$57.0M	0.7%																																																																			
Refrigeration	\$52.7M	1.103%	\$62.5M	0.7%																																																																			
Generation / Distribution	\$30.5M	0.6%	\$177.5M	2.1%																																																																			
Solar Thermal	\$0.2M	0.004%	\$130.0M	1.5%																																																																			
Hydro	\$0.0M	0%	\$350.0M	4.1%																																																																			
Hybrid	\$0.0M	0%	\$70.5M	0.8%																																																																			
Grand Total	\$4.8bn	100%	\$8.6bn	100%																																																																			
Total Project Amount	\$14.8bn		\$46.8bn																																																																				
PORTFOLIO BY JURISDICTION	<p>(*) At 31 December 2017, over half (50%) of our total investments are available nation-wide. The remaining investments which are state-specific are included in the following table:</p> <table border="1"> <thead> <tr> <th></th> <th>AT 31/12/2017 (*)</th> <th colspan="4">Pipeline</th> </tr> <tr> <th>Jurisdiction</th> <th>% of CEFC \$</th> <th># of projects</th> <th>Total CEFC Amount</th> <th>Total Project Amount</th> <th>% of CEFC \$</th> </tr> </thead> <tbody> <tr> <td>National</td> <td>50.2%</td> <td>35</td> <td>\$2,463.5M</td> <td>\$9,762.4M</td> <td>29.5%</td> </tr> <tr> <td>ACT</td> <td>0.1%</td> <td>1</td> <td>\$4.6M</td> <td>\$18.8M</td> <td>0.1%</td> </tr> <tr> <td>NSW</td> <td>17.1%</td> <td>31</td> <td>\$1,472.1M</td> <td>\$16,561.8M</td> <td>17.7%</td> </tr> <tr> <td>NT</td> <td>0.4%</td> <td>2</td> <td>\$129.2M</td> <td>\$354.0M</td> <td>1.5%</td> </tr> <tr> <td>QLD</td> <td>12.5%</td> <td>20</td> <td>\$2,095.5M</td> <td>\$10,897.6M</td> <td>25.1%</td> </tr> <tr> <td>SA</td> <td>5.9%</td> <td>5</td> <td>\$399.0M</td> <td>\$3,570.1M</td> <td>4.8%</td> </tr> <tr> <td>TAS</td> <td>0.1%</td> <td>1</td> <td>\$30.0M</td> <td>\$150.0M</td> <td>0.4%</td> </tr> <tr> <td>VIC</td> <td>12.9%</td> <td>18</td> <td>\$1,239.0M</td> <td>\$3,862.3M</td> <td>14.9%</td> </tr> <tr> <td>WA</td> <td>0.7%</td> <td>10</td> <td>\$507.0M</td> <td>\$1,596.5M</td> <td>6.1%</td> </tr> </tbody> </table>						AT 31/12/2017 (*)	Pipeline				Jurisdiction	% of CEFC \$	# of projects	Total CEFC Amount	Total Project Amount	% of CEFC \$	National	50.2%	35	\$2,463.5M	\$9,762.4M	29.5%	ACT	0.1%	1	\$4.6M	\$18.8M	0.1%	NSW	17.1%	31	\$1,472.1M	\$16,561.8M	17.7%	NT	0.4%	2	\$129.2M	\$354.0M	1.5%	QLD	12.5%	20	\$2,095.5M	\$10,897.6M	25.1%	SA	5.9%	5	\$399.0M	\$3,570.1M	4.8%	TAS	0.1%	1	\$30.0M	\$150.0M	0.4%	VIC	12.9%	18	\$1,239.0M	\$3,862.3M	14.9%	WA	0.7%	10	\$507.0M	\$1,596.5M	6.1%
	AT 31/12/2017 (*)	Pipeline																																																																					
Jurisdiction	% of CEFC \$	# of projects	Total CEFC Amount	Total Project Amount	% of CEFC \$																																																																		
National	50.2%	35	\$2,463.5M	\$9,762.4M	29.5%																																																																		
ACT	0.1%	1	\$4.6M	\$18.8M	0.1%																																																																		
NSW	17.1%	31	\$1,472.1M	\$16,561.8M	17.7%																																																																		
NT	0.4%	2	\$129.2M	\$354.0M	1.5%																																																																		
QLD	12.5%	20	\$2,095.5M	\$10,897.6M	25.1%																																																																		
SA	5.9%	5	\$399.0M	\$3,570.1M	4.8%																																																																		
TAS	0.1%	1	\$30.0M	\$150.0M	0.4%																																																																		
VIC	12.9%	18	\$1,239.0M	\$3,862.3M	14.9%																																																																		
WA	0.7%	10	\$507.0M	\$1,596.5M	6.1%																																																																		

**INVESTMENT
COMMITMENTS
IN 2017-18**

For the first 6 months of 2017-18, the CEFC made **24 investment commitments worth more than \$1.4 billion.** These include:

ACTIVE INVESTMENTS	s47G(1)(a)	Project Description	Commitment Date	Finance Type	Technology	s47G(1)(a)	CEFC Commitment (\$ALD)
Sacyr Environment Australia Pty Ltd		Organics processing facility (municipal waste to compost) to service a collection of Melbourne city councils, aggregated by one local government authority in Dandenong VIC	25/07/2017	Project Finance	Other		\$45,000,000
Genex Power - Kidston Solar Project		Corporate facility for Genex Power, to be used by the company as equity contingency for its 50MW large scale solar PV project the Kidston site in Northern Queensland. CEFC is a debt financier in the s47G(1)(a)	2/08/2017	Corporate Loans	Solar PV		\$4,100,000
Daydream and Hayman Solar Farms		Portfolio financing of 2 x utility scale solar farms totalling 200MW - the 150MWac Daydream Solar Farm and 50MWac Hayman Solar Farm near Collinsville, Queensland	10/08/2017	Project Finance	Solar PV		\$89,905,924
Cleanaway Waste Management Limited		Corporate Loan to utilise as needed for projects, assets and/or infrastructure that meets CEFC's eligibility criteria.	17/09/2017	Corporate Loans	Bioenergy		\$90,000,000
Macquarie Leasing		Energy efficiency funding program	21/09/2017	Corporate Loans	Vehicles		\$50,000,000
Ottoway Fabrication		Funding solution for wind tower manufacture, based in Whyalla, SA.	25/09/2017	Corporate Loans	Wind		\$4,200,000
Bannerton Solar Farm		110.2MW utility scale solar farm (Bannerton Solar Park) located at Bannerton, North West Victoria 0.4414%	29/09/2017	Project Finance	Solar PV		\$97,764,792
Kennedy Energy Park		Construction of wind, solar and storage hybrid energy solution comprising of 43MW of wind, 15MWac of solar and 20MWh of Lithium ion battery storage located in the Finders Shire, 20kms south west of Hughenden, Queensland.	16/10/2017	Project Finance	Wind		\$93,552,437
Lincoln Gap Wind Farm		Project to fund the design, construction, operation, and maintenance of the 125MW Lincoln Gap Wind Farm, along with a "Reliability Project" currently envisaged to involve the installation of batteries, located approximately 15km to the west of Fort Augusta, SA.	20/10/2017	Project Finance	Wind		\$146,864,894
ANZ Energy Efficient Asset Finance Program		Bank aggregation program for the origination of a range of energy efficiency and renewable energy assets	27/10/2017	Corporate Loans	HVAC, Monitoring Systems		\$50,000,000
CBA Energy Efficient Asset Finance Program		Bank aggregation program for the origination of a range of energy efficiency and renewable energy assets	22/11/2017	Corporate Loans	HVAC, Monitoring Systems		\$100,000,000
Bonds to refi Fleet Partners / Eclix		Bonds to refi existing commitment to Flynn	6/11/2017	Corporate Loans	Various		\$14,100,000
Granville Harbour Wind Farm - DD Costs		Granville Harbour Wind Farm - DD Costs only commitment to date		Equity	Wind		\$4,125,825
Ross River Solar Farm - incremental amount		Ross River Solar Farm - acquisition of the carried interest held by ESOD Pacific		Equity	Solar PV		\$4,200,000
Mirvac Group Finance Limited		Investment in residential development including solar PV and battery storage technologies for 341 dwellings located in Brisbane's Arana Hills and Everton Park and Sydney's Moorebank.	1/12/2017	Corporate Loans			\$30,000,000
Macquarie Agricultural Funds Management Limited		Opportunity to invest in a dedicated agriculture fund	7/12/2017	Equity			\$100,000,000
Clermont Solar Farm and Wemen Solar Farm		Development of a 110MW Solar Farm in Wemen, Victoria and a 89MW Solar Farm in Clermont, Queensland.	14/12/2017	Project Finance	Solar PV		\$207,208,720
Healthcare Wholesale Property Fund		Equity investment into property fund to drive energy efficient outcomes.	21/12/2017	Equity			\$50,000,000
Colambally Solar Farm		Development of a utility scale solar (150MW Colambally Solar Farm), located about 5km north east of Colambally, 70km South of Griffith, NSW	22/12/2017	Project Finance	Solar PV		\$29,673,729
Oakey Solar Farm Stage 2		Stage 2 of Oakey Solar Farm with an additional 59MW utility scale solar farm in Oakey, QLD	29/12/2017	Project Finance	Solar PV		\$54,324,828
TOTAL CEFC (excluding CEIF)							\$1,264,921,947
CEIF							
Wattwatchers Limited		Investment in Australian innovation for the new energy era of distributed generation and storage, behind-the-meter embedded services and Internet of Things (IoT) applications currently	10/08/2017	Equity	Other		\$2,000,000
Thinstra Pty Ltd		Opportunity to provide Series B Equity for an Internet of Things (IoT) start-up company	16/09/2017	Equity	Other		\$10,000,000
Relectrify Pty Ltd		Investment in a company that unites second-life batteries with advanced control technology	26/09/2017	Equity	Other		\$750,000
Redback Technologies Pty Ltd		Equity investment in a company producing low cost high functionality Hybrid Inverters	10/10/2017	Equity	Other		\$6,368,615
TOTAL CEIF							\$19,118,615
Contingent:							
Macquarie Leasing		Energy efficiency funding program	21/09/2017	Corporate Loans	Vehicles		\$50,000,000
ANZ Energy Efficient Asset Finance Program		Bank aggregation program for the origination of a range of energy efficiency and renewable energy assets	27/10/2017	Corporate Loans	HVAC, Monitoring Systems		\$100,000,000
Granville Harbour Wind Farm - Contingent		Granville Harbour Wind Farm - DD Costs only firm commitment to date so balance is treated as contingent		Equity	Wind		
Healthcare Wholesale Property Fund		Equity investment into property fund to drive energy efficient outcomes.	21/12/2017	Equity			\$50,000,000
TOTAL CONTINGENT							\$200,000,000
							\$1,484,040,562

**INVESTMENT
DEPLOYMENT IN
2017-18**

The following investments have been **deployed** (funded / drawn-down) during the 6 months ended 31 December 2017:

Innovation Fund	Year to date 31-Dec-2017	
Deal Name	Draws	Drawn / Invested
SEA Automotive TA SEA Electric	1	1,231,476
Wattwatchers	1	2,000,000
Relectrify Pty Ltd	1	750,000
Thinstra Pty Ltd	2	10,000,000
Redback Technologies	1	1,869,122
	6	15,850,598

Core Portfolio	Year to date 31-Dec-2017	
Deal Name	Draws	Drawn / Invested
TAEUF2 - Equity	1	15,635
EG Funds Management	6	1,826,063
Eclix Group Limited	8	8,703,931
LHC SGCH Sustainability	1	87,320
University of Melbourne	2	2,454,105
Quintessential Equity	6	33,752,592
Sapphire Wind Farm	4	61,858,342
Palisade Investment Partners - Class C Units	1	24,556
Neoen Australia - Penance	4	63,550,000
Neoen Australia - Griffin	3	35,140,000
Neoen Australia - Nebula	4	23,180,000
SAHF SGCH Sustainability	1	16,304
Welee Australia SubHoldCo Pty Ltd	5	26,548,887
Genex Power - Kidston Solar Farm A (Floating)	6	9,120,855
Bodangora Wind Farm	6	57,183,528
Longreach Solar Farm	6	8,485,376
Oakey Solar Farm	1	10,425,731
Genex Power - Kidston Solar Farm B (Fixed)	6	18,218,884
Ratesetter Green Loan Lending Platform	7	1,853,391
Blue Sky Alternative Investments Pty Ltd	6	22,805,558
Collinsville Solar Farm	1	1,463,631
ResourceCo RRF Pty Ltd	2	7,293,594
QIC Retail Pty Ltd	1	200,000,000
CBA Investment Bond 2	1	49,882,500
Genex Power Corporate Facility	1	4,100,000
Whitehaven Finance Company	5	26,328,190
Macquarie Bank	2	50,000,000
Ottoway Fabrication Pty Ltd	6	3,996,688
Cleanaway Waste Management Ltd	1	10,000,000
Kennedy Energy Park Pty Ltd	1	200,000
ANZ	1	50,000,000
Eclix Group Limited	1	14,100,000
Commonwealth Bank Bond 3	1	75,000,000
Commonwealth Bank Bond 4	1	25,000,000
TAEUF1 - Your DC 23 Woomera Avenue	1	152,787
TAEUF1 - 26 Flinders Street	1	149,999
Palisade - Granville Harbour	1	1,039,125
Macquarie Agriculture Fund - Crop Australia	1	51,810,000
Dexus Property Group	1	20,000,000
	114	975,767,572
TOTAL	120	991,618,170

Repayments in the portfolio during the 6 months ended 31 December 2017 totalled **\$93.5m** including \$43m from the Moree Solar Farm.

**HIGH EFFICIENCY
LOW EMISSIONS
(HELE)**

WILL HIGH EFFICIENCY LOW EMISSIONS (HELE) MEET THE LOW EMISSIONS TECHNOLOGY (LET) TEST?

- No. According to the Carbon Credits (Carbon Farming Initiative) Act 2011 and repeated in the 2016 National Greenhouse Gas Factors, the NEM is currently 820g/kWh for Scope 2 emissions
- According to the World Coal Association fact sheet, ultra-super critical coal is 740-800g/kWh in emissions intensity. It is not materially less emissions intense than the current grid and so would not pass the LET test

Which are HELE technologies?



	Efficiency rate*	CO ₂ intensity	Coal consumption	Steam temperature
Advanced ultra-supercritical	45-50%	670-740g CO ₂ /kWh	290-320g/kWh	700°C+
Ultra-supercritical	Up to 45%	740-800g CO ₂ /kWh	320-340g/kWh	600°C+
Supercritical	Up to 42%	800-880g CO ₂ /kWh	340-380g/kWh	Approx. 550°C- 600°C
Subcritical	Up to 38%	≥880g CO ₂ /kWh	≥380g/kWh	<550°C

*Lower heating value

Source: Adapted from IEA, Technology Roadmaps, High-efficiency low-emissions coal-fired power generation, 2012

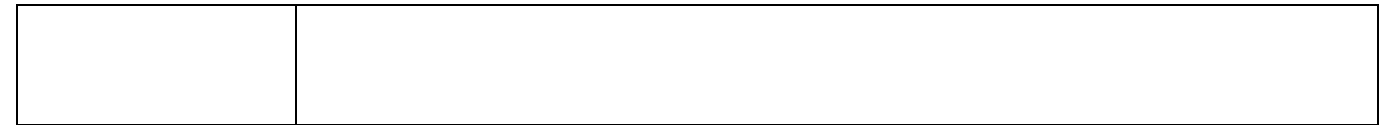
CAN THE CEFC DO CARBON CAPTURE AND STORAGE?

No. This is expressly prohibited by the Act as a prohibited technology.

Given these parameters, investing in such a long-dated asset is essentially speculative

ARE YOU AWARE OF PROPOSED CHANGES TO MANDATE AND ACT TO ASSIST COAL?

- We have seen the media reports and commentary from various sources.
- The prohibition on carbon capture and storage and nuclear technologies is in our Act. Ultimately any change to our legislation is a matter for the Government to determine as a matter of policy and the Parliament to determine as a matter of law.
- Amendment to the emissions intensity threshold could be achieved via the investment mandate, and provided that is a validly issued mandate we will administer it to the best of our ability.
- However, what people need to be aware of is that eligibility is the first gate. Any proposal then needs to get through the hurdle of commerciality or risk and return



Background material provided by CEFC on 20 March 2017 for potential speech input.

KEY MESSAGES

1. CEFC is getting on with the job

- CEFC has been getting on with the job at hand and welcomes the new mandate creating the Reef and Cities Funds.
- The Reef Fund will provide up to \$1 billion over 10 years in investment finance for projects in the Reef catchment region that deliver clean energy and reduce emissions, including projects that meet the objectives of the Reef 2050 Plan.
- The Cities Fund will leverage private sector capital to accelerate the deployment of cutting-edge projects, such as precinct-scale renewable energy plants and installations, next-generation transport management systems, green buildings and retrofit of social and affordable housing.

2. CEFC is achieving outcomes (as at 31 December 2016):

- The CEFC has cumulatively committed over \$3.0b in total finance in projects worth over \$8.3b.
- The CEFC has current commitments of almost \$2.4b against projects valued at over \$7.2b.
- The CEFC's investments help leverage additional private sector finance into the clean energy sector.
- Investments the CEFC makes are profitable for the CEFC, that's why their projects achieve abatement at a positive net benefit to the taxpayer.
- CEFC investments are earning a return above the relevant government cost of funds.
- CEFC has not provided anyone with financing at a rate below the government's cost of funds.

3. Demand for clean energy investment is growing:

- After over 3 years in operation, businesses have seen the types of services CEFC can provide and there is a greater understanding of the CEFC role in the market.
- More businesses are aware of who CEFC is and more confident in seeking CEFC finance.
- Businesses have watched first-movers in their industry cut costs and improve productivity using CEFC finance and are now coming to the Corporation seeking finance to do the same.
- CEFC already partnered with over 15 other financial institutions, including all of the major Australian banks and other banks who are now more willing to partner with CEFC on deals.
- CEFC has also seen more than 750 smaller customer projects financed through some of its aggregation partnerships.

- There is a steady flow of projects from the market place so CEFC is in the continuous process of receiving and reviewing new project proposals and making investments.

4. CEFC investments help lower costs and improve business productivity:

- All CEFC investments are improving the productivity and efficiency for businesses and the economy.
- CEFC has a broad sectoral reach, helping businesses reduce energy costs and adopt cleaner energy or generate their own on-site to better manage future energy price rises. Real examples of the type of projects financed include:
 - **Agribusiness** – waste abattoir sludge to energy through the production of biogas; refrigeration and irrigation upgrades to increase efficiency, growing tomatoes in the desert using the sun and seawater, processor upgrades
 - **Manufacturing** – upgrade of capital equipment for energy reductions and productivity gains (e.g. printers, industrial snap freezers, plastics ovens etc).
 - **Local Govt** – street lighting, upgrade of council admin buildings, sports & aquatic centres
 - **Property** – building retrofits to lighting, cooling & heating, ventilation and solar PV and tri-generation
 - **Mining** – remote site solar generation and battery storage.
 - **Utilities** – solar, wind, wave and biomass applications.
- The CEFC’s investments help businesses to operate more profitably and achieve emissions reductions whilst delivering a return to taxpayers.

QUICK FACTS ABOUT CEFC

Portfolio SIZE	<p>More than \$3.0Bn in cumulative commitments since 2013</p> <p>\$2.4Bn current portfolio of commitments to 31 December 2016</p> <p>~\$165.8M repaid investments to 31 December 2016</p>
Number of PROJECTS	<p>Since inception to 31 December 2016, the CEFC and its associated programs, has provided commitments to over 70 direct investments, including 7 co-finance partnerships that have delivered over 750 smaller projects across Australia.</p>
Portfolio LEVERAGE	<p>\$1.94 of private sector leverage for every \$1 of CEFC investment [based on current CEFC portfolio of \$2.4Bn, Private Sector Funds (debt and equity) \$4.6Bn and Grants \$185M, giving a Total Project Value of \$7.2Bn to 31 December]</p>

Portfolio TECHNOLOGY MIX	Based on \$2.4Bn portfolio of commitments to 31 December: 50.2% Renewables (\$1,203.0M) 49.8% Energy Efficiency (\$1,193.0M) 0% Other Low Emissions (\$0)
Current PIPELINE	<ul style="list-style-type: none"> ○ The CEFC is currently examining over 130 proposals seeking almost \$9Bn in funding for projects worth almost \$24Bn

CEFC INVESTMENTS AND PORTFOLIO

INVESTMENTS IN 2016-17

In 2016-17 to date, the CEFC made **19 investment commitments worth up to just over \$1 Billion**. These include:

- CEFC announces next wave of large-scale solar finance, with \$77m for projects in Queensland and Victoria
 - The latest three large-scale solar projects are all expected to be operational by the start of 2018, adding a combined 165MW (AC) of renewable energy to the national electricity grid, enough to power an estimated 87,000 homes.
 - The projects will lead to 300 jobs during construction. The projects are being developed by Australia's Edify Energy, alongside leading international renewable energy investor Wirsol.
 - Projects include:
 - 57.5MW (AC) Whitsunday Solar Farm, north of Collinsville, which has a 20-year Power Purchase Agreement (PPA) with the Queensland Government. The project is expected to generate around 144,000MWh of energy annually, enough to power an estimated 31,000 homes. This project is also receiving up to \$9.5 million in grant funding from the Australian Renewable Energy Agency (ARENA), as part of its large-scale solar funding round.
 - 57.5MW (AC) Hamilton Solar Farm, also north of Collinsville in Queensland, which is expected to generate around 144,000MWh of energy annually, enough to power an estimated 31,000 homes. Energy will be sold into the grid on a predominantly uncontracted or merchant basis.
 - 50MW (AC) Gannawarra Solar Farm, west of Kerang in Victoria, which has a 13-year PPA with Energy Australia. It is expected to generate about 116,000MWh of energy annually, enough to power an estimated 25,000 homes. This is the CEFC's first commitment to a Victorian solar farm.
- First Australian Clean Energy Seed Fund launches – INNOVATION FUND

- Artesian Venture Partners has launched Australia's first Clean Energy Seed Fund, which includes a \$10 million cornerstone commitment from the Innovation Fund.
- CEFC finance helps convert Queensland gold mine to solar with pumped hydro storage on the horizon
 - The CEFC has confirmed a major new investment in North Queensland, with \$54 million in finance for an innovative large-scale solar development that also has the potential to spearhead a new pumped hydro storage project.
 - Genex Power Ltd has secured \$54 million in debt finance from CEFC for the development of the Phase One 50MW large-scale solar farm at its Kidston Renewable Energy Hub, 270km north west of Townsville. The solar farm is expected to lead to the Phase Two development of a pumped hydro storage project on the same site.
- An investment in a Climate Bond that has an underlying asset base of residential rooftop solar – **Project not announced, details to be announced in due course.**
- SGCH secures \$130m in CEFC finance to support 300 new energy efficient community homes
 - The New South Wales Government awarded SGCH with a contract to build 300 new dwellings under the first phase of the new Social and Affordable Housing Fund (SAHF).
 - The CEFC finance will enable SGCH to build all its SAHF homes to a higher energy efficiency standard, with the new homes built to an average 7-Star National Housing Energy Rating System (NatHERS) rating.
- CEFC and CommBank commit \$100M to an energy efficient asset finance program for business
 - The new program enables businesses to benefit from reduced energy and fuel costs, while also lowering their carbon emissions.
 - The program will support business investment in energy efficient and lower emissions vehicles, equipment, machinery and fixtures that meet the CEFC's investment guidelines.
 - The finance will provide a 0.70 per cent discount on the bank's standard asset finance rate for assets ranging from \$10,000 to \$5 million, where the asset's technologies meet the CEFC's investment guidelines.
 - Eligible investments include a broad range of fuel efficient vehicles, energy efficient lighting and fittings, farm machinery, commercial lighting and rooftop solar panels.
- A Commercial Property Fund commit \$110M to a leading Australian sustainable property fund – **Project not announced, details to be announced in due course.**
- Proposed conditional commitment for a new Solar fund – **Project not announced, details to be announced in due course.**
 - This is an equity underwrite to help establish a new investment product being a dedicated clean energy fund and help attract institutional capital to the sector.

- **CEFC invests \$100m in AMP property fund targeting net zero emissions by 2030**
 - Landmark buildings in the heart of Sydney and Melbourne are the centrepieces of a \$100 million investment by CEFC in the AMP Capital Wholesale Office Fund (AWOF)
 - This project aims to deliver a property portfolio of net zero carbon emission buildings by 2030.

- **Construction of Sapphire Wind Farm 270MW near Glen Innes, NSW**
 - A new debt finance commitment of up to \$120 million from the CEFC is demonstrating the bankability of large-scale renewable energy projects which have not achieved 100 per cent energy offtake agreements through long-term contracted power purchase agreements (PPAs)
 - The CEFC is one of the co-financiers in the development of the \$588 million 270MW Sapphire Wind Farm between Glen Innes and Inverell in northern New South Wales.
 - The project is expected to generate enough electricity to power 110,000 average homes, and abate some 600,000 tonnes of carbon emissions a year.

- **Demand response firm providing sophisticated solutions to utility and distribution company clients – INNOVATION FUND**
 - The CEFC has committed \$5 million to an innovative Melbourne-based company aiming to bring smart technology solutions to the energy grid of the future, as part of an \$11.5 million Series B capital raising by GreenSync.
 - The CEFC investment is through the Innovation Fund, which finances emerging Australian technologies and businesses that have the potential to help accelerate Australia's transition to a clean energy economy.
 - The Innovation Fund draws on the combined skills and experience of the CEFC and the Australian Renewable Energy Agency (ARENA).

- **University focussed on a variety of initiatives under a broad capex program achieving Climate Bond status**
 - CEFC has made a \$20 million cornerstone investment in the world's first university-issued certified climate bond, issued by Monash University.
 - The \$218 million (AUD equivalent) climate bond, certified by the global Climate Bonds Initiative, creates an important new asset class for the financing of sustainability and clean energy projects in the university sector, and confirms Monash University's leadership role in this area.

- **Investment in Ross River Solar Farm (135 MW solar farm located near Townsville, Queensland) through an investment mandate with Palisade Partners**
 - CEFC will invest \$20 million in the Ross River Solar Farm near Townsville, providing an economic boost to the region and accelerating the development of Australia's biggest solar farm.
 - The investment is the first in a series of large-scale solar investments the CEFC will make in Queensland this year as the organisation works with developers on speeding up the delivery of clean energy opportunities.
 - This investment is relevant for the Reef and Cities platforms.

- **Debt funding mechanism to be used to develop solar projects**
 - CEFC has committed up to \$50 million to a \$100 million Australian solar fund to increase the financing options for developers of medium-scale solar farms.

- **Designs, manufactures and markets single piece carbon fibre composite wheels for automotive, aerospace and commercial uses – INNOVATION FUND**
 - Australia’s Clean Energy Innovation Fund is to invest in a Geelong-based company that has developed world-leading technology to tackle one of the most difficult to address sources of carbon emissions – light vehicles.
 - Carbon Revolution produces the world’s only mass produced one-piece carbon fibre car wheel. The unique carbon fibre wheels are as much as 45 per cent lighter than aluminium wheels, reducing vehicle weight and therefore fuel consumption and carbon emissions
 - The Innovation Fund draws on the combined skills and experience of the CEFC and the Australian Renewable Energy Agency (ARENA).

- **Establishment of a dedicated clean energy fund to invest in renewable energy infrastructure assets with a focus on late stage development, construction and brownfield assets**
 - CEFC is looking to attract mid-tier and large institutional investors to support the next wave of renewable energy projects, with a \$75 million cornerstone commitment to a new specialist renewable energy fund managed by Palisade Investment Partners (Palisade).
 - The Palisade Renewable Energy Fund (PREF) is looking to inject as much as \$500 million in new investment to accelerate the development of a pipeline of clean energy projects.

- **25MW utility scale solar PV farm located in Griffith, NSW.**
 - Regional New South Wales will benefit from a \$150 million investment from the CEFC, to accelerate the construction of three major solar projects with a total value of \$230 million.
 - The three large-scale solar farms will be built in Dubbo, Parkes and Griffith in regional NSW. They are the first projects to receive debt finance under the CEFC’s large-scale solar financing program and, together, represent the CEFC’s most substantial commitment to large-scale solar to date.
 - Project owner and developer Neoen expects the three projects will create an estimated 250 jobs during construction in 2017 and, once operational, will produce enough renewable energy to power some 41,500 homes.

- **Two projects involving 16MW solar PV project situated at Dubbo, NSW and 11MW solar PV project situated in Narromine, NSW.**
 - Regional New South Wales will benefit from a \$150 million investment from the CEFC, to accelerate the construction of three major solar projects with a total value of \$230 million.
 - The three large-scale solar farms will be built in Dubbo, Parkes and Griffith in regional NSW. They are the first projects to receive debt finance under the CEFC’s large-scale solar financing program and, together, represent the CEFC’s most substantial commitment to large-scale solar to date.
 - Project owner and developer Neoen expects the three projects will create an estimated 250 jobs during construction in 2017 and, once operational, will produce enough renewable energy to power some 41,500 homes.

- **49MW utility scale solar farm situated in Parkes, in the Central West region of New South Wales.**
 - Regional New South Wales will benefit from a \$150 million investment from the CEFC, to accelerate the construction of three major solar projects with a total value of \$230 million.
 - The three large-scale solar farms will be built in Dubbo, Parkes and Griffith in regional NSW. They are the first projects to receive debt finance under the CEFC’s large-scale solar financing program and, together, represent the CEFC’s most substantial commitment to large-scale solar to date.

- Project owner and developer Neoen expects the three projects will create an estimated 250 jobs during construction in 2017 and, once operational, will produce enough renewable energy to power some 41,500 homes.

PROGRAMS

The CEFC has **three current investment programs** designed to efficiently target subsectors with up to **\$750m** of clean energy finance.

- A **\$250 million** program for **large-scale solar PV** across Australia.
 - When fully deployed, the CEFC financing program will represent the largest lending commitment to the large-scale solar sector in Australia to date.
 - Complements ARENA's \$100 large-scale solar grants funding program.
- A **\$250 million Community Housing Program** to lower energy costs for low income families and residents.
 - Program expected to contribute to the construction of as many as 1,000 new energy efficient dwellings Australia-wide, via Australia's network of Community Housing Providers
 - The program offers tailored long-term loans for new social and affordable housing designed and built to an average seven-star rating under the Nationwide Housing Energy Rating Scheme (NatHERS).
 - Finance is also available to retrofit existing buildings to improve energy efficiency for tenants.
 - Eligible applicants include community housing providers or associations; faith providers; property developers (if partnering with a community housing provider); state governments; statutory corporations and other organisations.
- A **\$250 million Local Government Program** designed to provide **flexible and competitive fixed-rate, long-term finance** tailored to the needs of Australian councils.
 - Key elements of the CEFC Local Government Finance Program include:
 - Finance for eligible projects across renewable energy, energy efficiency and low emissions technologies
 - Loans of at least \$10 million for a single project or package of works
 - Finance can be drawn over three years
 - Ability for multiple councils to enter into joint financing agreements for eligible projects

- Access to competitive fixed-rate longer-dated senior debt (up to 10 years)
- A straightforward approval process with simple loan documentation.

The CEFC also has a \$200 million fund to **target early stage technologies through the Clean Energy Innovation Fund**.

- Innovation finance through the new **\$200 million Innovation Fund (CEIF)**.
 - The Innovation Fund will help innovative entrepreneurial companies build commercial strength, so they can make a positive contribution to the Australian economy
 - The Innovation Fund will focus on companies, businesses and projects at early stages of development that are now seeking growth capital or early stage capital to assist their businesses get to the next stage of their development
- We see the Innovation Fund as a bridge between activity that is exclusively grant funded at ARENA and activity that can be funded through ordinary debt and equity by the CEFC.
- The current mandate specifies the Innovation Fund will now be reduced from \$1bn over 10 years to \$200m over two years. This follows the parliamentary settlement of the omnibus savings bill.
- We note that figure allows for a deployment at the same rate as the original Innovation Fund.
- Of course it will be open to government to assess how the Fund is performing at the end of year two and make further decisions upon it at that time

Finally, **\$1bn of CEFC funding will be applied over ten years each** to the **Sustainable Cities Fund** and a **Reef Fund**.

KEY MESSAGES

1. CEFC is achieving outcomes (as at 16 December 2016):

- The CEFC has cumulatively committed over \$2.7b in total finance in projects worth over \$7.5b.
- The CEFC has current commitments of \$2.1b against projects valued at over \$6.6b.
- The CEFC's investments help leverage additional private sector finance into the clean energy sector.
- Investments we make are profitable for the CEFC, that's why our projects achieve abatement at a positive net benefit to the taxpayer.
- Our investments are earning a return above the relevant government cost of funds.
- We have not provided anyone with financing at a rate below the governments cost of funds.

2. Demand for clean energy investment is growing:

- After over 3 years in operation, businesses have seen the types of services we can provide and there is a greater understanding of our role in the market.
- More businesses are aware of who we are and more confident in seeking CEFC finance.
- Businesses have watched first-movers in their industry cut costs and improve productivity using CEFC finance and are now coming to us seeking finance to do the same.
- We've already partnered with over 15 other financial institutions, including all of the major Australian banks and other banks who are now more willing to partner with us on deals.
- We've also seen more than 500 smaller customer projects financed through some of our aggregation partnerships.
- There is a steady flow of projects from the market place so we are in the continuous process of receiving and reviewing new project proposals and making investments.

3. Our investments help lower costs and improve business productivity:

- All our investments are improving the productivity and efficiency for businesses and the economy.
- We have broad sectoral reach, helping businesses reduce energy costs and adopt cleaner energy or generate their own on-site to better manage future energy price rises. Real examples of the type of projects financed include:
 - **Agribusiness** – waste abattoir sludge to energy through the production of biogas; refrigeration and irrigation upgrades to increase efficiency, growing tomatoes in the desert using the sun and seawater

- **Manufacturing** – upgrade of capital equipment for energy reductions and productivity gains (e.g. printers, industrial snap freezers, plastics ovens etc).
- **Local Govt** – street lighting, upgrade of council admin buildings, sports & aquatic centres
- **Property** – building retrofits to lighting, cooling & heating, ventilation and solar PV and tri-generation
- **Mining** – remote site solar generation and battery storage.
- **Utilities** – solar, wind, wave and biomass applications. Assisting the grid in transitioning to a lower emissions future.
- The CEFC's investments help businesses to operate more profitably and achieve emissions reductions whilst delivering a return to taxpayers.

EXAMPLES:

INNOVATION:

- The Clean Energy Innovation Fund is **committing \$10 million as a cornerstone investment to Artesian Venture Partner's Australian Clean Energy Seed Fund**, which is targeting additional private sector equity investment of up to \$10 million. The \$20m Fund is the first of its kind in the clean energy space.
- **The seed fund targets scalable, high growth potential startups fueling innovation and creating opportunities in the development of clean technology.** It is looking across sectors such as the internet of things, energy storage, biofuels, alternative energy generation (solar, wave, geothermal, wind), metering and control, green building and biomaterials, transport technologies, water and waste.
- **Artesian expects the seed fund to invest at seed, angel and later-stage follow-on rounds in 30-50 startups over four to five years.** The seed fund is seeking registration with Innovation Australia as an early stage venture capital limited partnership (ESVCLP).

WIND:

- **The CEFC is committing \$120m to the 270MW Sapphire Wind Farm**, located between Glen Innes and Inverell in northern NSW, will feature the latest Vestas turbine technology, as well as transformers manufactured in Australia.
- When completed, the Sapphire Wind Farm is expected to supply enough electricity to power 110,000 average households and abate carbon emissions by approximately 600,000 tonnes a year.
- **The project will be the first in Australia to use the new Vestas V126 3.6MW turbine, which has one of the best available rates of energy production per turbine.** The use of 75 Vestas turbines will build on Vestas' presence in the Australian market, leading to an improved supply chain for turbine equipment and cost efficiencies.

- The **wind farm's transformers are being manufactured by the Wilson Transformer Company, Australia's largest manufacturer of power transformers.**

SOLAR:

- **The CEFC has committed up to \$20 million in cornerstone debt finance for the development of the Barcaldine Solar Farm**, which has also secured \$22.8 million in funding from the Australian Renewable Energy Agency (ARENA).
- **The Barcaldine Solar Farm has already commenced generating and exported its first power to the grid this month (December 2016).** When fully operational, a large-scale solar farm at Barcaldine in Central Queensland is expected to generate enough power to satisfy the needs of around 9,800 homes.
- The 20MW AC (25MW DC) Barcaldine Solar Farm covers about 90 hectares. The 79,000 solar modules use **single-axis tracking technology to maximise the effectiveness of the PV panels as they follow the sun.**

BIOMASS:

- The **CEFC is providing up to \$100 million as a cornerstone investment in a new equity fund for bioenergy and energy from waste**, managed by Foresight Group.
- **The \$200+ million Australian Bioenergy Fund is targeting equity investments** in \$2 million to \$100 million projects ranging from small scale anaerobic digestion to mid-scale energy-from-waste projects.
- Once deployed across energy from waste, wood pellet and anaerobic digestion technologies, **the Australian Bioenergy Fund is expected to cover a range of technologies including:**
 - **energy from agricultural waste projects**
 - **anaerobic digestion projects**
 - **sustainably sourced biomass to energy projects**
 - **landfill gas capture and destruction projects**
 - **wood pelletisation projects**
 - **production of biofuels.**

VEHICLES:

- The **CEFC and Eclix Group, one of Australia's largest independent fleet leasing companies, have established a \$50 million funding package to provide Eclix's corporate, government and not-for-profit fleet buyers**

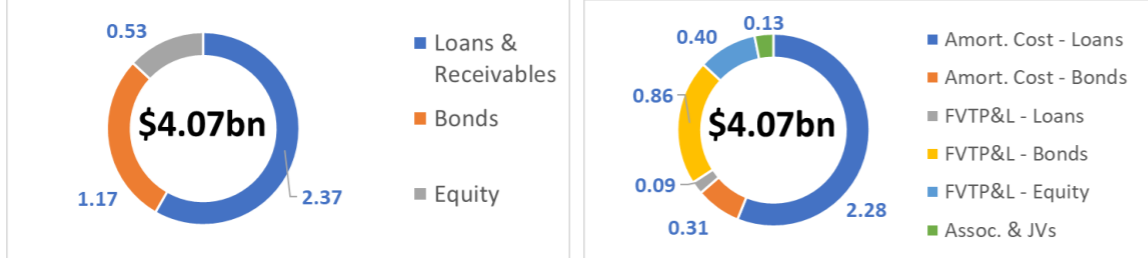
with access to favourable loan interest rates when choosing eligible low emissions passenger and light commercial vehicles.

- The improved fuel efficiency of low emissions vehicles can deliver substantial economic benefits. Within 10 years, Australia could save up to \$7.9 billion per year through reduced fuel use from the increased uptake of low emissions vehicles, according to ClimateWorks.
- In order to be eligible for the CEFC finance, **Eclipx customers must purchase vehicles that meet a CO₂ emissions threshold that is 20 per cent below the most recently published Australian averages for new passenger and light commercial vehicles.**

SMALL TO MEDIUM BUSINESS:

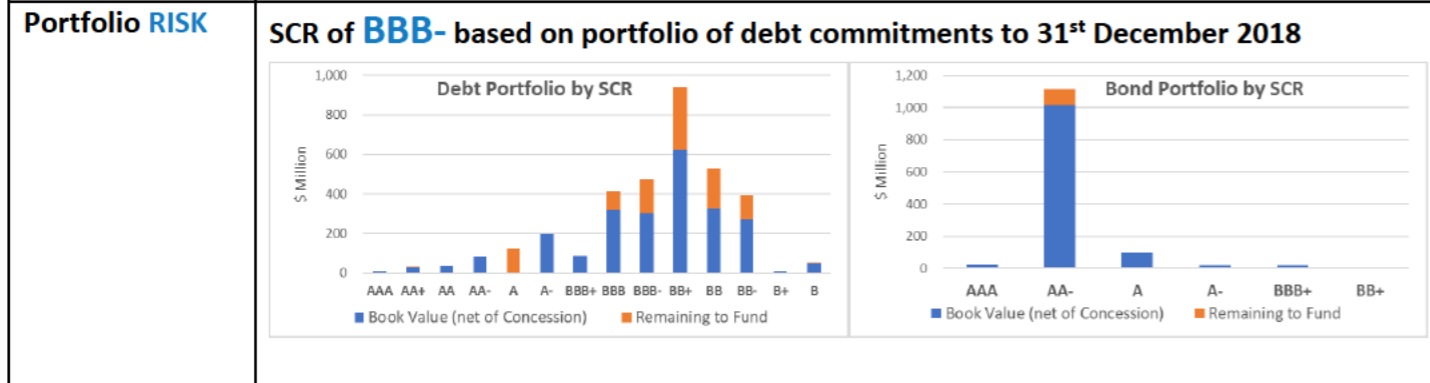
- **The \$100 million Energy Efficient Equipment Finance program, offered through the Commonwealth Bank, provides Australian businesses and not-for-profits lower cost finance** for a wide range of energy efficient assets.
- **Energy Efficient Equipment Finance is available for up to 100 per cent of the project cost for projects between \$10,000 and \$5 million**, including
 - Cars with low CO₂ tailpipe emissions
 - Trucks, buses and machinery powered by electric, hybrid or regenerative drive/engine
 - Energy efficient lighting
 - Industrial refrigeration units and chillers
 - Solar PV panels
 - Energy efficient electric motors, pumps and fans
 - Compressed air, variable speed drives
 - Cogeneration and trigeneration plants
- **The program offers a 0.70 per cent discount on Commonwealth Bank's standard asset finance rate** for technologies that meet the CEFC's investment guidelines.

QUICK FACTS ABOUT CEFC – 31st December 2018

Current PORTFOLIO	<p>CURRENT ON-RISK TOTAL:</p> <p>The CEFC currently has over \$5.6b funds on risk.</p> <p><i>i.e. Sum of (Current Deployed + Progress Draws to come + Current Irrevocable Commitments)</i></p>
	<p>CURRENT DEPLOYED</p> <p>The CEFC currently has over \$4.07b funds deployed.</p>  <p><i>i.e. Sum of (drawn + cap fees & interest – amortisation and principal repayments – actual losses recorded)</i></p>
	<p>CURRENT IRREVOCABLE COMMITMENTS:</p> <p>The CEFC has approximately \$1.6bn in pre-committed investments awaiting deployment.</p> <p><i>i.e. Sum of deals executed but where we have no discretion about whether to invest – e.g. just awaiting CPs to trigger</i></p>
	<p>LIFETIME PROJECT ACHIEVEMENT:</p> <p>Since inception in 2013 to 31 December 2018, the CEFC has made investment commitments of more than \$6.4b through more than 110 direct clean energy transactions, and a further 10 co-finance arrangements (that have delivered over 7,500 smaller transactions across Australia), together investing in projects worth over \$21b.</p> <p><i>i.e. Sum of (Cumulative Commitments – Expired Without Construction / Drawing + Cancelled but CEFC additionality/project went ahead)</i></p>
Achievement SINCE INCEPTION	<p>CANCELLED BUT CEFC ADDITIONALITY/PROJECT WENT AHEAD:</p> <p>Since inception \$75m in cancelled undrawn CEFC commitment has nonetheless been crucial to a project going ahead.</p> <p>Sundrop \$40m, Carnegie \$20m, Lighthouse \$15m</p> <p><i>i.e. Sum of reduction in contracted amounts where project proceeds + Sundrop outcomes where the commitment made the deal go ahead.</i></p>

	<p>REPAID:</p> <p>Since inception, the CEFC has had over \$500m in investment principal repaid, including over 30 projects fully repaid.</p> <p><i>i.e. Sum of (Principal Amounts Repaid in full + amortisation of outstanding facilities)</i></p>		
Leverage CURRENT & SINCE INCEPTION	<p>Since Inception: \$2.2 of private sector leverage for every \$1 of CEFC investment</p> <p><i>i.e. based on Lifetime project achievement</i></p>		
Carbon Abatement SINCE INCEPTION	<p>Since inception, the projects CEFC has invested in are forecast to contribute to over 230Mt/CO2-e in lifetime abatement across the useful life of projects, once constructed.</p>		
Innovation Fund	<p>9 projects, CEFC Investment Commitments of \$58.7m</p> <p>(Greensync \$5m, and second investment of \$2m in June 2018, Carbon Revolution \$10m, Artesian \$10m, SEA Automotive \$5m (fully repaid), Wattwatchers \$2m, Thinxtra \$10m, Relectrify \$0.75m, and second investment of \$2.5m in December 2018, Redback Technologies \$6.4m, Zen Ecosystems \$5m)</p>		
Performance Against BENCHMARK	<p>2016 Investment Mandate (No.2) Benchmark <i>Effective 11/01/2017</i></p>	<p>CORE PORTFOLIO <i>(Cumulative) through 31/12/18</i></p>	<p>INNOVATION FUND <i>(Cumulative) through 31/12/18</i></p>
	<p>PBR Benchmark</p>	<p>5.44% – 6.44% (2.44% + 3% to 4%)</p>	<p>3.22% (2.22% + 1%)</p>
	<p>Return (cumulative from inception to 30/9/18)</p>	<p>4.70%</p> <p><i>(Note: Effective 1/7/18 on the adoption of AASB9, the 30-6-18 return of 4.44% was restated to 4.61% cumulative from inception)</i></p>	<p>-19.03%</p> <p><i>(Note: We expect it to be negative initially as early investments are written-off before any significant write-ups on exit)</i></p>
	<p>Return (Cumulative Reported at 30 June each year)</p>	<p>2013/14: 4.75% (3.12% 5yrGBR) 2014/15: 4.79% (3.11% 5yrGBR) 2015/16: 4.65% (2.95% 5yrGBR) 2016/17: 4.50% (2.74% 5yrGBR) 2017/18: 4.44% (2.51% 5yrGBR)</p>	<p>2016/17: 0% (2.21% 5yrGBR) 2017/18: -14.71% (2.20% 5yrGBR)</p>
	<p>Return (Annualised)</p>	<p>2013/14: 4.76% (3.12% 5yrGBR) 2014/15: 4.81% (3.10% 5yrGBR) 2015/16: 4.44% (2.74% 5yrGBR) 2016/17: 4.22% (2.35% 5yrGBR) 2017/18: 4.37% (2.21% 5yrGBR)</p>	<p>2016/17: 0% (2.22% 5yrGBR) 2017/18: -14.99% (2.21% 5yrGBR)</p>

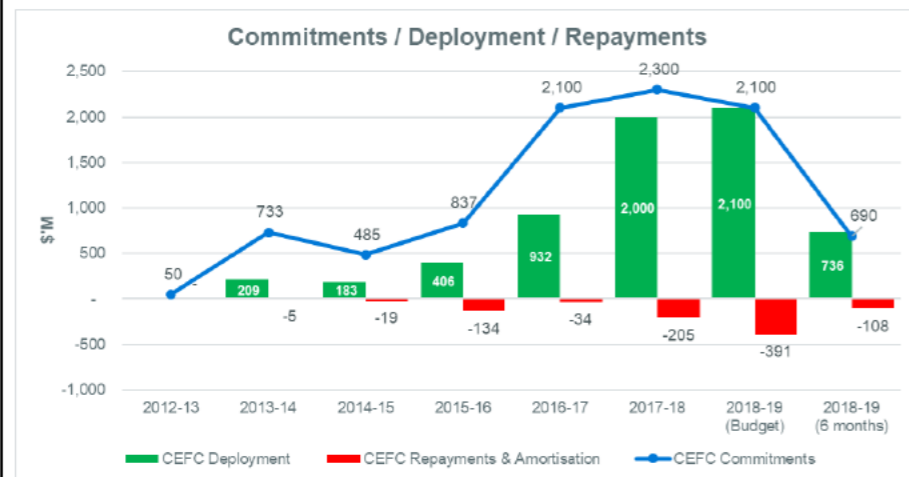
50% Renewables	<p>Reported publicly at each financial year end:</p> <p>31st December 2018: 53.5%</p> <p>30th September 2018: 51.7%</p> <p>30th June 2018: 53.3%</p> <p>30th June 2017: 48.2%</p> <p>30th June 2016: 47.5%</p>
----------------	--



ANNUAL INVESTMENT COMMITMENTS / DEPLOYMENT / REPAYMENTS

	CEFC Commitments	CEFC Deployment	CEFC Repayments & Amortisation
2018-19 (6 months)	\$690m	\$736m	(\$108m)
2018-19 Budget	\$1 - \$1.2bn	\$1.2bn	(\$391m)
2017-18	\$2.3bn	\$2.0bn	(\$205m)
2016-17	\$2.1bn	\$932m	(\$34m)
2015-16	\$837m	\$406m	(\$134m)
2014-15	\$485m	\$183m	(\$19m)
2013-14	\$733m	\$209m	(\$5m)
2012-13	\$50m	-	-

Note: While Commitments are only contractual commitments, not all of them have ended up being funded as some are cancelled or expire before funding (e.g. Balmain, SunDrop, etc)



FINANCIAL RESULTS

	12mths 30-06-16 ACTUAL	12mths 30-6-17 ACTUAL	12mths 30-6-18 ACTUAL	6mths 31-12-18 ACTUAL	12mths 30-6-19 BUDGET
Revenue (own source income)	\$51.0m	\$64.6m	\$132.4m	\$96.7m	\$168.8m
Operating Expenses	\$23.0m	\$28.4m	\$34.2m	\$20.3m	\$49.3m
Concession Charge	\$6.9m	\$11.4m	\$12.0m	\$7.5m	\$25.0m
Impairment Reserve	-	\$2.5m	\$10.3m	\$14.2m	\$25.0m
FV (Gains) / Losses + Share of Assoc's & JVs	-	\$0.6m	\$2.2m	(\$15.8m)	\$0.5m
	\$29.9m	\$42.9m	\$58.7m	\$26.2m	\$99.8m
Surplus	\$21.1m	\$21.7m	\$73.7m	\$70.5m	\$69.0m
Retained Surplus	\$83.7m	\$105.4m	\$179.1m	\$271.1m	\$226.9m
Operating Cash Flow	\$24.9m	\$40.3m	\$93.8m	\$55.0m	\$114.3m

RETAINED SURPLUS

Retained surplus to 31 December 2018: **\$271.1M**

(Note: The 30 June balance increased to ~\$200.6m (from \$179.1m) at 1 July 2018 upon adoption of AASB9)

CONCESSION (through 30/6/18)

Cumulative charge since inception: **~\$50.7M**

Charge net of unwind since inception: **~\$33.5M**
(less than 30 basis points on average over the portfolio)

	Charge	Unwind	Net
2018-19 (6 months YTD)	\$7.5m	\$3.8m	\$3.7m
2017-18	\$12.0m	\$6.1m	\$5.9m
2016-17	\$11.4m	\$2.4m	\$9.0m
2015-16	\$6.9m	\$2.0m	\$4.9m
2014-15	\$1.4m	\$1.5m	(\$0.1m)
2013-14	\$5.6m	\$1.5m	\$4.1m
2012-13	\$5.9m	-	\$5.9m
Cumulative	\$50.7m	\$17.2m	\$33.5m

Budget for full year 2018-19 is **\$25m** expense and **\$7m** unwind (net **\$18m** expense)

5-YR GOVT BOND RATE

1.925% Source: RBA, as at 14th January 2019
(Note: This is up from the low of 1.6% we saw in September 2016)

CEFC SPECIAL ACCOUNT

\$5.679bn available at 31 December 2018

	Credited	Drawn	Returned	Balance
At 31/12/18	\$10.0bn	(\$4.7628bn)	\$0.4418bn	\$5.679bn

STAFF	<p>Headcount of 96 staff filling 95.4 FTE positions (at 31/12/18).</p> <p>ASL Budget through 30/06/19: 112 (incl. 1.4 for Board).</p> <p>ASL through 31/12/18: 96 (incl. 1.4 for Board).</p>																																																																																																		
Current PIPELINE	<ul style="list-style-type: none"> The CEFC is currently examining over 100 proposals seeking almost \$4.6b in funding for projects worth over \$23b 																																																																																																		
PORTFOLIO OF COMMITMENTS BY ESTIMATED TECHNOLOGY SPLIT	<p><i>Note: Portfolio figures excludes contingent commitments, therefore less than \$5.9n</i></p> <table border="1"> <thead> <tr> <th rowspan="2">BY TECHNOLOGY BAND</th> <th colspan="2">At 31st December 2018</th> <th colspan="2">Pipeline</th> </tr> <tr> <th>Total CEFC Amount (\$m)</th> <th>% CEFC \$</th> <th>Total CEFC Amount (\$m)</th> <th>% of CEFC \$</th> </tr> </thead> <tbody> <tr> <td>Renewable energy</td> <td>\$3.0B</td> <td>53%</td> <td>\$3.4b</td> <td>75%</td> </tr> <tr> <td>Energy efficiency</td> <td>\$2.5bn</td> <td>44%</td> <td>\$1.0b</td> <td>21%</td> </tr> <tr> <td>Low emission</td> <td>\$149.9m</td> <td>3%</td> <td>\$200m</td> <td>4%</td> </tr> <tr> <td>Grand Total</td> <td>\$5.6bn</td> <td>100%</td> <td>\$4.6b</td> <td>100%</td> </tr> </tbody> </table>					BY TECHNOLOGY BAND	At 31 st December 2018		Pipeline		Total CEFC Amount (\$m)	% CEFC \$	Total CEFC Amount (\$m)	% of CEFC \$	Renewable energy	\$3.0B	53%	\$3.4b	75%	Energy efficiency	\$2.5bn	44%	\$1.0b	21%	Low emission	\$149.9m	3%	\$200m	4%	Grand Total	\$5.6bn	100%	\$4.6b	100%																																																																	
BY TECHNOLOGY BAND	At 31 st December 2018		Pipeline																																																																																																
	Total CEFC Amount (\$m)	% CEFC \$	Total CEFC Amount (\$m)	% of CEFC \$																																																																																															
Renewable energy	\$3.0B	53%	\$3.4b	75%																																																																																															
Energy efficiency	\$2.5bn	44%	\$1.0b	21%																																																																																															
Low emission	\$149.9m	3%	\$200m	4%																																																																																															
Grand Total	\$5.6bn	100%	\$4.6b	100%																																																																																															
PORTFOLIO OF COMMITMENTS AND PIPELINE BREAKDOWN BY ESTIMATED TECHNOLOGY SPLIT	<table border="1"> <thead> <tr> <th rowspan="2">Estimated Technology Split</th> <th colspan="2">At 31st December 2018</th> <th colspan="2">Pipeline</th> </tr> <tr> <th>Total CEFC Amount</th> <th>% of CEFC \$</th> <th>Total CEFC Amount</th> <th>% of CEFC \$</th> </tr> </thead> <tbody> <tr> <td>Solar PV</td> <td>\$1,909M</td> <td>32%</td> <td>\$866M</td> <td>19%</td> </tr> <tr> <td>Other</td> <td>\$1,305M</td> <td>22%</td> <td>\$922M</td> <td>20%</td> </tr> <tr> <td>Wind</td> <td>\$929M</td> <td>16%</td> <td>\$1,224M</td> <td>27%</td> </tr> <tr> <td>HVAC, Monitoring Systems</td> <td>\$457M</td> <td>8%</td> <td>\$101M</td> <td>2%</td> </tr> <tr> <td>Vehicles</td> <td>\$365M</td> <td>6%</td> <td>\$70M</td> <td>2%</td> </tr> <tr> <td>Lighting</td> <td>\$336M</td> <td>6%</td> <td>\$141M</td> <td>3%</td> </tr> <tr> <td>Industrial Process Improvement</td> <td>\$244M</td> <td>4%</td> <td>\$44M</td> <td>1%</td> </tr> <tr> <td>Storage</td> <td>\$124M</td> <td>2%</td> <td>\$104M</td> <td>2%</td> </tr> <tr> <td>Bioenergy</td> <td>\$118M</td> <td>2%</td> <td>\$430M</td> <td>9%</td> </tr> <tr> <td>Cogen</td> <td>\$84M</td> <td>1%</td> <td>\$24M</td> <td>1%</td> </tr> <tr> <td>Refrigeration</td> <td>\$19M</td> <td>0%</td> <td>\$13M</td> <td>0%</td> </tr> <tr> <td>Hybrid</td> <td>\$5M</td> <td>0%</td> <td>\$20M</td> <td>0%</td> </tr> <tr> <td>Solar Thermal</td> <td>\$0M</td> <td>0%</td> <td>\$130M</td> <td>3%</td> </tr> <tr> <td>Generation / Distribution</td> <td>\$0M</td> <td>0%</td> <td>\$73M</td> <td>2%</td> </tr> <tr> <td>Hydro</td> <td>\$1,909M</td> <td>32%</td> <td>\$450M</td> <td>10%</td> </tr> <tr> <td>Grand Total</td> <td>\$5.9bn</td> <td>100%</td> <td>\$4.6bn</td> <td>100%</td> </tr> <tr> <td>Total Project Amount</td> <td>\$18.7bn</td> <td></td> <td>\$23.1bn</td> <td></td> </tr> </tbody> </table>					Estimated Technology Split	At 31 st December 2018		Pipeline		Total CEFC Amount	% of CEFC \$	Total CEFC Amount	% of CEFC \$	Solar PV	\$1,909M	32%	\$866M	19%	Other	\$1,305M	22%	\$922M	20%	Wind	\$929M	16%	\$1,224M	27%	HVAC, Monitoring Systems	\$457M	8%	\$101M	2%	Vehicles	\$365M	6%	\$70M	2%	Lighting	\$336M	6%	\$141M	3%	Industrial Process Improvement	\$244M	4%	\$44M	1%	Storage	\$124M	2%	\$104M	2%	Bioenergy	\$118M	2%	\$430M	9%	Cogen	\$84M	1%	\$24M	1%	Refrigeration	\$19M	0%	\$13M	0%	Hybrid	\$5M	0%	\$20M	0%	Solar Thermal	\$0M	0%	\$130M	3%	Generation / Distribution	\$0M	0%	\$73M	2%	Hydro	\$1,909M	32%	\$450M	10%	Grand Total	\$5.9bn	100%	\$4.6bn	100%	Total Project Amount	\$18.7bn		\$23.1bn	
Estimated Technology Split	At 31 st December 2018		Pipeline																																																																																																
	Total CEFC Amount	% of CEFC \$	Total CEFC Amount	% of CEFC \$																																																																																															
Solar PV	\$1,909M	32%	\$866M	19%																																																																																															
Other	\$1,305M	22%	\$922M	20%																																																																																															
Wind	\$929M	16%	\$1,224M	27%																																																																																															
HVAC, Monitoring Systems	\$457M	8%	\$101M	2%																																																																																															
Vehicles	\$365M	6%	\$70M	2%																																																																																															
Lighting	\$336M	6%	\$141M	3%																																																																																															
Industrial Process Improvement	\$244M	4%	\$44M	1%																																																																																															
Storage	\$124M	2%	\$104M	2%																																																																																															
Bioenergy	\$118M	2%	\$430M	9%																																																																																															
Cogen	\$84M	1%	\$24M	1%																																																																																															
Refrigeration	\$19M	0%	\$13M	0%																																																																																															
Hybrid	\$5M	0%	\$20M	0%																																																																																															
Solar Thermal	\$0M	0%	\$130M	3%																																																																																															
Generation / Distribution	\$0M	0%	\$73M	2%																																																																																															
Hydro	\$1,909M	32%	\$450M	10%																																																																																															
Grand Total	\$5.9bn	100%	\$4.6bn	100%																																																																																															
Total Project Amount	\$18.7bn		\$23.1bn																																																																																																

PORTFOLIO BY JURISDICTION	<p>(*) At 31st December 2018, almost half (50%) of our total investments are available nation-wide. The remaining investments which are state-specific are included in the following table:</p> <table border="1"> <thead> <tr> <th rowspan="2">Jurisdiction</th> <th rowspan="2">At 31st December 2018 % of CEFC \$</th> <th colspan="4">Pipeline</th> </tr> <tr> <th># of projects</th> <th>Total CEFC Amount</th> <th>Total Project Amount</th> <th>% of CEFC \$</th> </tr> </thead> <tbody> <tr> <td>National</td> <td>49%</td> <td>24</td> <td>\$1,005.0M</td> <td>\$3,750.6M</td> <td>22%</td> </tr> <tr> <td>ACT</td> <td>0%</td> <td>0</td> <td>\$0.0M</td> <td>\$0.0M</td> <td>0%</td> </tr> <tr> <td>NSW</td> <td>20%</td> <td>37</td> <td>\$1,217.1M</td> <td>\$9,128.3M</td> <td>26%</td> </tr> <tr> <td>NT</td> <td>0%</td> <td>2</td> <td>\$100.0M</td> <td>\$300.0M</td> <td>2%</td> </tr> <tr> <td>QLD</td> <td>9%</td> <td>20</td> <td>\$1,159.0M</td> <td>\$3,242.0M</td> <td>25%</td> </tr> <tr> <td>SA</td> <td>7%</td> <td>6</td> <td>\$370.0M</td> <td>\$3,605.0M</td> <td>8%</td> </tr> <tr> <td>TAS</td> <td>0%</td> <td>1</td> <td>\$125.0M</td> <td>\$500.0M</td> <td>3%</td> </tr> <tr> <td>VIC</td> <td>13%</td> <td>13</td> <td>\$143.7M</td> <td>\$1,065.1M</td> <td>3%</td> </tr> <tr> <td>WA</td> <td>2%</td> <td>12</td> <td>\$491.3M</td> <td>\$1,606.3M</td> <td>11%</td> </tr> </tbody> </table>					Jurisdiction	At 31 st December 2018 % of CEFC \$	Pipeline				# of projects	Total CEFC Amount	Total Project Amount	% of CEFC \$	National	49%	24	\$1,005.0M	\$3,750.6M	22%	ACT	0%	0	\$0.0M	\$0.0M	0%	NSW	20%	37	\$1,217.1M	\$9,128.3M	26%	NT	0%	2	\$100.0M	\$300.0M	2%	QLD	9%	20	\$1,159.0M	\$3,242.0M	25%	SA	7%	6	\$370.0M	\$3,605.0M	8%	TAS	0%	1	\$125.0M	\$500.0M	3%	VIC	13%	13	\$143.7M	\$1,065.1M	3%	WA	2%	12	\$491.3M	\$1,606.3M	11%
Jurisdiction	At 31 st December 2018 % of CEFC \$	Pipeline																																																																			
		# of projects	Total CEFC Amount	Total Project Amount	% of CEFC \$																																																																
National	49%	24	\$1,005.0M	\$3,750.6M	22%																																																																
ACT	0%	0	\$0.0M	\$0.0M	0%																																																																
NSW	20%	37	\$1,217.1M	\$9,128.3M	26%																																																																
NT	0%	2	\$100.0M	\$300.0M	2%																																																																
QLD	9%	20	\$1,159.0M	\$3,242.0M	25%																																																																
SA	7%	6	\$370.0M	\$3,605.0M	8%																																																																
TAS	0%	1	\$125.0M	\$500.0M	3%																																																																
VIC	13%	13	\$143.7M	\$1,065.1M	3%																																																																
WA	2%	12	\$491.3M	\$1,606.3M	11%																																																																
Reef Funding Program (since announced on 20/06/2016)	<ul style="list-style-type: none"> Total CEFC commitments of over \$370m can attributed to the Reef Funding Program \$320m is in large scale investments (Ross River, Whitsunday and Hamilton Solar Farms, Collinsville, Daydream and Hayman Solar Farms, and Clermont Solar Farm), and over \$50m in over 370 small projects through aggregation partners at 31 December 2018 <p>6 projects with a total value of \$1.1 million specifically targeting on-farm irrigation equipment which has a positive co-benefit for water quality</p>																																																																				
Cities Funding Program (since announced on 20/06/2016)	<p><i>The Cities figures are provided based on postcode data from the Department</i></p> <p>ESTIMATE – over \$2.4b large scale investments - conservative</p> <p>ESTIMATE over \$500m through over 3,800 in small projects through aggregation partners.</p> <p>CITY Deal areas:</p> <table border="1"> <thead> <tr> <th colspan="3">Darwin City Deal - CEFC invests over \$2 million</th> </tr> </thead> <tbody> <tr> <td>Small Scale Projects</td> <td>19 projects in Darwin</td> <td>\$2 million in CEFC investments</td> </tr> <tr> <td>Large Scale Projects</td> <td>0 projects in Darwin</td> <td>\$0 million in CEFC investments</td> </tr> </tbody> </table>					Darwin City Deal - CEFC invests over \$2 million			Small Scale Projects	19 projects in Darwin	\$2 million in CEFC investments	Large Scale Projects	0 projects in Darwin	\$0 million in CEFC investments																																																							
Darwin City Deal - CEFC invests over \$2 million																																																																					
Small Scale Projects	19 projects in Darwin	\$2 million in CEFC investments																																																																			
Large Scale Projects	0 projects in Darwin	\$0 million in CEFC investments																																																																			

	Geelong City Deal - CEFC invests over \$85 million		
Small Scale Projects	54 projects in Geelong	\$7 million in CEFC investments	
Large Scale Projects (Carbon Revolution, Quintessential)	2 projects in Geelong	\$78 million in CEFC investments	
Hobart City Deal - CEFC invests \$5 million			
Small Scale Projects	41 projects in Hobart	\$5 million in CEFC investments	
Large Scale Projects	0 projects in Hobart	\$0 million in CEFC investments	
Launceston City Deal - CEFC invests \$5 million			
Small Scale Projects	46 projects in Launceston	\$5 million in CEFC investments	
Large Scale Projects	0 projects in Launceston	\$0 million in CEFC investments	
Perth City Deal - CEFC invests over \$36 million			
Small Scale Projects	285 projects in Perth	\$36 million in CEFC investments	
Large Scale Projects	0 projects in Perth	\$0 million in CEFC investments	
Townsville City Deal - CEFC invests over \$30 million			
Small Scale Projects	107 projects in Townsville	\$7 million in CEFC investments	
Large Scale Projects (Ross River)	1 project in Townsville	\$24 million in CEFC investments	
Western Sydney City Deal - CEFC invests over \$320 million			
Small Scale Projects	172 projects in Western Sydney	\$33 million in CEFC investments	
Large Scale Projects (ResourceCo, Qube, SCGH)	3 projects in Western Sydney	\$290 million in CEFC investments	
Aggregation Programs	PERFORMANCE OF AGGREGATION SELL-THRU FINANCE/ SUBSIDIARY TRANSACTIONS		
	REACHED FINANCIAL CLOSE:		
	Sponsor, Product and Vintage	Drawdown Performance to 31 December 2018	
	NAB Energy Efficient Bonus 2014-15 (\$120m commitment + \$180m extension)	s47G(1)(a) deployed to date in s47G(1)(a) contracts across energy efficiency and renewables.	
	TAEUF (NAB & ANZ) (2013-14 originally LCAL Investment)	s47G(1)(a) deployed to date in s47G(1)(a) upgrade projects worth s47G(1)(a) .	
	Eclix 2015-16 (\$50m commitment)	s47G(1)(a) deployed to finance more than s47G(1)(a) fleet vehicle upgrades to lower carbon emitting vehicles.	

ANZ Energy Efficient Asset Finance Program 2017-18 (\$150m commitment)	s47G(1)(a) deployed to date in s47G(1)(a) contracts across energy efficiency and renewables.
CBA Energy Efficiency Program 2016-17 (\$300m commitment)	s47G(1)(a) deployed to date in s47G(1)(a) contracts across energy efficiency and renewables.
Westpac Solar & Energy Efficient Finance Program 2016-17 (\$200m commitment)	s47G(1)(a) deployed to date in s47G(1)(a) contracts across energy efficiency and renewables.
Ratesetter 2016-17 (\$20m commitment)	s47G(1)(a) deployed to date in s47G(1)(a) contracts across EE and renewables.
Macquarie Leasing 2017-18 (\$100m commitment)	s47G(1)(a) deployed to date in s47G(1)(a) contracts – mainly for electric vehicles.
Metro Finance Pty Ltd 2017-18 (\$50m commitment)	s47G(1)(a) deployed to date in s47G(1)(a) contracts –lower carbon emitting vehicles, including electric vehicles.
Firstmac 2014-15 (\$50m commitment, then reduced to \$10m, increased back to \$25m)	Completed contractual and financial close

s22

From: s22
Sent: Wednesday, 28 November 2018 10:04 AM
To: s22
Subject: FW: Information Request - all CEFC New generation supported since inception [DLM=For-Official-Use-Only]
Attachments: Brief 20181109 CEFC All New Generation Supported Since Inception.xlsx

From: s22
Sent: Friday, 9 November 2018 11:32 AM
To: [Redacted]
Cc: s22
[Redacted]
[Redacted]
[Redacted]
[Redacted]
[Redacted]

Subject: Information Request - all CEFC New generation supported since inception

Hi s22

Please find attached the information you requested. This contains all large scale (including repaid) listed individually and a conservative bundled estimate for smaller scale PV funded by aggregation programs and some smaller commercial scale PV projects. Breakdowns are available in the spreadsheet attached.

The headline summary is that the CEFC has financed more than 2.8GW of new generation capacity since inception – with \$2.3 billion of CEFC finance supporting projects worth more than \$8 billion.

GRAND TOTAL	CEFC	TOTAL PROJECT
2,821MW	\$2,368,357,317	\$8,179,408,783

Kind regards

s22
Head of Government and Stakeholder Relations

CLEAN ENERGY FINANCE CORPORATION

s22
[Redacted]

[W cefc.com.au](http://cefc.com.au)



Important information: This email (including attachments and links) is confidential and may be subject to privilege, neither of which is waived by mistaken delivery. If you are not the intended recipient please notify the sender by return email, do not use or disclose information contained in this email in any way and permanently delete all copies of the message. Information that you provide to the CEFC may be used and disclosed in accordance with our Privacy Policy and our Privacy Collection Statements and is subject to the Freedom of Information Act 1982.

CEFC Finance

ACTIVE INVESTMENTS	s47G(1)(a)	Finance Type	State	Technology	Nameplate Generation Capacity	CEFC Commitment	Total Funds Mobilised (A + B + C)
					[MW] NEW	[\$AUD]	[\$AUD]
Numurkah Sola Farm		Project Finance	VIC	Solar PV	100	\$56,236,324	\$198,419,837
Phoenix Energy Australia Pty Ltd		Project Finance	WA	Bioenergy	40	\$89,458,695	\$696,028,956
SA Gov Home Energy Storage Subsidy Scheme		Co-financing Programs	SA	Solar PV	15	\$20,000,000	\$37,500,000
Daydream and Hayman Solar Farms		Project Finance	QLD	Solar PV	200	\$89,905,924	\$395,659,085
Cleanaway Waste Management Limited		Corporate Loans	National	Bioenergy	11	\$90,000,000	\$90,000,000
Bannerton Solar Farm		Project Finance	VIC	Solar PV	88	\$96,955,394	\$169,355,301
Kennedy Energy Park		Project Finance	QLD	Wind	58	\$93,552,437	\$170,888,943
Lincoln Gap Wind Farm		Project Finance	SA	Wind	126	\$150,000,000	\$303,041,150
Palisade Investment Partners IMA investment in Granville Harbour Wind		Equity	TAS	Wind	112	\$25,410,000	\$306,100,000
Clermont Solar Farm and Wemen Solar Farm		Project Finance	VIC	Solar PV	200	\$207,208,720	\$378,091,961
Coleambally Solar Farm		Project Finance	NSW	Solar PV	150	\$29,317,431	\$258,688,561
Oakey Solar Farm Stage 2		Project Finance	QLD	Solar PV	55	\$54,324,826	\$114,335,878

Newcastle City Council	s47G(1)(a)	Corporate Loans	NSW	Solar PV	5	\$6,500,000	\$8,200,000
Crudine Ridge Wind Farm		Project Finance	NSW	Wind	135	\$37,730,000	\$272,307,786
Sapphire Wind Farm		Project Finance	NSW	Wind	270	\$119,325,010	\$587,621,000
Palisade Partners IMA investment in Ross River Solar Farm		Equity	QLD	Solar PV	116	\$24,050,000	\$245,500,000
Impact Investment Group Solar Income Fund		Project Finance	National	Solar PV	15	\$23,797,000	\$53,600,000
Griffith Solar Farm		Project Finance	NSW	Solar PV	30	\$40,849,372	\$62,973,149
Dubbo Solar Farm		Project Finance	NSW	Solar PV	24	\$30,621,218	\$52,402,684
Parkes Solar Farm		Project Finance	NSW	Solar PV	55	\$79,526,789	\$115,389,425
Kidston Solar Project		Project Finance	QLD	Solar PV	50	\$37,560,000	\$130,400,000
Gannawarra, Whitsundays and Hamilton Solar Farms		Project Finance	QLD	Solar PV	164	\$77,024,000	\$384,545,650
Longreach Solar Farm		Project Finance	QLD	Solar PV	15	\$13,324,973	\$31,352,878

Oakey Solar Farm	s47G(1)(a)	Project Finance	QLD	Solar PV	25	\$19,125,779	\$55,878,084
Bodangora Wind Farm		Project Finance	NSW	Wind	113	\$81,386,680	\$235,930,710
Collinsville Solar Farm		Project Finance	QLD	Solar PV	42	\$60,000,000	\$107,426,000
Qube Holding Limited		Corporate Loans	NSW	Solar PV	60	\$150,000,000	\$150,000,000
QIC Shopping Centre Fund		Corporate Loans	National	Lighting	9	\$200,000,000	\$1,000,000,000
deGrussa Sol Project		Project Finance	WA	Solar PV	11	\$15,000,000	\$43,566,000
Ararat Wind Farm		Project Finance	VIC	Wind	240	\$67,000,000	\$513,500,000
Barcaldine Remote Community Solar Farm		Project Finance	QLD	Solar PV	20	\$20,000,000	\$69,000,000
Yulara Solar P Ltd		Project Finance	NT	Solar PV	2	\$4,599,083	\$7,199,083
Taralga Wind Farm		Project Finance	NSW	Wind	107	\$37,491,532	\$288,130,532
Total					2,662	\$2,147,281,187	7,533,032,653

CEFC Finance Repaid:

INVESTMENTS	s47G(1)(a)	Finance Type	State	Technology	Nameplate Generation Capacity [MW] NEW	CEFC Commitment [\$AUD]	Total Funds Mobilised (A + B + C) [\$AUD]
-------------	------------	--------------	-------	------------	--	----------------------------	---

Pacific Hydro Australia	s47G(1)(a)	Project Finance	VIC	Wind	47	\$20,000,000	\$20,000,000
Pacific Hydro Australia		Project Finance	VIC	Wind	0	\$50,000,000	\$341,000,000
Moree Solar Farm		Project Finance	NSW	Solar PV	56	\$46,076,130	\$165,776,130
Landfill Gas Industries Pty Ltd		Corporate Loans	QLD	Bioenergy	6	\$10,000,000	\$24,600,000
Total					109	\$126,076,130	551,376,130

CEFC Aggregation Finance/Small loans

Various	Various	Aggregation Programs/Small loans	National	Solar PV	~50	95,000,000+	95,000,000+
Total					~50	95,000,000+	95,000,000+
GRAND TOTAL					2,821	\$2,368,357,317	\$8,179,408,783

Non-financial Investment Outcomes – Carbon abatement

s22 [REDACTED] – Head of Portfolio Management
November 2016

SCALE SOLAR CLEANER POWER BIOENERGY LARGE-SCALE SOLAR GRID AND STORAGE
BIOENERGY SOLUTIONS WASTE GRID AND STORAGE WIND BIOENERGY AGRICULTURE
SOCIAL HOUSING INFRASTRUCTURE BETTER BUILT GOVERNMENTS INFRASTRUCTURE
TRANSPORT PROPERTY INDUSTRY ENVIRONMENT UNIVERSITIES NOT FOR PROFITS
CO-FINANCIERS CLIMATE BONDS EQUITY FUNDS CLIMATE NEW SOURCES INNOVATIO
BONDS INNOVATION EQUITY CLIMATE BONDS CO-FINANCIERS OF CAPITAL EQUITY FUN

CEFC MISSION


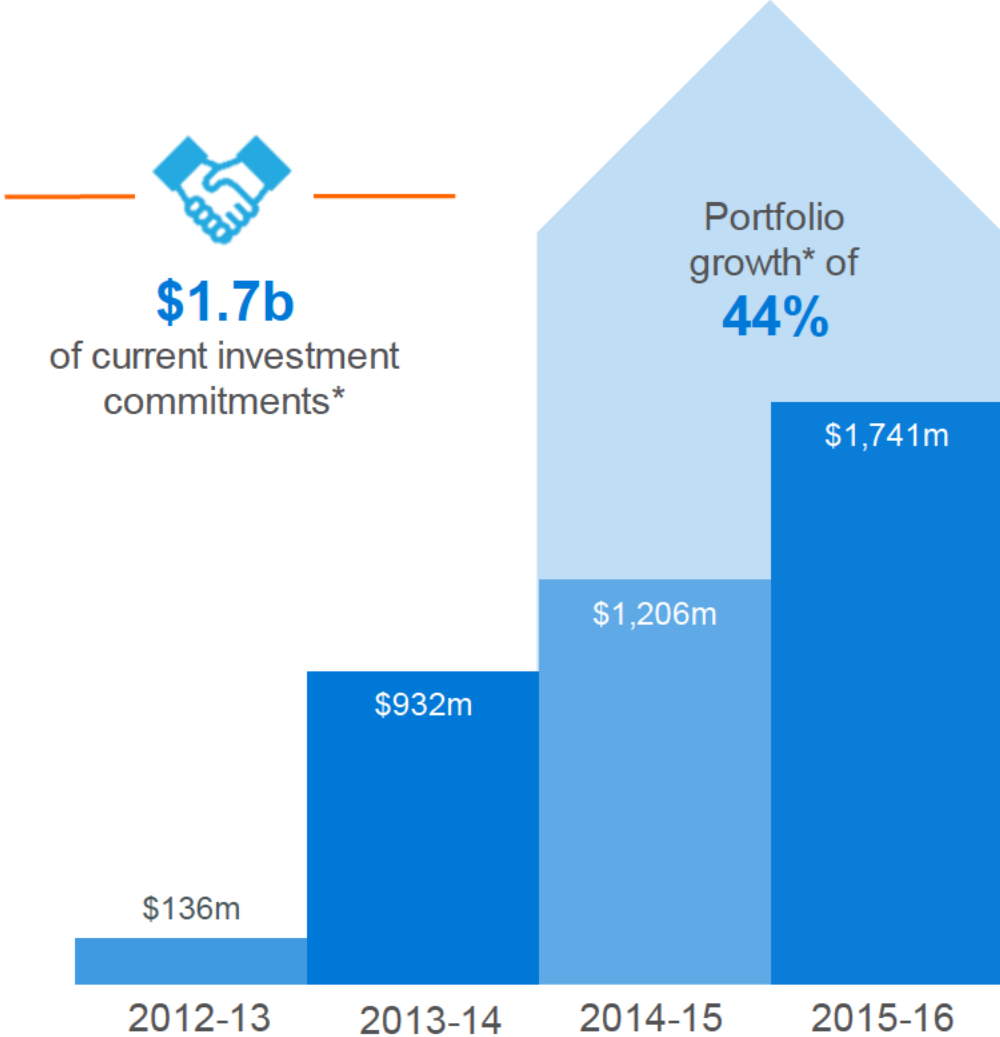
To accelerate **Australia's transformation** towards a more **competitive economy** in a carbon constrained world, by acting as a **catalyst** to **increase investment in emissions reduction**.



CONTENTS

1. About the CEFC
2. Overview of abatement methodology
3. Abatement reporting

CEFC CLEAN ENERGY PORTFOLIO



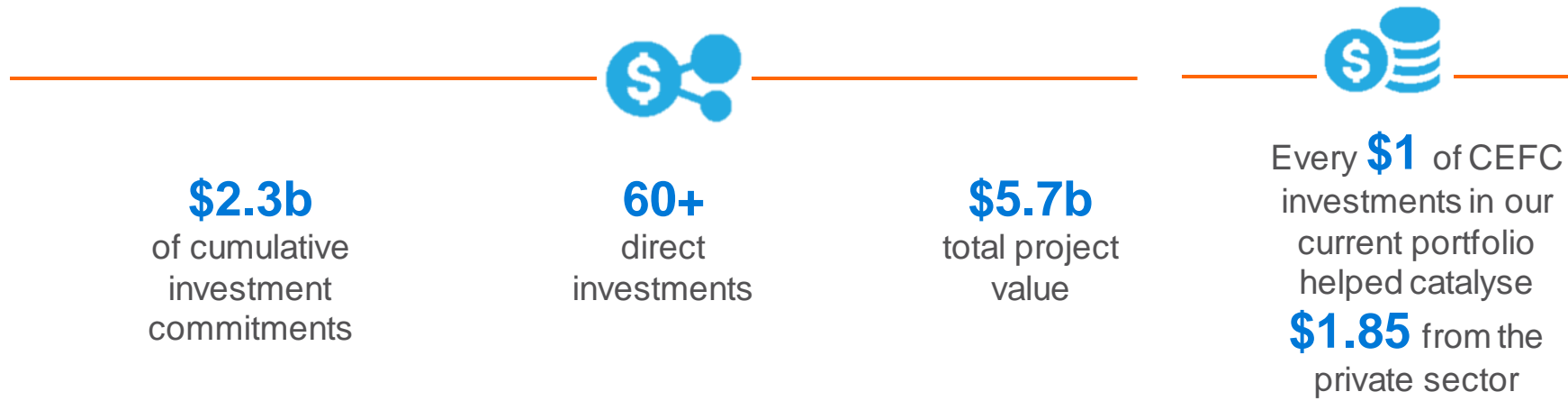
Over **60** direct investments with a forecast investment yield of over **5%**

7 co-finance and aggregation programs that have delivered over **\$100m** in finance to more than **500** smaller projects and businesses across Australia

*After allowing for new investments in each year, minus loans fully amortised, repaid or exited, and expired or cancelled undrawn commitments, at June 30 2016

DRIVING CLEAN ENERGY INVESTMENT









Since establishment in 2012, we have delivered outcomes which have a measurable impact on Australia's clean energy investment.



Source: CEFC, figures as at 30 June 2016

INVESTING ACROSS THE ECONOMY

We invest in businesses and projects which develop or commercialise clean energy technologies, as well as businesses that supply the goods and services needed to develop and commercialise clean energy technologies.

CLEANER POWER SOLUTIONS		A BETTER BUILT ENVIRONMENT	
	LARGE SCALE SOLAR		PROPERTY AND MANUFACTURING
	WIND		INFRASTRUCTURE AND TRANSPORT
	WASTE, BIOENERGY AND AGRICULTURE		GOVERNMENT AND UNIVERSITIES
	GRID AND STORAGE SOLUTIONS		SOCIAL HOUSING

NEW SOURCES OF CAPITAL



CEFC DIRECT

Our direct investments can include both debt products and equity investments, or a combination of both.



DEBT MARKETS

We have supported green bonds and securitised vehicles in the debt markets. We also work with co-financiers to support small-scale investment opportunities.



INVESTMENT FUNDS

We invest in major clean energy projects together with other investment funds in order to catalyse investment into the sector.



INNOVATION FUND

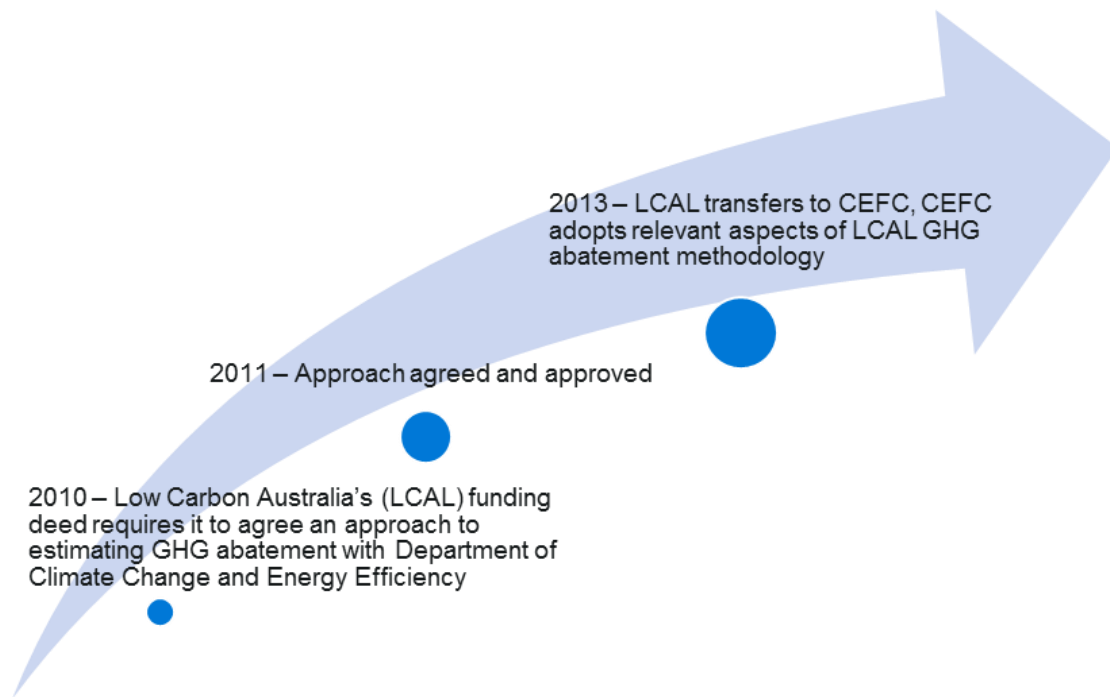
We invest in innovative technologies and businesses that will benefit from growth or early stage capital.



CONTENTS

1. About the CEFC
2. Overview of abatement methodology
3. Abatement reporting

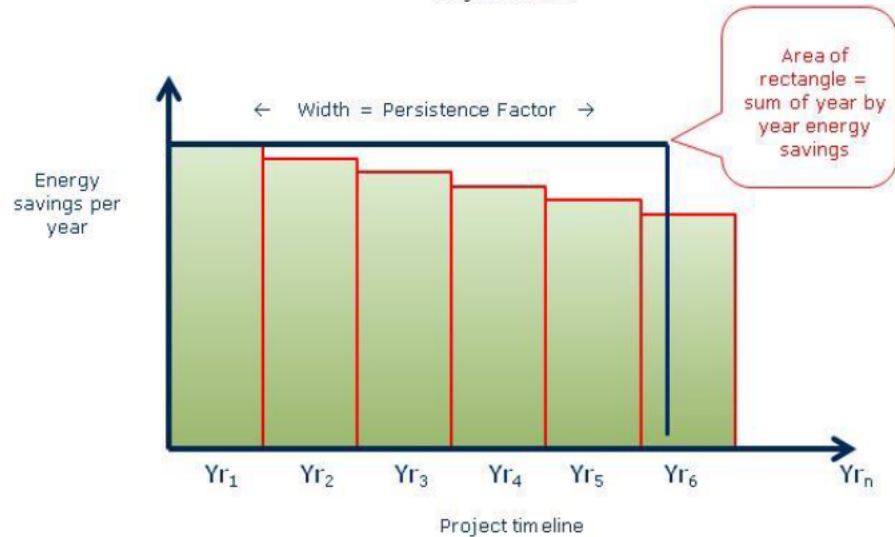
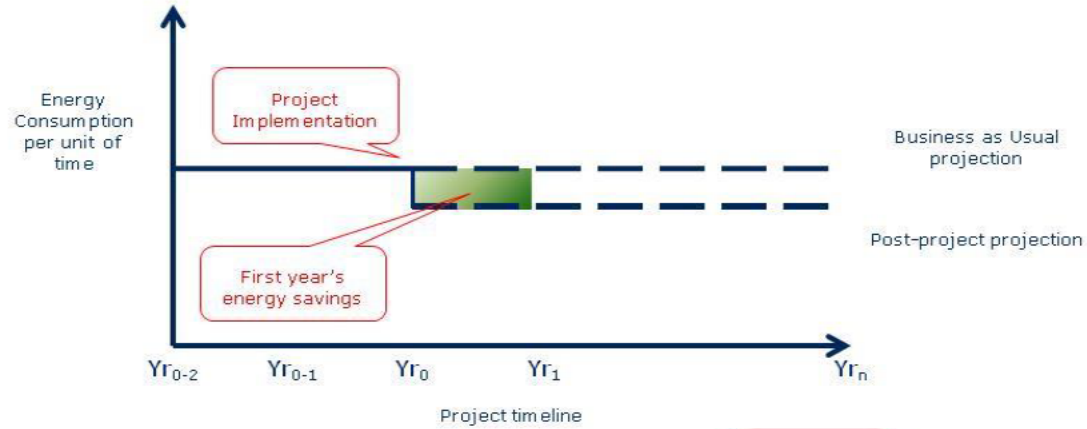
Abatement methodology development



Key aspects

- Originally energy efficiency focussed
- BAU versus project approach
- Use of Persistence Factors
- National Greenhouse Account Factors, plus Treasury modelling
- Complement to established methods e.g. NABERS, ESS, ERF

Abatement methodology – Energy Efficiency and Low Emissions Technology



- Mostly ex-ante in approach
- Project specifics can override a standardised approach
- Conservative PF for multi-technology projects

Abatement methodology – Large Scale Renewables*

Operations

Production

Overall description

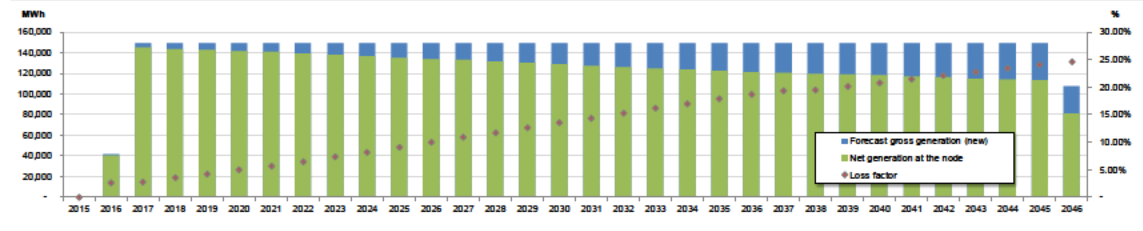
Nominal power	MW	70.18	Average gain from horizontal	%	32.81%
Solar irradiance	KWh/m2 p.a.	1,967	Average net performance ratio	%	81.19%
Average equivalent hours	KWh/KWp	1,597	Availability	%	100.00%
Maximum production	MWh p.a.	112,092			

Degradation and loss factor profiles

Degradation	% p.a.	OpY 1	OpY 2	OpY 3	OpY 4	OpY 5	OpY 6
MLF	%	97.36%	97.32%	97.28%	97.25%	97.21%	97.17%

Generation profile

Financial Year	Total	FY2014	FY2015	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028	FY2029	FY2030+
Forecast gross generation (new)	MWh	4,466,003	-	-	41,367	148,867	148,867	148,867	148,867	148,867	148,867	148,867	148,867	148,867	148,867	148,867	148,867	2,489,368
Net generation at the node	MWh	3,837,545	-	-	40,274	144,735	143,663	142,594	141,535	140,466	139,345	137,959	136,650	135,335	134,003	132,679	131,368	2,006,635
Losses factor	%	14.07%	-	-	2.64%	2.78%	3.50%	4.21%	4.52%	5.64%	6.40%	7.30%	8.20%	9.09%	9.98%	10.87%	11.75%	12.64%



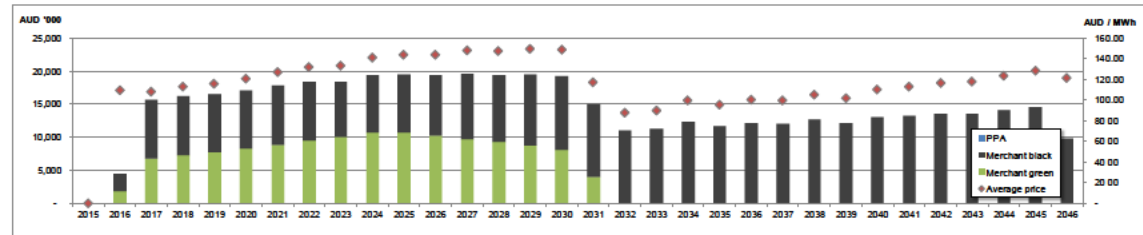
Financial highlights

Revenue

Financial Year	Total	FY2014	FY2015	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028	FY2029	FY2030+
PPA	AUD 000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Merchant black	AUD 000	330,511	-	-	2,597	8,959	8,967	8,794	8,818	9,016	8,950	8,340	8,612	8,736	9,095	9,911	10,157	10,757
Merchant green	AUD 000	131,582	-	-	1,802	6,780	7,243	7,737	8,265	8,828	9,435	10,046	10,707	10,701	10,208	9,710	9,217	8,655
Summary																		
Revenue	AUD 000	464,700	-	-	4,400	15,703	16,276	16,538	17,153	17,915	18,440	18,400	19,396	19,515	19,383	19,703	19,458	19,538
Opex	AUD 000	(102,433)	-	-	(794)	(2,394)	(2,450)	(2,495)	(2,540)	(2,596)	(2,661)	(2,727)	(2,802)	(2,864)	(3,008)	(3,091)	(3,159)	(3,232)
Net working capital adjustment	AUD 000	-	-	-	(560)	(35)	(21)	(21)	(57)	(25)	(27)	(35)	(59)	8	(5)	9	2	1
Capex	AUD 000	(179,362)	-	-	(117,263)	(62,098)	-	-	-	-	-	-	-	-	-	-	-	-
Funding	AUD 000	176,565	-	-	114,466	62,098	-	-	-	-	-	-	-	-	-	-	-	-
Interest income	AUD 000	3,223	-	-	19	75	92	116	144	169	191	211	235	251	255	197	210	226
GST received	AUD 000	4,833	-	-	2,797	2,036	-	-	-	-	-	-	-	-	-	-	-	-
Tax	AUD 000	(80,553)	-	-	-	(237)	(1,740)	(2,020)	(2,321)	(2,723)	(2,973)	(3,116)	(3,510)	(3,758)	(3,826)	(3,942)	(4,007)	(4,203)
Movement in O&M reserve	AUD 000	(0)	-	-	(190)	(400)	(400)	(400)	(400)	(400)	(400)	(400)	(400)	(400)	(465)	(465)	(465)	(465)
Maintenance capex	AUD 000	(7,801)	-	-	-	-	-	-	-	-	-	-	-	(2,308)	-	-	-	(5,493)
CPAD6	AUD 000	279,172	-	(0)	5,021	12,713	11,756	11,778	11,980	12,341	12,578	12,394	12,860	12,761	12,455	12,495	12,108	11,961

Prices

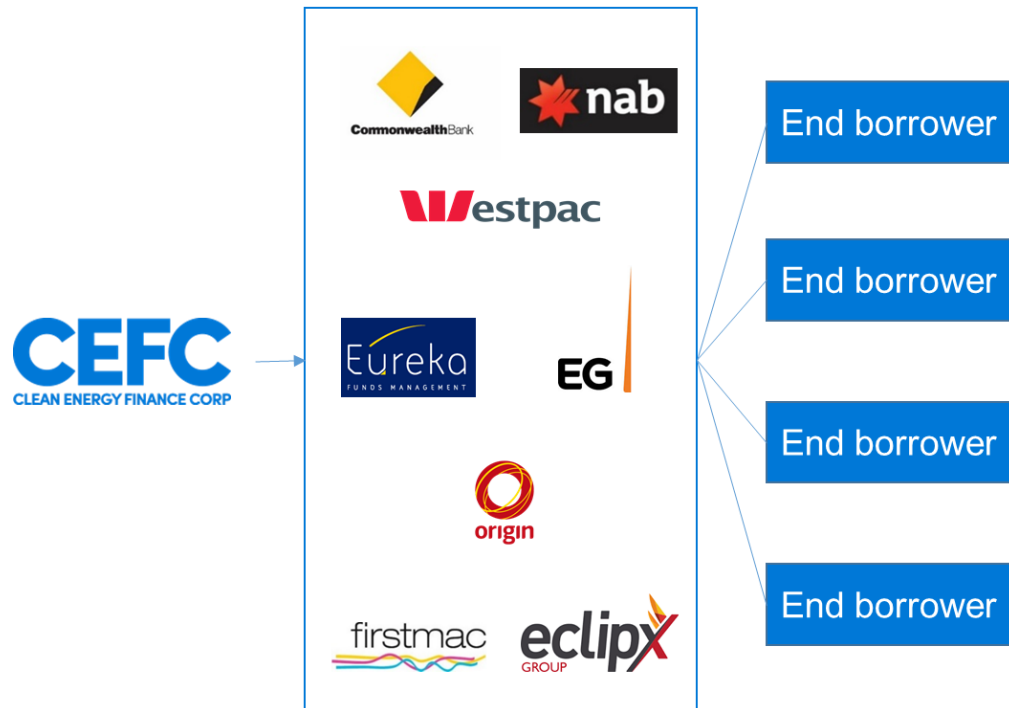
Financial Year	Total	FY2014	FY2015	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028	FY2029	FY2030+
PPA	AUD / MWh	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Merchant black	AUD / MWh	86.13	-	-	64.49	61.21	62.42	61.67	62.30	64.19	64.23	60.43	63.02	67.87	74.70	77.32	83.02	104.08
Merchant green	AUD / MWh	34.24	-	-	44.74	46.84	50.42	54.26	58.40	62.85	67.64	72.80	78.35	79.07	75.17	73.19	70.16	66.55



- Estimates driven by financial modelling (P50)
- Degradation factors over warranted lifetime
- Compliance reporting enables validation once operational

*For small-scale generation – STC calculation by postcode

Abatement methodology – Co-finance Programs



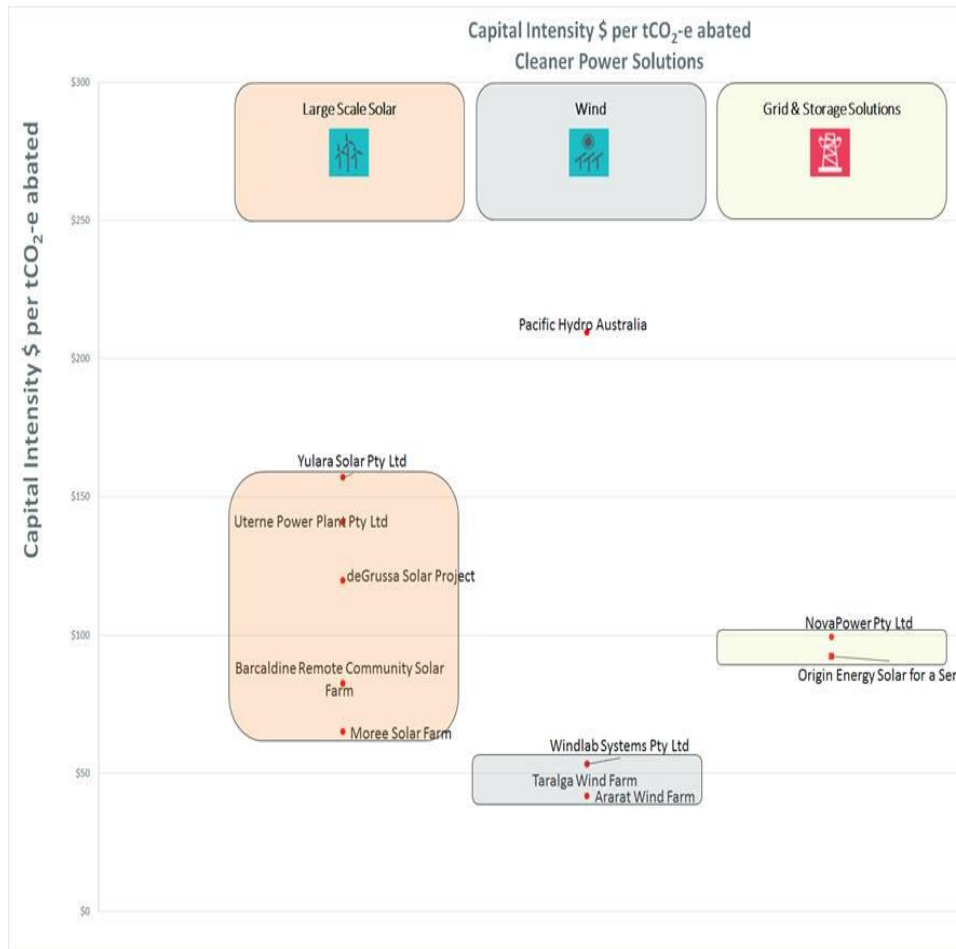
- Initially ex-ante, typical capex driven
- Verified through project review and/or sampling
- Conservative PFs
- Feedback loop to iterate estimates



CONTENTS

1. About the CEFC
2. Overview of abatement methodology
3. Abatement reporting

Abatement reporting – Project Evaluation



- Abatement reporting as part of investment screening
- Sensitivity to technology and sector
- Zero abatement for bonds and re-finance

Abatement reporting – Annual Report



Total projected lifetime carbon abatement of current portfolio is 38.5 million tonnes of CO₂ equivalent emissions.

Note the CEFC does not claim that this abatement occurs independently of complementary policy, such as the RET.

CLEAN ENERGY FINANCE CORPORATION

t. 1300 002 332

i. +61 2 8039 0800

e. info@cleanenergyfinancecorp.com.au

cleanenergyfinancecorp.com.au



Australian Government

Department of the Environment and Energy

s22

s22

s22

s22

s22

SPEECH/TALKING POINTS



Deputy Secretary Jo Evans

Keynote address for the Clean Energy Finance Corporation Stakeholder Event

Tuesday 24 July 2018

No.35 Restaurant, Sofitel hotel, 25 Collins St

Melbourne

Introduction and welcome

- Thank you very much for inviting me here today.
- I would like to acknowledge the traditional owners and custodians of the land on which we are meeting the Boon Wurrung and Woiwurrung (Wurundjeri) peoples of the Kulin Nation and pay my respects to their elders past, present and future.
- I welcome the new members of the Clean Energy Finance Corporation Board. I have every confidence in your ability to guide and shape the ongoing work of the agency.
- The Minister regrets he is unable to join you today.

1. The Environment and Energy portfolio

- The Environment and Energy portfolio covers of the Australian Government's policies and programs to protect and conserve the environment, water and heritage, promote climate action, and provide adequate, reliable and affordable energy to meet future energy consumption needs.
- This is a very broad remit, which makes for a busy Minister.
 - **Protecting the environment is core to our business.** The portfolio manages environmental assessments under the Environment Protection and Biodiversity Conservation Act 1999 (the EPBC Act).
 - The EPBC Act is our central piece of environmental legislation. It provides a legal framework to protect and manage nationally and internationally important flora, fauna, ecological communities and heritage places.
 - The Portfolio, through Parks Australia, **manages six Commonwealth National Parks, the Australian National Botanic Gardens and 58 Commonwealth Marine Reserves.** These parks and reserves which include Booderee National Park on the South Coast of NSW, Uluru-Kata Tjuta National Park in central Australia and Christmas Island to the North west of the Australian Continent protect some of the country's most stunning natural areas and Aboriginal heritage.
 - We manage and preserve Commonwealth, National and World Heritage in conjunction with state and local governments.
 - The Environment and Energy portfolio develops and implements policies and programs **to reduce emissions and adapt to a changing climate.** We measure current, and predict future emissions to meet our international obligations. We support business and industry, farmers and land managers, and local governments and communities to be innovative and adopt smarter practices and technologies to

adapt to our changing climate. *The CEFC supports change and the adoption of new technologies helping to reduce emissions.*

- **The Great Barrier Reef** features prominently in the portfolio. It is one of the world's natural wonders and is the largest coral reef on earth. The Reef is important to communities and industries who depend on a healthy Reef, and attracts millions of visitors each year who come to the Reef to experience this natural wonder.
 - The Reef 2050 Plan, established in 2015 is the centerpiece of Australia's efforts to build the resilience of the Great Barrier Reef, a World Heritage site.
 - *The CEFC is making its contribution to the management of this iconic site through the Reef Funding Program, which provide for up to \$1 billion investment in clean energy projects in the Reef catchment area.*
 - *I welcome further engagement with the CEFC to support the delivery of the Government's Reef 2050 Plan, aiming to bring the benefits of clean energy to support the long-term health of the Great Barrier Reef.*
- The Department works closely with the Council of Australian Governments Energy Council, and energy market bodies such as the Australian Energy Market Commission; the Australian Energy Market Operator; and the Australian Energy Regulator to ensure Australians have **access to secure, reliable and affordable energy**. Renewable generation and storage technologies like batteries are becoming increasingly important as older generation exits the system. *The CEFC plays an important role is supporting uptake of these technologies and driving growth of renewables and low emission technology industries.*
- **Waste** is emerging as an important consideration. The recent meeting of Environment Ministers in April this year focused on the need to take action on recycled waste spurred by the import restrictions announced by China. The restrictions account for 4 per cent of Australia's recyclable waste, 35 per cent of recyclable plastics and 30 per cent of recyclable paper and cardboard. In response to the outcomes of this meeting the Department has established a waste task force.
 - Some of the actions agreed to by Ministers were to:
 - Reduce the amount of waste generated aiming to have 100 percent of Australian packaging being recyclable, compostable or reusable by 2025 or earlier
 - Increase our recycling capacity at the domestic scale

- Update the National Waste Strategy by the end of 2018 to include circular economy principles
 - Explore opportunities to advance waste-to-energy and waste-to-biofuels projects, as part of a broader suite of industry growth initiatives.
- I thank you for your contribution to this important and growing sector and look forward to collaborating further to address our waste issues and supporting our transition to a lower emissions economy.
- To date the CEFC has committed to investments of more than \$200 million to the waste-to-energy and waste-to-bioenergy sectors, in projects worth more than \$400 million.
- Mr Skala has confirmed he sees significant further opportunities in this sector, specifically in the areas of
 - Supporting diversion of landfill for projects which are wholly or primarily renewable, energy efficient or otherwise substantially reduce emissions. Examples include destruction of waste methane, composting and supporting waste-to-energy plants
 - Financing the recycling sector to modernise equipment and/or build new plants.

2. Australia's energy policy landscape

- Australia faces an energy trilemma: we need to secure our electricity system and reduce energy prices faced by businesses and consumers, while also achieving our long-term aim of a lower emissions future.
- Australia's energy sector is undergoing a fundamental transition. This transition is being driven by changing consumer preferences, new technologies and the shift towards a low emissions future.
- The development, demonstration and deployment of clean energy technologies is crucial to the ability of Australia's energy sector to be able to meet these challenges.
- The Australian Government is committed to the development of renewable energy and supporting the transition to a lower emissions economy while at the same time providing sustainable, secure and affordable energy to industry and households.
- The Government provides support through a suite of initiatives to assist the development, commercialisation and market deployment of existing and emerging renewable energy technologies.

- Australian Government agencies including the CEFC and the Australian Renewable Energy Agency are playing a significant role in this transition.
- I want to acknowledge the CEFC's vital role as a catalyst for clean energy investment in Australia.

3. The CEFC's contribution so far

- The CEFC's current commitments to 31 March 2018 total over \$5 billion since it began investing in 2013. Investments contribute to a diverse range of more than 95 projects with a total value of over \$19 billion.
- Total CEFC commitments to projects under the reef funding program equate to over \$345 million. \$320 million of this funding is for large scale investments and the remainder for over 310 small projects.
- Equally important of course is the contribution the CEFC is making to Australia's environment. I am pleased to note that the CEFC's investment portfolio, as it currently stands, will achieve a greenhouse gas abatement of almost 7.3 million tonnes CO_{2e} annually. This translates into more than 121 million tonnes CO_{2e} over the lifetime of these projects – a fantastic achievement for our environment.
- Through the Clean Energy Innovation Fund the CEFC supports Australian early stage and emerging clean energy technologies achieve International success.
 - The CEFC provided \$10 million to Carbon Revolution to kick start their carbon wheel project. The success of this project has led to international contracts with companies including Ford and Ferrari.

s22

[Redacted]

|

[Redacted]

|

[Redacted]

|

[Redacted]

|

[Redacted]

s22

[Redacted text block containing multiple paragraphs and bulleted points]

6. Conclusion

- I am confident that the CEFC will continue making a significant contribution to Australia’s energy future and the aspiration to fast-track our shift to a lower emissions economy whilst making energy secure, reliable and affordable for Australian families and businesses.
- In closing, I’d like to acknowledge the crucial work being done by the CEFC in transforming the clean energy sector. You are doing a fantastic job, and the Government looks forward to the important contributions you will continue to make to Australia’s energy future.

s22

s22

s22

s22

s22

s22

s22

s22

s22

s22

s22

s22

s22

s22



Australian Government

Department of the Environment and Energy

s22

s22

s22

s22



THE HON JOSH FRYDENBERG MP

Minister for the Environment and Energy

The CEFC's role in Australia's environmental and energy policy

Paper to the CEFC Strategy Day 2018

Friday 16 February 2018

Premier's Room, Level 2, Intercontinental Hotel, 117 Macquarie Street, Sydney

Introduction and welcome

- Thank you for inviting me to speak at your 2018 strategy day.
- I last spoke with you at your all-staff meeting in August 2017. Much has happened since then, both within the CEFC and in energy policy, so I am very pleased to be able to address you again to explain the Government's vision for the coming year and the ways in which the CEFC can help us achieve this.
- I give a particularly warm welcome to the new CEFC Board Members: Philip Coffey, Laura Reed and Andrea Slattery. I have every confidence in your ability to guide and shape the ongoing work of the agency. I also farewell and thank the outgoing Board members, Paul Binsted and Martijn Wilder, for their important contributions to the establishment of the CEFC's operations and directing it through to the mature organisation that it is today.

1. Australia's energy policy landscape

- Australia faces an energy trilemma: we need to secure our electricity system and reduce energy prices faced by businesses and consumers, while also achieving our long-term aim of a lower emissions future.
- The development, demonstration and deployment of clean energy technologies is crucial to the ability of Australia's energy sector to be able to meet these challenges.
- I want to acknowledge the CEFC's vital role as a catalyst for clean energy investment in Australia. The CEFC's successful performance can largely be attributed to the diligence and professionalism of its workforce. On behalf of the Government, I thank you for the important work you do and the positive impact this has had and continues to have across Australia.

2. The CEFC's contribution so far

- The CEFC's total commitments since it began investing in 2013 now stand at over \$5.7 billion, contributing to a diverse range of projects with a total value of more than \$16 billion. As at 31st December 2017, the CEFC has current commitments of over \$4.7 billion to more than 90 projects with a total value of almost \$15 billion
- Equally important of course is the contribution the CEFC is making to Australia's environment. I am pleased to note that the CEFC's investment portfolio, as it currently stands, will achieve a greenhouse gas abatement of almost 7.3 million tonnes CO_{2e} annually. This translates into more than 121 million tonnes CO_{2e} over the lifetime of these projects – a fantastic achievement for our environment.
- In addition to generating positive economic and environmental outcomes through its investments, the CEFC also generates revenue for the Government. As an indicator of its organisational maturity, the CEFC's operating costs are met from its earnings and it

generates a positive return on its investments. At 30 June 2017, the CEFC's general portfolio return was 4.5 per cent, which in turn the CEFC can reinvest in the clean energy sector.

- CEFC funding in 2016-17 supported a range of significant projects across Australia:
 - Solar: The CEFC invested \$440 million across 10 large-scale solar projects with a combined project value of \$1.3 billion. These projects, which will add in excess of 500MW of new generating capacity to the grid, will take place in a range of locations across the country: from Victoria's first solar farm at Gannawarra, to a "solar belt" of projects across regional New South Wales (Dubbo, Griffith, Parkes), to the first stage of the Kidston Solar Farm in Queensland.
 - Wind: The CEFC invested \$200 million into two major wind farms in New South Wales: the 270MW Sapphire Wind Farm (northern NSW) and the 113MW Bodangora Wind Farm (central west NSW).
 - Batteries: In an innovative arrangement, the CEFC invested \$20 million in the Pilgangoora lithium mine (Western Australia). Australia has the world's fourth largest reserves of lithium, a crucial component in battery storage and electric vehicle manufacture. This project therefore has the capacity to establish a new Australian export industry of lithium supply that will allow us to contribute to the clean energy technologies of the future.
 - Biofuels: The CEFC provided \$30 million to ResourceCo, an Adelaide-based company constructing two biofuel plants that will process 150,000 tonnes of non-recyclable waste annually. The resultant fuel will be used in cement kilns, where it will reduce the need for coal and other fossil fuels.
 - Energy efficiency: The CEFC invested more than \$1 billion in energy efficiency projects. This included sizeable investments in commercial property development and redevelopment funds and a logistics park to reduce road freight emissions.
 - Decarbonisation: The CEFC invested \$102 million in electrification and fuel switching projects. As the grid becomes less reliant on fossil fuels, and as new renewable biofuels emerge, electrification and fuel switching will become increasingly integral components of a long-term decarbonisation strategy in Australia.
 - Expert advice: The CEFC also made itself available, alongside ARENA and the Infrastructure and Project Financing Agency, to provide the Government with advice on the potential provision of up to \$110 million to construct a 150MW concentrating solar thermal power plant at Port Augusta, South Australia. This

is a sensitive project, and the Government is grateful for the CEFC's support in this area.

- The Government is particularly pleased with the CEFC's progress in committing funding through the special funds we directed you to establish through your Investment Mandate:
 - As at 31st December 2017, the CEFC has made almost \$50 million in commitments to 8 individual investments via the Innovation Fund, with an estimated total project value of over \$100 million. These investments, are in areas as diverse as the production of carbon fibre wheels to reduce vehicle fuel consumption, the development of software that will coordinate the integration of renewable energy and battery storage into the grid, and the creation of a drive system to electrify light-weight freight vehicles. The Innovation Fund is a \$200 million program run in conjunction with ARENA that supports the growth of innovative, early-stage clean energy technologies.
 - As at 31st December 2017, the CEFC has contributed almost \$345 million in commitments to more than 280 projects, with an estimated total project value of over \$1.2 billion under the Reef Funding Program. These projects are both direct CEFC commitments to large scale solar programs and also financing to SMEs through our aggregation programs. Project proponents have invested in irrigation equipment, improved fuel efficiency for farm equipment and small-scale equipment and system wide upgrades. The Reef funding Program is a \$1 billion program targeting clean energy projects in the Great Barrier Reef catchment area that support the delivery of the Government's Reef 2050 plan.
 - As at 31st December 2017, the CEFC has contributed more than \$1.4 billion in commitments to over 2,000 projects, with an estimated total project value of approximately \$3.9 billion under the Sustainable Cities Investment Program. These projects are both direct CEFC commitments and also financing to SMEs through our aggregation programs. The projects funded include the construction of energy efficiency student and community housing and the commissioning of a guide detailing best practice zero carbon property initiatives, amongst many others. The Sustainable Cities Investment Program is a \$1 billion program that aims to bring clean energy and energy efficiency technology solutions into the built environment.
- The CEFC has now reached a position of organisational and financial maturity. The sheer size and scale of the investments made by the agency in 2016-17, and the forecast future investment pipeline of \$9 billion, indicates your success in pursuing the vision for which you were established. On behalf of the Government – thank you.

s22

Conclusion

- Once again, I'd like to acknowledge the crucial work being done by the CEFC in transforming the clean energy sector. You are doing a fantastic job, and the Government looks forward to the important contributions you will continue to make to Australia's energy future.

s22

s22

s22