The Auditor-General
Auditor-General Report No.26 2020–21
Performance Audit

Investments by the Clean Energy Finance Corporation

Clean Energy Finance Corporation

Australian National Audit Office

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Canberra ACT

17 December 2020

Dear Mr President
Dear Mr Speaker

In accordance with the authority contained in the *Auditor-General Act 1997*, I have undertaken an independent performance audit in the Clean Energy Finance Corporation. The report is titled *Investments by the Clean Energy Finance Corporation*. Pursuant to Senate Standing Order 166 relating to the presentation of documents when the Senate is not sitting, I present the report of this audit to the Parliament.

Following its presentation and receipt, the report will be placed on the Australian National Audit Office's website — http://www.anao.gov.au.

Yours sincerely

Grant Hehir
Auditor-General

The Honourable the President of the Senate
The Honourable the Speaker of the House of Representatives
Parliament House
Canberra ACT

AUDITING FOR AUSTRALIA

The Auditor-General is head of the Australian National Audit Office (ANAO). The ANAO assists the Auditor-General to carry out his duties under the *Auditor-General Act 1997* to undertake performance audits, financial statement audits and assurance reviews of Commonwealth public sector bodies and to provide independent reports and advice for the Parliament, the Australian Government and the community. The aim is to improve Commonwealth public sector administration and accountability.

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Audit snapshot

Auditor-General Report No.26 2020–21

Investments by the Clean Energy Finance Corporation

Why did we do this audit?

- To provide assurance over the ongoing management of the portfolio of investment projects and how well the Clean Energy Finance Corporation (CEFC) is meeting its legislative objective.

Key facts

- The CEFC was established to facilitate increased flows of finance into the clean energy sector.
- CEFC has been provided with access to $10 billion in capital.
- CEFC invests directly and indirectly, in clean energy technologies.
- Clean energy technologies include: energy efficiency technologies; low emission technologies; and renewable energy technologies.
- CEFC had investment commitments (deployed and contractually committed capital) of $5.95 billion as at 30 June 2020, of which:

What did we find?

- The CEFC has suitable arrangements in place to assess and approve investments and for their ongoing management.
- The CEFC has met its legislative requirement to invest at least 50 per cent of funds into renewable technologies.
- The CEFC has not yet met either of the target medium to long term benchmark rates of return set by the Investment Mandate.
- The CEFC has largely effective risk management processes in place.
- The CEFC has facilitated increased funding into the clean energy sector, but the extent is unclear.

What did we recommend?

- The Auditor-General made eight recommendations to the CEFC.
- The CEFC agreed to seven recommendations.

35%	15%	~77%
were in utilities	were in commercial buildings	were in debt and the remaining 23% in equities

Summary and recommendations

Background

1. The Clean Energy Finance Corporation (CEFC) was established under the *Clean Energy Finance Corporation Act 2012* (CEFC Act) 'to facilitate increased flows of finance into the clean energy sector' (section 3). It has been provided with access to $10 billion in capital through a special account, which is drawn down over time.

2. Section 58 of the CEFC Act states that the function of the CEFC is to invest, directly and indirectly, in clean energy technologies, which are defined in section 60 as:

- energy efficiency technologies;
- low emission technologies; and
- renewable energy technologies (under subsection 58(3), from 1 July 2018 at least half of the funds invested are to be in renewable energy technologies).

3. As at 30 June 2020, the CEFC had investment commitments (deployed and contractually committed capital) of $5.95 billion.

4. Section 64 of the CEFC Act provides for responsible Ministers[1] to give the Board directions about the performance of the CEFC's investment functions and the policies to be pursued. These directions together constitute the 'Investment Mandate'. The current Investment Mandate (May 2020) requires the CEFC, among other things, to:

- target an average return (before operating expenses) of the five-year bond rate plus three to four per cent per annum over the medium to long term as the benchmark return of the Corporation's core portfolio (section 7);
- in targeting this return and operating with a commercial approach, seek to develop a portfolio across the spectrum of clean energy technologies that in aggregate has an acceptable but not excessive level of risk (section 8);
- consider the potential effect on other market participants and the efficient operation of the Australian financial and energy markets and not act in a way that is likely to cause damage to the Australian Government's reputation (section 12);
- include in its investment activities a focus on technologies and financial products as part of the development of a market for firming intermittent sources of renewable energy generation, as well as supporting emerging and innovative clean energy technologies (section 13); and
- make available funds for investment in clean energy projects and businesses through five nominated Funds and Programs (section 14).

Rationale for undertaking the audit

5. The audit provides assurance to Parliament on the effectiveness of the CEFC's selection of investments, including determination of an appropriate risk level and investment return. The audit also provides assurance over the ongoing management of the portfolio of funded projects,

1 The responsible Ministers are the Minister for Energy and Emissions Reduction and the Minister for Finance.

and the extent to which the CEFC is meeting its function of funding clean energy technologies through energy efficiency, low emission and renewable technologies.

Audit objective and criteria

6. The audit's objective was to assess the effectiveness of the selection, contracting and ongoing management of investments by the CEFC and the extent to which the CEFC is meeting its legislated objective.

7. The following high level audit criteria were adopted:

- Does the CEFC have effective arrangements in place to assess potential investments and manage and report on the performance of its investments?
- Has the CEFC effectively met its objective under the *Clean Energy Finance Corporation Act 2012* consistent with legislative requirements and directions?

Conclusion

8. The CEFC has largely met its legislated objective of facilitating increased flows of finance into the clean energy sector, consistent with legislative requirements and directions.

9. The CEFC's arrangements to manage and report on investments are largely suitable. There is a need for the CEFC's policy statement to include more detail on its environmental, social and governance policies. There is an opportunity for the screening documents for new investments to specifically address all Investment Mandate requirements and for the CEFC to benchmark its performance in terms of clean energy outcomes and leverage against one or more other green banks.

10. The CEFC has not yet met the target benchmark rates of return set by the Investment Mandate and does not have a strategy in place to meet them. The CEFC also does not have a suitable measure of aggregate portfolio risk and the Board does not regularly record its assessment of the mandated requirement that the investment portfolio in aggregate has an acceptable but not excessive level of risk.

11. While the CEFC has facilitated increased flows of finance into the clean energy sector, the extent to which it has leveraged additional funds is unclear.

12. There is a lack of clarity in the Investment Mandate on whether CEFC investments in sustainable cities is restricted to the $1 billion limit for the Sustainable Cities Investment Program set by the Mandate.

Supporting findings

CEFC's arrangements to monitor and report on its investments

13. The CEFC has suitable arrangements in place to assess and approve investment opportunities. Its policy statement is broad and the section on environmental, social and governance policies does not adequately meet the requirements of section 16 of the Investment Mandate. There would be merit in the CEFC ensuring that all Investment Mandate obligations have been adequately considered in documentation for the assessment of new investment proposals.

14. The CEFC has implemented effective arrangements for sound contractual partnerships for new investment projects and for their ongoing management. Since inception the CEFC has not been involved in any legal cases.

15. The CEFC has appropriate arrangements in place to manage its investments. All investments are overseen by either the Asset Management Committee or the Joint Investment Committee. These committees receive regular reports on the progress of the investments and take action to respond to market changes or to ensure compliance with the CEFC Act. Reports are also provided to the Board for information and, where needed, decision. Reviews of relevant projects are undertaken annually to ensure that they remain compliant with the CEFC Act.

16. The CEFC has met its reporting requirements under the *Public Governance, Performance and Accountability Act 2013* and the CEFC Act. There is scope to include other information to more fully inform users about the performance of the Corporation.

CEFC performance in meeting its legislative obligations

17. The CEFC has met the requirement in section 58 of the CEFC Act for at least 50 per cent of funds invested at one time to be in renewable energy technologies. It has also met its investment obligations under the Clean Energy Innovation Fund and the Reef Funding Program. However, CEFC investments in sustainable cities was $3.4 billion as at 30 June 2020, $2.4 billion more than the limit of $1 billion set in the Investment Mandate of funds to be made available for the Sustainable Cities Investment Program. There is a lack of clarity on the CEFC's ability to invest more than $1 billion in sustainable cities as part of its core investments. There is also a need for the CEFC, when reporting on investments included in each fund or program, to include amounts that have been included in other funds or programs.

18. Since 2014–15 the CEFC has not yet met either of the two portfolio target benchmark return rates set by the Investment Mandate. The CEFC does not have a strategy in place to enable the mandated rates of return to be achieved over the medium to long term (10 years).

19. The CEFC should document its operating procedure for calculating the actual rates of return and ensure that the calculation spreadsheets include references to all source data.

20. The CEFC has partially effective risk management processes in place. It has yet to develop a satisfactory measure of portfolio value-at-risk and the Board also does not regularly record its assessments against the mandated requirement to develop a portfolio that in aggregate has an acceptable but not excessive level of risk.

21. The concessionality charge each financial year has been well below the limit of $300 million set in section 9 of the Investment Mandate and the CEFC has not exceeded the limits on guarantees specified in section 10 of the Investment Mandate.

22. There is evidence that the CEFC has facilitated increased levels of funds into the clean energy sector from the private sector and other sources, but the extent of these increased funds is unclear because the calculations of leverage both overstates some leveraged funds and does not include funds that may have been indirectly leveraged.

Recommendations

Recommendation no.1
Paragraph 2.16

The Clean Energy Finance Corporation develop a more comprehensive statement of its investment policies in regard to environmental, social and governance issues in order to meet the requirement of section 16 of the Investment Mandate.

Clean Energy Finance Corporation response: *Agreed.*

Recommendation no.2
Paragraph 2.50

The Clean Energy Finance Corporation include in its annual performance statements a carbon abatement capital efficiency metric as an additional performance measure.

Clean Energy Finance Corporation response: *Agreed.*

Recommendation no.3
Paragraph 2.70

To help decision-makers take account of all mandated requirements when assessing investment proposals, the Clean Energy Finance Corporation include in its screening documentation for all projects information on:

(a) specific consideration of the potential effect on other market participants and the efficient operation of the Australian financial and energy markets; and

(b) a comparison of the rate of return with the relevant benchmark average rate of return in the Investment Mandate.

Clean Energy Finance Corporation response: (a) *Agreed;* **(b)** *Not Agreed.*

Recommendation no.4
Paragraph 2.116

The Clean Energy Finance Corporation benchmark its performance in terms of clean energy outcomes and leverage against one or more other green banks.

Clean Energy Finance Corporation response: *Agreed.*

Recommendation no.5
Paragraph 3.32

The Clean Energy Finance Corporation:

(a) ask responsible Ministers to clarify in the Investment Mandate the intention of the requirement in subsection 14(2) that the Clean Energy Finance Corporation make available up to $1 billion of investment finance over 10 years for the Sustainable Cities Investment Program; and

(b) in reporting on investments included in each fund or program, include amounts that have been included in other funds or programs.

Clean Energy Finance Corporation response: *Agreed.*

Recommendation no.6
Paragraph 3.51

The Clean Energy Finance Corporation document procedures for calculation of benchmarks and actual rates of return against the benchmarks, and ensure that the calculation spreadsheets include references to all source data.

Clean Energy Finance Corporation response: *Agreed.*

Recommendation no.7
Paragraph 3.64

The Clean Energy Finance Corporation keep responsible Ministers informed of action it is taking to meet the target rates of return and any concerns it has about its ability to achieve the target rates.

Clean Energy Finance Corporation response: *Agreed.*

Recommendation no.8
Paragraph 3.103

The Clean Energy Finance Corporation:

(a) develop a metric that provides an aggregate estimate of risk capital at the portfolio level; and

(b) include in the quarterly Enterprise Risk Report a specific statement as to the Clean Energy Finance Corporation's assessment of risk against the mandated requirement to develop a portfolio that in aggregate has an acceptable but not excessive level of risk.

Clean Energy Finance Corporation response: *Agreed.*

Clean Energy Finance Corporation summary response

The CEFC welcomes the ANAO's performance audit report on *Investments by the Clean Energy Finance Corporation* (Report). The Report notes, amongst other things, that the CEFC has facilitated increased funding into the clean energy sector, and that the CEFC has suitable arrangements in place to assess and approve investments and for their ongoing management. This is consistent with the conclusion reached also by Deloitte in conducting the 2018 Independent Statutory Review of the CEFC.

We accept all but one of the recommendations contained in the Report and their implementation will be overseen by the CEFC Board's Audit and Risk Committee. The CEFC has already started to address a number of the items identified by the ANAO and we have benefited from discussions with the audit team throughout this process.

Regarding the one recommendation in the Report not accepted by the CEFC, the difference in opinion would appear to stem largely from differing approaches in the way we analyse investment returns on an individual versus portfolio basis. The portfolio benchmark return is defined in the Investment Mandate and then managed consistently on a *portfolio* basis, and it is our view that this is not an integral part of each *individual investment* decision. *Individual investment* decisions more appropriately reference the relevant market-equivalent rate of return and the maximum rate that can be achieved while still ensuring the appropriate public policy outcome.

Notwithstanding this one area in which we respectfully disagree, we are absolutely committed to implementing the ANAO's recommendations, and to continuously improving the efficiency and effectiveness of our operations and governance arrangements.

Key messages from this audit for all Australian Government entities

23. Below is a summary of key messages, including instances of good practice, which have been identified in this audit and may be relevant for the operations of other Australian Government entities.

Policy/program implementation

- Where responsible Ministers provide entities with directions, the entities should implement arrangements to provide assurance that the mandated directions are being effectively addressed at both strategic and operational levels.
- To assist decision-makers entities should document compliance with all mandated requirements in proposals.
- Entities should document and obtain endorsement for methodologies for key performance and other metrics.
- Entities should regularly review and update performance information to ensure they provide meaningful information to the Parliament and the public.

Audit findings

1. Background

Introduction

1.1 The Clean Energy Finance Corporation (CEFC) was established under the *Clean Energy Finance Corporation Act 2012* (CEFC Act) 'to facilitate increased flows of finance into the clean energy sector' (section 3). It has been provided with access to $10 billion in capital through a special account.

1.2 Section 58 of the CEFC Act states that the function of CEFC is to invest, directly and indirectly, in clean energy technologies, which are defined in section 60 as:

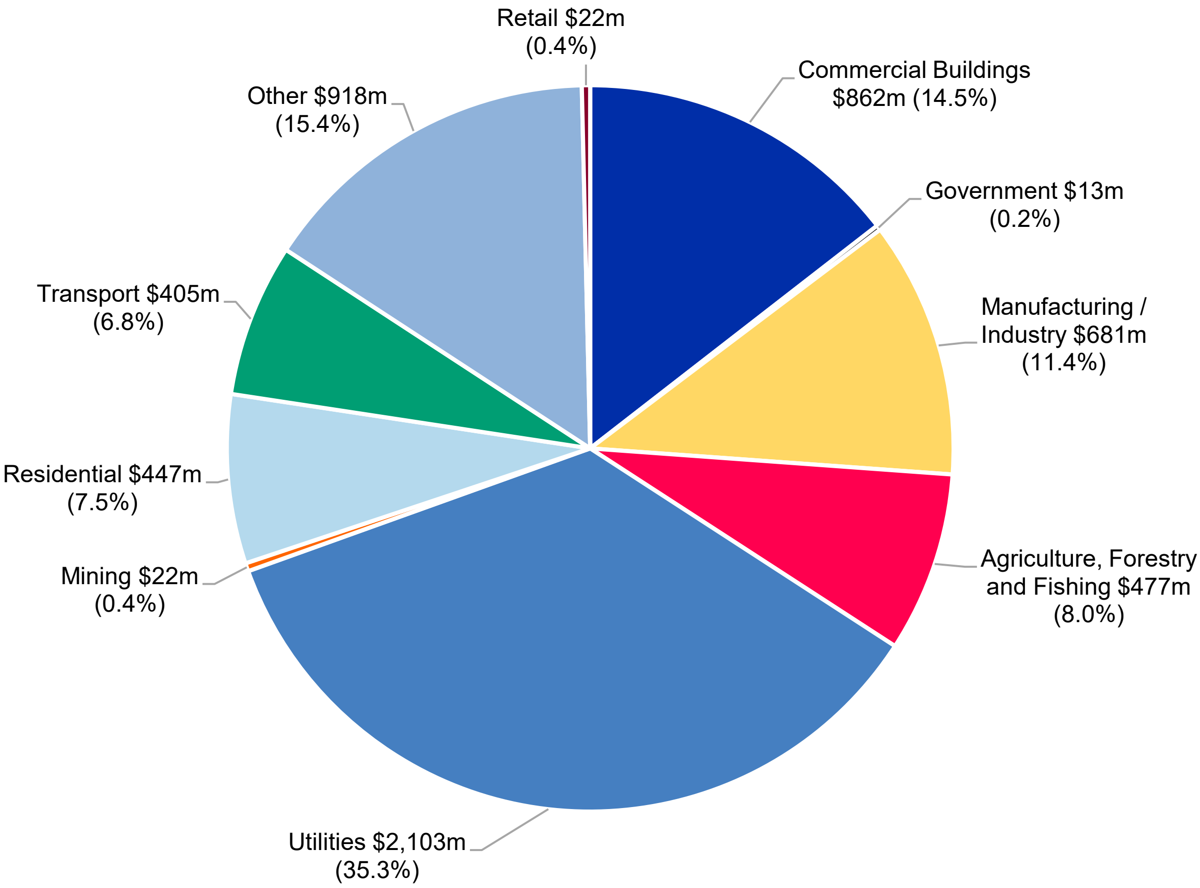
- energy efficiency technologies;
- low emission technologies; and
- renewable energy technologies (under subsection 58(3), from 1 July 2018 at least half of the funds invested are to be in renewable energy technologies).[2]

1.3 The CEFC is prohibited from investing in technology for carbon capture and storage, nuclear technology and nuclear power.

1.4 As at 30 June 2020, the CEFC had investment commitments (deployed and contractually committed capital) of $5.95 billion. The breakdown of commitments by industry sector is shown at Figure 1.1. Most investments were in the utilities (35 per cent), commercial buildings (15 per cent) and other (15 per cent) sectors.

2 Renewable energy projects include solar, wind and storage batteries, and may also include grid connectivity, waste to energy and emerging technologies such as hydrogen.

Figure 1.1: CEFC investment commitments by Industry sector as at 30 June 2020



Source: ANAO analysis of CEFC data.

1.5 Section 64 of the CEFC Act provides for responsible Ministers[3] to give the Board directions about the performance of the CEFC's investment function and the policies to be pursued. These directions together constitute the 'Investment Mandate'.[4] The current Investment Mandate (May 2020) requires the CEFC, among other things, to:

- target an average return (before operating expenses) of the five-year bond rate plus three to four per cent per annum over the medium to long term as the benchmark return of the Corporation's core portfolio (section 7);

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3 The responsible Ministers are the Minister for Energy and Emissions Reduction and the Minister for Finance. While the CEFC Act defines responsible Ministers as meaning the Treasurer and the Finance Minister, this has been altered through two separate reference orders. In table item 4 of Part 5 of Schedule 1 to the *Acts Interpretation (Substituted References—Section 19BA) Order 2004*, 'Treasurer' was changed to 'Minister for the Environment'; and in table item 1 of subsection 2.3(2) of the *Acts Interpretation Substituted Reference Order 2017*, 'Minister for the Environment' was changed to 'Minister administering the Clean Energy Finance Corporation Act 2012'.

4 The first Investment Mandate was issued in April 2013. Later Investment Mandates were issued in February 2015, December 2015, May 2016, December 2016, December 2018, December 2019 and May 2020.

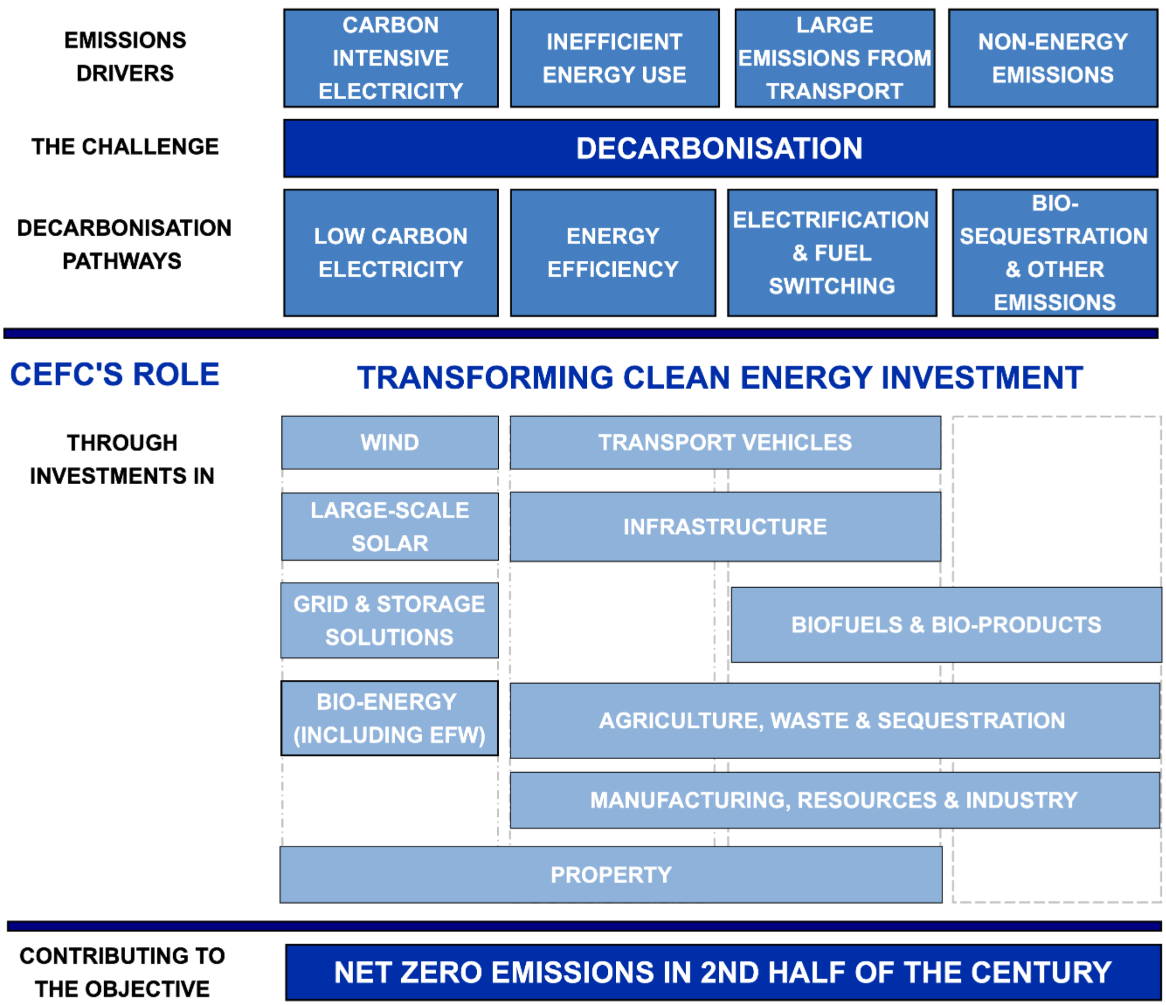
- in targeting this return and operating with a commercial approach, seek to develop a portfolio across the spectrum of clean energy technologies that in aggregate has an acceptable but not excessive level of risk (section 8);
- consider the potential effect on other market participants and the efficient operation of the Australian financial and energy markets and not act in a way that is likely to cause damage to the Australian Government's reputation (section 12);
- include in its investment activities a focus on technologies and financial products as part of the development of a market for firming intermittent sources of renewable energy generation, as well as supporting emerging and innovative clean energy technologies (section 13); and
- outside of its 'core' investment activities, make available funds for investment in clean energy projects and businesses through five nominated Funds and Programs (section 14):
  - the Clean Energy Innovation Fund (up to $200 million) where technologies have passed beyond the research and development stages but require start-up support;
  - the Sustainable Cities Investment Program (up to $1 billion);
  - the Reef Funding Program ($1 billion over 10 years to support delivery of the Reef 2050 Plan);
  - from 2020, the Australian Recycling Investment Fund (up to $100 million over ten years); and
  - from 2020, the Advancing Hydrogen Fund (up to $300 million in concessional finance).[5]

1.6 Section 13 of the Investment Mandate also encourages the CEFC, in supporting clean energy technologies, to prioritise investments that support the reliability and security of the electricity supply.

1.7 The CEFC's role in facilitating investment in clean energy is summarised in its policy statement as shown in Figure 1.2.

5 In October 2019, the Government also announced its intention to establish a $1 billion Grid Reliability Fund, but this has not yet been implemented.

Figure 1.2: CEFC's investment role in transforming clean energy investment



Source: CEFC Investment Policies, February 2019, p. 12.

1.8 A statutory review of the CEFC, commissioned by the Department of the Environment and Energy and published in October 2018[6], found that:

- the CEFC had been effective in facilitating increased flows of finance into the clean energy sector projects it supported although, given the nature and relative immaturity of a number of projects it supported, it was difficult to measure the full impact of the CEFC's involvement in the clean energy sector more broadly;
- the CEFC invests in different industries and sectors across the economy, but with a concentration of most of its investments in the energy, property and industrial sectors;

6 *Statutory Review of the Clean Energy Finance Corporation—Report prepared for the Department of the Environment and Energy*, 10 October 2018. Section 81 of the CEFC Act provided for the review of the operation of the Act to be undertaken as soon as practicable after 1 July 2016. The Government has not yet responded to the Review.

- in making investments in clean energy, the CEFC had tended to invest in lower risk financial instruments, including senior debt (debt that takes priority over other unsecured or otherwise more 'junior' debt owed by the issuer); and
- in 2016–17, the CEFC's actual investment return and forecast lifetime investment return was 4.5 per cent and 5.4 per cent respectively, both below the target range of 5.8 per cent to 6.8 per cent.

Rationale for undertaking the audit

1.9 The CEFC was established in 2012 and an audit of CEFC's investment program was included in the Australian National Audit Office's Annual Audit Work Program 2019–20.

1.10 The audit provides assurance to Parliament on the effectiveness of the CEFC's selection of investments, including determination of an appropriate risk level and investment return. The audit also provides assurance over the ongoing management of the portfolio of funded projects, and the extent to which the CEFC is meeting its function of funding clean energy technologies through energy efficiency, low emission and renewable technologies.

Audit approach

Audit objective, criteria and scope

1.11 The audit's objective was to assess the effectiveness of the selection, contracting and ongoing management of investments by the CEFC and the extent to which the CEFC is meeting its legislated objective.

1.12 The following high level audit criteria were adopted:

- Does the CEFC have effective arrangements in place to assess potential investments and manage and report on the performance of its investments?
- Has the CEFC effectively met its objective under the *Clean Energy Finance Corporation Act 2012* consistent with legislative requirements and directions?

1.13 The audit examined the financial performance of the CEFC's investment portfolio since its inception in 2012 and the CEFC's selection and management of investments from 1 July 2017 to 31 December 2019.[7] In relation to externally managed 'green funds' (aggregation programs maintained by other institutions designed to fund ecological/environmental projects) in which the CEFC has invested[8], the audit did not examine individual investment decisions, but examined arrangements the CEFC has in place to manage risks associated with such investments.

Audit methodology

1.14 The audit methodology comprised:

7 This period was selected on the basis that it reflected performance in recent years, when the growth of investments had been increasing. Between 1 July 2017 and 31 December 2019, the CEFC reported that there were 86 investments. This represented 56 per cent of 154 investments reported since inception.

8 As at 30 June 2020, CEFC investment commitments in aggregation programs totalled $1.19 billion or 20 per cent of total investment commitments of $5.95 billion.

- collection and analysis of CEFC documents on investment policies and strategies, consideration and approval or rejection of investment proposals and the ongoing management of its investments;
- analysis of a sample of 23 investments (informed by statistical analysis) approved from 1 July 2017 to 31 December 2019[9], stratified by type of clean energy technology, investment sector and investment instrument as to how well they have met the CEFC's legislative requirements and obligations under the Investment Mandate. This included analysis of how the CEFC manages investments to achieve the targeted rate of investment return set by the Investment Mandate;
- analysis of potential investments from 1 July 2017 onwards that were under active consideration, but had not proceeded;
- analysis of the performance of the CEFC's investment portfolio since its establishment in 2012;
- interviews with the Australian Renewable Energy Agency (ARENA), the Department of Industry, Science, Energy and Resources and the Department of Finance;
- consideration of the statutory review of the CEFC's investments and other relevant reviews, including internal audit reports, and the implementation of relevant recommendations or other actions taken to address their findings/conclusions; and
- interviews with CEFC staff.

1.15 The audit was conducted in accordance with ANAO Auditing Standards at a cost to the ANAO of $458,147.

1.16 The team members for this audit were Michael White and Resolution Consulting Services Pty Ltd.

9 A total of 86 investments were approved over this period.

2. Arrangements to manage and report on investments

Areas examined

This chapter assesses the effectiveness of the Clean Energy Finance Corporation's (CEFC) arrangements to assess potential investments and report on the performance of investments once selected.

Conclusion

The CEFC's arrangements to manage and report on investments are largely suitable. There is a need for the CEFC's policy statement to include more detail on its environmental, social and governance policies. There is an opportunity for the screening documents for new investments to specifically address all Investment Mandate requirements and for the CEFC to benchmark its performance in terms of clean energy outcomes and leverage against one or more other green banks.

Areas for improvement

The ANAO has made four recommendations aimed at providing better assurance that Investment Mandate requirements have been met and improving performance reporting.

2.1 In assessing the effectiveness of the CEFC's arrangements for selecting investments and reporting on their performance once selected, the audit examined whether the CEFC has:

- suitable arrangements in place to assess and approve investment opportunities and enable it to meet its investment performance obligations;
- implemented sound contractual and other partnership arrangements for the selection and management of its investments;
- appropriate arrangements in place to manage its investments; and
- reported accurately on the financial and non-financial performance of its investments, including the relevant requirements under section 74 of the CEFC Act.

Does the CEFC have suitable arrangements in place to assess and approve investment opportunities and enable it to meet its investment performance obligations?

The CEFC has suitable arrangements in place to assess and approve investment opportunities. Its policy statement is broad and the section on environmental, social and governance policies does not adequately meet the requirements of section 16 of the Investment Mandate. There would be merit in the CEFC ensuring that all Investment Mandate obligations have been adequately considered in documentation for the assessment of new investment proposals.

2.2 To review the effectiveness of the arrangements that the CEFC has implemented to assess and approve new investments and to enable it to meet its legislative and Investment Mandate obligations, the audit examined:

- the governance, policy and other arrangements in place; and

- the processes for the assessment of individual investment proposals using a sample of investments approved from 1 July 2017 to 31 December 2019.

Arrangements that the CEFC has in place to assess and approve investments

2.3 Arrangements to assess and approve investments include: the overall governance arrangements for assessing and approving and later managing investments; the CEFC's investment policies and strategy; and arrangements to manage potential conflicts of interest.

Governance arrangements

2.4 Under section 16 of the Investment Mandate, the CEFC must have regard to 'Australian best practice' in determining its approach to corporate governance principles.[10] The *Public Governance, Performance and Accountability Act 2013* (PGPA Act), which establishes rules for financial management and also for the broader governance, performance and accountability for the Commonwealth public sector, applies to the CEFC.

2.5 The CEFC's governance structure is summarised in Figure 2.1.

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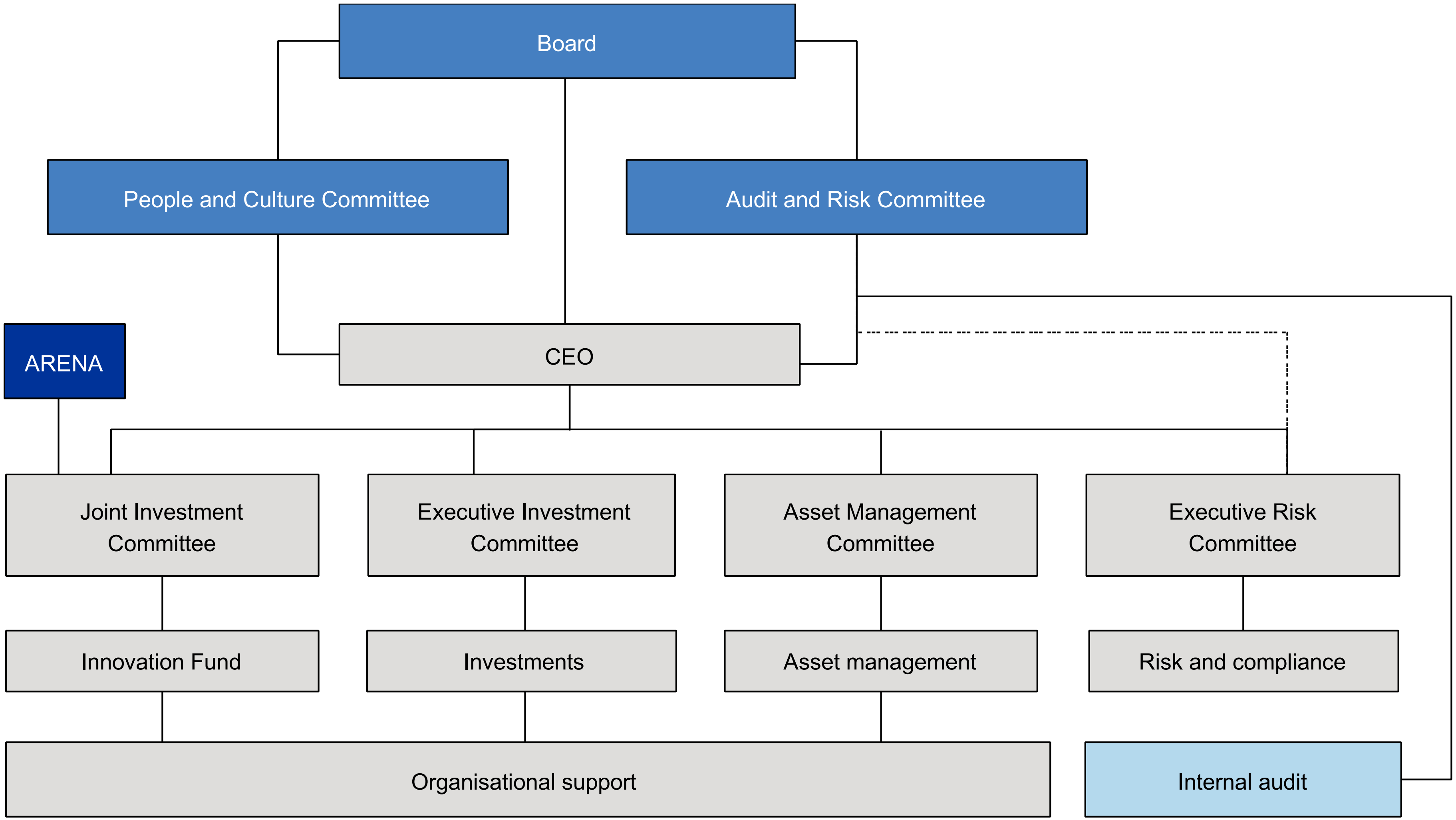
10 Unless otherwise stated, Investment Mandate provisions are for the Clean Energy Finance Corporation Investment Mandate Direction 2020. This provision has been included in all versions of the Investment Mandate, although it has not had the same section number in all versions.

Figure 2.1: CEFC's governance structure



Note: ARENA is the Australia Renewable Energy Agency, which is a separate Commonwealth entity.

Source: Based on CEFC internal data.

2.6 All proposed investments other than those relating to the Clean Energy Innovation Fund are reviewed by the Executive Investment Committee before they are submitted to the Board for consideration.

2.7 The Joint Investment Committee reviews proposals relating to the Clean Energy Innovation Fund. The Australian Renewable Energy Agency (ARENA), a separate Commonwealth entity, is represented on this committee, as the Innovation Fund sponsors may also receive grant funds from it. Once investments have reached financial close[11], they are monitored and managed by the Asset Management Committee or, in the case of Clean Energy Innovation Fund investments, the Joint Investment Committee.

CEFC investment policies

2.8 Section 68 of the CEFC Act requires the CEFC to prepare and publish on its website policies on:

- its investment strategy;
- benchmarks and standards for assessing the performance of investments and of the CEFC itself; and
- risk management for CEFC's investments and for the CEFC itself.

2.9 Section 16 of the Investment Mandate also requires the CEFC to develop policies with regard to environmental, social and governance issues.

2.10 The CEFC has formulated investment policies and published them on its website since 2013.[12] The CEFC has also published separate complementary guidelines on complying investments under the CEFC Act, which provide more information on investments the CEFC is permitted to make.

2.11 The policy statement notes Investment Mandate requirements. It provides broad descriptions of the CEFC's legislative, governance and risk management frameworks. It also includes a description of the CEFC's investment strategy. The CEFC advised that the description of its investment strategy allows for different technologies and industry focuses to be adopted over time as technologies mature and become more commercial.

2.12 The policy statement only briefly mentions (on page 24) the section 16 requirement in the Investment Mandate for it to develop policies with regard to environmental, social and governance issues. It states that:

> the CEFC will act as any prudent investor would in seeking to encourage the adoption of good governance practices within the CEFC itself as well as in the businesses and projects in which it invests.

2.13 It does not indicate what its policies are in relation to environmental, social and governance issues. The CEFC has advised that it does have a number of discrete policies/methodologies that cover different aspects of environmental, social and governance issues (for example, employment, work health and safety, modern slavery and carbon abatement).

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11 An Investment will be approved, then it will reach contractual (that is, 'legal') close and then financial close. Financial close is the point at which the first funds are advanced to the investee. Prior to this point, the investment is managed by the Executive Investment Committee.

12 The latest update was provided in February 2019.

2.14 Given the requirement in section 16 of the Investment Mandate for the CEFC to develop policies on environmental, social and governance risk management, a more comprehensive statement of its policies on these issues is required.

2.15 The CEFC has advised that it engaged a consultant in May 2020 to develop a more holistic consolidated environmental, social and governance policy.

Recommendation no.1

2.16 The Clean Energy Finance Corporation develop a more comprehensive statement of its investment policies in regard to environmental, social and governance issues in order to meet the requirement of section 16 of the Investment Mandate.

Clean Energy Finance Corporation response: *Agreed.*

2.17 *The CEFC has a number of discrete policies/methodologies that ensure ESG considerations are taken into account, and which have been ingrained in our practices and reinforced by our corporate culture. The CEFC engaged a consultant in May 2020 (prior to this recommendation being received) to assist with the development of a more holistic consolidated ESG Policy. Development of this policy is under way and will be made publicly available on our website when complete.*

CEFC investment strategy

2.18 The CEFC's investment approach and strategy are summarised in the CEFC's policy statement, corporate plan and strategic plan.

2.19 The current 2019–20 corporate plan covers the four financial years commencing on 1 July 2019 and ending on 30 June 2023. It summarises the CEFC's investment approach and investment strategy[13] at a high level.

2.20 The strategic plan covers the period 2018–19 to 2021–22. It lists a number of strategic themes, including:

- transitioning from transaction volume for scale to seeking greater emissions impact from new investments;
- having an enhanced focus on emissions reduction outcomes from the CEFC's existing investments;
- supporting nationally significant energy infrastructure projects that underpin the energy transition; and
- supporting energy innovation businesses and venture capital market through the Clean Energy Innovation Fund.

2.21 The strategic plan forecasts a portfolio mix of investments in 2021–22 in which large scale solar, grid and storage will each comprise 23 per cent of the portfolio, property 20 per cent and infrastructure and transport 10 per cent.

2.22 While the strategic plan is at a relatively high level, detailed investment plans have been presented to the Board. For example, in October 2019, the CEFC outlined its renewable energy

13 Clean Energy Finance Corporation, *Corporate Plan 2019–20*, pp. 5, 7.

strategy for 2019–20. This included a selective approach to solar projects (one to two utility scale projects) addressing market gaps and attracting capital. It also included one to two wind deals and supporting early stage projects and specialist development companies to bridge gaps in development funding and facilitate the next wave of projects. Similar presentations were provided to the Board in November and December 2019 on the CEFC's proposed property and listed equities strategies.

2.23 As noted at paragraph 1.2, subsection 58(3) of the CEFC Act requires the CEFC to ensure that at least half of its invested funds are in renewable energy technologies. The CEFC does not set targets for each of the other technology groups — energy efficiency and low emissions.

2.24 The corporate plan's list of key performance indicators do not include the need for the CEFC to target the key mandated benchmark rates of return, which are set by the Investment Mandate and are expected to be met over the medium to long term. There is an opportunity for the CEFC to indicate in the corporate plan specific strategies to enable the target benchmark returns to be met. Performance against the target benchmark rates is considered further in Chapter 3.

Management of conflicts of interest

2.25 The CEFC has developed and implemented appropriate arrangements to manage potential conflicts of interest, including:

- a conflicts and material personal interests policy, which requires all CEFC officials to declare their personal interests and specifies arrangements to manage any conflicts. This includes reporting to the Audit and Risk Committee and the Executive Risk Committee how any material personal interest conflicts are being managed;
- a conflicts of interest register that records employees' declared conflicts of interest and is kept up-to-date; and
- routinely requiring those attending Board or committee meetings to declare any potential conflicts of interest and, if necessary, to absent themselves from the meetings during consideration of any investment proposals for which there may be a potential conflict.

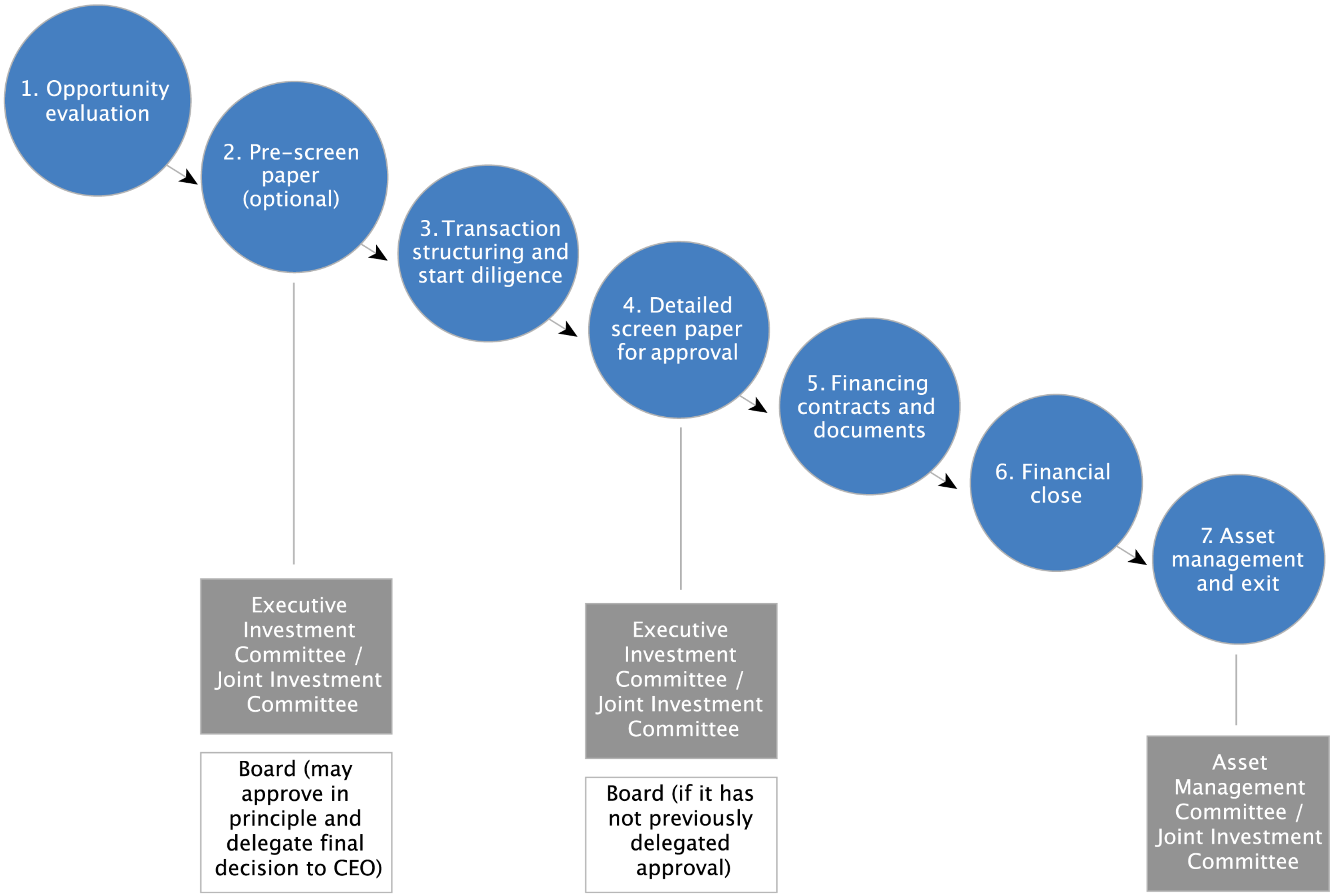
Assessment of individual investment proposals

2.26 To consider the CEFC's process for assessing investment proposals, and how well it assesses proposals against its obligations in the CEFC Act and Investment Mandate, a randomly selected sample of investments that were approved between 1 July 2017 and 31 December 2019 was examined. These were stratified to enable a range of clean energy technologies, investment instruments, sectors and locations to be examined. There were 23 investments in the sample.

Process for assessing investment proposals

2.27 The investment lifecycle, including the process for considering investment proposals, is depicted in Figure 2.2.

Figure 2.2: Investment lifecycle



Source: CEFC.

2.28 Investment opportunities can arise in different ways. These include direct approaches from clean energy investment sponsors (such as clean energy technology companies, manufacturers, financial institutions, property developers, state and local governments and universities), initiatives by the CEFC itself to help address gaps in the clean energy market and indirect responses to market offerings, such as bonds.

2.29 Since inception, a large number of potential investment opportunities have been recorded by the CEFC. Only a small proportion of these were selected and approved (174 out of 1414 or 12 per cent).[14]

2.30 Analysis of the 23 approved investments in the sample showed that they mainly resulted from:

- direct approaches from sponsors — 11 projects, where the CEFC committed $776.5 million;
- the CEFC working with investors to develop project proposals — seven projects, of which two were considered strategic projects for the CEFC, where the CEFC committed $453.7 million;
- flow-ons from joint work with ARENA — three projects, where the CEFC committed $138.5 million; and
- projects previously financed by the CEFC with the same sponsor — two projects, where the CEFC committed $93.6 million.[15]

2.31 The CEFC undertakes detailed assessments of investment opportunities that it evaluates as having merit. Where there is a need to obtain in-principle support for an investment proposal, an initial assessment of the proposal (a 'pre-screen' paper) is submitted to the Executive Investment Committee or the Joint Investment Committee. If endorsed, it is then submitted to the Board for consideration. Pre-screen reports were prepared for 19 of the 23 investments reviewed by the ANAO. Depending on the nature of the proposal:

- the Board may approve the proposal at the pre-screen stage, subject to further detailed analysis and consideration by the Executive Investment Committee or Joint Investment Committee (through a 'detailed screen' paper), and delegate final approval to the Chief Executive Officer (the Board is later briefed on the outcomes of these proposals); or
- await later receipt of the detailed screen paper.

2.32 For the 23 investments examined, the main reasons identified in the screening papers for supporting the projects (more than one reason can be advanced for a project) were:

- the clean energy merit of the project (level of carbon abatement, innovative or significant clean energy product, supporting energy from waste) — 16 projects;
- influencing other providers and industry (market influence, improved leverage and standard setting) — 12 projects;

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14 There has been a reduction in potential investment opportunities in more recent years. For example, 129 proposals were received in 2015 and 23 in 2019. This partly reflects both the maturing of the clean energy market and a better understanding by industry of the CEFC's role.

15 One of these was a follow-on investment in a distributed energy business which was expanding and where the CEFC wished to maintain its share of equity in the business. The second project involved debt finance for a community housing provider's successful bid into the second phase of a community housing development.

- a need for the CEFC to be involved (CEFC assessment that the investment was too risky for the private sector alone, that CEFC investment is needed for co-lender involvement and accelerating project development) — 10 projects;
- support for sponsors and clients (strong previous relationship with client, supporting the CEFC's relationship with key parties, the client's wish to maintain its existing banking group, support for a green energy client in difficulty, working with state governments and universities and refinancing on current market terms) — 14 projects;
- CEFC portfolio issues (diversification of the investment portfolio, meeting the 50 per cent renewables target and support for a target Fund, such as the Clean Energy Innovation Fund) — seven projects; and
- other reasons (energy security and reliability, increased consumer awareness and knowledge and data sharing) — five projects.

2.33 Once approval is given to a proposal, the CEFC will prepare and conclude the necessary contractual documentation to proceed with ('close') the investment. After financial close[16], progress in relation to all executed investments, except Clean Energy Innovation Fund investments for which the Joint Investment Committee has responsibility, is overseen by the Asset Management Committee (see paragraphs 2.85 to 2.104).

2.34 Governance arrangements implemented by the CEFC for management of its investments, including consideration of investment proposals, were appropriate. The CEFC Board and oversight committees have met regularly, and clear records of their meetings (including management of potential conflicts of interest) have been kept.

2.35 In January 2020, the Department of Finance published a Resource Management Guide on Commonwealth investments. The CEFC procedures are broadly consistent with the relevant principles in the Guide.

Consideration of performance obligations in assessment of individual investment proposals

2.36 The CEFC's performance obligations are set out in the CEFC Act and Investment Mandate. The Investment Mandate reflects the requirements of the responsible Ministers and includes matters that the CEFC must follow as well as other matters that the CEFC is encouraged to pursue in its investments. [17]

Complying investments

2.37 Under section 59 of the CEFC Act, the CEFC is only permitted to invest in 'complying investments', namely energy efficiency, low emission and renewable energy technologies. For the sample of 23 investments, the CEFC sought to ensure that the investments complied with section 59 of the CEFC Act mainly by:

- reviewing proposals at the outset to ensure that they will comply;

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16 Financial close is the point at which the first funds are advanced to the investee. Prior to this point, the investment is managed by the Executive Investment Committee.

17 While the CEFC must comply with the Investment Mandate in its investment decisions, portfolio ministers do not have a role in individual investment decisions. However, under the Investment Mandate (May 2020), the CEFC is required to consider and take into account the advice of the Department of Industry, Science, Energy and Resources when making project considerations for the newly established Advancing Hydrogen Fund.

- working with investment sponsors to tailor projects or components of projects to requirements and requiring that the funds will only be used to invest in the specified complying purposes; and
- implementing arrangements, such as having a representative on the project's board or funding committees or undertaking sample audits of aggregation programs, to provide continuing oversight.

2.38 The CEFC has suitable arrangements in place to confirm compliance with section 59 of the CEFC Act. Compliance analysis is initially completed at the pre-screen level and the General Counsel confirms compliance with section 59 of the CEFC Act. In the sample of 23 investments, all pre-screen papers included statements that the investments would comply with the CEFC Act and 21 of the 23 detailed screen papers also included such statements. The 23 investments examined in the sample complied with the CEFC Act.

2.39 The screening papers included analysis of compliance with section 59 of the CEFC Act.[18] The CEFC advised that its practice, consistent with guidance issued by the Australian Institute of Company Directors and Governance Institute of Australia[19], is only to record outcomes on an exception basis (that is, where the Board or committee has a concern about the certification in the screening documents) and where further work is needed. For this reason, the CEFC advised that the records of decisions of the Board, Executive Investment Committee and Joint Investment Committee do not routinely mention the Board's or committee's express satisfaction with this assessment.

2.40 Complying technology investment requirements are considered further at the portfolio level in Chapter 3 (paragraphs 3.3 to 3.12).

Carbon abatement

2.41 Under section 6 of the Investment Mandate, the CEFC should have regard to positive externalities and public policy outcomes when making investment decisions and when determining the extent of any concessionality.[20] The screening documents typically include estimated reductions in emissions of carbon dioxide (CO_2-e) in this context.

2.42 The CEFC's estimates of reductions in CO_2-e by projects take a consistent approach, the main features of which are:

- establishing a counterfactual case, estimating emissions under 'Business As Usual' (for instance, estimating emissions when electricity is made by the grid);

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18 There was evidence in only two of the 23 projects that the Board had considered the issue. One project was approved by the Board subject to confirmation that the project would comply with the Act. However, there was no evidence in the supplementary screening papers or committee decisions that the project would in fact do so. In a second project, the Board's decision delegated the decision to the CEO and the Executive Investment Committee decision indicated that the investment complied with the Act.

19 Australian Institute of Company Directors and Governance Institute of Australia, Joint statement on board minutes, August 2019, available from https://aicd.companydirectors.com.au/-/media/cd2/resources/advocacy/research/2019/pdf/govinst-aicd-minutes-project-july-2019-final-v2.ashx [accessed 14 December 2020].

20 A concessional loan is a loan provided on more favourable terms than the borrower could obtain in the marketplace. Concessionality is discussed further at paragraph 3.113.

- identifying the reduction in emissions that would result from the proposed project (for a solar power project, the reduction would be compared with the CO_2-e had the same amount of electricity come from the grid)[21];
- summing the CO_2-e saved over the life of the project (say, 25 or 30 years for a solar power project[22]); and
- reporting all the reductions from the project.[23]

2.43 The CEFC's calculation methodology is based on industry practice (such as accounting for the gradual decline in emissions savings as the emissions intensity of the grid is forecast to decrease over time) and official published data (such as the national emission intensity conversion factors). Where the estimates rely on forecasts (such as forecast levels of electricity generation), the CEFC's calculations are conservative (based on the most likely outcome) and subject to quality assurance of the estimated amount of energy generated (a key variable in the carbon abatement calculation) by a qualified externally contracted party.

2.44 The ANAO reviewed the calculations for carbon abatement outcomes for the 23 investments in the audit sample and concluded that the methodology and calculations for determining overall carbon abatement were sound.

2.45 The CEFC considers a range of measures (that is, not a single metric) to provide a balanced approach to achieving a cost effective outcome for carbon abatement.[24] However, in its annual performance statements, it only reports the cost of carbon. This is a net cost of less than $0 and results in a net return to the CEFC per tonne of CO_2-e abated.

2.46 The CEFC uses two methods to calculate the net cost of carbon per tonne of CO_2-e abated, both of which produce similar results:

- cost to CEFC of investment (calculated as expenses and the cost of capital (based on the five-year government bond rate[25]) less investment income), divided by the lifetime tonnes CO_2-e abated (Method A); and
- cost to CEFC of investment (calculated as expenses and drawdowns less repayments and applying a discount factor), divided by the lifetime tonnes CO_2-e abated (Method B).

2.47 The CEFC also considers, but does not publish, a capital efficiency measure, which compares investments based on capital investment per tonne CO_2-e abated (that is, the upfront capital

21 The CEFC calculates only those emissions saved by operating the proposed project over its lifetime (operating emissions). For example, reductions claimed from a building project will only include those from running the facility and will exclude emissions from construction and demolition (the full lifecycle emissions). If the CEFC finances a building so that it achieves a 5.5 star rating, it only reports the abatement for the incremental abatement benefit beyond how the building might otherwise have been constructed, for example, 4.5 stars.

22 The NSW Department of Planning, Industry and Environment states that large scale solar farms usually have a life of 25 to 30 years: Department of Planning, Industry and Environment, *Solar Energy in NSW* [Internet], available from https://energy.nsw.gov.au/renewables/renewable-generation/solar-energy [accessed 7 December 2020].

23 Emissions reductions are claimed once only – for instance, CEFC does not claim additional emissions reductions when it re-finances an existing project.

24 CO2-e can be based on an annual or whole of life basis. Cost can be based on the total project or CEFC contribution.

25 The market rate for the cost of capital would be more appropriate.

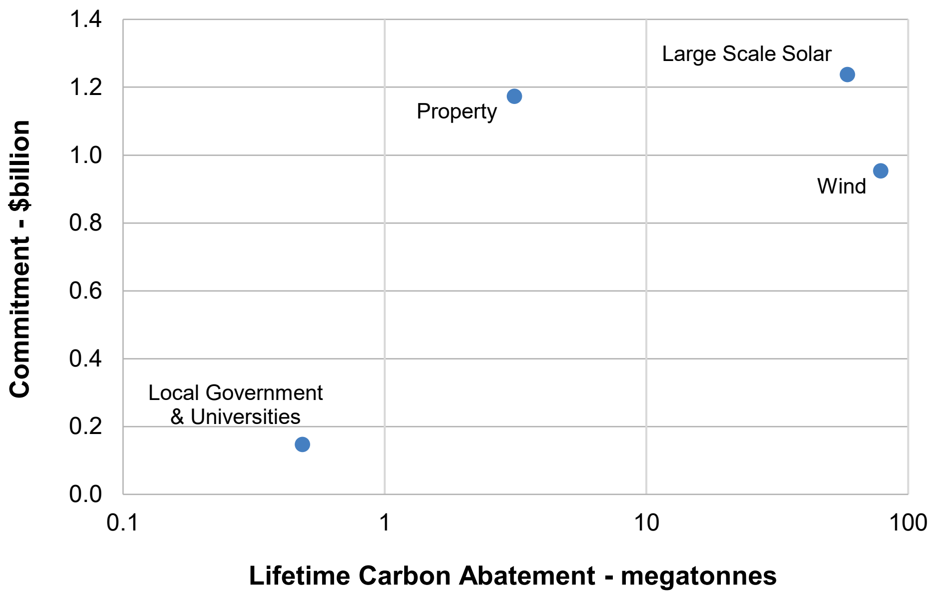
investment divided by the tonnes of carbon abated). There would be merit in also publishing performance against this measure, since this represents the opportunity cost of capital in terms of carbon abatement.

2.48 The following illustrates the results for two projects (Project Lafite, an equity investment of \$85 million in a property investment fund, with an internal rate of return of 8.5 per cent and with around 38,000 lifetime tonnes CO_2-e abated; and Project Coogee, a senior debt investment of \$38 million in a wind farm with a return of 5.12 per cent and 8,222,072 lifetime tonnes CO_2-e abated) using the cost of carbon measures and the capital efficiency.

- For Project Lafite the net cost is a negative value of around \$1500 per tonne[26], compared to a negative value of under \$1.00 per tonne[27] for Project Coogee. By this measure, Project Lafite has the higher financial return to the CEFC per tonne of carbon abatement. However, the CEFC advised that it favours a cost number closer to \$0 while remaining negative (best carbon outcome for the return) rather than a higher negative number.
- For Project Lafite, the capital efficiency is over \$2500 per tonne, compared to less than \$5 per tonne for Project Coogee. By this measure, Project Coogee is the more capital efficient project for carbon abatement.

2.49 The carbon abatement estimated to be delivered by each of the key sectors of the CEFC's investment portfolio as at 30 June 2020 is shown at Figure 2.3. Investments in wind and large scale solar projects have delivered lifetime CO_2-e abatement of 78.44 and 58.58 megatonnes respectively, while a comparable commitment in property investments has produced 3.13 megatonnes of carbon abatement.

Figure 2.3: Lifetime carbon abatement by commitment amounts for key industry sectors, 30 June 2020



Note: The horizontal axis is logarithmic to encompass the very wide range of carbon abatement.

Source: ANAO analysis of CEFC data.

26 \$1,512.94 using Method A and \$1,352.14 using Method B.

27 60 cents using Method A and 69 cents using Method B.

Recommendation no.2

2.50 The Clean Energy Finance Corporation include in its annual performance statements a carbon abatement capital efficiency metric as an additional performance measure.

Clean Energy Finance Corporation response: *Agreed.*

2.51 *The CEFC agrees that there is merit in including in its annual performance statements a carbon abatement capital efficiency metric as an additional performance measure. A capital efficiency metric can be useful in comparing investment efficiency within specific industry sectors or technologies (e.g. property, or large-scale solar PV). It will be difficult to establish a meaningful target or single capital efficiency measure at the corporate whole-of-portfolio level as different sectors, technologies and financial asset classes have inherently different levels of capital intensity required to achieve the necessary carbon abatement, so we will look to report this on an appropriate segmented basis.*

2.52 *The CEFC has been established to facilitate increased financial flows to the clean energy sector and this is achieved by providing capital to economically viable projects that often suffer only from a lack of available capital. Therefore, caution must be employed when comparing capital efficiency across projects, technologies, between sectors and across different time periods. It would be inappropriate to simply conclude, for example, that projects requiring the least amount of capital per tonne of CO_2-e should be favoured. Similarly, a capital efficiency metric needs to be interpreted in the context of other metrics such as the (negative) cost of carbon, as the CEFC is required to achieve a positive return on its investment and recover its investment capital.*

Other externalities and public policy benefits

2.53 In addition to potential CO_2-e abatement outcomes, CEFC screening documents frequently tabulate other potential externalities and public policy outcomes under the heading 'Externalities/Public Policy Benefits'.

2.54 For example, the screening documents for a proposal to build facilities to a standard that would significantly reduce energy use and CO_2-e included the benefits of demonstrating that the CEFC was a viable lender, as well as those of geographically extending the CEFC's activities:

> Investment in this Project would establish CEFC as a viable lender in concession based project finance transactions in this sector. The Project would be a strong precedent to pave the way for other similar student accommodation projects and their related energy efficiency/renewable outcomes.
>
> There has been limited CEFC investment in the built environment in Western Australia. This Project is a significant investment amount, across multiple mixed use assets in a master planned site for WA's largest university which will build CEFC's profile in WA and the University Sector.

2.55 While the detailed screenings documents provided to the CEFC Board and decision-makers present a range of financial, environmental and other externalities for consideration prior to making investment decisions, it is unclear what consideration is given to these factors in decisions. There would be merit in recording this in decisions.

Financial outcomes

2.56 Section 6 of the Investment Mandate states that the CEFC should apply commercial rigour when making its investment decisions. The Mandate also provides that the CEFC is to target specified benchmark rates of return for its core portfolio (section 7), the Clean Energy Innovation Fund and the Advancing Hydrogen Fund (section 14).

2.57 For each of the investment projects examined, detailed screening reviews were prepared. The financial considerations focused primarily on the form of the CEFC investment (for example, equity or loan), other investors in the project, investment risk and risk mitigating strategies and the terms of the investment (for example, interest rate of loans). The business case presented in the screening documents is detailed and provides evidence of the application of commercial rigour in the assessment of proposals.

2.58 In considering investments, the CEFC has regard to market rates (for example, rates being offered by other lenders for loans with comparable terms and conditions) and rates it has offered on comparable projects. It does not consider how the expected return compares to the benchmark target average rates of return for the core portfolio, Clean Energy Innovation Fund and Advancing Hydrogen Fund.

2.59 Performance against these targets is only reviewed at the whole-of-portfolio level (assessed in Chapter 3) and it is acknowledged that simply because an individual transaction's financing rate is lower than the benchmark, this is not an indication that the CEFC should not participate. Nonetheless there would be merit in also including in the screening documents a comparison with the relevant mandated benchmark average rate of return and any implications for the Corporation's ability to meet the target over the medium to long term. Where the benchmark rates of return cannot be achieved, but the clean energy outcomes justify proceeding with the investment, this can be documented.

Market impact

2.60 While adopting a commercial approach, the CEFC is also to apply Australian Industry Participation (AIP) Plans, where required, and consider the impacts of its investment strategy when making investments.

Australian Industry Participation Plans

2.61 Section 11 of the Investment Mandate requires the CEFC to apply AIP Plans to projects in which the Corporation invests in accordance with the Government's AIP Plan policy. In June 2013, the CEFC developed a protocol on the application of AIP Plans to CEFC investment projects, in consultation with the Australian Industry Participation Authority.[28] This protocol has been updated periodically, with the latest on 1 April 2019. Under the protocol, AIP Plans are only required for certain projects (as detailed in the protocol) involving CEFC financing of $20 million or more.

2.62 As part of its closure procedures of investment projects, there is a sign-off of AIP Plan requirements. This process is managed by the CEFC's legal team. AIP Plan Implementation Reports are provided to the Department of Industry, Science, Energy and Resources for applicable projects.

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28 The Australian Industry Participation (AIP) Authority is a full time statutory position established by the *Australian Jobs Act 2013*. The AIP Authority's role as defined in the Act is to evaluate, approve and publish summaries of AIP plans for major Australian projects, as well as to monitor compliance and report on the implementation of plans.

2.63 The CEFC has efficiently implemented the protocols for the application of AIP Plans to investment projects. However, it is not usually clear from the screening documents whether an AIP Plan will apply to a project. In only three of the 23 projects examined was there any mention of AIP Plans. The CEFC could consider including information in screening documents on the application of the AIP Plans protocol to the proposed investment so that decision-makers are aware of whether the investment would need to comply with the policy and any implications for the implementation or cost of the project.

Other market participants and the operation of the Australian financial and energy markets

2.64 Section 12 of the Mandate requires the CEFC to 'consider the potential effect on other market participants and the efficient operation of the Australian financial and energy markets' when considering investment proposals.[29] It must also 'not act in a way that is likely to cause damage to the Australian Government's reputation'.

2.65 While the screening documents include a 'Rationale' section, which lists reasons for CEFC involvement, they do not include specific consideration of the potential effect on other market participants and the efficient operation of the Australian financial and energy markets. Specific consideration of these issues in the screening papers would provide a clearer consideration of the obligation in section 12 of the Mandate.

2.66 Assessing the potential effect on other market participants also involves examination of the need for the CEFC to be involved. Some of these factors are listed at paragraph 2.32. As set out in that paragraph, in the 23 investments examined there were 10 where the rationale included reasons (too risky for the private sector alone, CEFC needed for co-lender involvement and accelerating project development) that the project may not proceed, or not proceed as quickly, without CEFC involvement.

2.67 The need for involvement is reasonably clear where the CEFC has been approached by an investor who has first approached other financial institutions or where the CEFC is endeavouring to fill a gap in the market. In other cases, the CEFC may support an investment because of the demonstration effect on the market and so influence decision-makers to achieve higher rates of carbon abatement or other outcomes, such as where CEFC involvement would accelerate the commencement of a project, and where benefits might include earlier reductions in CO_2-e.

2.68 Examples of investments in the audit sample that would not have occurred without CEFC involvement include:

- Project Nebula, a large-scale solar farm in New South Wales, and Project Firestar, a solar farm in Victoria, where the commercial banking sector was unwilling to invest because power purchasing agreements had not yet been negotiated; and
- Project Coogee, a wind farm in New South Wales, where CEFC involvement was needed to attract co-lender involvement.

2.69 Project Firestar arose from a joint initiative of the CEFC and ARENA. Under this initiative, called Project Alceste, ARENA conducted a competitive round of up to $100 million in grant funding to successful applicants for large-scale solar projects as part of its Advancing Renewables Program and the CEFC agreed to provide secured debt to the successful developers. Some projects, such as

29 There is also a similar requirement in section 6 of the Mandate.

Firestar, were unsuccessful in obtaining grant funding from ARENA, but still proceeded with debt finance provided by the CEFC. The CEFC's assessment of the Firestar project indicated that it would not have proceeded without the CEFC at the time.[30]

Recommendation no.3

2.70 To help decision-makers take account of all mandated requirements when assessing investment proposals, the Clean Energy Finance Corporation include in its screening documentation for all projects:

(a) specific consideration of the potential effect on other market participants and the efficient operation of the Australian financial and energy markets; and

(b) a comparison of the rate of return with the relevant benchmark average rate of return in the Investment Mandate.

Clean Energy Finance Corporation response: (a) *Agreed;* **(b)** *Not Agreed.*

Response to (a)

2.71 *For each investment (either debt or equity), the CEFC does consider the need for CEFC involvement, the potential effect on other relevant market participants and the potential impact on the efficient operation of the Australian financial and energy markets under the heading "Investment Rationale". However, we agree that this could be made more explicit within our screening papers.*

2.72 *The impact on other relevant market participants and the efficient operation of the Australian financial and energy markets, is often best measured on an aggregate business platform, industry or portfolio basis rather than for each individual transaction.*

2.73 *The CEFC does not participate in transactions if it will lead to the exclusion of willing potential investors. This is manifest in the CEFC's fundamental principle of "crowding in" not "crowding out". Part of our investment rationale is our willingness to go first and trust that a successful initial investment will then encourage follow-on investment from other market participants. It is worthy of note that in its 2018 statutory review, Deloitte concluded (refer p.19) "…that the risk of CEFC crowding out private sector finance is minimal.".*

Response to (b)

2.74 *The Portfolio Benchmark Return as specified in the Investment Mandate is a "portfolio" metric and not an "investment by investment" metric. This is fundamental to ensuring an appropriate risk weighted and balanced portfolio can be established and maintained.*

2.75 *Individual transactions are most appropriately benchmarked against the relevant market-based rates of return in view of their specific characteristics and private sector risk appetite – commensurate with standard market practice and commercial rigour. Simply because an individual transaction's financing rate is lower than the benchmark is not an indication that the CEFC should not participate, as the object of the CEFC is to facilitate increased flows of finance*

30 One of the key factors for solar farm developers is to secure offtake agreements with power companies. Where they are able to secure such agreements, they may obtain finance from commercial lenders. There was no offtake agreement when the Firestar project was being developed. Later, it was able to obtain offtake agreements and construction of the solar farm has now been completed.

into the clean energy sector. The financing rate reflects the risk of an investment and, in some markets, undertaking a risk that warrants pricing that matches the benchmark return often assumes a level of risk that is non-commercial and either out-of-market or outside of the CEFC's stated risk appetite.

Has the CEFC implemented sound contractual and other partnership arrangements for the selection and management of its investments?

The CEFC has implemented effective arrangements for sound contractual partnerships for new investment projects and for their ongoing management. Since inception the CEFC has not been involved in any legal cases.

2.76 This section of the audit focused on the effectiveness of the contracting arrangements from the time a proposal is selected for investment through to financial close (that is, when all conditions have been satisfied, documents have been settled and draw-downs are permissible). Following that, the audit reviewed the management of investment obligations through to the repayment of a loan or equity divestment. It did not include technical legal analysis of the specific clauses and content of the contractual documentation.

2.77 The CEFC has a General Counsel who manages an internal legal team and engages external legal advice as required. The internal legal team works with the deal team to financial close and to ensure the commercial terms negotiated with the counterparties meet the CEFC's requirements and the CEFC's standard terms are documented in the contract. It also provides appropriate legal support to the Asset Management Committee and the Portfolio Management team as and when required throughout the life of an investment.

2.78 Each investment made by the CEFC is bespoke. CEFC contractual documentation varies depending on the investment type and the obligations of the investment sponsor.

2.79 For example, equity investments typically follow the form of documents prepared by the issuer or its counsel, whereas debt documents will vary depending on whether the facilities are bilateral, syndicated, secured, unsecured, senior debt or subordinated debt and will depend on the nature of the facility.[31] This can be contrasted to the 'high volume, low value' transactional work undertaken by the commercial banking sector which typically uses a standard suite of contractual documentation.

2.80 There can be large numbers of contract documents, and significant numbers of contract variations after execution of a project to address issues that arise during the course of a project. For instance, as at October 2019, there were 88 executed documents for Project Coogee, a wind farm in New South Wales.

31 Syndicated facilities involve multiple senior ranking financiers whereas bilateral involves two parties (borrower and lender). Senior debt is debt that takes priority in repayment over other unsecured or more junior debt. Subordinated debt is a form of hybrid security which ranks below senior debt and above unsecured creditors all of whom rank above ordinary shares in a winding up process.

2.81 Contractual documentation for the aggregation platform[32] is typically limited to a program agreement. This sets out the framework under which the CEFC will invest in bonds or other debt instruments issued by the financial institution responsible for the program to provide the necessary capital for investment in clean energy technologies and the conditions on which the CEFC will make that investment.

2.82 Contractual documentation for equity investments varies on a case-by-case basis. It typically involves a form of subscription agreement under which the CEFC agrees to subscribe to certain equities and a side letter that sets out CEFC specific conditions to its investment being made. Investments in companies may be subject to a form of shareholders agreement, which regulates the relationship between shareholders or, in the case of an investment in a fund, a trust deed which sets out the terms of the trust in which the CEFC may hold units or shares as a beneficial owner.

2.83 In addition to contractual documentation for the CEFC investment, the CEFC may maintain a range of other contractual documentation that provides important supporting information. For example, the key project contracts for a large scale solar project may cover:

- engineering, procurement and construction of the solar farms;
- operation and maintenance of the solar farm;
- where ARENA is also involved, an ARENA Funding Agreement;
- an Asset Management Agreement to manage the day to day operations; and
- a Power Purchase Agreement.[33]

2.84 The CEFC maintains two contract records management systems—the Contractual Rights and Obligations Management system (CROMs) and the Contract Management System (CMS). CROMs assists the CEFC in ensuring that the terms of the contract are regularly reviewed and the counterparty fulfils those terms at the agreed time, location, standard and the price.[34] The CMS supports the record keeping of contractual documentation, which is stored electronically on a secure database, to which there is restricted access.

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32 The CEFC Annual Report 2018–19 (page 168) defines aggregation finance as ‘the provision of CEFC finance via intermediary partners, to aggregate customer demand that would otherwise be too expensive to be serviced directly by the CEFC’. Clean Energy Finance Corporation, *Investing in Australia’s clean energy transition — Annual Report 2018–19* [Internet], available from https://annualreport2019.cefc.com.au/ [accessed 14 December 2020].

33 The CEFC Annual Report 2018–19 (page 170) defines a Power Purchase Agreement as ‘a type of offtake agreement where a purchaser agrees to purchase and a supplier agrees to supply future generated electricity, usually at a specified price for a defined period’. This provides a degree of certainty about the future revenue stream for the investment and reduced risk of the investment.

34 CROMs is an alert system for actions to be completed by the Deal teams, which is triggered by key dates for obligations in each contract.

Does the CEFC have appropriate arrangements in place to manage its investments?

> The CEFC has appropriate arrangements in place to manage its investments. All investments are overseen by either the Asset Management Committee or the Joint Investment Committee. These committees receive regular reports on the progress of the investments and take action to respond to market changes or to ensure compliance with the CEFC Act. Reports are also provided to the Board for information and, where needed, decision. Reviews of relevant projects are undertaken annually to ensure that they remain compliant with the CEFC Act.

2.85 In assessing the arrangements that the CEFC has in place to manage investments, ANAO examined asset management responsibilities, the CEFC's asset management framework and monitoring and reporting on investments.

Asset management responsibilities

2.86 Portfolio management activity is reported to the Joint Investment Committee for Innovation Fund investments and to the Asset Management Committee for all other investments and ultimately, to the CEFC Board. Both the Asset Management Committee and Joint Investment Committee meet on a monthly basis.

2.87 Each executed investment is allocated a dedicated portfolio manager (and secondary manager). The Portfolio Management team works closely with the Investment team up until financial close and liaises as needed after financial close and throughout the investment period. Contractual obligations are recorded in CROMs[35], which enables a quarterly reminder to be sent to the Portfolio Management team alerting it to the contractual obligations that are due in the coming 90 days. The team then provides reminders to borrowers of the impending deadlines.

2.88 The key focus areas of each portfolio manager vary depending on the nature of the investments. For example, project finance projects have a high level of focus on the construction phase (that is, cost and time to complete) and formal sign-off on power purchase agreements, and the debt/equity funding required to achieve the key milestones.

2.89 Investment funds, green bonds and aggregation loans to major banks have a lower credit risk exposure.[36] The focus with aggregation programs is on monitoring compliance of the issued loans with the eligibility criteria stated in program agreements. Equity investments are monitored more closely with more detailed and frequent reporting requirements. Innovation fund investments are generally rated as higher risk due to being classified as venture capital and are managed by the Innovation team.

Asset Management Framework

2.90 The key aspects of the CEFC's asset management framework for all investments where relevant include:

35 See paragraph 2.84.

36 See Appendix 2 for descriptions of CEFC's financial instruments and business platforms.

- analysis of business plans and strategies and challenging the direction/approach where appropriate;
- preparation of asset management plans[37];
- analysis of risks and opportunities;
- monitoring progress and reporting on performance of the investment and compliance with/progress on a counterparty's sustainability commitments or obligations (where relevant);
- reporting to the Asset Management Committee, Joint Investment Committee and Board, including requesting necessary approvals;
- financial reporting and analysis;
- capital management strategies; and
- monitoring contractual obligations.

2.91 Portfolio management of debt finance investments focuses on the governance and compliance processes associated with the contractual obligations. The main areas of focus are ensuring that payments are made in accordance with the interest and debt repayment schedules and that the borrower meets the reporting requirements.

2.92 Indirect investments such as investment funds, green bonds and aggregation loans are monitored regularly.[38] Aggregation programs focus on monitoring compliance of the issued loans with the eligibility criteria stated in program agreements (which is based on technical and compliance reviews conducted by an independent third party[39]) and monthly compliance reports from the banks.

2.93 Equity investments[40] have a higher risk profile and are monitored more closely with more detailed and frequent reporting requirements than debt finance and indirect investments. The CEFC monitors the overall business performance of the investment including, profitability, liquidity and solvency.

2.94 Under its Valuation Policy, the CEFC undertakes or procures the valuation of direct equity investments[41] that it manages. Equity interests (direct or indirect) that are managed by third party

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37 Asset management plans were added to the asset management framework in 2019. CEFC advised that they have only been developed for seven or eight equity projects to date.

38 See Appendix 2 for description of terms.

The key focus areas for monitoring aggregation loans include: percentage utilisation of available fund capacity (take up rate); new commitments finalised in past period; performance of the investment; compliance with/progress on a counterparty's sustainability commitments and obligations (where relevant); and the cost of concessions provided.

39 The reviews ensure that the loans are provided for qualifying assets (eligible purchases) only as specified in the Program Agreement (for example, electric vehicles, heating, ventilation and air conditioning, tractors and irrigation equipment, storage batteries and rooftop solar panels). If compliance breaches are identified the bank is required to refund the CEFC and incur the cost of the concessional interest rate provided to the bank customer.

40 The CEFC's level of commitments in equity investments has increased over the past three years, from 12.7 per cent of the investment portfolio in 2017–18 to 20.3 per cent in 2018–19 and 16.8 per cent in 2019–20.

41 Equity investments include direct equity investments in unlisted and listed companies, unlisted equity securities in unit trusts, listed equity securities, and joint venture/associate investments.

investment managers are subject to the specific manager's valuation policy (although the CEFC does undertake analysis and assess the performance of these other investments). According to the CEFC's Valuation Policy, the valuation of equity investments should consider the nature and outlook for the industry, maturity of the underlying assets, current market conditions, quality, reliability and availability of the source data and assumptions. This approach also applies to the Clean Energy Innovation Fund's equity investments .[42]

2.95 A review of the acquisition financial model for Project Mistral was undertaken to ensure that the model aligned to the CEFC Valuation Policy.[43] The spreadsheet-based model was accurate, robust and repeatable, and included reasonable assumptions. However, the model could be enhanced by documenting or referencing the methodology, formal review and approval procedures, change logs and a control sheet (section 4.2 of the Valuation Policy).

2.96 Asset Management Plans aim to provide a holistic overview of equity investments and inform the allocation of the CEFC's asset management resources.[44] The plans are initially developed by the Portfolio Management team with input from the Investment team responsible for originating and executing the transaction. The plans assist the teams to better understand the nature of the CEFC's investments, how the profiles change over time and industry developments, and facilitate the proactive management of the CEFC's investments.

Monitoring and reporting on investments

2.97 The Asset Management Committee receives a comprehensive suite of monthly/quarterly reports. These include:

- two portfolio level reports — portfolio commitment dashboard reports and portfolio investment quarterly reports;
- quarterly sustainability performance reports;
- performance rating reports — each investment is given a Performance Rating (PR) and any changes in the status of investments and analysis of the underperforming investments are reported to the Asset Management Committee for consideration;
- monthly updates on the progress of investments (such as wind and solar power generating facilities) under construction; and

42 CEFC Valuation Policy, June 2019, section 4, pp. 4–5. Equity investments are to be valued in accordance with AASB13 *Fair Value*. The financial models should support sensitivity analysis, must be periodically reviewed, and maintain an audit trail of changes. Key assumptions in the models must be appropriate, consistently applied and documented, and market data must reference the source of the market based information (for example, foreign exchange rates).

43 The acquisition model is one of a number of valuation papers/independent valuation reports (and other documents) that help to inform valuation decisions.

44 Asset management plans cover: key metrics and performance indicators; rationale of the CEFC's investment; market outlook; CEFC representation on boards or committees; counterparties' commitments and key deliverables; capital management strategy including exit plans; key initiatives to drive the CEFC's investment objectives, capitalise on opportunities and/or mitigate risks; Australian Industry Participation plans; list of portfolio assets; key risks and mitigating controls; and determination of the investment's overall risk assessment. The plans highlight key work, health and safety and environmental, social and governance metrics and initiatives.

- progress reports on approved projects under the aggregation partnership programs that have reached financial close.

2.98 Regular financial update reports are also provided to the Audit and Risk Committee and the Board. These provide financial analysis of revenue, expenditure, operating results, retained earnings, portfolio benchmark returns, and special account and portfolio investment assets by product line and business platform.

2.99 Each investment is reported on to the Asset Management Committee separately at least annually, with updates included in the other reports.[45]

2.100 Consent and waiver requests are assessed and negotiated by the responsible portfolio manager or Innovation Fund lead with the decisions being made in accordance with the relevant debt and equity and fund portfolio management authorisations and the Innovation Fund authorisations. Most reported contractual breaches relate to reporting requirements, with few financial breaches and a low level of write-offs to date.

2.101 The minutes of Asset Management Committee meetings record any approved corrective actions for an investment that are approved by that committee.[46]

2.102 The Chief Asset Management Officer is responsible for determining the approach for managing the portfolio, including reducing the level of investment or exiting the investment. Much of the CEFC senior debt investments are still early within their period of legal tenor and equity investments are still maturing. Most investments have not yet reached the point where consideration of whether to refinance (by a counterparty) or sell down (by CEFC) an investment has been made for a number of reasons, most notably relating to the investment's lifecycle.[47]

2.103 Financial analysis on the CEFC Special Account completed in September 2019 indicated that the CEFC was likely to be able to maintain current investment levels into the future without additional funding from government.[48]

2.104 The analysis indicated that the CEFC would have no less than \$1.965 billion of headroom within the existing \$10 billion appropriation at any point over the next five years, with no active

45 These include changes to the Shadow Credit Rating (SCR); changes to the Performance Rating (reported monthly); equity investments (reported quarterly); updates on investments involving construction phases such as renewables and property (reported quarterly); and SCRs of A- and below with investment values of more than \$5 million (reported quarterly).

46 Examples of possible corrective actions include: decisions on whether or not to fund additional amounts; restructuring the loan facility; approving consents or waivers; undertaking a technical, operational or compliance review or extend the period for the current review; increased reporting requirements; undertaking a site visit; deferring a repayment date; and redeeming a portion of the investment.

47 Project Ryan is an example of a recent project that was exited before full legal tenor. It was an investment in a wind farm that had completed the construction phase and signed the power purchase agreement. There are also some equity investments that have been sold down (for example, the Innovation Fund investment in Project Caribou and the partial sell down of three large property investment projects Imereti, Lafite and Abigaille) for a profit.

48 The CEFC cannot borrow funds except in accordance with section 55 of the CEFC Act. While the Australian Government had previously indicated that there would not be any new appropriations, it has now tabled a Grid Reliability Fund Bill to Parliament that would introduce a \$1 billion Grid Reliability Fund to support investments in new energy generation, storage and transmission infrastructure, including eligible projects shortlisted under the Underwriting New Generation Investments program.

recycling.[49] The CEFC has developed a Capital Management Strategy which includes an option to recycle (sell) assets in order to maintain sufficient funds for investment.

Does the CEFC accurately report on the financial and non-financial performance of its investments, including the relevant requirements under section 74 of the Act?

> The CEFC has met its reporting requirements under the *Public Governance, Performance and Accountability Act 2013* and the CEFC Act. There is scope to include other information to more fully inform users about the performance of the Corporation.

2.105 The CEFC is expected to meet reporting requirements in both the PGPA Act and the CEFC Act. These requirements and the assessment of performance against them are considered here.

Reporting requirements

2.106 The Finance Secretary direction under subsection 36(3) of the PGPA Act sets out the requirements for performance information to be included in Portfolio Budget Statements (PBS)[50], including a strategically focused set of high-level performance information.[51] Section 39 of the PGPA Act requires Commonwealth entities to prepare annual performance statements and include those statements in their annual reports. Commonwealth entities are to report, through the annual performance statements, the extent they have fulfilled their purpose(s) as articulated at the beginning of a reporting year in their PBSs and corporate plans.

2.107 In addition to the requirements of the PGPA Act:

- paragraph 68(1)(b) of the CEFC Act requires an investment policy to define benchmarks and standards for assessing the performance of the investments and the CEFC itself;
- section 74 of the CEFC Act lists a number of matters that are to be included in the annual report; and
- section 15 of the Investment Mandate requires the CEFC, as part of its annual report, to report on the non-financial outcomes of all of its investments, including those for the nominated funds under section 14 of the Mandate.

2.108 As required by section 15 of the Investment Mandate Direction 2016 (No. 2), the CEFC, in consultation with the then Department of the Environment and Energy, agreed a range of performance indicators against which to report these non-financial outcomes, and advised the responsible Ministers of those indicators on 10 July 2017. This information is reported in the CEFC's annual report.

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49 This conclusion is based on ongoing new investment each year of $0.9 billion to $1.0 billion, surplus revenue of $100 million, natural repayments between $375 million and $894 million (over next five years) and accelerated repayments of $400 million per annum. The available funds account for $1.75 billion in unfunded financial commitments (that is, funds not yet drawn down).

50 *Requirements for Performance Information Included in Portfolio Budget Statements*, Finance Secretary Direction under subsection 36(3) of the *Public Governance and Accountability Act 2013*, 3 March 2013.

51 At least one high level performance criterion, targets and expected dates of achievement for existing programs and detailed information for new or materially changed programs.

2.109 The CEFC has met its reporting requirements under the PGPA Act and the CEFC Act, but there is scope to include other performance information to more fully inform users about the performance of the Corporation.

Annual performance statements

2.110 The CEFC provides a set of high-level performance information in the PBS. A comparison of the performance targets and reported information for 2018–19 was undertaken.[52] They were found to be consistent, although the level of detail varies. There is an opportunity to add a supporting table reconciling the components of the CEFC's investment portfolio to the total portfolio commitment value.[53]

CEFC legislative obligations and other key performance indicators

2.111 The CEFC reports on the matters required by section 74 of the CEFC Act. These include compliance with the 50 per cent renewable energy technologies requirement (discussed at paragraphs 3.6 to 3.12) and a benchmark comparison of operating costs and expenses. To meet the latter requirement, the CEFC provided a benchmark comparison against the Future Fund, Export Finance Australia and Northern Australia Investment Fund.[54] The commentary explained the nature of each comparator and the differences between them, and provided horizontal analysis using a percentage comparison for each cost pool.

2.112 The CEFC has a single efficiency measure in its performance framework — operating expenditure as a percentage of the deployed portfolio balance. There is scope to include other measures, such as the time taken to close projects after approval. The average time to commitment per project has increased significantly from 189 days in 2012–13, 171 days in 2013–14, and 228 days in 2014–15 to 382 days in 2018–19.

2.113 There is an opportunity to include benchmarking data on clean energy outcomes with another green bank.[55] There are other green banks with readily available comparative performance data, although comparable green banks are much smaller than the CEFC.[56] Possible performance measures include percentage of total energy generation, cost per tonne of carbon abatement ($MtCO_2e$), reduction of greenhouse gas emissions, renewable energy generation, leveraging private sector capital (discussed in Chapter 3) and waste to energy conversion. Benchmarking performance

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52 The ANAO has conducted three performance audits of annual performance statements: Auditor-General Report No.58 2016–17 *Implementation of the Annual Performance Statements Requirements 2015–16*, Auditor-General Report No.33 2017–18 *Implementation of the Annual Performance Statements Requirements 2016–17* and Auditor-General Report No.17 2017–18 *Implementation of the Annual Performance Statements Requirements 2017–18*.

53 The CEFC's 2016–17 Annual Report included a summary of the portfolio by financial instrument (Figure 31 on page 53). Clean Energy Finance Corporation, *Annual Report 2016–17* [Internet], available from https://annualreport2017.cefc.com.au/ [accessed 14 December 2020].

54 Clean Energy Finance Corporation, *Investing in Australia's clean energy transition — Annual Report 2018–19* [Internet], Appendix C, pp. 148–151, available from https://annualreport2019.cefc.com.au/ [accessed 14 December 2020].

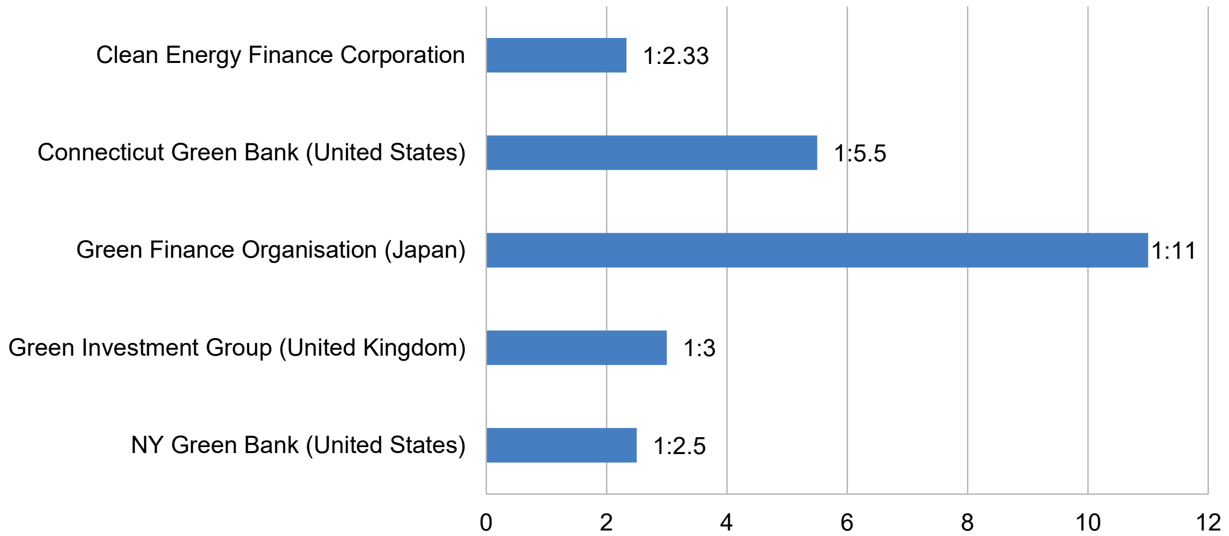
55 The OECD defines a green bank as a public, quasi-public or non-profit entity established specifically to facilitate private investment into domestic low-carbon, climate resilient infrastructure. The website of the Green Bank Network (https://greenbanknetwork.org/) lists nine member green banks, including the CEFC and other banks, such as the Green Investment Group, which was originally owned by the UK Government but is now owned by Macquarie Bank. Comparisons could be made with other Green Bank Network banks.

56 For example, the Green Investment Group in the UK.

against other green banks would enhance the available performance information and indicate the relative maturity of the Australian green energy sector.

2.114 A comparison of CEFC performance against other green banks using published results since inception to 2018–19 indicates that the CEFC's performance in the sector is at the lower end for funds leveraged (see Figure 2.4). The Green Finance Organisation (Japan) is an outlier with 11:1, Connecticut Green Bank (US) 5.5:1, Green Investment Group (UK) 3:1, and NY Green Bank (US) 2.5:1. This result is consistent with the benchmarking completed in 2017 as part of the statutory review.

Figure 2.4: Leverage ratios since inception for the CEFC and other green banks to 2018–19



Note: Dates of inception were: Energy Efficiency and Renewable Sources Fund: 2004; Connecticut Green Bank: 2011; CEFC: 2012; Green Investment Group: 2012; NY Green Bank: 2013; and Green Finance Organisation: 2013.

Source: ANAO analysis.

2.115 A number of qualifying factors in funds leveraged are:

- with the exception of the Green Investment Group (UK), total investments by the other green banks are substantially below the CEFC's investment[57];
- differing investment mandates influence the amount of leverage able to be achieved. For example, some green banks are able to provide grant funding as well as investment capital which influences the ability of the bank to invest in clean energy projects; and
- there are differences in leverage calculation methodology which impacts the comparability of reported leverage and may overstate the leverage achieved as compared to the CEFC's approach.

57 The Green Finance Organisation had invested US$123 million to 30 June 2019, the Connecticut Green Bank had invested US$1.6 billion to 30 June 2019, the Green Investment Group (now privately owned by Macquarie) had invested US$23.75 billion to 30 June 2019, the NY Green Bank commenced had invested US$736 million and the CEFC had invested US$3.8 billion to 30 June 2019.

Recommendation no.4

2.116 The Clean Energy Finance Corporation benchmark its performance in terms of clean energy outcomes and leverage against one or more other green banks.

Clean Energy Finance Corporation response: *Agreed.*

2.117 *While this is not technically required under the CEFC Act, the PGPA Act or the Investment Mandate, we agree it may be a useful comparison to undertake.*

2.118 *We will adopt the OECD definition of "green bank" (a public, quasi-public or non-profit entity established specifically to facilitate private investment into domestic low-carbon, climate-resilient infrastructure) as the basis for selecting appropriate comparators.*

2.119 *It is important to note that any comparison will be limited to publicly available data and will be inherently flawed as, amongst other things:*

- *each 'green bank', just like the CEFC, has its own unique mandate specific to its own particular market needs, including target sectors, technologies, financial instruments at their disposal, geographical limitations, extent of capital, etc;*
- *the CEFC is at least double the size of the next largest 'green bank';*
- *the material difference in emissions intensity for different grids around the world will result in substantially different carbon abatement metrics for identical projects in different countries; and*
- *leverage is heavily influenced by the types of financial tools available to the various 'green banks'. For example, equity investments typically have higher investment leverage, project finance are typically 2-3x, whereas asset finance usually has very low (or no) leverage. Not all 'green banks' invest across every asset class.*

3. Performance in meeting legislative obligations

Areas examined

This chapter examines how effectively the Clean Energy Finance Corporation (CEFC) has met its objective under the *Clean Energy Finance Corporation Act 2012* (CEFC Act) to facilitate increased flows of finance into the clean energy sector, consistent with legislative requirements and directions.

Conclusion

The CEFC has largely met its legislated objective of facilitating increased flows of finance into the clean energy sector, consistent with its legislative requirements and directions.

The CEFC has not yet met the target benchmark rates of return set by the Investment Mandate and does not have a strategy in place to meet them. The CEFC also does not have a suitable measure of aggregate portfolio risk and the Board does not regularly record its assessment of the mandated requirement that the investment portfolio in aggregate has an acceptable but not excessive level of risk.

While the CEFC has facilitated increased flows of finance into the clean energy sector, the extent to which it has leveraged additional funds is unclear.

There is a lack of clarity in the Investment Mandate on whether CEFC investments in sustainable cities is restricted to the $1 billion limit for the Sustainable Cities Investment Program set by the Mandate.

Areas for improvement

The ANAO made four recommendations aimed at:

- improved reporting of investments against nominated funds and programs and clarifying whether investments in sustainable cities can exceed the $1 billion set in the Investment Mandate for the Sustainable Cities Investment Program;
- better documenting operating procedures and methodologies for the calculation of renewable energy contributions and the calculation of performance against the benchmark rates of return in the Investment Mandate;
- keeping responsible ministers informed of action the CEFC is taking to achieve the target benchmarks rates of return over the medium to long term; and
- improving how the CEFC assesses the risk of the investment portfolio.

3.1 To assess the effectiveness of the CEFC in meeting its legislative obligations, the following were considered. Whether:

- the investments made by the CEFC are consistent with its obligations under the CEFC Act and Investment Mandate;
- the CEFC has met its investment performance obligations under the Investment Mandate, including those related to the target average rates of return and the risk profile of its investments;

- the CEFC has leveraged increased levels of funds into the clean energy sector from the private sector and other sources; and
- the investments in the clean energy sector that were partly financed by the CEFC would have occurred without its involvement.

Are the investments made by the CEFC consistent with its obligations under the *Clean Energy Finance Corporation Act 2012* and Investment Mandate Directions?

The CEFC has met the requirement in section 58 of the CEFC Act for at least 50 per cent of funds invested at one time to be in renewable energy technologies. It has also met its investment obligations under the Clean Energy Innovation Fund and the Reef Funding Program. However, CEFC investments in sustainable cities was $3.4 billion as at 30 June 2020, $2.4 billion more than the limit of $1 billion set in the Investment Mandate of funds to be made available for the Sustainable Cities Investment Program. There is a lack of clarity on the CEFC's ability to invest more than $1 billion in sustainable cities as part of its core investments. There is also a need for the CEFC, when reporting on investments included in each fund or program, to include amounts that have been included in other funds or programs.

3.2 The CEFC Act and Investment Mandate specify the technologies in which the CEFC may invest and requirements to make available up to specified amounts for investment in nominated Funds and Programs. This section considers the CEFC's compliance with these obligations.

Complying technologies

3.3 This section outlines the requirements relating to complying technologies, how the CEFC determines amounts invested in renewable energy technologies and the CEFC's management of compliance with the 50 per cent target for renewable energy technologies.

Complying technology requirements

3.4 As noted at paragraph 1.2, under section 59 of the CEFC Act the CEFC is to invest, directly and indirectly, in clean energy technologies, which are defined in section 60 as:

- energy efficiency technologies;
- low emission technologies; and
- renewable energy technologies.

3.5 Examination of the 23 investments in the audit sample indicated that they met the section 59 requirements. The CEFC also advised that there have also been no instances where it has become aware that the investments were non-complying or had become non-complying and:

- the counterparty has not taken corrective action; and/or
- the CEFC has found it necessary to divest itself of the investment, as required by section 59 of the CEFC Act.

3.6 Under subsection 58(3) of the CEFC Act, from 1 July 2018, at least half of the funds invested are to be in renewable energy technologies. A breakdown of total CEFC investment commitments (deployed and contractually committed capital) by permitted clean energy technologies and the percentage reported by the CEFC for renewables as at 30 June of each year since its inception in 2012 are shown at Table 3.1.

3.7 While not required to meet the 50 per cent threshold before 1 July 2018, the CEFC reported that, since its inception, it had invested more than 50 per cent in renewable energy in each year with the exceptions of 2015–16 and 2016–17, with 53 per cent of CEFC finance reported to have been committed to renewable energy technologies as at 30 June 2020.

Table 3.1: CEFC investment commitments by permitted clean energy technologies as at 30 June, 2012–13 to 2019–20, $ million

	2012–13	2013–14	2014–15	2015–16	2016–17	2017–18	2018–19	2019–20
Renewables	88	577	6734	827	1472	2619	3270	3165
Energy Efficiency	50	279	487	915	1584	2166	2733	2634
Low Emissions Technology	0	75	75	0	0	121	150	152
Total	**138**	**931**	**1235**	**1742**	**3056**	**4906**	**6153**	**5950**
% Renewables	63.6%	62.0%	54.5%	47.5%	48.2%	53.4%	53.1%	53.2%

Note: Differences in totals are due to rounding.

Source: CEFC.

CEFC's management of compliance with the 50 per cent renewable energy technology requirement

3.8 The CEFC manages compliance with subsection 58(3) of the CEFC Act at a whole-of-portfolio level. The status of the portfolio is reported against the 50 per cent requirement at each Board and Executive Committee meeting. Progress in meeting the 50 per cent requirement is also monitored regularly by the Executive Investment Committee.

3.9 On 23 July 2018, the responsible Ministers advised of their agreement to the approach the CEFC had proposed for managing performance against the 50 per cent renewable energy technology requirement. That approach was to target 55 per cent of 'funds invested' in renewable energy technologies, which would allow a margin of safety for unseen events (such as an unexpected early repayment of a renewable-related loan).

3.10 In maintaining the CEFC's renewable energy component above 50 per cent of the portfolio, the CEFC indicated that it faces the following challenges:

- a slowdown in wind, solar and other renewable activities due to the perceived uncertain policy framework (post Renewable Energy Target 2020) and energy market issues (such as grid constraints, marginal loss factor reductions, grid connection delays, and merchant energy price volatility);
- earlier than expected refinancing and CEFC divestment of CEFC wind and solar transactions (usually as these projects come out of the construction phase and into operation). If a renewable facility has been de-risked through construction by the CEFC,

and has obtained a Power Purchase Agreement since origination, then it is possible that the facility could be refinanced solely by the private sector; and

- difficulties in maximising the renewable component in projects that are largely energy efficiency focused (in the property and infrastructure sectors, or when developing new investment products in debt markets).

3.11 Investment in large-scale renewable energy projects increased significantly between 2016 and 2019. It is estimated to have accounted for nearly five per cent of non-mining business investment at its recent peak in 2018. This investment was completed almost entirely by the private sector, with large-scale renewable projects driving much of the strong growth in private sector electricity-related investment during this period.[58]

3.12 The large-scale market has matured significantly during this period; there is now less demand for the CEFC to provide project finance for these projects as the private sector is directly contributing more finance. In addition, the CEFC's Investment Mandate focus has shifted over time with the result that less emphasis is given to financing intermittent renewables.

Investments in nominated Funds and Programs

3.13 As noted at paragraph 1.5, the Investment Mandate requires the CEFC to make funds available up to specified limits for investment in nominated funds and programs. Only three funds and programs were included in the Investment Mandate up to November 2019 — the Clean Energy Innovation Fund, the Sustainable Cities Investment Program and the Reef Funding Program.[59] These are considered here, as well as the way the CEFC reports investments against nominated programs.

Clean Energy Innovation Fund

3.14 Subsection 14(1) of the Investment Mandate requires the CEFC to 'make available up to $200 million [through the Clean Energy Innovation Fund] for debt and equity investment in emerging clean energy technology projects and businesses that involve technologies that have passed beyond the research and development stages but are not yet established or of sufficient maturity, size or otherwise commercially ready to attract sufficient private sector investment'.

3.15 As at 30 June 2020 commitments under the Program totalled $85.7 million.

3.16 The CEFC Board must target an average return of at least the five-year Australian Government bond rate plus one per cent per annum over the medium to long term as the benchmark return for the Fund, with performance being measured before operating expenses. The CEFC performance against the benchmark is considered at paragraphs 3.37 to 3.50.

Sustainable Cities Investment Program

3.17 The Investment Mandate (subsection 14(2)) requires the CEFC to 'make available up to $1 billion of investment finance over 10 years for a Sustainable Cities Investment Program'.

3.18 The Explanatory Statement to the Investment Mandate provides for a wide range of potential investments in the Sustainable Cities Investment Program:

58 Reserve Bank, *Bulletin*, March 2020, p. 37.

59 The Australian Recycling Investment Fund was added to the Mandate in November 2019 and the Advancing Hydrogen Fund was added in May 2020.

> To make available up to $1 billion of investment finance over 10 years for clean energy projects and businesses that improve the productivity, accessibility and liveability of cities. Example investments could include loans to cities to finance innovative upgrades to street lighting and commercial buildings; equity or loans in privately funded co-generation installations in commercial buildings and manufacturing; and long-term loans to support community housing providers to build or retrofit energy efficient, affordable homes.[60]

3.19 It was also agreed with the then Department of Environment and Energy in 2017 that:

- any CEFC activity within a 'city' could be counted against the Sustainable Cities funding program; and
- in deciding on the definition of a 'city' for the purposes of the program, the CEFC sought the advice of Cities Division (then within the Department of the Prime Minister and Cabinet) and the then Department of Environment and Energy. It was agreed to use postcodes (mapped to ABS significant urban areas), and to have a cut off for a city of around 25,000 people.

3.20 In its 2018–19 annual report the CEFC reported that it had 'exceeded its $1 billion target, with the CEFC committing almost $2.9 billion to some 5000 Sustainable Cities opportunities at 30 June 2019'.[61] The CEFC has also advised that, as at 30 June 2020, investment commitments in the Sustainable Cities Investment Program was $3.4 billion (including $790 million through aggregation partnerships).

3.21 However, since the Investment Mandate sets an upper limit on the amount to be made available, it could be argued that the CEFC has over-invested in the Program by a ratio of almost 3:1. On the other hand, since the CEFC can invest in projects eligible for inclusion in the Sustainable Cities Investment Program as part of its core investment activities, it may have been open to the CEFC not to have included some investments in the Sustainable Cities Investment Program.

3.22 The Department of Finance (Finance) advised ANAO that it raised with the CEFC its performance against the $1 billion requirement. Finance also advised that there may be issues relating to the classification of investments in the Program, since some investments could be classified against both specific investment programs and core investments.

3.23 While some investments in sustainable cities would be compliant with both the Sustainable Cities Investment Program and core investments, there is a need for the CEFC to obtain clarification of the $1 billion limit set for the Program in the Investment Mandate.

3.24 The CEFC is often not required as a cornerstone investor in property investments and the investment strategy is typically to influence the key decision makers to adopt higher sustainability outcomes. As at 30 June 2020, the Sustainable Cities Investment Program represented 57 per cent of total CEFC investment commitments (that is $3.4 billion out of $5.95 billion). Sixty per cent of CEFC investments in the Sustainable Cities Investment Program was in commercial and residential property development.

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60 Explanatory Statement to the Clean Energy Finance Corporation Investment Mandate Direction 2019, Authorised Version Explanatory Statement registered 16 December 2019 to F2019L01623, pp. 7–8.

61 Clean Energy Finance Corporation, *Investing in Australia's clean energy transition — Annual Report 2018–19* [Internet], p. 28, available from https://annualreport2019.cefc.com.au/ [accessed 14 December 2020].

Reef Funding Program

3.25 Subsection 14(3) of the Investment Mandate requires the CEFC to make available up to $1 billion of investment finance over 10 years for clean energy projects and businesses that support delivery of the Government's Reef 2050 plan.[62] The Explanatory Statement to the 2019 Investment Mandate stated that:

> Example investments could include projects or businesses that have a positive co-benefit for the health of the Reef (either directly by improving water quality, or indirectly by reducing emissions). The [Reef Funding Program] will focus primarily on projects located in (and businesses that provide services or products to) the water catchment areas that flow into the Great Barrier Reef World Heritage area.[63]

3.26 Almost any clean energy technology project sited in the reef catchment area is eligible for inclusion in the Reef Funding Program. Reef Funding Projects are determined by reference to whether they the meet the specifications of the Mandate, including whether the relevant water catchment empties into the Reef areas.

3.27 In its 2018–19 Annual Report, the CEFC reported that, as at 30 June 2019, it had committed more than $370 million to about 410 transactions under the Reef Funding Program.[64] As at 30 June 2020, the CEFC advised that it had committed $386 million under the Program, including $51 million through aggregation partnerships.

Other nominated funds

3.28 Recent changes to the Investment Mandate have included requirements for the CEFC to make available up to:

- $100 million for an Australian Recycling Investment Fund to support recycling or recycled content projects utilising clean energy technologies, with a particular focus on waste plastics, paper, glass and tyres (November 2019); and
- $300 million in concessional finance for the Advancing Hydrogen Fund to support the growth of a clean, innovative, safe and competitive Australian hydrogen industry.

3.29 As at 30 June 2020, the CEFC had made no investment commitments in projects related to these Funds.

Reporting of investments against nominated programs

3.30 Investments may qualify under more than one designated program. In its advice of 10 July 2017 to responsible Ministers mentioned at paragraph 2.108, the CEFC stated that:

> It is proposed that the investment's non-financial outcomes should be reported under each program or fund for which it is eligible, therefore potentially being included under multiple funds or programs'. [CEFC] reports investments against the nominated programs in this way.

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62 Clean Energy Finance Corporation Investment Mandate Direction 2019, 11 November 2019, subsection 14(3), p. 5.

63 Explanatory Statement to the Clean Energy Finance Corporation Investment Mandate Direction 2019, Authorised Version Explanatory Statement registered 16 December 2019 to F2019L01623, p. 8

64 Clean Energy Finance Corporation, *Investing in Australia's clean energy transition — Annual Report 2018–19* [Internet], p. 26, available from https://annualreport2019.cefc.com.au/ [accessed 14 December 2020].

3.31 To ensure clarity on the attribution of investments between programs, the CEFC should include in the reports for each fund or program the amounts that had been included on other funds or programs.

Recommendation no.5

3.32 The Clean Energy Finance Corporation:

(a) ask responsible Ministers to clarify in the Investment Mandate the intention of the requirement in subsection 14(2) that the Clean Energy Finance Corporation make available up to $1 billion of investment finance over 10 years for the Sustainable Cities Investment Program; and

(b) in reporting on investments included in each fund or program, include amounts that have been included in other funds or programs.

Clean Energy Finance Corporation response: *Agreed.*

3.33 *The CEFC's view is that we have made available up to $1 billion for the Sustainable Cities Investment Program (as is required by the Investment Mandate). The CEFC has invested in accordance with the CEFC Act in clean energy technologies, and it so happens that ~$3.4bn of those investments also meet the Department's definition for the Sustainable Cities Investment Program.*

3.34 *Noting the Sustainable Cities Investment Program obligation has in fact been met, the CEFC will request responsible Ministers to consider either removing the obligation as having been met, or to consider clarifying in the next Investment Mandate, that the "up to $1 billion for the Sustainable Cities Investment Program" does not act as a cap preventing the CEFC from investing in Australia's 55 largest cities — as to do so would rule out most of Australia's economic activity and be at odds with the object of the CEFC Act which is to facilitate increased flows of finance into the clean energy sector, which includes Australia's cities.*

3.35 *Due to the overlapping definitions of what is to be counted as an investment for the purposes of the different funds defined in the Investment Mandate, the CEFC agrees that it would be appropriate when reporting on investments included in each fund or program, to state those amounts that have been included in multiple funds or programs. As this matter is regulated by agreement with the Department, the CEFC will seek to update the previously agreed arrangements.*

Has the CEFC met its investment performance obligations under the Investment Mandate Directions, including those related to the average target rates of return on investments and the risk profile of its investments?

Since 2014–15 the CEFC has not yet met either of the two portfolio target benchmark return rates set by the Investment Mandate. The CEFC does not have a strategy in place to enable the mandated rates of return to be achieved over the medium to long term (10 years).

> The CEFC should document its operating procedure for calculating the actual rates of return and ensure that the calculation spreadsheets include references to all source data.
>
> The CEFC has partially effective risk management processes in place. It has yet to develop a satisfactory measure of portfolio value-at-risk and the Board also does not regularly record its assessments against the mandated requirement to develop a portfolio that in aggregate has an acceptable but not excessive level of risk.
>
> The concessionality charge each financial year has been well below the limit of $300 million set in section 9 of the Investment Mandate and the CEFC has not exceeded the limits on guarantees specified in section 10 of the Investment Mandate.

Investment Mandate performance obligations

3.36 The main performance obligations in the Investment Mandate relate to requirements for the CEFC to:

- target benchmark rates of return for its core portfolio and the Clean Energy Innovation Fund;
- seek to develop a portfolio across the spectrum of clean energy technologies that in aggregate has an acceptable but not excessive level of risk;
- limit the amount of concessionality in any one financial year to $300 million[65]; and
- ensure that the limits on guarantees specified in the Investment Mandate are met.

Performance against the target benchmark rates of return

3.37 Assessing performance against the benchmarks requires:

- an understanding of the target benchmark rates of return set by the Investment Mandate for the CEFC's core investments and on investments in the Innovation Fund (and newly established Advancing Hydrogen Fund);
- calculating the target benchmark rates of return for each investment;
- calculating the actual rates of return against the target benchmarks; and
- managing performance against the target benchmarks.

Definition of the target benchmark rates of return

3.38 Section 7 of the 2018 Investment Mandate (used by the CEFC for its reporting of performance in 2018–19) specified the CEFC's obligation to target a benchmark rate of return of:

> In relation to all investments other than those made under subsection 14(1) of this direction [Clean Energy Innovation Fund], the Board is to target an average return of the five–year Australian Government bond rate +3 to +4 per cent per annum over the medium to long term as the

65 A concessional loan is a loan provided on more favourable terms than the borrower could obtain in the marketplace.

benchmark return of the portfolio. Performance against this benchmark will be measured before operating expenses.[66]

3.39 Section 14 of the Investment Mandate also sets target benchmark return rates of an average return of at least the five-year Australian Government bond rate plus one per cent per annum over the medium to long term as the benchmark return of the Clean Energy Innovation Fund and the newly established Advancing Hydrogen Fund.

3.40 Since 2016, the Explanatory Statements to the Mandates have stated that:

> It is expected that the Corporation will apply commercial rigour when making its investment decisions. By adopting a commercial approach, it is expected that the Corporation will invest responsibly and manage risk so it is financially self-sufficient and achieves the Portfolio Benchmark Return and the benchmark return for the Clean Energy Innovation Fund. In achieving this aim the Government has the expectation that the Board will take a medium/long-term outlook (ten years) when setting the investment strategy for the Corporation.

3.41 The average rates of return are therefore expected to be met over a period of 10 years.

Calculation of the target benchmark return rates

3.42 The portfolio target benchmark return rate and the Clean Energy Innovation Fund target benchmark return rate are calculated by the CEFC using a spreadsheet.[67] The Investment Mandate requires the CEFC to calculate an 'individual reference rate for each investment' and then add the one per cent, three per cent or four per cent for the relevant class of investments (Innovation Fund or core investments). The series is then to be used to determine an overall target for the core portfolio and the Clean Energy Innovation Fund. ANAO confirmed the benchmark rates that the CEFC has reported.

3.43 The target rates for the core portfolio were 5.95 per cent in 2015–16, 5.74 per cent in2016–17, 5.51 per cent in 2017–18 and 5.99 per cent in 2018–19. The Clean Energy Innovation Fund targets were 3.21 per cent in 2017–18 and 3.22 per cent in 2018–19.

Actual return rates

3.44 Reported rates of return for the CEFC's core portfolio and the Clean Energy Innovation Fund for the period 2015–16 to 2019–20 are shown in Table 3.2. As at 30 June 2020, the core portfolio had achieved an inception to 30 June (seven years) average annual rate of return of 4.75 per cent[68] against a benchmark of 5.28 to 6.28 per cent. The Clean Energy Innovation Fund had achieved an inception to 30 June (two years) of -6.02 per cent against a benchmark of 3.15 per cent.

3.45 The actual rates of return reported by the CEFC on its 'core portfolio' since inception have slowly increased from 4.15 per cent in 2013–14 to 4.75 per cent in 2019–20 over a time when benchmark rates have fallen. As a result, the CEFC's core portfolio performance has risen from

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66 A similar requirement to achieve an average return of the five-year Australian Government bond rate +3 to +4 per cent per annum over the medium to long term has been included in Investment Mandates since 2016. Before then the CEFC was required to an average return of at least the five-year Australian Government bond rate +4 to +5 per cent per annum as the benchmark return of the portfolio.

67 The CEFC also runs a parallel calculation in its financial management system (TechOne) to validate the results of the spreadsheet calculation.

68 A late change to the calculation for the impairment loss allowance in the 2018–19 financial statements was not reflected in the workings for the rate of return. As a result, the rate of return in the annual report slightly overstated the return.

1.3 per cent below the benchmark in 2015–16 to being 0.53 per cent below the benchmark in 2019–20. The CEFC could consider including forecast returns up to the 10 year mark for the core portfolio and the Innovation Fund, until each has been operating for 10 years, recognising that the Explanatory Statement to the Investment Mandate defines the medium to long term over which the benchmark rates of return are to be achieved as 10 years.

Table 3.2: Reported rates of return against benchmark rates, 2015–16 to 2019–20

	2015–16	2016–17	2017–18	2018–19	2019–20
Core portfolio					
Benchmark	5.95% – 6.95%	5.74% – 6.74%	5.51% – 6.51%	5.39% – 6.39%	5.28% – 6.28%
Actual[a]	4.65%	4.50%	4.44%	5.27%[b]	4.75%
Difference	-1.30	-1.24	-1.07	-0.12	-0.53
Clean Energy Innovation Fund					
Benchmark	–	–	3.21%	3.22%	3.15%
Actual[c]	–	–	-14.71%	-27.05%	-6.02%
Difference	–	–	-17.92	-30.27	-9.17

Note a: These cumulative rates reflect the annualised returns for all investments made since the CEFC was created.

Note b: The 2018–19 return of 5.27% has been adjusted from the annual report.

Note c: The negative returns on the Clean Energy Innovation Fund were due to the write-down in investments. In 2018–19 this was mostly due to a $10 million write-down in one investment. However, this write-down was sold at a profit 8 months later and the write-down was removed and the actual return then calculated.

Source: CEFC annual reports for 2015–16 to 2018–19 and CEFC advice for 2019–20.

3.46 The CEFC has advised that actual rates of return can only accurately be compared to expected rates of return at the very end of an investment cycle (and this can often be many years, with some debt extending to 17 years). This is because rates of return are calculated on a net present value/internal rate of return basis using cash flows.

3.47 Cash flows for loans are uneven over time, as fees tend to be received in advance and some facilities have 'step up' arrangements on interest rates to incentivise early refinance by the private sector. For equity investments, any rate of return calculations would be materially impacted by exit assumptions and therefore can also only be accurately assessed at exit.

3.48 The CEFC has yet to report a positive rate of return on the Clean Energy Innovation Fund. This partly reflects the fact that $64.2 million of the $69.2 million (93 per cent) of these investments as at 30 June 2019 were in the form of equities (venture capital), the final return on which will not be known until the investments are sold or written off. In its Portfolio Budget Statements, the CEFC has drawn attention to the risks inherent in investing in earlier stage technologies and that in practice this will involve some short-term volatility in the Corporation's returns, including the possibility of losses in some years.

3.49 The CEFC's Finance team calculates the actual return realised at exit of an investment and assesses any material deviation from the anticipated rate. The CEFC's investment database (iMart) is then updated to reflect the final rate of return at the exit point.

3.50 The CEFC was not able to provide a standard operating procedure document for the calculation of returns. The spreadsheet provided by the CEFC included no instructions, references to source data or list of assumptions. The CEFC should document and validate the operating procedure for the calculation of benchmark rates and actual rates of return against the benchmarks for both the core portfolio and Innovation Fund, ensuring that the spreadsheets reference all source data and are regularly validated.

Recommendation no.6

3.51 The Clean Energy Finance Corporation document procedures for calculation of benchmarks and actual rates of return against the benchmarks, and ensure that the calculation spreadsheets include references to all source data.

Clean Energy Finance Corporation response: *Agreed.*

3.52 *The CEFC agrees that we could improve process documentation for the calculation of benchmarks and actual rates of return against the benchmarks, albeit these are standard calculations, the methodology for which is laid out in the Investment Mandate or that follow commonly enunciated and practiced principles.*

Managing performance against the benchmark return rates

3.53 The CEFC monitors performance against the benchmarks, but does not have strategies in place to seek to achieve them.

Monitoring performance against the target benchmark return rates

3.54 The monthly financial update reports to the Board mentioned at paragraph 2.97 provide a comparison of actual rates of return to the portfolio target benchmark rates of return. The CEO's reports to the Board also provide information on how the CEFC is performing against the portfolio benchmarks.

3.55 Performance against the target benchmarks is reported to the Minister for Energy and Emissions Reduction and to the Department of Industry, Science, Energy and Resources on a quarterly basis and briefings are provided, where required. Performance is also reported in the department's annual report.

3.56 While the Board is advised of performance against the benchmark, Board papers do not explain why the target benchmark rates of return were not achieved and the Board has not indicated its strategy to seek to meet them in the future. Instead, there appears to be an acceptance that this is simply a by-product of its investment activities and not targets that it actively needs to seek to meet. For example, the Board minutes of 23 August 2018 recorded that:

> The Board discussed the portfolio benchmark return (PBR) and, in particular, the fact that the CEFC invests primarily for a public policy purpose and operates in a manner that seeks to crowd in private capital, not crowd out. While the business operates in a commercial manner that always lends at maximum possible a rate above the Government's cost of funds, the actual return achieved is typically a consequence of the CEFC's investment objectives rather than the primary driver, as it is in private sector organisations.

CEFC views on the appropriateness of the specified benchmark return rates

3.57 In May 2016, before providing a draft proposed Investment Mandate to the CEFC for consultation, Finance commissioned advice on an appropriate average target benchmark rate of return and acceptable level of risk for the Clean Energy Innovation Fund and for the investment portfolio of the CEFC. The advice provided to Finance reflected, among other things, the reduced expectations of returns in the investment market more generally as well as factors directly relevant to the CEFC:

> We observe downward pressure on returns and expected margins across a wide range of investments, including private debt and equity funds, due to the low interest rate environment. [Our] expectations for future risk and return, as expressed in our 'market aware' risk and return assumptions, take account of the current market conditions and incorporate an expected reversion of asset prices towards what are now lower long-term means over a five-year to seven-year period. …
>
> Our analysis of the investment framework for the investment portfolios identified factors which would serve to lower the potential returns and increase the risk from what might otherwise be expected in an unconstrained framework.
>
> Therefore, we propose ranges which incorporate qualitatively lower returns than the targets nominated above. Our recommended benchmark returns are:
>
> - CEFC: five-year Australian Government bond rate +3% pa to 4% pa over a rolling 10-year period.
> - [CEIF]: five-year Australian Government bond rate +1% pa to 3% pa over a rolling 10-year period.

3.58 A revised mandate was subsequently provided for CEFC consultation, including proposed benchmark rates of return consistent with the advice provided to Finance, but without the suggested rolling 10-year period for achievement. This proposed that the Board target an average return of the five-year Australian Government bond rate of + 3 to +4 per cent per annum over the medium to long term as the benchmark return of the portfolio to be measured before operating expenses.

3.59 The CEFC commented on the proposed mandate, advising responsible Ministers that:

> The Board notes that the Government has amended the Portfolio Benchmark Return for the CEFC's core portfolio (i.e. investments other than those in the CEIF) to 3% to 4% over the 5-year Australian Government bond rate. While this is a minor reduction in the Portfolio Benchmark Return from the target set out in the two most recent Investment Mandates issued to the CEFC (in February 2015 and December 2015), the Board is of the view that this is still an unrealistically high return target for this market. It does not reflect the CEFC's approach to risk and the proportion of public sector counterparties (universities and councils) within the current investment portfolio.
>
> As participants in the financial markets are aware, global equity risk premiums as well as both credit and duration spreads on debt instruments are compressed and are at or close to long term lows. These market pressures, when coupled with the CEFC's narrow investment universe of clean energy technologies in Australia, mean that the CEFC has limited ability to access higher yielding transactions. Consequently, as expressed in my responses to the last two Investment Mandates issued to the CEFC, the Board's view remains that targeting such a high rate of return will require the CEFC to seek out-of-market returns, which will be difficult to achieve.
>
> In relation to the benchmark return of 1% over the 5-year Australian Government bond rate set for the CEIF, the Board would also like to highlight to the Ministers that there is a very wide range of potential returns on the early stage long term investments anticipated for the CEIF. As the portfolio will be both concentrated within a single industry sector, and involve technologies that are not yet fully commercially established, the return outcome of the CEIF investments will range

from full loss of the investment to a return of a multiple of the investment. This variability in investment returns will be more pronounced in the CEIF than in the core portfolio and while the benchmark return set for CEIF is lower than that set for the core portfolio, the Government should expect high volatility on a year-to-year basis from this developing portfolio of early stage assets.[69]

3.60 The proposed target benchmark rate for the core portfolio was adopted unamended and remains unchanged.

3.61 Finance informed the ANAO that Ministers' maintenance of mandated benchmark rates of return at the levels proposed in the consultation drafts indicates the Government's continued expectation that the CEFC should strive to achieve the benchmarks. However, Finance also indicated there is a recognition that the CEFC's primary policy objective is to increase flows of finance into the energy sector, and that the benchmark rates of return are to be achieved over the medium to long term and that the CEFC has not yet been operating for 10 years.

3.62 Some CEFC Board papers have noted the difficulty in achieving the benchmark rate of return for the core portfolio and also meeting other investment obligations, such as the requirement for 50 per cent of investments to be in renewable energy.

3.63 Given the requirement in the Mandate to target the specified rates of return over the medium to long-term, the CEFC should be actively seeking to achieve them by 2022 when it will have been operating for 10 years. It should keep responsible Ministers informed of the action it is taking to meet the target rates of return and any concerns it has about its ability to do so, while also meeting its overall legislative objective to facilitate increased flows of funds into the clean energy sector. As noted at paragraph 2.24, the CEFC's corporate plan does not include action to achieve the target benchmark rates of return.

Recommendation no.7

3.64 The Clean Energy Finance Corporation keep responsible Ministers informed of action it is taking to meet the target rates of return and any concerns it has about its ability to achieve the target rates.

Clean Energy Finance Corporation response: *Agreed.*

3.65 *The CEFC takes seriously its obligation to take all reasonable steps to target the portfolio benchmark return over the longer term and monitors and reports against this regularly as noted by the ANAO (refer 3.53 to 3.56). However, the primary objective of the Corporation is to increase the flows of finance into the clean energy sector and this primary objective will, rightly continue to be the primary focus of the investment strategy.*

3.66 *The CEFC will continue to inform the responsible Ministers regularly of its actual performance relative to the target benchmark and to consult with the responsible Ministers on an appropriate benchmark relative to the prevailing market conditions as well as the requirements of both the CEFC Act and the Investment Mandate.*

69 Clean Energy Finance Corporation, Response to the CEFC Investment Mandate, 3 May 2016, available from https://www.cefc.com.au/media/178175/board-response-to-resp-ministers-on-consultation-draft-20160503.pdf [accessed 14 December 2020]. On 29 November 2016, in commenting on Investment Mandate 2016 (No.2) Consultation Draft, the Board restated its view that the benchmark return for the core portfolio 'remains an unrealistically high return target for this market'.

3.67 *It is a matter of public record that in their responses to the various Investment Mandates over time, the CEFC Board has consistently stated that they remain of the view that:*

- *The current Portfolio Benchmark Return for the CEFC's core portfolio (i.e. investments other than those in the Clean Energy Innovation Fund) of 3% to 4% over the 5-year Australian Government bond rate remains an unrealistically high return target for this market;*
- *The Board's opinion has been corroborated by the work of Dr Steven Bishop & Professor Bob Officer, which is also a matter of public record;*
- *It is inconsistent with a portfolio of complying investments originated and managed in accordance with the Investment Mandate's directions as to portfolio risk management; and*
- *Investment returns are a function of the level of risk taken, and to achieve the current Portfolio Benchmark Return would require the CEFC to identify and contract out-of-market returns through taking on excessive levels of risk.*

3.68 *Given the restrictions in the CEFC Act and Investment Mandate, the CEFC is limited to investing in specific sectors / asset classes / products / geographies which makes for a concentrated portfolio. This is further accentuated by the requirement to invest at least 50% in renewable energy. Thus, it is more challenging for the CEFC to achieve the benchmark rates, compared to a diversified private sector portfolio which is primarily focused on commercial returns. The ANAO has acknowledged the "difficulty the CEFC has in balancing the achievement of the environmental policy outcomes with the benchmark rate of return" and the independent Deloitte 2018 Statutory Review Report noted, "That the CEFC did not meet the targeted portfolio benchmark return may indicate that the return expectation is not consistent with the current mandate, the returns available in the market or may not reflect the public benefit of the CEFC".*

3.69 *Notwithstanding the current shortfall against the target PBR, it is important that readers of this Report understand that the CEFC still earns the taxpayer a financial return above the cost of Australian Government funds while achieving the policy objective of investing to abate carbon.*

The CEFC's management of portfolio risk

3.70 The requirements for managing portfolio risk are set out in sections 8 and 14 of the Investment Mandate. The CEFC has three mandated risk related responsibilities:

- the agreement of a suitable investment risk evaluation process;
- the periodic review of investment practices; and
- the development of a portfolio that in aggregate has an acceptable but not excessive level of risk.

3.71 The CEFC also needs to monitor portfolio risk and ensure that there is an acceptable but not excessive level of risk and have effective fraud control policies and processes.

Agreement to suitable investment risk evaluation process

3.72 Section 8 of the Clean Energy Finance Corporation Investment Mandate Direction 2016 of 5 May 2016 and the Clean Energy Finance Corporation Investment Mandate Direction 2016 (No.2) of 13 December 2016 included the following:

> Within six months of the date of this direction the Board should agree a suitable investment risk evaluation process to assess the risk, and should advise the responsible Ministers of the process chosen.[70]

3.73 Section 14 of the Clean Energy Finance Corporation Investment Mandate Direction 2016 (No.2) also provided, that:

> Within six months of the date of this direction the Board should, in consultation with ARENA, agree a suitable investment risk evaluation process to assess the Clean Energy Innovation Fund risk, and should advise the responsible Ministers of the process chosen.

3.74 While similar provisions are no longer included in the Investment Mandate, the CEFC did comply with them. On 4 November 2016, and again on 10 July 2017, the Chair of the CEFC Board provided responsible Ministers with the CEFC's risk evaluation processes in relation to governance, risk management, and investment risk. The advice also provided the CEFC's response to the investment risk evaluation processes for the Clean Energy Innovation Fund. In those advices, the CEFC Chair stated:

> The CEFC spends considerable effort understanding the creditworthiness of borrowers, the technology, the business case of the proposal, the security on offer, and what will happen to the CEFC's funds in the capital structure if the proposal ultimately fails.
>
> The CEFC diversifies its portfolio, seeking to avoid excessive concentration of risk in specific technologies, in exposure to single entities, in exposure to higher-risk finance in the capital structure, in exposure to merchant risk, in exposure to individual commodity markets and geographical areas.
>
> The CEFC has instituted an extensive portfolio management function, systems and process.[71]

Periodic review of investment practices

3.75 Section 8 of the Investment Mandate provides that:

> The Board is to periodically review its investment practices for the purposes of managing the risk of the portfolio over time and must advise the responsible Ministers of specific measures taken in this regard.[72]

3.76 Section 14 of the Investment Mandate also provides direction on risk levels for the Clean Energy Innovation Fund. It provides that:

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70 Clean Energy Finance Corporation Investment Mandate Direction 2016, 5 May 2016, section 8, page 3; and Clean Energy Finance Corporation Investment Mandate Direction 2016 (No.2), 13 December 2016, section 8, page 3.

Similar requirements have been included in subsequent Investment Mandates. The requirement for the Board to agree a suitable risk evaluation process within six months was not included in later Investment Mandates because the CEFC had already complied with this earlier requirement.

71 Correspondence from the Chair of the CEFC Board, Ms Jillian Broadbent AO, on 4 November 2016 and 10 July 2017.

72 Clean Energy Finance Corporation Investment Mandate Direction 2016, 5 May 2016, section 8, page 3; and Clean Energy Finance Corporation Investment Mandate Direction 2016 (No.2), 13 December 2016, section 8, page 3.

Similar requirements have been included in subsequent Investment Mandates. The requirement for the Board to agree a suitable risk evaluation process within six months was not included in later Investment Mandates because the CEFC had already complied with this earlier requirement.

> The Board, in consultation with ARENA, should periodically review its investment practices for the purposes of managing the risk of the Clean Energy Innovation Fund portfolio over time and must advise the responsible Ministers of specific measures taken in this regard.

3.77 In June 2019, the CEFC's 2017 risk management framework was reviewed, revised and approved by the Board. The revised framework specified the Board's responsibilities for formulating written policies in relation to risk management for the CEFC's investments, and ultimate responsibility for overseeing the efficient and effective operation of the CEFC. This included the oversight and governance of investment decisions, and risk management within the parameters of the CEFC Act and the Investment Mandate. Other Board duties included:

- providing direction to management in setting risk parameters and the CEFC's investment strategy; and
- overseeing the CEFC's governance structure and monitoring performance in terms of both risk and return.

3.78 In February 2019, in the course of the review, the CEFC formalised and recorded its risk appetite, setting the risk boundaries within which it operates, noting, among other things, that:

> Excessive risk-taking will jeopardise our long-term financial sustainability, while an overly risk averse approach may inhibit the ability to maximise our public policy objective.[73]

3.79 The Risk Appetite Statement approved by the Board lists risks that the CEFC will not tolerate (such as fraud), others for which it has some tolerance (including equity risks to the core investment portfolio); and risks that it tolerates (credit risk, concentration risk, interest rate risk, and technology risk relating to the Innovation Fund portfolio). In relation to the risks tolerated, the Statement noted that:

> We are tolerant of certain risks because they are central to us being able to meet our objectives. Each of these risks is managed through implementation of controls such as limits and our governance processes that require review and approval before these risks are taken on.[74]

3.80 Recognising this, the Board has set bounds on certain risks, including limiting equity exposure to 30 per cent of the investment portfolio and limiting floating rate exposure to not more than 20 per cent of total loans, while observing the $200 million limit on Innovation Fund capital.

Acceptable portfolio risk

3.81 In ascending order of risk, CEFC investments comprise debt investments; equity investments in managed funds; and direct equity investments.[75] CEFC investment commitments by investment type as at 30 June 2020 are shown at Figure 3.1.

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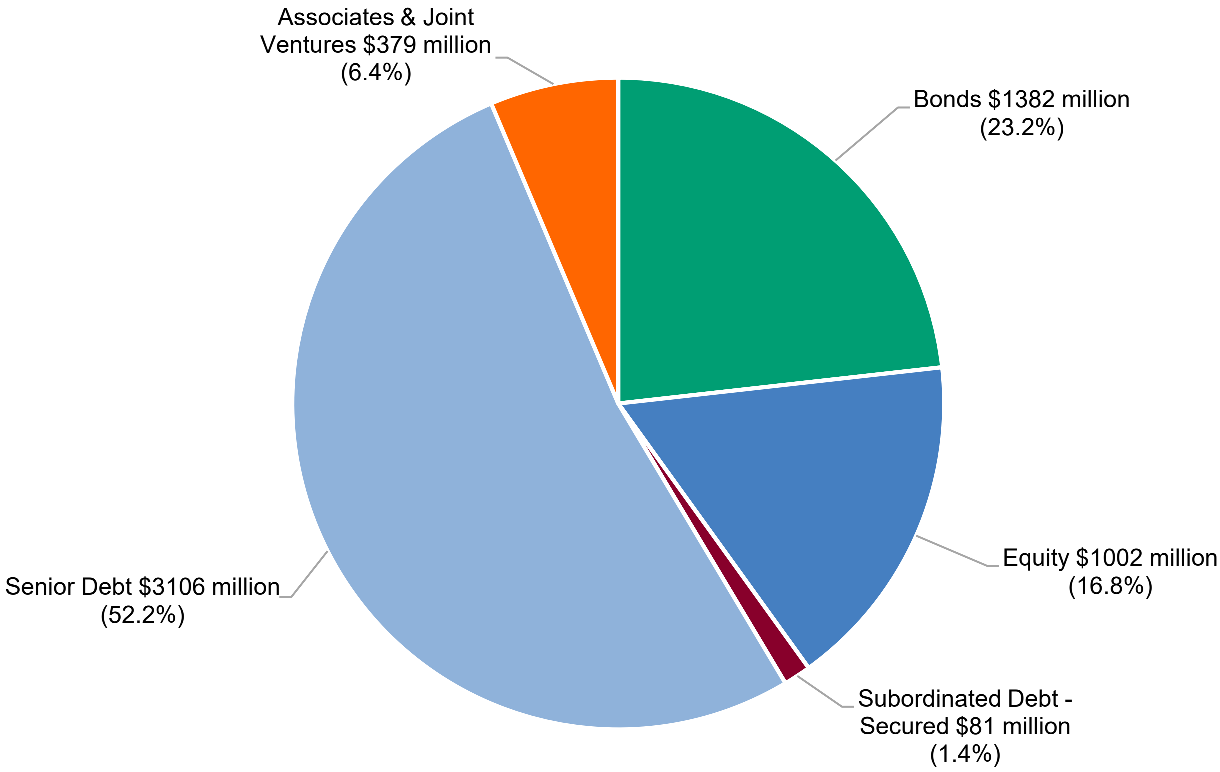
73 Clean Energy Finance Corporation, *Board Risk Appetite,* version approved February 2019, p. 4.

74 ibid., p. 5.

75 Clean Energy Finance Corporation, *Risk Management Framework*, version approved June 2019, p. 7.

Figure 3.1: CEFC investment commitments by type as at 30 June 2020



Source: ANAO analysis of CEFC data.

Debt investments

3.82 Debt investments are loans for which the principal is repaid and interest is charged. As at 30 June 2020, debt investments comprised around 77 per cent of the portfolio. The CEFC advised that that the level of risk of proposed debt investments is assessed according to the credit quality of the investment and the expected loss should the borrower default on the loan.

3.83 The CEFC uses its in-house shadow credit rating methodology to assess the likelihood of an investment default risk materialising. Several steps are involved. The assessed rating is then associated with a likely rate of default that depends on the time horizon of the proposed investment, based on Standard and Poors' credit rating scale.

3.84 For each debt investment, the CEFC estimates the Loss Given Default (LGD), an assessment of the losses that it might bear should the investment counterparties default:

> LGD is primarily determined by CEFC's security position for each investment. … Implicitly, the LGD is a monetary indicator of the potential consequence of a risk of default materialising.[76]

3.85 The potential monetary impact is estimated by the following Expected Loss calculation:

$$Expected\ Loss = Debt\ outstanding\ at\ default \times Probability\ of\ default \times LGD$$

3.86 While LGD estimates are investment-specific, shadow credit ratings are usually counterparty-specific.

76 Clean Energy Finance Corporation, *Risk Management Framework*, 17 March 2017, p. 35.

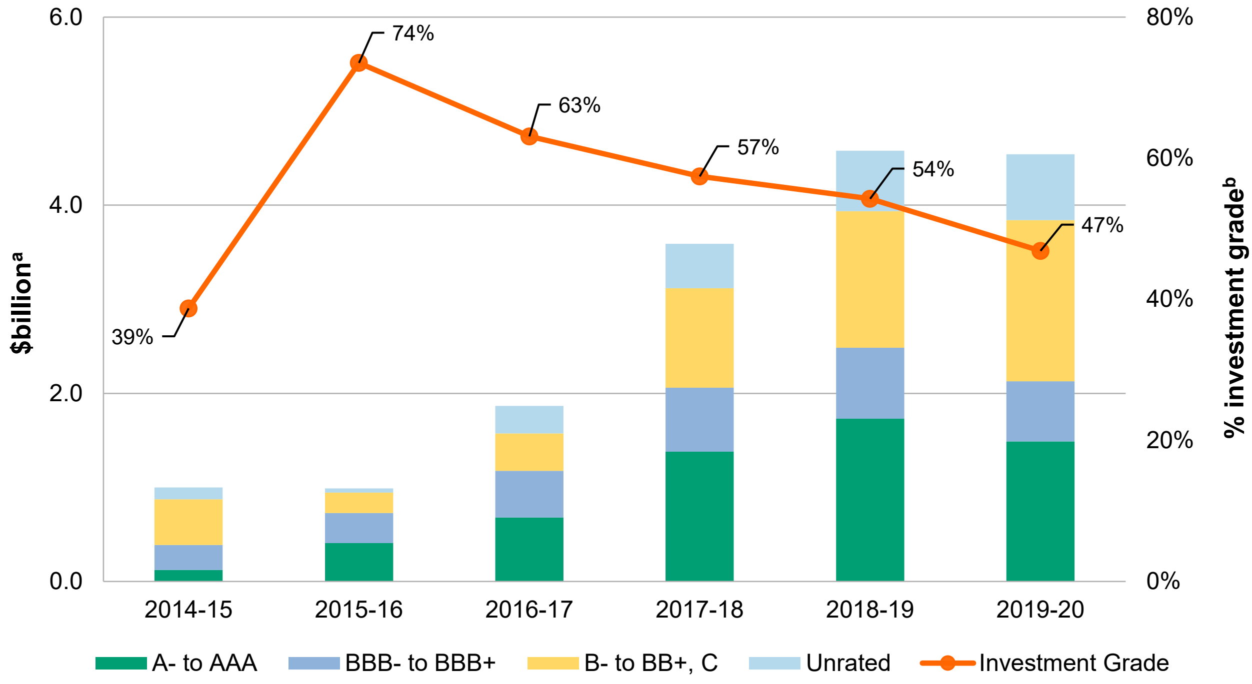
3.87 Before a proposal is formally considered by the CEFC Board or its delegates, the risk assessment undertaken by the transaction team is reviewed for approval by the CEFC's credit team.

3.88 Examination of the audit sample of debt investment proposals showed that the CEFC always applied the expected loss calculation to assess credit risk. This measure served for both assessing and considering investment proposals and, under the risk management framework, was intended to aggregate to a portfolio-level estimate of the CEFC's risk capital:

> Each of these pieces of data is utilised when evaluating a "risk capital" amount that is a quantification of the level of risk embedded in each transaction. This risk capital is aggregated at the portfolio level to evaluate and monitor the total risk in the portfolio at a given point in time. These inputs also assist in pricing transactions to ensure that the CEFC is being adequately remunerated for the risk it is bearing.[77]

3.89 This approach has not been adopted and the CEFC continues to use the shadow credit rating approach and reports results in its audited financial statements, compiled and presented in Figure 3.2 below. The compilation illustrates changes to the balance of risk in the CEFC's aggregate investment portfolio, such as the decline in the proportion of investments with an investment grade rating (BBB- or higher) since 2016–17, a trend that has occurred alongside improvements in the CEFC's rates of return in recent years.[78]

Figure 3.2: CEFC aggregate investments at 30 June each year by Shadow Credit Rating



Note a: The left axis shows the value of loans categorised by shadow credit rating indicated in the bar charts.

Note b: The right axis shows the value of investment grade rated loans (BBB- or higher) as a proportion of the total loans at 30 June each year.

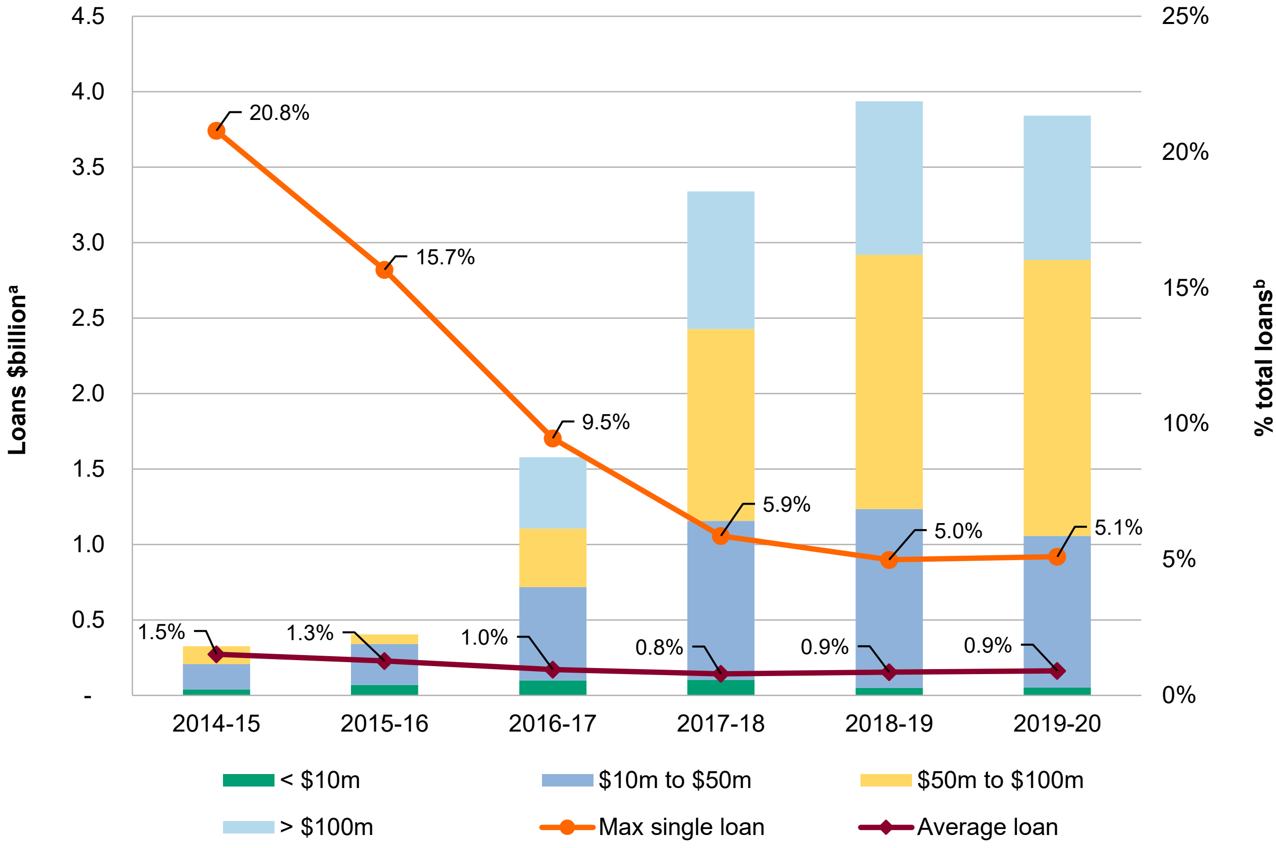
Source: ANAO analysis of CEFC annual reports and other CEFC data.

77 ibid.

78 This is consistent with the 2018 finding of the statutory review that 'since the 2016 Mandate and under current settings, the CEFC is able to assume a higher level of risk, and evidence suggests it is beginning to do so.': *Statutory Review of the Clean Energy Finance Corporation—Report prepared for the Department of the Environment and Energy*, 10 October 2018, p. 18.

3.90 Other portfolio risk indicators included in the CEFC's financial statements include the spread of investments by value, and the relative size of the largest debt exposure, compiled in Figure 3.3 below. The compilation illustrates the growth in the CEFC's total loan portfolio of loans of $50 million or more. Average loan exposure remains small at 1.1 per cent of the total loan portfolio and the largest loan exposure is now a smaller proportion of the overall exposure, indicating a favourable change in this aspect of the risk profile of the CEFC's aggregate portfolio.

Figure 3.3: CEFC loan exposure at 30 June each year by size of loan



Note a: The left axis shows the dollar value of CEFC debt investments at 30 June each year, categorised by the loan amount in $ million.

Note b: The right hand axis shows the average CEFC loan amount as a proportion of all loans, and the relative size of the single largest CEFC loan.

Source: ANAO analysis of CEFC financial statements and other CEFC data.

Equity investments

3.91 The CEFC's equity investments are held as shares in publicly-listed entities, units in unincorporated unit trust structures or direct holdings in unlisted companies. The CEFC has a non-controlling (minority) interest in each of its equity investments. As distinct from debt investments, equity investments aim to deliver dividends and capital gains.

3.92 By virtue of their diversification, equity investments in professionally managed diversified funds usually bear a lower risk than direct equity investments. Direct equity investors bear a higher risk, as they rank behind all other investors, such as lenders, in respect of claims over the cash flows and assets of the proponent. The higher risk is compensated for by a correspondingly higher expected rate of return.

3.93 The CEFC assesses the investment risk of its equity investment proposals in a similar fashion to debt investments, including detailed reviews by the CEFC's Executive Investment Committee or the Joint Investment Committee before consideration by the Board. Equity investments differ from loans and are not usually able to be assessed in the same way (for instance, the CEFC does not assign shadow credit ratings to proposed investments in equities and units in trusts). When deciding on equity investments, the CEFC Board has relied on its consideration of the assessments provided by its investment committees.

Portfolio risk reporting and assessment

3.94 The CEFC Board receives regular Portfolio Reports, including quarterly Portfolio Reviews that provide information on portfolio risk. These reports set out aggregate investment commitments (along with changes in investments since the previous quarter, including new commitments, reduced or cancelled commitments), portfolio composition, portfolio yield, the extent of merchant energy price risk[79], and key portfolio risk indicators, such as:

- the total debt investments by shadow credit rating;
- a weighted average shadow credit rating;
- single investment, sector and technology exposures, merchant exposed capital at risk (MEPR) and property market risk;
- headline events and developments with a bearing on portfolio risk (for instance the report for the March quarter of 2020 highlighted matters such as re-financing arrangements and liquidity assistance arising from the impact of COVID-19); and
- project-by-project summaries of those investments that are underperforming.

3.95 Underperforming investments are assigned performance ratings of PR3, PR4 or PR5 in order of decreasing performance (with acceptable performance rated at PR1 or PR2). Management updates are provided for each underperforming investment, including steps being taken by the CEFC and other parties to improve performance, or steps to limit or mitigate the CEFC's exposure to loss.

3.96 In addition to the Portfolio Reports to the Board, management also prepares a quarterly Enterprise Risk Report which is submitted to the Executive Risk Committee, Audit and Risk Committee and/or the Board. It covers the entire business, including key risk indicators and exposures and commentary on the main risks and industry outlooks. Importantly, it is an aggregated, holistic view of risk across the CEFC. It tracks operational, investment, strategic and regulatory risks in the CEFC's risk register and changes in risks and risk ratings and hence the risk profile across the business.

3.97 The portfolio reports are provided to the Board for noting and, on occasions, Board minutes record discussion of particular matters rin the reports. However, the reports provided to the Board do not include a specific statement of its assessment of the risk of the CEFC portfolio at the aggregate level based on the risk indicators and other information provided.

3.98 Consistent with the guidance issued by the Australian Institute of Company Directors and Governance Institute of Australia, the Board's practice is to note the reports. There is therefore no

79 Merchant energy price risk is that posed by expectations of the future price that energy distributors will be willing to pay for electricity, whether or not it is produced from renewable sources.

explicit statement of its consideration of portfolio performance in relation to risk, the key investment risk indicators, or its assessment of the portfolio risk at the aggregate level.

3.99 Reporting to the Board on portfolio risk does not include aggregate estimates of risk capital at the portfolio level. As noted at paragraphs 3.88 and 3.89, unlike the 2017 version of the risk management framework, the 2019 version no longer includes aggregation 'at the portfolio level to evaluate and monitor the total risk in the portfolio at a given point in time'.[80] The CEFC advised the ANAO in May 2020 that the estimation of risk capital was no longer a metric of portfolio risk and that it had yet to adopt such a measure:

> At the time the 2017 Risk Management Framework was revised, a "Risk/Reward" Framework was under development to facilitate portfolio risk quantification (for debt) and to assist with consideration of pricing, using a return on risk adjusted capital approach. The latter is incorporated in each investment paper, however, the methodology underpinning the former was not endorsed by the Executive Risk Committee. The business has instead pursued an approach to risk quantification based on scenario stress testing for material sectors. In particular, methodologies are in place for electricity market risk and property market risk. When the risk management framework was revised in 2019, references to risk capital were removed … [The CEFC] continues to refine and review approaches which to date have included an evaluation of [Value at Risk].

3.100 The CEFC has yet to put in place a metric that includes aggregation 'at the portfolio level to evaluate and monitor the total risk in the portfolio at a given point in time'. This could better enable the Board to meet the requirement under section 8 of the Investment Mandate to 'seek to develop a portfolio across the spectrum of clean energy technologies that has an acceptable but not excessive level of risk'. There would be merit in having such a metric.

3.101 The CEFC's Annual Report 2018–19 only discusses implementation of the Investment Mandate with reference to general provisions for managing portfolio risk.

3.102 Indicators of portfolio risk, such as shadow credit risk ratings, are included in the audited financial statements appended to the CEFC's published annual reports. However, in the body of its annual reports, the CEFC does not discuss these indicators or other measures of portfolio risk at the aggregate level or otherwise indicate that it satisfies the portfolio risk requirement of the Investment Mandate.

Recommendation no.8

3.103 The Clean Energy Finance Corporation:

(a) develop a metric that provides an aggregate estimate of risk at the portfolio level; and

(b) include in the quarterly Enterprise Risk Report a specific statement as to the Clean Energy Finance Corporation's assessment of risk against the mandated requirement to develop a portfolio that in aggregate has an acceptable but not excessive level of risk.

Clean Energy Finance Corporation response: *Agreed.*

Response to (a)

3.104 *The CEFC already has aggregate estimates of risk at the portfolio level. The Board has approved a Risk Appetite Statement which sets out what the CEFC considers to represent*

80 Clean Energy Finance Corporation, Risk Management Framework, 17 March 2017, p. 35.

acceptable but not excessive levels of risk. This is underpinned by specific risk policies/guidelines such as the Merchant Exposed Pricing Risk (MEPR) and Property Risk Exposure Capital (PREC) policies which set specific risk limits for our largest and most critical exposures. Risks are reported on regularly by the Risk and Portfolio Management teams to the Executive Risk Committee, Asset Management Committee, Board Audit & Risk Committee and the Board (as relevant). In addition to the Portfolio Reports (noted herein at 3.94), Management also prepares a quarterly Enterprise Risk Report which is submitted to the Executive Risk Committee, Board Audit & Risk Committee and/or Board. It covers the entire business, including key risk indicators and exposures and commentary on the main risks and industry outlooks. Importantly, it is an aggregated, holistic view of risk across the CEFC. It tracks operational, investment, strategic and regulatory risks in the CEFC's risk register and changes in risks and risk ratings and hence the risk profile across the business. It is a broad view of risk and the CEFC's view is that this is an appropriate risk assessment tool given the multi-faceted nature of our organisation and our existence as a government agency.

3.105 *What the CEFC does not have, and what the ANAO is recommending, is a single Value at Risk (VaR) metric — a statistical measure that quantifies the level of financial risk within the overall portfolio over a specific time frame, or equivalent. As the business matures, the CEFC agrees that it would be appropriate to continue to investigate the feasibility of developing a VaR (or equivalent) measure.*

Response to (b)

3.106 *Management regularly reports to the Board Audit & Risk Committee and the Board on portfolio and enterprise risks. The former includes portfolio related matters, specific investments, industry developments and pertinent risks. Enterprise risk is an aggregated, holistic view of risk across the CEFC. It covers operational, investment, strategic and regulatory risks and characterises the risk profile across the business.*

3.107 *However, we agree it would be beneficial to evidence the CEFC's assessment of risk against the mandated requirement to develop a portfolio that in aggregate has an acceptable but not excessive level of risk, by including a specific statement to this effect in the quarterly Enterprise Risk Report.*

Fraud control

3.108 The CEFC's Fraud Control Policy of August 2019 notes that:

> In developing this Fraud Control Policy, the CEFC has considered the binding requirements of the [PGPA Act Fraud Rule], practices outlined in the Commonwealth Fraud Control Policy, and the Resource Management Guide No. 2018.

3.109 The CEFC's fraud control policy is supported by subordinate policies and controls, including: security requirements and access control; a program to ensure compliance with anti-money laundering and counter-terrorism finance obligations; a Code of Conduct and Ethics; a policy governing Conflicts and Material Personal Interests; requirements for handling material non-public information; a policy governing the acceptance of gifts and gratuities and precluding the giving or receiving of bribes; a management process for identifying, minimising and preventing operational risk incidents; a Privacy Policy; a Procure to Pay Policy; and a policy governing Public Interest Disclosures.

3.110 The CEFC policy and supporting controls comply with the requirements of the Fraud Rule and include elements of good practice in addition to the requirements of the Rule, such as annual reporting to the Institute of Criminology.

3.111 The Fraud Rule also requires:

- the regular conduct of fraud risk assessments, including when there is a substantial change in the structure, functions or activities; and
- as soon as practicable following a risk assessment, developing and implementing a fraud control plan that deals with identified risks.

3.112 The records of the CEFC's Executive Risk Committee and Audit and Risk Committee show the review and approval of revised fraud control policies, including in 2017 and 2019. In August 2019, following the revision of the fraud control plan, the CEFC commenced a review of payroll fraud risk, and instigated staff training in fraud control policy. The CEFC conducts regular Fraud Risk and Control Review Workshops, most recently on 10 December 2019.

Concessionality

3.113 A concessional loan is a loan provided on more favourable terms than the borrower could obtain in the marketplace. Concessions are sometimes needed where there are considered to be public policy benefits, such as significant carbon abatement, but where implementation or take-up of the technology cannot be financed at market rates, generally because of the higher level of risk involved. Under section 9 of the Investment Mandate, the CEFC must limit concessionality of its investments to no more than $300 million in any one year.[81]

3.114 In its policy statement, the CEFC states that its approach in relation to concessional loans is:

- the CEFC considers public policy benefits in making investment decisions and in determining when it is justifiable to offer any form of concessionality; and
- offers of concessional finance will generally be limited to avoid unintended market impacts, distortions in the efficient operation of the capital markets, or other government policies and programs.[82]

3.115 The CEFC uses a spreadsheet to calculate concessionality that employs the methodology stated in the Department of Finance's Resource Management Guide No.5: *Accounting for concessional loans*, namely, a concessional loan 'refers to a loan made by the government at a discount to the prevailing market rate to the borrower.' This requires the CEFC to determine what the 'prevailing market rate to the borrower would be'.

3.116 The concessional discount provided on a loan is calculated using a 'market rate' that is determined by the CEFC. On loans approved in 2018–19 the discount provided ranged from 0.2 per cent to 1.5 per cent (sample basis) and assessed market rates from 2.6 per cent to 9 per cent.

81 The Investment Mandate states that concessionality reflects the mark-to-market valuation of loans made that financial year and should be measured as the difference between the present value of each loan at market rates and the present value of each loan at the given concessional rate.

82 Clean Energy Finance Corporation, Investment Policies, February 2019, p. 20.

3.117 A sample of the CEFC's spreadsheets, accounting papers and audited financial statements and the work papers of the financial statements auditors were reviewed, and no material issues were identified.

3.118 Market rate data for individual loans are not readily available, since financial institutions regard them as commercial-in-confidence. The CEFC therefore calculates an implied market equivalent rate to determine what is generally available in the market for known projects with similar terms and conditions, adjusted for known differences in tenor, credit rating, drawdown, repayment and security, applying a discounted cash flow analysis to determine the net impact. The CEFC acknowledges that the calculation of the concessional rate requires extensive judgment.

3.119 The CEFC's reported concessionality charge each financial year has been well below the $300 million annual limit set in section 9 of the 2018 Investment Mandate — less than $12 million has been granted in any one year since inception (although the CEFC has advised that this may increase with the recent requirements for funds to be set aside for investment in the Advancing Hydrogen Fund and the foreshadowed Grid Reliability Fund).[83] The relatively small amount of concessionality granted indicates that the $300 million limit is an ineffective control.

Guarantees

3.120 As at 30 June 2020, the CEFC had provided no guarantees.

Has the CEFC leveraged increased levels of funds into the clean energy sector from the private sector and other sources?

> There is evidence that the CEFC has facilitated increased levels of funds into the clean energy sector from the private sector and other sources, but the extent of these increased funds is unclear because the calculations of leverage both overstates some leveraged funds and does not include funds that may have been indirectly leveraged.

3.121 The object of the CEFC Act as specified in section 3 is to establish the CEFC to facilitate increased flows of finance in the clean energy sector. The CEFC Act and supporting documentation do not provide any further guidance on how to assess effectiveness in achieving the object. In assessing the CEFC's performance, the ANAO examined:

- reported financial leverage;
- the approach used by the CEFC to calculate leverage; and
- benchmarking with other green banks.

Reported leverage

3.122 The 2018–19 Annual Report (page 19) reported that, since inception to 30 June 2019, the CEFC had achieved $24 billion of total investment commitments into clean energy projects (see Table 3.3) based on $6.2 billion of CEFC active investments. As at 30 June 2020, the CEFC estimates that it had achieved $28 billion of total investment commitments into clean energy based on $5.95 billion of active investments.

83 $5.890 million in 2013–14, $1.393 million in 2014–15, $6.876 million in 2015–16, $11.433 million in 2016–17, $11.972 million in 2017–18 and $3.922 million in 2018–19.

Table 3.3: CEFC estimates of leveraged investment commitments into clean energy per year since inception

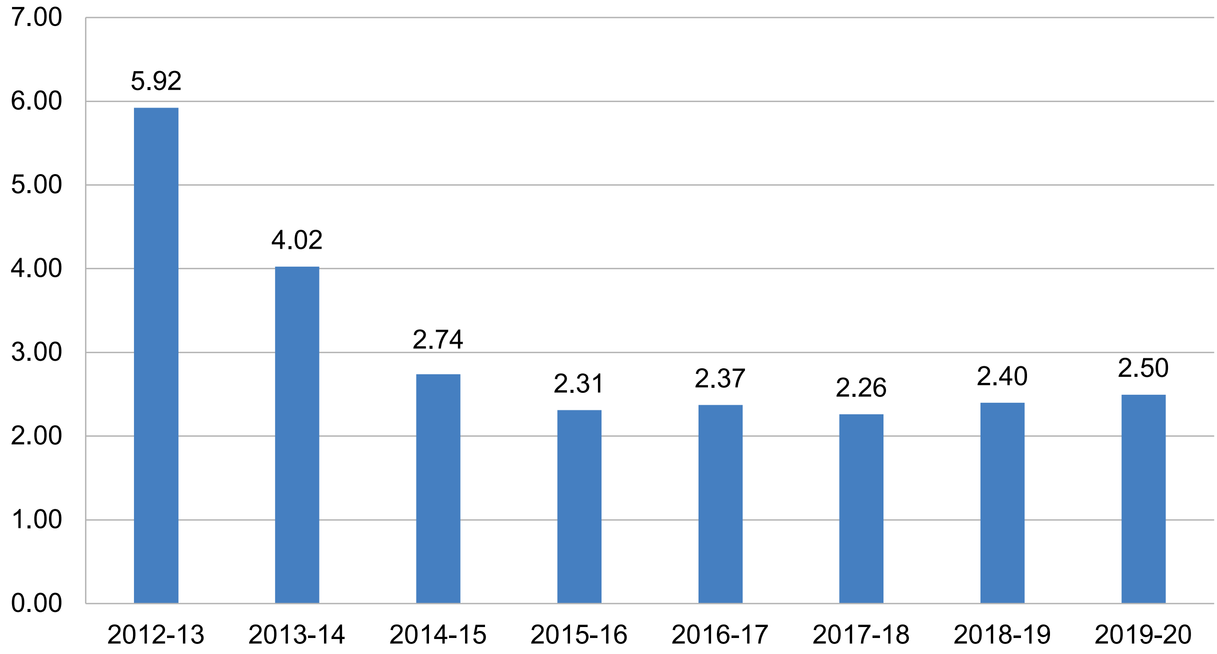
Year	Amount ($)
2012–13	1,074,582,963
2013–14	1,017,850,101
2014–15	761,390,823
2015–16	1,797,944,204
2016–17	6,404,296,727
2017–18	7,318,014,622
2018–19	5,915,140,425
Total	**24,286,358,510**

Source: ANAO analysis of iMART data.

3.123 The CEFC Board has set a target of 2:1 (that is $2 of non-government investment for every $1 dollar that the CEFC invests) for financial leverage and reports actual performance against the target in the Annual Performance Statements.

3.124 Figure 3.4 illustrates that the CEFC has reported that it had achieved the target leverage ratio for the portfolio for each year.[84]

Figure 3.4: CEFC estimates of portfolio leveraged amounts per dollar invested by the CEFC by year since inception

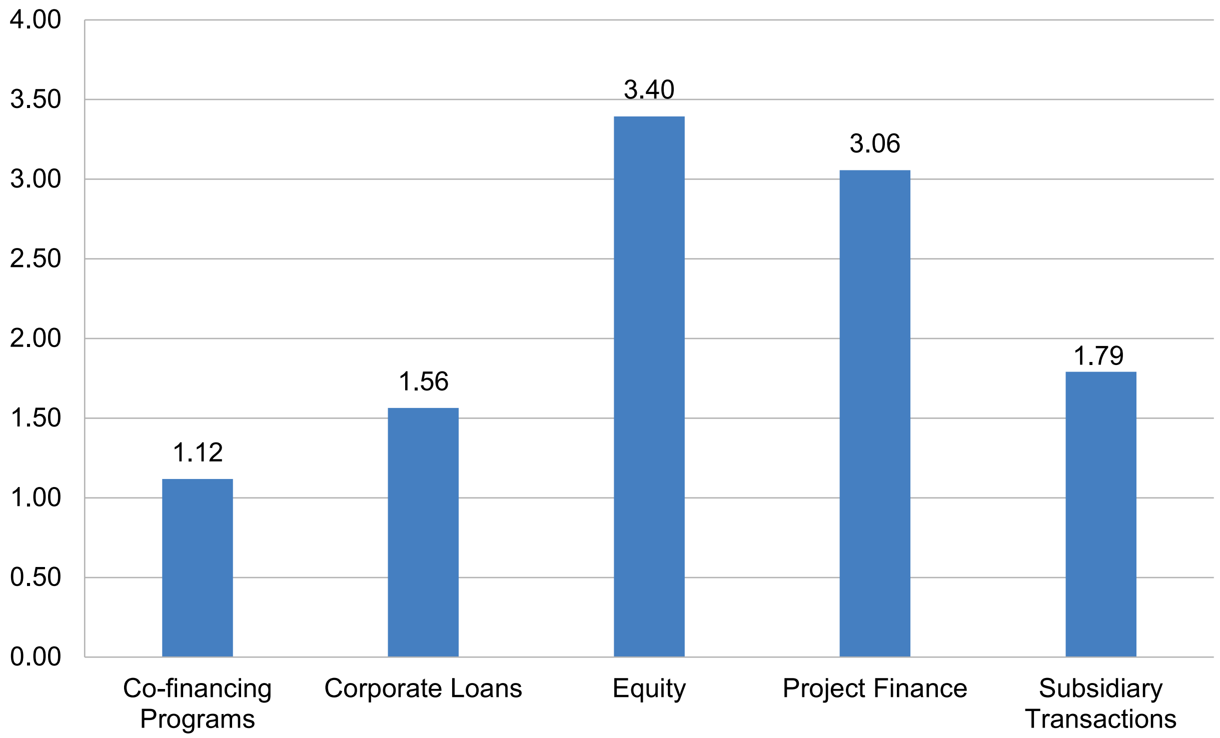


Source: ANAO analysis of iMART data.

84 The reported leverage ratio for each year was 2012–13: 2.9:1; 2013–14: 2.2:1; 2014–15: 1.8:1; 2015–16: 1.85:1; 2016–17: 2.12:1; 2017–18: 1.8:1; and 2018–19: 3:1. The commitment value of the active investments used for the calculation of the leverage ratio may not be fully drawn down but the capital allocated cannot be used for other projects.

3.125 The estimated leverage ratio varies by product line. For the CEFC's investment commitments of $6 billion as at 30 June 2020, the leveraged amounts for each dollar the CEFC invested are shown at Figure 3.5. Project finance and equity have had the highest leverage ratio for product lines of around 3:1 compared to corporate loans and co-financing programs and subsidiary transactions with between 1.12:1 and 1.79:1. The aggregation programs managed by the banking sector do not attract any other investments and do not include the amount contributed by the bank customer to purchase the new vehicle or equipment as this data is not captured.

Figure 3.5: Leveraged amounts by product line (per dollar invested by the CEFC) as at 30 June 2020



Source: ANAO analysis of iMART data.

3.126 Estimated leverage by industry sector is shown at Table 3.4. Commercial buildings and utilities both have high commitment values and relatively high leverage ratios (over 4:1 for commercial buildings and over 3:1 for utilities).

Table 3.4: Leveraged amounts by industry sector (per dollar invested by the CEFC) as at 30 June 2020

Sector	Leverage	Commitment ($ million)
Agriculture, Forestry and Fishing	0.82	477
Commercial Buildings	1.41	862
Government	3.78	13
Manufacturing / Industry	0.18	681
Mining	2.03	22
Other	3.85	918
Residential	2.00	448
Retail	–	22
Transport	2.85	405
Utilities	13.31	2103

Source: ANAO analysis of iMART data.

3.127 The statutory review in 2018 concluded that the CEFC has been effective in facilitating increased flows of finance into the clean energy sector. However, the review also noted that, given the nature and immaturity of a number of CEFC investments, it is difficult to measure the full impact of the CEFC's involvement on private investment in the clean energy sector more broadly.

Calculation of financial leverage

3.128 The CEFC calculates leverage as the amount of funds (excluding CEFC funds and any government grants) included in a project's costs where the CEFC has provided finance, divided by the CEFC investment.[85] The calculation of financial leverage by the CEFC is applied consistently across all product lines.

3.129 The CEFC's approach to the calculation of financial leverage:

- does not include indirect increased investment flows to the clean energy sector that the CEFC may have been instrumental in influencing as a result of previous investments, such as where a bank issues climate bonds on similar terms to previous bond issues that involved the CEFC and where the CEFC is no longer required as an investor; and
- includes investments in projects where the CEFC is not a cornerstone investor and where it is likely that the investments would have progressed without the CEFC's involvement, albeit with less favourable clean energy outcomes (such as Project Lafite, an equity investment of $85 million in a property investment fund with a claimed leverage of $471 million and where most of the leveraged funds would have been applied for the property development and not specifically for clean energy technologies). In such

85 The statutory review reported that the Green Investment Group (UK) applied the same methodology: *Statutory Review of the Clean Energy Finance Corporation—Report prepared for the Department of the Environment and Energy*, 10 October 2018, p. 53. Where a project involves several funding rounds, project costs only relate to the particular funding round in which the CEFC is involved.

instances, the claimed additional funds for clean energy resulting from CEFC's involvement are overstated.

3.130 Examination of the 23 survey projects identified examples where it was clear that the CEFC was a cornerstone investor and where it was reasonable for the CEFC to claim non-government investment amounts as leveraged funds. Examples are provided at paragraph 2.68.

3.131 While the CEFC has leveraged increased levels of funds into the clean energy sector, for the reasons stated at paragraph 3.129, it is unclear what level of increased funds has been generated.

3.132 The assessment of the CEFC's effectiveness in facilitating an increased level of funding into the clean energy sector could be further improved by financial analysis of industry data on the overall flows of investment into clean energy projects. For example, the clean energy sector has matured in terms of projects having less risk (offtake agreements and construction) and generating more commercially acceptable returns without the need for concessions or grants. This has led to a surge in private sector investments in renewable energy projects to $9.1 billion in 2017.[86]

Grant Hehir
Auditor-General

Canberra ACT
17 December 2020

86 *Statutory Review of the Clean Energy Finance Corporation—Report prepared for the Department of the Environment and Energy*, 10 October 2018, Figure 2.3, p. 31.

Appendices

Appendix 1 Clean Energy Finance Corporation response

11 December 2020

Mr Grant Hehir
Auditor-General
Australian National Audit Office
GPO Box 707
Canberra ACT 2601

Dear Mr Hehir,

ANAO's Performance Audit Report on Investments by the Clean Energy Finance Corporation

Thank you for your correspondence seeking comment from the Clean Energy Finance Corporation (CEFC) on the Australian National Audit Office's (ANAO) performance audit report on *Investments by the Clean Energy Finance Corporation* (Report).

The CEFC welcomes the ANAO's Report. The Report notes, amongst other things, that the CEFC has facilitated increased funding into the clean energy sector and that the CEFC has suitable arrangements in place to assess and approve investments as well as for their ongoing management.

This finding is consistent with the conclusion reached by Deloitte in conducting the 2018 Independent Statutory Review where it stated (p11) that *"Our analysis through this review supports a finding that the CEFC has been effective in facilitating increased flows of finance into the clean energy sector projects it supported. The CEFC has invested its own capital in the sector, as well as attracted further private investment in the clean energy projects it supported. There is evidence to support a finding that in the absence of the CEFC a range of projects it supported may not have proceeded. However, given the nature and immaturity of a number of CEFC investments, it is difficult to measure the full impact of the CEFC's involvement on private investment in the clean energy sector more broadly."*

We accept all but one of the recommendations contained in your Report and their implementation will be overseen by the CEFC Board's Audit and Risk Committee.

Regarding the one recommendation in the Report not accepted by the CEFC, the difference in opinion would appear to stem largely from differing approaches in the way we analyse investment returns on an individual versus portfolio basis. The portfolio benchmark return is defined in the Investment Mandate and then managed consistently on a *portfolio* basis, and it is the CEFC's view that this is not an integral part of each *individual investment* decision. *Individual investment* decisions more appropriately reference the relevant market-equivalent rate of return and the maximum rate that can be achieved while still ensuring the appropriate public policy outcome.

The CEFC understands its obligation to make all reasonable efforts to target a specified benchmark and absolutely does this, while also being mindful of the Investment Mandate's other obligations to exercise commercial rigour and to build a portfolio with an acceptable but not excessive level of risk having regard to the sector.

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The intersection between public policy outcomes, investment risk and returns, constraints over industry, asset class, financial products and geography all impact on the potential returns that can be achieved. The CEFC primarily invests for a public policy purpose. We invest in the areas of greatest policy need in order to stimulate private sector investment in emerging technologies / practices and for demonstrative effect, and therefore the investment return is largely, and by necessity, a function or consequence of the CEFC's investment objective rather than the primary driver.

We agree with Recommendation No. 3 (a) and note that our approach to considering the 'potential effect on other market participants' will be focussed on those participants that are relevant to that particular market.

As the ANAO has noted, the CEFC uses very little concessionality, and overwhelmingly invests at, or very close to, current market rates of return, all while achieving a public policy outcome within the Investment Mandate risk parameters.

We would also like to highlight the CEFC's exceptional track record of investment with no material losses to date, or expected, in the investment portfolio. This is one of the fundamental indicators of the effectiveness of selection, contracting and ongoing management of investments by the CEFC. This has been achieved to date through careful analysis and diligence throughout the investment origination and management process and the ability to make investment decisions independently in accordance with the CEFC Act. To this end, we have suggested the statement at paragraph 20 that the "CEFC has partially effective risk management processes in place" should delete the qualification "partially".

We see significant value in the ANAO performance audit process and will make improvements to the CEFC's systems and processes as a result. Notwithstanding the comments on the one area in which we respectfully disagree, I would like to thank your staff for the professional and collegiate manner in which this audit was conducted and assure you that we are absolutely committed to implementing the ANAO's recommendations, and to continuously improving the efficiency and effectiveness of the CEFC's operations and governance arrangements.

Yours sincerely,

Steven Skala AO
Chair

Clean Energy Finance Corporation

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ABN: 43 669 904 352

Appendix 2 Glossary

This appendix provides definitions of the Clean Energy Finance Corporation's financial instruments and business platforms.

Financial instruments

Common equity

Equity investments are amounts held by way of shares in publicly listed entities, units in unincorporated unit trust structures or direct holdings in unlisted companies where the group is not deemed to have significant influence.

Preferred equity

Fixed-income investments with equity-like features, which typically pay dividends, offer multiple rate structures, often have investment grade ratings, and are subordinated in the capital structure (above common equity and below debt).

Senior debt

Debt that takes priority in repayment over other unsecured or more junior debt.

Subordinate debt

It is a form of hybrid security which 'ranks behind preferred/secured creditors, ordinary bank and trade creditors, and potentially other subordinated bonds that are expressed to rank in preference (and so therefore rank ahead only of ordinary shares in a winding up').

Business platforms

The CEFC has two primary business platforms:

- direct investments; and
- indirect investments.

Direct investments include:

- project finance for electricity generation by renewable energy sources (e.g. large-scale solar farms, wind farms, grid reliability, energy from waste, storage batteries, and hydrogen); and
- corporate loans for energy efficiency, low emission and small-scale solar investments as subsets of larger projects (e.g. commercial and residential properties, infrastructure and transport, manufacturing and industry, agriculture and retail industry sectors).

Indirect investments include:

- aggregation finance provides small loans for SMEs and individual customers purchases of energy efficiency and small-scale solar assets;
- green/climate bonds provide capital funding for renewable energy, low emission and energy efficient projects; and
- investment funds provide capital funding for renewable energy, low emission and energy efficient projects.

Aggregation finance

This is the provision of CEFC finance via co-finance intermediary partners, to aggregate customer demand that would otherwise be too expensive to be serviced directly by the CEFC. Aggregation finance allows the CEFC to invest in smaller scale projects and provide a more efficient mechanism to reach high volume/low value customers through utilising commercial lender customer networks and typically targets specific sectors (e.g. agriculture).[87] The CEFC purchases bonds from the commercial lender/bank and earns a fixed rate of interest. Concessional rates of interest are offered to encourage customer purchases of clean energy technologies.

Corporate facility or corporate loan

This is typically a loan to a company (rather than a specific project) for smaller-scale projects, or a bundle of projects, often secured against the assets or operations of the corporate entity.

Green/climate bond

This is a specific type of green bond issued under the Climate Bond Standards and Certification Scheme.[88] This scheme aims to enable and mobilise debt markets to fund projects that contribute to environmental sustainability. Green bonds facilitate capital-raising and investments for new and existing projects which have environmental benefits and can mitigate risks associated with climate change. Green bonds are typically issued by banks, state governments and major corporations and can be invested in by the general investment community.

Investment funds

The CEFC has made equity investments in several investment funds ranging from funds with major investment managers to smaller funds. The investment funds tend to target specific industry sectors (e.g. agri-food technology or agricultural assets) and are set up to increase the funds available for capital projects. Investing in the larger trust funds provides an opportunity for the CEFC to influence the behaviour of institutional investors.

Project finance

This involves a large financial outlay using senior debt or equity at an early stage in the project lifecycle. This finance is for long-term financing of infrastructure and industrial projects (such as a utility-scale generator or an onsite generation facility) which will be repaid from the projected cash flows of the project without recourse to the balance sheets of the sponsors.

A key focus area for the investment decision is on the expected future cash flows and assets of the project. Project finance is typically provided with the CEFC as a cornerstone investor to assist the project at an early stage to get it off the ground.[89] The CEFC's approach is to de-risk projects

87 A Program Agreement defines eligible purchases/qualifying assets (e.g. energy efficient equipment such as electric vehicles, HVAC (heating, ventilation and air conditioning), and tractors, renewables such as storage batteries and rooftop solar panels). Compliance reviews provide assurance that the funding is being utilised for eligible purchases only.

88 The Climate Bonds Standard and Certification Scheme is a labelling scheme for bonds and loans. Criteria ensure that bonds and loans with Certification, are consistent with the two degrees Celsius warming limit in the Paris Agreement. The Scheme is used globally by bond issuers, governments, investors and the financial markets to prioritise investments which genuinely contribute to addressing climate change.

89 These investments are designed to crowd in capital to bring an investment together and this typically requires early involvement in a project.

by investing at an early stage in the lifecycle by providing funding at a comparable cost (i.e. interest rate based on market price and risk) as the commercial lenders would when the project is de-risked.[90] When the project is commercially ready (i.e. commercial lender/investor can achieve a commercial rates of return) the CEFC exits the financing arrangement and allows commercial lender/s to provide the ongoing finance.

90 For example, a project has a SCR of BBB- due to the project being at the pre-construction stage and not having a Power Purchase Agreement (PPA) in place. ARENA grants were provided at an early stage in the development of a new industry sector to prove the viability of the new technology. CEFC then provided debt funding to de-risk the investments and make the clean energy projects more commercially viable for private sector investors.