The Auditor-General
Audit Report No.39 2011–12
Performance Audit

Management of the National Solar Schools Program

Department of Climate Change and Energy Efficiency

Australian National Audit Office

ISSN 1036–7632

ISBN 0 642 81246 2

Australian National Audit Office

Canberra ACT
7 June 2012

Dear Mr President
Dear Mr Speaker

The Australian National Audit Office has undertaken an independent performance audit in the Department of Climate Change and Energy Efficiency in accordance with the authority contained in the *Auditor-General Act 1997*. 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, and the accompanying brochure, to the Parliament. The report is titled *Management of the National Solar Schools Program*.

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

Yours sincerely

Ian McPhee
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

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Abbreviations

ALP	Australian Labor Party
ANAO	Australian National Audit Office
ANAO Better Practice Guide	ANAO Better Practice Guide, *Implementing Better Practice Grants Administration*, Canberra, June 2010
AuSSI	Australian Sustainable Schools Initiative
BGAs	Block Grant Authorities
CEC	Clean Energy Council
CFAs	cooperative funding agreements
CGGs	Department of Finance and Deregulation, *Commonwealth Grant Guidelines—Policies and Principles for Grants Administration*, Financial Management Guidance No.23, Canberra, July 2009
COPEs	Commonwealth own-purpose expenses
DCCEE	Department of Climate Change and Energy Efficiency
DCSVS	Data collection, storage and visualisation system
DEEWR	Department of Education, Employment and Workplace Relations
DEWHA	Department of the Environment, Water, Heritage and the Arts
ERC	Expenditure Review Committee of Cabinet
FFR Act	*Federal Financial Relations Act 2009*
Finance	Department of Finance and Deregulation
Finance Minister	Minister for Finance and Deregulation

FMA Act	*Financial Management and Accountability Act 1997*
FMA Regulations	*Financial Management and Accountability Regulations 1997*
GLP	Green Loans Program
Gov	Government
GST	Goods and Services Tax
HIP	Home Insulation Program
kW	kilowatt
Non-gov	Non-government
NPA	Council of Australian Governments, *National Partnership Agreement on the National Solar Schools Program*
NSSP	National Solar Schools Program
ORER	Office of the Renewable Energy Regulator
PBS	Portfolio Budget Statement
PV	Photovoltaic
t CO_2-e	tonnes of carbon dioxide equivalent
Treasury	Department of the Treasury

Summary and Recommendations

Summary

Introduction

1. The National Solar Schools Program (NSSP) offers primary and secondary schools the opportunity to apply for grants of up to $50 000 to install solar and other renewable power systems, solar hot water systems, rainwater tanks and a range of energy efficiency measures. The objectives of the NSSP are to:

- allow schools to:
  - generate their own electricity from renewable sources;
  - improve their energy efficiency and reduce their energy consumption;
  - adapt to climate change by making use of rainwater collected from school roofs;
  - provide educational benefits for school students and their communities; and
- support the growth of the renewable energy industry.

2. The establishment of the NSSP followed a commitment made by the Australian Labor Party (ALP) in the lead up to the November 2007 Federal election.[1] Specifically, the ALP had made a commitment to establish a National Solar Schools Plan to make every Australian school, which equated to some 9500 schools, a solar school within eight years. The commitment was characterised as generating jobs and investment in Australia's sustainable industries and trades, with significant educational benefits for students and communities.

3. Following the election, funding for the program of $480.6 million over eight years (2007–08 to 2014–15) was provided in the 2008–09 Budget.

[1] The National Solar Schools Plan was one of a number of ALP election commitments in the area of climate change. Other program commitments included: rebates for household solar panels; rebates for solar hot water; rebates for rainwater tanks and grey water recycling; rebates to help landlords install energy-efficient insulation in rental homes; and low interest Green Loans to help families invest in solar and practical water and energy savings devices.

NSSP demand and program funding

4. In June 2008, guidelines for the NSSP were approved by the then Minister for the Environment, Heritage and the Arts. Generally, schools were eligible for grants of up to $50 000 against a list of eligible items for installation. The program opened to applicants on 1 July 2008. The NSSP operated between this date and October 2009 as a demand-driven grants program.[2]

5. When the NSSP was established, a mechanism such as application rounds was not put in place to manage demand for program funds in-line with the program's annual funding. This situation hindered the management of demand for NSSP funding. Further, possible funding duplication with other Australian Government programs later emerged as an issue.

6. As a result of higher than expected demand[3], school claims on the program were suspended in October 2009, after fifteen months of operation. Following the suspension of the NSSP and its administrative transfer from the then Department of the Environment, Water, Heritage and the Arts (DEWHA) to the Department of Climate Change and Energy Efficiency (DCCEE) in March 2010, a number of changes were put in place via a new set of program guidelines (July 2010). The changes included:

- funding to be capped each financial year and annual application rounds to be held;
- applications to be assessed on a merit basis using predetermined criteria, with schools required to demonstrate value for money, environmental and educational benefits in their applications; and

[2] As outlined in ANAO Better Practice Guide, *Implementing Better Practice Grants Administration*, Canberra, June 2010 (referred to in this audit report as ANAO's Better Practice Guide), an early and important consideration in the design of a grant program is establishing how to structure the process by which potential funding recipients will be able to access the program. In this context, a demand-driven process involves applications that satisfy stated eligibility criteria receiving funding, up to the limit of available appropriations and subject to revision, suspension or abolition of the program. See further discussion in ANAO's Better Practice Guide, pp. 44–46.

[3] ANAO's Better Practice Guide outlines that an 'important consideration in establishing demand-driven programs is the potential for the program to become oversubscribed. This may result in the program needing to be closed to further applications earlier than originally planned, unless additional funding is made available. It is important that the potential for this situation to arise is assessed in the program's design phase'. See further in ANAO Better Practice Guide, p. 64.

- to address potential duplication of funding sources[4], schools that had been approved to receive funding for solar power systems under any other Australian Government program from 1 July 2008 would only be eligible for funding of up to $15 000.[5]

7. Under the NSSP, each year's total funding budget is allocated between government and non-government school sectors based on the proportion of eligible schools in each sector. Funding for government schools and non-government schools in each state and territory is then allocated on a similar proportional basis, taking into account grants already awarded to schools in each state and territory. The intention is that each state and territory (government and non-government sectors) will receive a proportional share of funding over the life of the program.

8. Under the new program guidelines, applications for the first competitive round were open between 15 July and 20 August 2010. More than 2000 schools submitted applications totalling $94 million for the $51.8 million in funding that was available. Applications were assessed against the three published assessment criteria of value for money (weighted at 45 per cent), environmental benefit (with a weighting of 40 per cent) and educational benefit (weighted at 15 per cent). A total of 1226 projects were approved by the Parliamentary Secretary for Climate Change and Energy Efficiency, with the successful projects announced in December 2010.

Program status

9. The May 2011 Budget announced a number of changes to the program, including that the NSSP would finish two years earlier than originally planned (30 June 2013) with savings of $156.4 million being redirected to support other Government priorities. This left a remainder of $49.8 million available for the 2011–12 and 2012–13 funding rounds. As a result of these changes, DCCEE anticipates that over the life of the program only about 60 per cent of all primary and secondary schools will receive an NSSP grant.

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4 In particular, the Building the Education Revolution program permitted funds to be used for items such as solar power systems, which were also covered by the NSSP. The administration of the largest component of the Building the Education Revolution program was examined in ANAO Audit Report No. 33, 2009–10, *Building the Education Revolution—Primary Schools for the 21st Century,* Canberra, 5 May 2010.

5 Senator the Hon Penny Wong, Minister for Climate Change, Energy Efficiency and Water, *National Solar Schools Program Re-Opens*, Media Release, 14 July 2010.

10. Applications for the second competitive funding round were open between 1 August and 30 September 2011. Nearly 2000 schools submitted applications totalling $64 million for the $25 million in funding that was available. Under revised administrative arrangements that states and territories had formally agreed to by November 2011 and reflected in the *National Partnership Agreement on the National Solar Schools Program* (NPA), state and territory education authorities would apply the program assessment criteria and assessment methodology to decide which government schools in their jurisdiction would receive grants under the NSSP.[6] Applications from non-government schools continued to be assessed by DCCEE.

11. Applications were assessed by the states (government schools) and DCCEE (non-government schools) against the same three criteria as applied in the first round (see paragraph 8), as well as whether they were located in a remote or low socio-economic area (to allow the remaining program funding to be directed to schools most in need). A total of 784 projects were approved for the 2011–12 funding round, with the successful projects announced in January 2012.

12. The 2012–13 funding round is the final round for schools to apply for a grant. Funding of $24.8 million is available[7], with applications opening on 13 February 2012 and closing on 18 May 2012. The successful applications are expected to be announced in July or August 2012.

Audit objective, criteria and scope

13. The objective of the audit was to assess the effectiveness of the design and management of the NSSP, including demonstrated progress towards achieving the program's objectives.

14. The audit assessed the program's establishment, implementation and administration against relevant policy and legislative requirements for the

[6] The NPA also specifies the indicative annual funding allocation to each state and territory. As a result of the NPA, from November 2011 payments made to states and territories under the NSSP are no longer subject to Commonwealth Grant Guidelines (see further at paragraphs 4.10 to 4.21).

[7] This includes $200 000 that has been retained to cover the cost of any successful appeals against funding decisions. Once the appeals process is complete this remaining contingency funding will be allocated.

expenditure of public money[8] and the seven key principles for grants administration established by the Australian Government and set out in the Commonwealth Grant Guidelines (CGGs).[9] Emphasis was also given to examining whether the NSSP was achieving its stated objectives and providing value for public money. The focus of the audit analysis was on the conduct of the 2010–11 and 2011–12 funding rounds.

Overall conclusion

15. The NSSP is intended to assist schools to take practical action on climate change through grants to install solar and other renewable power systems, solar hot water systems, rainwater tanks and a range of energy efficiency measures. The program objectives also include providing educational benefits for school students and their communities, and supporting the growth of the renewable energy industry. The program is well advanced in its implementation, with over 4600 projects approved for funding, of which more than half have been reported as completed. The last competitive funding round for the program is currently underway.

16. Whilst there are some shortcomings in the design of the program and the available data, early indications are that overall the program has:

- assisted schools to generate their own electricity from renewable sources and improve their energy efficiency, although the energy abatement achieved has come at a considerable cost[10];
- contributed to schools making use of rainwater collected from school roofs;
- assisted to increase student awareness of the need to be more energy efficient and to conserve water; and

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[8] Commonwealth grant programs involve the expenditure of public money and thus are subject to applicable financial management legislation. Specifically, the *Financial Management and Accountability Act 1997* (FMA Act) provides a framework for the proper management of public money and public property which includes requirements governing the process by which decisions are made about whether public money should be spent on individual grants, including those made under the NSSP.

[9] Department of Finance and Deregulation, *Commonwealth Grant Guidelines—Policies and Principles for Grants Administration*, Financial Management Guidance No. 23, Canberra, July 2009 (referred to in this report as Commonwealth Grant Guidelines (CGGs)). The seven key principles are: (1) Robust planning and design; (2) An outcomes orientation; (3) Proportionality; (4) Collaboration and partnership; (5) Governance and accountability; (6) Probity and transparency; and (7) Achieving value with public money (at p. 14).

[10] Estimated by DCCEE to be in the order of $284 per tonne.

- made a small contribution to the growth of the renewable energy industry.[11]

17. When it was established in 2008, the NSSP operated as a demand-driven grant program but its operations were suspended in October 2009, as a result of over-subscription. Since 2010–11, the NSSP has operated as competitive, merit-based grants program. This approach is consistent with the preference expressed in the CGGs for competitive, merit-based selection processes based upon clearly defined selection criteria to be used in Commonwealth grants programs. The risk of over-subscription was also effectively addressed in the redesign of the program, through an annual cap on program funding.

18. Overall, the 2010–11 and 2011–12 funding rounds were well designed and effectively implemented. Of particular note is that:

- generally clear and effective guidance was provided to schools and other stakeholders on the redesigned NSSP and its operation;
- the program eligibility requirements and assessment criteria have been published and applied. The nominated assessment criteria were directed at the identification of those applications that both represented value for money and could be expected to best contribute to the achievement of the program objectives (within the limits of the amount of funding allocated to the government and non-government school sectors in each state);
- weightings of the assessment criteria were also published, thereby providing potential applicants with a clear understanding of the relative importance to the program of the factors that would be taken into account in selecting the successful applications;
- a robust and appropriately documented assessment process was implemented. A key aspect of the selection process was that eligible applications were clearly scored against each assessment criteria, with the aggregate assessment score[12] used to rank applications. This

[11] These program achievements have also been highlighted in an interim evaluation of the NSSP conducted by DCCEE.

[12] Eligible applications were scored against each criterion, and an overall score allocated (out of a maximum of 1000 in respect to the 2010–11 funding round, and out of a maximum of 130 in respect to the 2011–12 funding round). Eligible applications were then ranked in each state and sector on the basis of their overall assessment score.

ranking was then used to determine (within the funding allocated to the government and non-government school sectors in each state) which applications would be successful; and

- clear funding recommendations were provided by DCCEE to the Parliamentary Secretary for Climate Change and Energy Efficiency, with the decision-maker accepting the department's recommendations.

19. Nevertheless, certain aspects of the design and implementation of the NSSP could have been improved. Firstly, while guidelines applying to the competitive application rounds have been developed, updated and published in a timely manner, there were some shortcomings in their content, as follows:

- important information concerning the assessment methodology was included in an administrative arrangements document rather than the program guidelines. This approach does not sit comfortably with the single reference approach for program guidelines advised to agencies in the CGGs.[13] However, for the NSSP, the associated risks were mitigated by DCCEE also publishing the associated administrative arrangements document. Nevertheless, as outlined in a cross-portfolio ANAO audit on the development and approval of grant program guidelines[14], where practical, agencies should develop a single program guidelines document that represents the reference source for guidance on the grant selection process, including the relevant threshold and assessment criteria, and how they will be applied in the selection process;
- the revised program guidelines that applied to the 2011–12 funding round (and the 2012–13 funding round currently underway) indicated that 'additional weighting' would be given to applications from schools located in remote or low socio-economic areas. This approach did not provide stakeholders with sufficient clarity about what was, in effect, a fourth assessment criteria and the importance of this criterion to the assessment scoring[15]; and

[13] Commonwealth Grant Guidelines, p. 22.

[14] See further in ANAO Audit Report No.36 2011–12, *Development and Approval of Grant Program Guidelines*, Canberra, 30 May 2012, pp. 88–89.

[15] The scoring approach adopted meant that there were now four rather than three assessment criteria, with a school's remoteness or low socio-economic status being the third most heavily rated criterion. Further, given the nature of this criterion and the scoring approach adopted, the impact it had on the selection of successful applications was more significant than any one of the other criteria.

- the guidelines did not indicate to schools that the scoring of applications against the value for money criterion would favour applications for the four eligible items most commonly submitted for funding over other categories of eligible items.[16]

20. The more significant issue identified by the audit relates to the interrelationship between the scoring of individual applications and the framework in which decisions were then made about which applications would receive funding. The scoring approach was designed and implemented to identify the individual merits of applications against the assessment criteria and, therefore, the extent to which each application would contribute towards the program objectives.[17] Applications were then ranked on the basis of their assessment score with funding awarded in each state and sector based on the rankings until the annual allocation for each state and sector was exhausted.

21. A range of variables affect the score, including the amount of funding that is sought. Applications seeking the maximum available funding are better able to achieve a higher score as they can achieve economies of scale (and therefore achieve a higher score against the value for money criterion) and larger environmental outcomes (and therefore achieve a higher score against the environmental benefits criterion).[18] In addition, higher scores are achieved where a school plans to use the project to demonstrate energy efficiency benefits.[19]

22. It is well recognised that the assumption underlying the production of an aggregate score from a numeric scale is that a higher score indicates more satisfaction of the criteria than a lower score.[20] It is for this reason that

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[16] The four most commonly eligible items submitted for funding involve solar power systems, solar/heat pump hot water systems, rainwater tanks and energy efficient lighting. These items are present in approximately 97 per cent of applications for the 2010–11 and 2011–12 funding rounds.

[17] In this respect, both the program guidelines and the related administrative arrangements document stated that the assessment process would be used to determine which applications best meet the criteria. This is consistent with selection criteria forming the key link between a program's stated objectives and the outcomes that are subsequently achieved from the funding provided. See further in ANAO Better Practice Guide, pp. 61–62.

[18] Collectively, these two criteria comprised 85 per cent of the aggregate score that could be achieved in the 2010–11 funding round and 65 per cent of the aggregate score that could be achieved in the 2011–12 funding round. Other factors that affect scoring against these two criteria include the quality, type and size of the product to be installed, its location and the competitiveness of the pricing offered by potential suppliers.

[19] In addition, commencing with the 2011–12 funding round, additional scoring points are awarded where a school is located in a remote or low socio-economic area.

[20] ANAO Better Practice Guide, pp. 75–76. Similar guidance was included in the 2002 version of ANAO's grants administration Better Practice Guide.

aggregate scores are commonly used to rank competing applications. It also necessarily follows that applications that receive a low aggregate score need to be carefully considered in terms the extent to which they can be expected to contribute towards the program objectives, and satisfy the statutory requirement that public money only be approved where the proposed expenditure represents an efficient, effective and economical use of resources.[21]

23. However, neither the design of the program[22] nor DCCEE's advice to the Parliamentary Secretary for Climate Change and Energy Efficiency on individual funding round outcomes addressed how eligible applications that scored poorly against the assessment criteria provided a sufficient contribution towards the program objectives and could be seen to represent an efficient, effective and economical use of public money.[23] As a result, and particularly in respect to the 2010–11 funding round (see Figure S 1), a number of applications that did not receive a high score against the assessment criteria have been approved for funding. Axiomatically, awarding funding to applications that have achieved a relatively low score against the assessment criteria has an adverse impact on the extent to which a program is able to achieve its objectives.

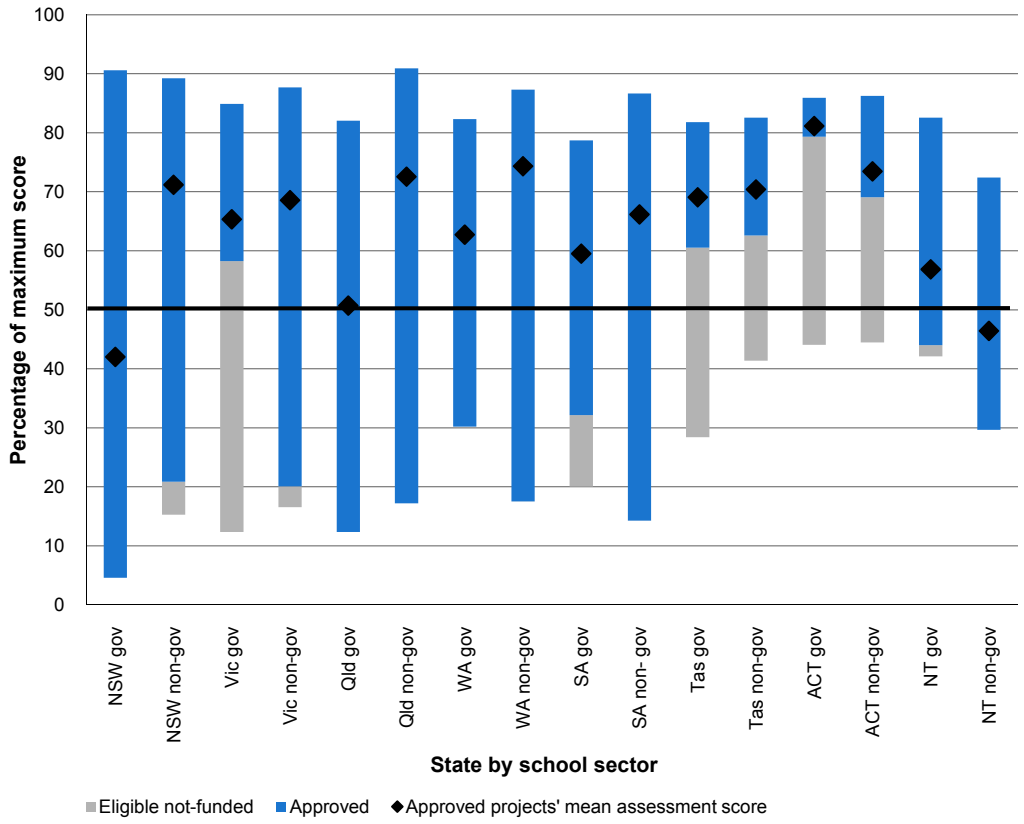
[21] Regulation 9 of the *Financial Management and Accountability Regulations 1997* (FMA Regulations) requires that funding not be approved unless the approver is satisfied, after undertaking reasonable inquiries, that giving effect to the spending proposal would be an efficient, effective, economical and ethical use of Commonwealth resources that is consistent with the policies of the Commonwealth. For grants programs, the key policies of the Commonwealth are the CGGs and the guidelines for the particular program.

[22] While the program's 2010 redesigned funding and delivery model was an effective way to manage demands upon the program, the adoption of 16 funding pools (comprising a government and non-government funding pool in each jurisdiction) as the method to allocate funding available for competitive application meant that where a limited number of applications were received compared to the size of the funding pool, low aggregate scores in terms of the assessment criteria could be approved for funding. Most notably, this occurred in situations where there were insufficient applications to fully use the allocated funding (such that all applications in that state and sector were awarded funding, irrespective of their score) as well as where a significant proportion of the applications received a low aggregate score. The risk of this occurring was not explicitly considered in departmental advice on the redesign of the program either in 2010, when the NSSP moved to be a competitive, merit-based program, or in 2011 when the program funding and timeframe was curtailed.

[23] Awarding funding to all eligible applications in certain states and sectors, irrespective of their aggregate score, means that the program has in certain respects continued to operate as a demand-driven program.

Figure S 1

Approved and eligible-not funded application score ranges by state and sector in the 2010–11 funding round



Source: ANAO analysis of DCCEE data.

Note: In a number of state/sectors there are approved projects that have a lower assessment score than the highest assessment score for eligible-not funded projects (NSW government — 85 projects; NSW non-government — seven projects; Vic non-government — six projects; Qld non-government — two projects; WA non-government — three projects; SA government — 16 projects; and SA non-government — three projects). This is in part due to a separate 2010–11 funding allocation set aside for schools that had been approved for funding for a solar power system under any other Australian Government program from 1 July 2008. In this case, eligible NSSP project funding was generally up to $15 000. For the purposes of clarity in the above figure, the lowest approved assessment score is presented, although there may be eligible-not funded project assessment scores above this approved project score.

24. Although the NSSP is nearing completion, DCCEE administers a number of other grant programs.[24] In this context, ANAO has made two recommendations. The first relates to ensuring the program guidelines cover all the important aspects of the application assessment process. The second relates to the establishment of clear links between the assessment of individual applications against the published criteria, an overall assessment as to whether each proposed grant represents an efficient, effective and economical use of public money, and the resulting recommendation to decision-makers about which applications should therefore be awarded funding.

Key findings by chapter

Program Oversight and Design (Chapter 2)

25. As part of DCCEE's program governance framework, a range of key governance documentation has been developed for the NSSP. In addition, advice on program performance is provided as part of monthly reporting on solar programs to the Parliamentary Secretary for Climate Change and Energy Efficiency and Minister for Climate Change and Energy Efficiency. Effective program oversight has been further promoted through the conduct of a comprehensive interim evaluation of the extent to which the NSSP has achieved its objectives to date.[25]

26. Program objectives were developed when the NSSP was first established as a demand-driven grant program. Significant work was undertaken to redesign and implement the changes to move the program from a demand-driven arrangement to a competitive, merit-based selection process, although the program objectives were unchanged.

27. To address the matter of over-subscription that led to the demand-driven NSSP being suspended, the redesigned program involved an annual cap on program funding with funding to be awarded to those applications on the basis of merit. This has proven to be an effective response.

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[24] This includes the $200 million Community Energy Efficiency Program, established as part the Government's plan for a Clean Energy Future, as a competitive, merit-based grant program to provide matched funding to local councils and non-profit community organisations to undertake energy efficiency upgrades and retrofits to council and community-use buildings, facilities and lighting. ANAO's Audit Work Plan for 2012–13 includes a potential audit of the Community Energy Efficiency Program.

[25] A final evaluation, at the conclusion of the program, is also to be conducted.

28. In regard other program redesign features, each year's total funding budget is allocated between states and territories based on the proportion of eligible schools in each sector. Funding for government schools and non-government schools in each state and territory is then allocated on a similar proportional basis, taking into account grants already awarded to schools in each state and territory. The intention was that each state and territory (and government and non-government sectors) will receive a proportional share of funding over the life of the program.

29. Together with an associated administrative arrangements document that has also been published, the July 2010 published program guidelines provided generally clear and effective guidance to schools and other stakeholders on the redesigned NSSP and its operation. The program guidelines were updated and re-published in July 2011 to reflect further changes to the design and operation of the program. A further version of the separate (but also published) administrative arrangements document was released at the same time. However, including important program information in a document other than the program guidelines does not sit comfortably with the CGGs.[26] In this respect, as outlined in a cross-portfolio ANAO audit on the development and approval of grant program guidelines[27]:

- where practical, agencies should seek to develop a single program guidelines document that represents the reference source for guidance on the grant selection process, including the relevant threshold and assessment criteria, and how they will be applied in the selection process; or
- where more than one document is produced, and each outlines important aspects of the grant selection process, it is important that agencies recognise that collectively, all these documents constitute the program guidelines for the purposes of the CGGs and, accordingly, should collectively be subject to the grant program approval requirements and made available to stakeholders.

[26] In this respect, the CGGs state (on page 22) that: 'Clear, consistent and well-documented grant guidelines are an important component of effective and accessible grants administration. A single reference source for policy guidance, administrative procedures, appraisal criteria, monitoring requirements, evaluation strategies and standard forms, helps to ensure consistent and efficient grants administration.'

[27] See further in ANAO Audit Report No. 36 2011–12, *Development and Approval of Grant Program Guidelines*, Canberra, 30 May 2012, pp. 88–89.

Application Assessment (Chapter 3)

30. Overall, the assessment approach for the NSSP was consistent with the preference expressed in the CGGs for competitive, merit-based selection processes based upon clearly defined selection criteria to be used in Commonwealth grants programs.[28]

31. The program guidelines outlined the program eligibility requirements. Together with an associated administrative arrangements document that was also published, the guidelines also outlined that three assessment criteria would be applied. Each eligible application was to be scored with the aggregate score against all criteria to be used to rank eligible applications. Both the guidelines and the administrative arrangements document outlined that this merit-based, competitive assessment process would be used to determine which applications best met the assessment criteria and would be offered funding (within each state and sector).

32. Both the 2010 and 2011 program guidelines stated that there were three assessment criteria: value for money; environmental benefit; and educational benefit. The nominated assessment criteria were directed at the identification of those applications that both represented value for money and could be expected to best contribute to the achievement of the program objectives (within the limits of the amount of funding allocated to the government and non-government school sectors in each state). This was further aided by the department publishing, through the administrative arrangements document, weightings for each of the assessment criteria, thereby providing potential applicants with a clear understanding of the relative importance to the program of the factors that will be taken into account in selecting the successful applications.

33. The inclusion of a criterion for value for money[29] demonstrated the benefits of administering agencies explicitly considering this matter in the

[28] Commonwealth Grant Guidelines, p. 29.

[29] Under the Commonwealth's financial framework, the overall test as to whether public money should be spent requires consideration of whether a spending proposal represents efficient, effective, economical and ethical use of public money that is consistent with the policies of the Commonwealth (particularly the CGGs and the grant program guidelines). Often, this is referred to as a 'value for money' test. In this context, for the NSSP, the value for money criterion was focused on whether the costs of the item(s) in the project were considered reasonable (by comparing the costs to the cost of similar items and other applications, and having regard to whether quotes had been obtained). In terms of the financial framework, this analysis addressed the issue of whether each proposed grant was economical.

assessment of applications to grant programs.[30] In this respect, a noteworthy feature of scoring against the value for money criterion was the considerably better performance by non-government schools compared with government schools.[31] This had a significant effect on the 2011–12 funding round outcomes in the New South Wales government sector (the state with the largest allocation of funding in that year) where nearly half of the successful applications would not have been awarded funding had value for money not been included as an assessment criterion. In other words, the assessment process favoured those applications that had demonstrated better value for money. However, the published program materials did not inform schools that applications for other than the four most common eligible items[32] applied for by schools were unable to achieve a high score against this criterion.

34. A significant change was made to the assessment criteria for the 2011–12 and 2012–13 funding rounds. Specifically, the guidelines were revised to state that, in selecting the successful applications, additional weighting would be given to applications from schools located in remote or low socio-economic areas so as to allow remaining funding to be directed to schools most in need. However, the extent of this weighting was not made clear in any of the published material. The approach taken meant that there were four assessment criteria used in the 2011–12 funding round examined by ANAO (the published program guidelines had continued to state that there were three criteria). A school's remoteness or low socio-economic status was the third most heavily weighted criterion (higher than educational benefit) with this relatively heavy weighting having a reasonably significant impact on the selection of successful applications. Further, given the nature of this criterion and the scoring approach adopted, the impact it had on the selection of successful applications was greater than any of the other criteria.

35. For the 2010–11 and 2011–12 funding rounds examined by ANAO, a robust and appropriately documented assessment process was implemented. In this respect, school applications were assessed in accordance with the

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[30] This issue has been raised in a number of ANAO audit reports. See, for example, ANAO Audit Report No.7 2011–12, *Establishment, Implementation and Administration of the Infrastructure Employment Projects Stream of the Jobs Fund*, Canberra, 22 September 2011 and ANAO Audit Report No.27 2011–12, *Establishment, Implementation and Administration of the Bike Paths Component of the Local Jobs Stream of the Jobs Fund*, Canberra, 20 March 2012.

[31] See footnote 36 and paragraph 5.21 concerning the reasons for the average cost difference between government and non-government schools in relation to the installation of solar power systems.

[32] Namely: solar power systems; hot water systems; rain water tanks; or energy efficient lighting.

published program guidelines, the published administrative arrangements document and internal departmental scoring procedures.[33]

Decision-making and Funding Distribution (Chapter 4)

36. Decision-making arrangements for the NSSP have been clearly communicated to schools and other stakeholders through the published program documentation. Specifically, the Parliamentary Secretary for Climate Change and Energy Efficiency approved individual grant applications for both government and non-government school applications in the 2010–11 funding round and non-government school applications in the 2011–12 funding round. Government school applications to the 2011–12 funding round were approved by state government officials, in line with the devolved assessment and decision-making arrangements reflected in the NPA finalised in November 2011.

37. The assessment briefings provided by DCCEE to the Parliamentary Secretary in respect to government and non-government applications to the 2010–11 funding round and non-government applications to the 2011–12 funding round included a clear recommendation that the Minister award funding to projects listed in attachments as recommended. Those attachments ranked each eligible and recommended project in terms of its overall assessment score.[34] Greater detail on the assessment process undertaken was included in a separate detailed attachment to each brief (in the form of an assessment report for the round). In addition, specific mention was made of the requirements of the FMA Act.

38. In addition to addressing the requirements of the published program guidelines including an assessment against the published assessment criteria, grants decision-making arrangements are required to be conducted in accordance with the statutory framework governing the expenditure of public money. Of particular importance in this regard is the FMA Regulation 9 requirement that funding not be approved unless the approver is satisfied, after undertaking reasonable inquiries, that giving effect to the spending proposal would be an efficient, effective, economical and ethical use of

[33] An important element in the assessment of applications was use of DCCEE's Web Application Assessment module. This application calculated the value for money, environmental benefit and components of educational benefit scores based on data provided by schools in their applications.

[34] Attachments were also included for government school applications to the 2011–12 funding round, with the list of projects approved in each state again sorted in order of highest to lowest aggregate assessment score.

Commonwealth resources that is consistent with the policies of the Commonwealth.

39. In the context of the NSSP, the aggregate assessment score of each application outlined the extent to which the application met the published assessment criteria and therefore also provided a key input to decide whether the application represented an efficient, effective and economical use of Commonwealth resources.[35] In this context, the clear and transparent scoring of eligible NSSP applications through the application of predetermined and weighted assessment criteria together with a well documented assessment methodology provided a sound basis for compliance with the requirements of FMA Regulation 9. In particular, applications assessed as scoring highly against the assessment criteria demonstrably represented, in the terms of the published program guidelines, an efficient, effective and economical use of public money. However, neither the design of the program nor DCCEE's advice to the Parliamentary Secretary for Climate Change and Energy Efficiency on funding round outcomes addressed how eligible applications that scored poorly against the assessment criteria could be seen to represent an efficient and effective use of public money (in terms of FMA Regulation 9).

40. Instead, funding has been awarded to eligible grants in each state/sector on the basis of the assessment rankings (from highest to lowest) up to the limit of the funding available in that state/sector for the year, but with no minimum score specified that an application needed to meet. Consequently, a significant number of applications were approved for funding in the 2010–11 and 2011–12 funding rounds notwithstanding that the application received a low overall score against the assessment criteria. In this context, there was no recognition in advice to government on program design, or in departmental advice on individual funding round outcomes, of the likely reduced level of achievement against the program objectives that could be expected to result

[35] This was reflected in the program guidelines and administrative arrangements document which, respectively, stated as follows:

- 'A merit-based, competitive assessment process will be used to determine which applications best meet these criteria and will be offered funding'; and
- 'This merit-based, competitive assessment process is used to determine which applications best meet these criteria and will be offered funding. …Applications will be scored against each criterion with an additional score allocated to schools located in remote or low socio-economic areas. Applications will be ranked on the basis of those scores and funding will then be granted based on the rankings (highest to lowest) until the funding allocation for that state and sector is fully committed.'

from the awarding of funding to applications that had achieved low scores against the assessment criteria.

Progress Towards Program Objectives (Chapter 5)

41. The NSSP is well advanced in its implementation, with over 4600 projects approved for funding of which more than half have been reported as completed. Nevertheless, there have been some delays with the commencement and completion of projects, reflecting a delay in the finalisation of the NPA to cover funding for government schools, and delays with the finalisation of acquittals for some projects.

42. While there are standards and state/territory regulation applying to the solar power installation industry, an area identified as high risk by DCCEE has been the likelihood of solar power systems installed under the NSSP failing to comply with the program guidelines and meet relevant safety requirements. To date, the outcomes from solar power safety inspections show that the proportion of non-compliant, potentially hazardous systems under the NSSP is almost twice the level of non-compliant, potentially hazardous systems for DCCEE's solar inspection program as a whole. In briefing the Minister for Climate Change and Energy Efficiency in late 2011, DCCEE outlined a range of existing and additional measures to address the high levels of non-compliant, potentially hazardous systems installed. At the time of this report, data on the impact of these measures was not available.

43. Although not a program objective, a key consideration in the selection of successful applications was the assessment of the value for money likely to be provided by candidate projects. This approach was consistent with the CGGs, which outline an expectation that value for money will be a core consideration in determining funding recipients under a grant program. Analysis undertaken by ANAO as part of this audit of the major cost items funded under the program, as well as analysis undertaken by the consultants engaged to perform the interim program evaluation, indicates that the costs of installed items are generally consistent with industry benchmarks and trends.

In addition, in general the cost of similar projects in government schools and non-government schools has been comparable.[36]

44. Four of the five elements of the program objective related to environmental benefits, and 'environmental benefits' was accorded significant weighting in the assessment criteria advised to schools in the published program documentation. In this context, while there are some shortcomings in the available data, indications are that the program has contributed to schools: generating their own electricity from renewable sources; improving their energy efficiency; and making use of rainwater collected from school roofs. The program has also made a small contribution to the growth of the renewable energy industry.[37]

45. Of particular note in respect to environmental benefits is that DCCEE has estimated the cumulative abatement effect of NSSP photovoltaic installations at 0.3 million tonnes of carbon dioxide equivalent (t CO_2-e) over the assumed 15-year lifetime of the installed systems. This is a significant figure, as it is more than one per cent of the abatement to be delivered by the Australian Government's Renewable Energy Target by 2020. However, the resource cost of the estimated abatement is considerable, being in the order of $284 per t CO_2-e. In addition to the inherent limitations of such estimates, due to some shortcomings with installation work[38]—that DCCEE is aware of and is responding to—the estimate is likely to overstate the level of abatement achieved and, therefore, understate the cost of the abatement that has been achieved.

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[36] By a significant margin, the most popular item funded under the NSSP has been the installation of solar photovoltaic (PV) systems. On average, non-government schools over the last three years have been able to obtain lower cost solar power systems, compared to government schools. For the 2011–12 grant year, the cost difference was approximately 20 per cent. The major contributing factor to this difference is that economies of scale operate, such that the cost of solar power systems per kilowatt decrease as system sizes increase. Non-government schools on average have installed larger solar power systems due to larger average NSSP grants compared to the level for government schools, which enable the achievement of slightly lower per unit costs. For example, in the 2011–12 funding round, there was only an average $145 (around three per cent) cost difference per kilowatt in favour of non-government schools, where government and non-government schools were planning to install 5 to 10 kilowatt solar power systems.

[37] In comparative terms, the NSSP's contribution to the growth of the renewable energy industry has been relatively small. A degree of concentration has occurred around solar power systems being installed by a relatively limited number of suppliers, but this partly reflects procurement panel arrangements for government schools in a number of states.

[38] In particular, there have been issues identified through compliance inspections with the standard of system installations and not all of the installed systems are performing in line with the solar production estimates from the Office of the Renewable Energy Regulator (ORER) (which were relied upon in preparing the estimate).

46. The program objective also outlines that the NSSP should allow schools to provide educational benefits for school students and their communities. The focus of the program against this part of the objective has centred on creating greater awareness and/or understanding of renewable energy and energy efficiency among students and their community. Maximising the educational benefits from funded projects has been impeded by some system installation issues and variations in the extent to which schools use data from solar power systems in their resource materials/learning plans. Nevertheless, the available data indicates that, as a result of the NSSP and other environmental sustainability initiatives, schools consider that their students have a greater awareness of the need to be more energy efficient and to conserve water. However, to date, there is no data available on the extent to which any increased awareness and understanding has been translated into behavioural change.

Summary of agency response

47. The proposed audit report or relevant extracts were provided to DCCEE, the Department of Finance and Deregulation and the Department of the Treasury for comment, with formal comments provided by DCCEE, as set out below.

> The Department of Climate Change and Energy Efficiency (the Department) welcomes this review of the National Solar Schools Program (NSSP) and that the report recognises that overall the 2010–11 and 2011–12 funding rounds of the NSSP were well designed and effectively implemented. This included that there was clear and effective guidance provided to schools and other stakeholders; the program eligibility requirements and assessment criteria were published and applied; and a robust and appropriately documented assessment process was implemented.
>
> The Department agrees with the two recommendations made in the audit report.
>
> Recommendation 1 seeks refinements to the content of future program guidelines. For future programs, the Department will look to enhance program guidelines, paying particular attention to the matters referred to by the ANAO.
>
> Recommendation 2 focuses on clearly identifying, in program documentation advice to decision-makers, the relationship between the application scores and the assessment of proposals with respect to efficient, effective and economical use of public money. In regard to the NSSP, the briefing material to the Parliamentary Secretary for Climate Change and Energy Efficiency will in future more clearly explain the scoring process and checks undertaken to

provide assurance that all applications, including those with a low score, are a proper use of Commonwealth funds.

The Department is also satisfied that all funding paid represents an efficient, effective and economical use of public money. Analysis and checks performed on individual projects will in future be summarised into a single report to strengthen the documentation and support clearer advice to decision-makers.

Recommendations

Set out below are ANAO's recommendations and the Department of Climate Change and Energy Efficiency's abbreviated responses. More detailed responses are shown in the body of the report immediately after each recommendation.

Recommendation No.1

Paragraph 3.47

To enhance its administration of grant programs, ANAO recommends that the Department of Climate Change and Energy Efficiency clearly identify in the published program guidelines:

(a) all assessment criteria and, where relevant, the relative weighting applying to each of these criteria; and

(b) any categories of applications, or features of individual applications, that are to be preferred or otherwise ranked more highly in the assessment process.

DCCEE response: Agreed.

Recommendation No.2

Paragraph 4.56

In designing and administering competitive, merit-based grants programs that involve the scoring of grant proposals, ANAO recommends that the Department of Climate Change and Energy Efficiency clearly identify in program documentation advice to decision-makers the interrelationship between the level of score that an application achieves and the assessment required to demonstrate that proposals represent an efficient, effective and economical use of public money.

DCCEE response: Agreed.

Audit Findings

1. Introduction

This chapter provides an overview of the National Solar Schools Program (NSSP) as an Australian Government measure to assist schools to take practical action on climate change. It also outlines the audit objective, scope and criteria.

Background

1.1 The National Solar Schools Program (NSSP) offers primary and secondary schools the opportunity to apply for grants of up to $50 000 to install solar and other renewable power systems, solar hot water systems, rainwater tanks and a range of energy efficiency measures. The objectives of the NSSP are to:

- allow schools to:
  - generate their own electricity from renewable sources;
  - improve their energy efficiency and reduce their energy consumption;
  - adapt to climate change by making use of rainwater collected from school roofs;
  - provide educational benefits for school students and their communities; and
- support the growth of the renewable energy industry.

1.2 The establishment of the NSSP followed a commitment made by the Australian Labor Party (ALP) in the lead up to the November 2007 Federal election. Specifically, the ALP had made a commitment to establish a National Solar Schools Plan to make every[39] Australian school a solar school within eight years.[40] The commitment was characterised as generating jobs and investment in Australia's sustainable industries and trades, with significant

[39] In May 2012, the Department of Climate Change and Energy Efficiency (DCCEE) advised ANAO that, by the end of the program it is expected that approximately 60 per cent of all primary and secondary schools will have received an NSSP grant. The curtailment of the program is discussed at paragraph 1.11.

[40] The National Solar Schools Plan was one of a number of ALP election commitments in the area of climate change. Other program commitments included: rebates for household solar panels; rebates for solar hot water; rebates for rainwater tanks and grey water recycling; rebates to help landlords install energy-efficient insulation in rental homes; and low interest Green Loans to help families invest in solar and practical water and energy savings devices.

educational benefits for students and communities.[41] It provided that all schools would be able to apply for:

- grants of up to $20 000 to install two kilowatt solar panels; and
- grants of up to $30 000 to install efficiency improvements so schools can invest in energy and water measures, including rainwater tanks, solar hot water systems and lighting upgrades.[42]

1.3 The commitment under the plan involved funding of $489 million over eight years.[43] This amount of funding incorporated the $336 million under the predecessor Coalition Government's Green Vouchers for Schools program and an additional $153 million in new funding to meet the scope of the election commitment.[44]

Program establishment and operation

1.4 Following the outcome of the election, on 18 December 2007 the Government formally agreed to establish the NSSP. The then Department of the Environment, Water, Heritage and the Arts (DEWHA) was assigned administrative responsibility for the program. Program funding of $480.6 million over eight years (2007–08 to 2014–15) was provided in the 2008–09 Budget.[45]

1.5 In June 2008, program guidelines were approved by the then Minister for the Environment, Heritage and the Arts. The program opened to applicants

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41 Peter Garret MP, Shadow Minister for Climate Change, Environment and Heritage, and Anthony Albanese MP, Shadow Minister for Infrastructure and Water, *Solar Schools - Solar Homes*, Election 07 Policy Document, p. 8.

42 ibid.

43 Under the *Charter of Budget Honesty Act 1998* and arrangements for the costing of election commitments, the then Leader of the Opposition put forward the ALP's National Solar Schools Plan for costing by the then Department of Finance and Administration. The Department's costing to fully deliver the election commitment was $480.6 million. The costing assumed that there were 9612 schools that would access the full $50 000 grant. Departmental expenses associated with the policy were to be absorbed by the then Department of the Environment and Water Resources. Source: <http://web.archive.org/web/20080523091437/http://www.electioncostings.gov.au/index/opposition_costings/O30102010> [accessed 14 December 2011].

44 In July 2007, the then Government had announced the Green Vouchers for Schools program, with funding of $336 million over four years. The demand-driven program provided all eligible schools with the opportunity to claim an amount of up to $50 000 (GST exclusive) on the installation of solar hot water systems and water tanks. Source: Department of Environment and Water Resources, *Australian Government Green Vouchers for Schools Guidelines*, 2007, p. 2.

45 Funding included $9 million in 2007–08 under the Green Vouchers initiative.

on 1 July 2008, using a demand-driven claims process.[46] The NSSP operated between this date and October 2009 as a demand-driven grants program.

NSSP demand and program funding

1.6 When the NSSP was established, a mechanism such as application rounds was not put in place to manage demand for program funds in-line with the program's annual funding. This situation hindered the management of demand for NSSP funding. Further, possible funding duplication with other Australian Government programs had emerged as an issue.

1.7 As a result of higher than expected demand, school claims on the program were suspended in October 2009, after 15 months of operation.[47] Following the suspension of the NSSP, a number of changes were put in place as a result of Government decisions and these were reflected in a new set of program guidelines (July 2010). The changes included:

- funding to be capped each financial year and annual application rounds to be held;
- applications to be assessed on a merit basis criteria using predetermined criteria, with schools required to demonstrate value for money, environmental and educational benefits in their applications; and
- to address potential duplication of funding sources[48], schools that had been approved to receive funding for solar power systems under any

[46] As outlined in ANAO Better Practice Guide, *Implementing Better Practice Grants Administration*, Canberra, June 2010 (referred to in this audit report as ANAO Better Practice Guide), an early and important consideration in the design of a grant program is establishing how to structure the process by which potential funding recipients will be able to access the program. In this context, a demand-driven process involves applications that satisfy stated eligibility criteria receiving funding, up to the limit of available appropriations and subject to revision, suspension or abolition of the program. See further discussion in the ANAO Better Practice Guide, pp. 44–46.

[47] Almost 1500 schools made direct grant funding claims on the program prior to its suspension. A further 1100 government schools were covered by cooperative funding agreements established between DEWHA and five state education authorities prior to the program's suspension.

[48] In particular, the Building the Education Revolution program permitted funds to be used for items such as solar power systems, which were also covered by the NSSP. The administration of the largest component of the Building the Education Revolution program was examined in ANAO Audit Report No. 33, 2009–10, *Building the Education Revolution—Primary Schools for the 21st Century,* Canberra, 5 May 2010.

other Australian Government program from 1 July 2008 would only be eligible for funding of up to $15 000.[49]

1.8 Under the NSSP, each year's total funding budget is allocated between government and non-government school sectors based on the proportion of eligible schools in each sector. Funding for government schools and non-government schools in each state and territory is then allocated on a similar proportional basis, taking into account grants already awarded to schools in each state and territory. The intention is that each state and territory (government and non-government sectors) will receive a proportional share of funding over the life of the program.

1.9 During the NSSP suspension period, Machinery of Government changes had resulted in the administration of the NSSP transferring in March 2010 from DEWHA to the Department of Climate Change and Energy Efficiency (DCCEE).

First competitive funding round

1.10 In accordance with the new program guidelines, applications under the first competitive round were open between 15 July and 20 August 2010. More than 2000 schools submitted applications totalling $94 million for the $51.8 million in funding that was available. A total of 1226 projects were approved by the Parliamentary Secretary for Climate Change and Energy Efficiency, with the successful projects announced in December 2010.

Program status

1.11 The May 2011 Budget announced that the NSSP would finish two years earlier than originally planned (30 June 2013) and savings of $156.4 million would be redirected to support other Government priorities. This left a remainder of $49.8 million available in total for the 2011–12 and 2012–13 funding rounds.

1.12 A number of other changes to the remaining two years of the program were also made, including:

[49] Senator the Hon Penny Wong, Minister for Climate Change, Energy Efficiency and Water, *National Solar Schools program re-opens*, Media Release, 14 July 2010.

- additional assessment weighting for schools in remote or low socio-economic areas to allow funding to be directed to the most disadvantaged schools;
- removal of additional funding availability for multi-campus schools; and
- the ability of state and territory education authorities to request that the maximum funding amount available to government schools in their jurisdiction is reduced to allow more schools to receive a grant.

Second competitive funding round

1.13 Applications for the second competitive funding round were open between 1 August and 30 September 2011, with $25 million of funding made available. Nearly 2000 schools applied for a grant, with a total funding bid of $64 million. Under revised administrative arrangements that all jurisdictions had formally agreed to by November 2011 and reflected in the *National Partnership Agreement on the National Solar Schools Program* (NPA), states and territories would use an assessment tool (which was developed in consultation with the states) and business rules developed by DCCEE to assess and determine which government schools in their jurisdiction would receive grants under the program.[50] Applications from non-government schools continued to be assessed by DCCEE, using the same assessment tool and business rules.

1.14 A total of 784 projects were approved for the 2011–12 funding round, with the successful projects announced in January 2012.

Third and final competitive funding round

1.15 The 2012–13 funding round is the final round for schools to apply for a grant. Funding of $24.8 million is allocated[51], with applications opening on 13 February 2012 and closing on 18 May 2012. The successful applications are expected to be announced in July or August 2012.

Grants administration framework

1.16 Grants administration is an important activity for many Commonwealth entities, involving the payment of billions of dollars of public

[50] The NPA also specifies the indicative annual funding allocation to each state and territory.

[51] This includes a total of $200 000 to cover the cost of any successful appeals for grant funding. Once the appeals process is complete this remaining contingency funding will be allocated.

funds each year. Commonwealth grant programs are subject to applicable financial management legislation. Specifically, the *Financial Management and Accountability Act 1997* (FMA Act) provides a framework for the proper management of public money. That framework includes requirements governing the process by which decisions are to be made about whether public money should be spent on individual grants, as well as various accountability requirements.

1.17 Prior to late 2007, there was no official guidance to agencies relating specifically to the administration of grant programs. In December 2007, Finance Minister's Instructions were issued providing information about the Budget and other related processes, including in respect to grants.[52] The key grants-related instructions included that:

- Ministers were not to make any decisions on discretionary grants[53] without first receiving departmental advice on the merits of the grant application relative to the guidelines for the program;
- guidelines for any new discretionary grant programs were to be considered by the Expenditure Review Committee of Cabinet (ERC); and
- agencies were to have adequate arrangements in place to manage discretionary grant programs in accordance with relevant legislation, regulations and guidance.

1.18 In February 2008, the then Minister for Finance and Deregulation (Finance Minister) announced that a comprehensive review of the value of discretionary grants and the transparency and effectiveness of existing programs would be undertaken.[54] In establishing and undertaking the review, particular attention was paid to the findings and recommendations of the wide range of audits of grants administration undertaken by the Australian National Audit Office (ANAO). In this respect, the July 2008 report of the *Strategic Review of the Administration of Australian Government Grant Programs* (Strategic Review) commented that many of these audits had raised significant issues

[52] As part of *Estimates Memorandum 2007/50*, dated 21 December 2007.

[53] Discretionary grants were defined as: 'grants where the minister or agency has discretion in determining whether or not a particular application receives funding and may or may not impose conditions in return for the funding' and not including 'entitlement-based and demand-driven payments or rebates.'

[54] Minister for Finance and Deregulation, National Press Club Address, 6 February 2008.

going both to the overall framework for the administration of grant programs and to the quality of administration of individual programs.[55]

1.19 After considering the Strategic Review, in December 2008 the Government agreed to a range of measures to reform the administration of grants.[56] In this context, on 1 July 2009, the *Financial Management and Accountability Regulations 1997* (FMA Regulations) were amended to:

- insert a new FMA Regulation 3A that defined the meaning of the term 'grant' based on an arrangement exhibiting each of four specified characteristics[57];
- insert a new FMA Regulation 7A, providing that the Finance Minister may issue Commonwealth Grant Guidelines[58] (CGGs) for matters relating to grants administration, and requiring officials to act in accordance with the CGGs; and
- amend FMA Regulation 12 to require that, where a spending proposal relates to a grant, the approver must record the basis on which they are satisfied that the proposal complies with Regulation 9[59] (as well as the terms of the approval, which were already required to be recorded for all approved spending proposals).

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[55] Mr Peter Grant PSM, *Strategic Review of the Administration of Australian Government Grant Programs*, 31 July 2008, p. 2.

[56] The Hon Lindsay Tanner MP, Minister for Finance and Deregulation, *Improving Government Grants*, Media Release, 9 December 2008.

[57] FMA Regulation 3A(1) defines a *grant* as an arrangement for the provision of financial assistance by the Commonwealth:

a. under which public money is to be paid to a recipient other than the Commonwealth; and

b. which is intended to assist the recipient achieve its goals; and

c. which is intended to promote one or more of the Australian Government's policy objectives; and

d. under which the recipient is required to act in accordance with any terms or conditions specified in the arrangement.

This is similar to the definition of a grant included in the Finance Minister's Instructions of 16 January 2009 being: 'an arrangement for the payment of public money, with conditions, to an external recipient for a specified purpose. Grants are provided to recipients to assist them to achieve their goals, while furthering the policy objectives of the Australian Government'.

[58] Department of Finance and Deregulation, *Commonwealth Grant Guidelines—Policies and Principles for Grants Administration*, Financial Management Guidance No. 23, Canberra, July 2009.

[59] FMA Regulation 9 prohibits approval of a spending proposal unless the approver is satisfied, after making reasonable inquiries, that it would be a proper use of Commonwealth resources.

1.20 The CGGs, issued under new FMA Regulation 7A, took effect from 1 July 2009 and represent the whole-of-government policy framework for grants administration. They apply to all agencies subject to the FMA Act and also include a number of process requirements that apply to Ministers where they exercise the role of financial approver in relation to grants. The CGGs:

- set out seven key principles for grants administration[60];
- outline the legislative and policy framework for grants administration, including certain mandatory process requirements; and
- provide guidance on sound practice in grants administration that agencies should have regard to in implementing grant programs.

1.21 The guidance included in the CGGs is presented in relation to each of the seven key principles for grants administration.[61] The guidance set out in the CGGs is supplemented by associated Finance Circulars issued by Finance.[62] It is complemented by an ANAO Better Practice Guide on grants administration[63], which was revised and reissued following the promulgation of the CGGs.

Audit objective, criteria and scope

1.22 The objective of the audit was to assess the effectiveness of the design and management of the NSSP, including demonstrated progress towards achieving the program's objectives.

1.23 The audit objective was met through analysis of the program's establishment, implementation and administration against relevant policy and

[60] The seven key principles are: (1) Robust planning and design; (2) An outcomes orientation; (3) Proportionality; (4) Collaboration and partnership; (5) Governance and accountability; (6) Probity and transparency; and (7) Achieving value with public money (see Department of Finance and Deregulation, *op. cit.*, p. 14). These key principles reflect the seven high-level principles to guide the process of reform identified by the Strategic Review (see paragraph 1.18).

[61] The better practice guidance included in the CGGs was based, in large part, on guidance provided by ANAO in the 2002 version of a grants administration Better Practice Guide.

[62] There is also a range of other Finance Circulars on the application of the financial framework–see for example, Finance Circular 2011/01, *Commitments to spend public money (FMA Regulations 7 to 12)*, 31 March 2011.

[63] ANAO Better Practice Guide.

legislative requirements for the expenditure of public money[64] and the seven key principles for grants administration established by the Australian Government and set out in the CGGs. Particular emphasis was given to examining whether the NSSP was achieving its stated objectives and providing value for public money, including through consideration of whether:

- advice to government from relevant departments on the design and implementation of the program was robust and timely;
- departmental business practices met policy and legislative requirements, including the FMA Regulations, the CGGs, relevant Finance Minister's Instructions and other government decisions;
- candidate projects were assessed and approved for funding in accordance with the principles outlined in the CGGs as well as the published program guidelines;
- appropriate funding arrangements were established with approved funding recipients having regard for the size of the approved funding, the type of entity involved and the nature of the funded project; and
- approved projects have been monitored, delivered and subsequently reconciled in accordance with the terms and conditions of funding.

1.24 The audit scope covered the initial planning phase following the 2007 election, until the outcomes from the 2011–12 funding round were announced in January 2012. The audit methodology included:

- an examination of policy documents, guidelines, reports, program files, project management IT systems and operational documents;
- interviews with senior departmental managers, program managers and program staff;
- consultation with state government education departments and independent schools' organisations;

[64] Commonwealth grant programs involve the expenditure of public money and thus are subject to applicable financial management legislation. Specifically, the FMA Act provides a framework for the proper management of public money and public property which includes requirements governing the process by which decisions are made about whether public money should be spent on individual grants, including those made under the NSSP.

- visits to a number of government and non-government NSSP project schools in Queensland, New South Wales, Victoria and the Australian Capital Territory; and
- engagement with a number of stakeholders relevant to the audit, including the Clean Energy Council (CEC) and the Office of the Renewable Energy Regulator (ORER).

1.25 The audit was conducted in accordance with ANAO auditing standards at a cost to the ANAO of $535 000.

Report structure

1.26 The structure of the report is outlined in Table 1.1.

Table 1.1

Structure of the report

Chapter	Chapter Overview
2. Program Oversight and Design	Examines the governance and oversight arrangements as well as discussing the development of the NSSP and the key design features.
3. Application Assessment	Examines the assessment of applications received in the 2010–11 and 2011–12 funding rounds.
4. Decision-making and Funding Distribution	Examines the ranking of eligible applications and the related processes by which funding decisions were made in the 2010–11 and 2011–12 funding rounds.
5. Progress Towards Program Objectives	Examines NSSP progress to date against its stated objectives, and discusses the more significant issues in relation to this progress.

Source: ANAO

2. Program Oversight and Design

This chapter examines the governance and oversight arrangements for the program. The development of the NSSP and the key program design features are also discussed.

Departmental governance and oversight arrangements

2.1 The development and implementation of the NSSP coincided with a significant expansion of the then DEWHA's responsibilities following the 2007 change of government. Specifically, the department had responsibility for 107 new policy initiatives, with 10 new renewable and energy efficiency programs[65], including the NSSP.

2.2 In the first 18 months of the program's operation under DEWHA, the focus was on the day-to-day management of the NSSP, with no clear articulation of structured senior departmental oversight of the program. In addition, for the period of the NSSP's operation under DEWHA, records show little in the way of finalised governance documentation.[66] In this context, the NSSP's July 2008 guidelines essentially operated as the key governance document for the program.

2.3 Following the temporary suspension of the NSSP in October 2009, the program became one of the five DEWHA demand-driven programs that were subject to the oversight and management by an Energy Efficiency Taskforce. The Taskforce was established in November 2009 by DEWHA, following a review requested by the Minister as the result of his dissatisfaction with briefings and DEWHA's capacity to respond quickly and accurately to requests for information. The Taskforce's role was to consolidate program delivery effort and expertise, and begin improving the visibility of program performance for DEWHA's executive management.[67] Until the NSSP's transfer to DCCEE in March 2010, the main focus of program work performed under the Taskforce was dealing with school grant funding claims submitted prior to the program's suspension, and work to inform Government consideration of a redesigned program.

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[65] See further in ANAO Audit Report No.12 2010–11, *Home Insulation Program*, Canberra, 15 October 2010, p. 23.

[66] For example, the NSSP Project Plan, which included a risk register, a communications plan and an issues register was still in draft form at the time of the program's temporary closure in October 2009.

[67] ANAO Audit Report No.9 2010–11, *Green Loans Program*, Canberra, 29 September 2010, pp. 46–47.

2.4 During the NSSP's suspension, wider pressures for improvements to DEWHA program governance came into play with ANAO reports and other inquiries into the Home Insulation Program and Green Loans Program.[68] With DCCEE taking over responsibility for the administration of a number of energy efficiency programs and assuming a greater program delivery role than previously, DCCEE's response to these reports was a commitment to establish a program governance framework by the end of 2010, including clearly structured senior governance oversight arrangements through the introduction of program boards (see Figure 2.1).[69] In the case of arrangements covering the NSSP, the first meeting of its program board occurred in July 2010.

[68] These include: ibid.; ANAO Audit Report No.12 2010–11, *Home Insulation Program*; Allan Hawke, *Review of the Administration of the Home Insulation Program*, 6 April 2010; and *Independent Inquiry—Green Loans Program: Review of procurement and contractual arrangements*, June 2010 (Faulkner Inquiry).

[69] This governance approach drew upon approaches and methodologies developed by the UK Office of Government Commence.

Figure 2.1

NSSP and departmental governance — overview

Energy and Safety Programs Program Board

- Role — to provide support to the SES2 (accountable to SES3, who in turn reports to DCCEE Exective Board) to successfully deliver the program, including monitoring and reviewing program management and performance.
- Chaired by SES2, with SES1 membership supported by advisers.
- Monthly meeting (minimum).

Solar Program Project Board

- Role — to provide overall direction and management to the project to ensure on time, on budget and on quality delivery.
- Chaired by SES1, with further SES1 member and EL2 members.
- Monthly meeting.
- Report to Program Board.

NSSP Probity Board

- Role — to support the Director NSSP in the administration of the NSSP and ensure the integrity of the application assessment process is maintained and to resolve any issues which could be perceived as being inconsitent with the merit-based assessment.
- Chaired by SES1, with EL2 NSSP Director, departmental lawyer and program advisor membership.
- Meeting as required during each annual funding round.

Source: ANAO analysis of DCCEE data.

Note: Both the Program Board and the Project Board deal with a number of programs, of which NSSP is but one. For example, the Solar Program Project Board covers the Renewable Energy Bonus Scheme – Solar Hot Water Rebate, the Solar Homes and Communities Plan and the NSSP.

2.5 With the program's transfer to DCCEE in March 2010 and preparations for the reopening of the NSSP, a considerably stronger focus on governance documentation also occurred. In addition to the program guidelines, the suite of finalised NSSP governance documentation currently includes a project management plan; risk register; issues log; probity plan; compliance and assurance strategy; stakeholder management and communications plans; and acquittal management. While a formal program evaluation plan has not been developed, an interim evaluation has been conducted, with a final evaluation planned in 2013. A program closure plan is to be considered in 2012–13, with a range of program activities to be completed post the program's closure on 30 June 2013.

Advice to ministers on program design and progress

2.6 An issue raised by ANAO in earlier audits of the Home Insulation Program and the Green Loans Program related to the advice provided to the responsible Minister on program implementation and delivery. Beginning in early 2008, the then DEWHA provided advice on the design of the program. However, during the period up to the suspension of the program in mid-October 2009, the relevant Minister was not provided with any regular or timely advice about the performance status of the program, such as key program metrics.[70] From early November 2009, the department's Energy Efficiency Taskforce began providing the Minister with high-level weekly metrics reports, which included NSSP data.[71]

2.7 Following the transfer of the program to DCCEE, advice was provided to the responsible Minister to inform government consideration of options for redesigning the NSSP. Since the reopening of the program in July 2010, the focus of departmental advice has involved the establishment of an NPA for the NSSP; aspects of program management such as compliance arrangements; and advice on ministerial approval of successful school applications for NSSP grants. In addition, since May 2011 advice on program performance has been provided through a monthly status report on solar programs from the department to the Parliamentary Secretary for Climate Change and Energy Efficiency and copied to the Minister for Climate Change and Energy Efficiency.[72] The reports provide an overview of key program issues, with further detail covered in attached metrics reports.

Program objectives

2.8 The setting of program objectives is a critical element in the design and implementation phases of any grants program. It is recognised that objectives

[70] For example, in October 2009 the then responsible Minister advised the then Prime Minister that 'I have only today received advice from the Department that demand for NSSP funding has been so high that the balance of uncommitted funding for 2009–10 is now insufficient to meet all claims on hand'. The program was suspended six days later.

[71] The metrics reports began in November 2009 and continued until mid-2010. They were then replaced with Project Progress Reports.

[72] Prior to May 2011, DCCEE briefings to the Parliamentary Secretary for Climate Change and Energy Efficiency on the status of the program were prepared on an 'as required' basis.

should be stated in a way which clearly communicates what is to be achieved and/or assessed.[73]

2.9 The broad intent of the National Solar Schools Plan was articulated in the ALP's 2007 election policy commitment that 'every Australian school will be a solar school within eight years'. Against this background, the first NSSP guidelines (July 2008) were approved by the Minister[74], and detailed that the objectives of the program were to:

- allow schools to:
  - generate their own electricity from renewable sources;
  - improve their energy efficiency and reduce their energy consumption;
  - adapt to climate change by making use of rainwater collected from school roofs;
  - provide educational benefits for school students and their communities; and
- support the growth of the renewable energy industry.[75]

2.10 The program's objectives are stated in general terms, which is a characteristic of many grant programs.[76] In a situation where a program has un-prioritised multiple objectives, such as is the case with the NSSP, this can make it more difficult to target the program's administrative effort to achieve the outcomes sought by government. For example, it is not clear the extent to which support for the growth of the renewable energy industry is a priority, as against improving school energy efficiency and reducing energy consumption. Departmental records indicate a relatively strong focus on program delivery,

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[73] ANAO Audit Report No.26 2009–10, *Administration of Climate Change Programs*, Canberra, 20 April 2010, p. 42.

[74] The Hon Peter Garrett MP, Minister for the Environment, Heritage and the Arts approved the NSSP Guidelines on 17 June 2008. Under Finance Minister's Instructions issued in December 2007, guidelines for any new grant programs were to be considered by the ERC of Cabinet. Cabinet records do not indicate that ERC consideration of the guidelines occurred. The development and approval of grant program guidelines, including the frequency with which the approval of guidelines did not occur in accordance with enhancements made to the grants administration framework commencing with the December 2007 Finance Minister's Instructions was examined in ANAO Audit Report No.36 2011–12, *Development and Approval of Grant Program Guidelines*, Canberra, 30 May 2012.

[75] DEWHA, *National Solar Schools Program Guidelines July 2008*, p. 3.

[76] See for example, ANAO Audit Report No.26 2009–10, *Administration of Climate Change Programs*, p. 42, where program objectives have been stated in similar broad terms.

while program impacts on the renewable energy industry were often a less significant consideration.[77] There are benefits in gaining greater clarity over the program's key objectives to help focus program effort and better inform stakeholder expectations about what should reasonably be expected to be achieved through the program.

2.11 An important feature of any grants program, especially one with a relatively long planned lifecycle, is to periodically review the program objectives. Significant external factors affecting the program and developments in the program itself can act as a catalyst for departments to advise government on the continuing appropriateness and relevance of the program's objectives. For example, a key but unstated NSSP objective until May 2011 was that every school would receive an NSSP grant. This unstated objective was a major determinant of funding levels for the program and was an implicit assumption in the redesign of the program in 2009–10. Similarly, grant applications from low socio-economic or remote schools have in recent rounds received greater emphasis in funding compared to earlier periods in the program. The examples above highlight the importance of actively monitoring the relevance of the program's objectives at key junctures in a program's evolution.

2.12 However, since the NSSP's commencement in July 2008, the objectives have remained unchanged. This is notwithstanding the opportunity afforded on two particular occasions. The first opportunity was following the temporary suspension of the program in October 2009. While DEHWA provided advice to the government on options for what proved to be a redesigned NSSP, the matter of the program's objectives was not addressed. The second opportunity arose with the Government's May 2011 Budget decision to close the NSSP two years earlier than originally planned. As part of considerations leading up to this decision, new NSSP guidelines, which incorporate the program's objectives, were approved by the ERC. Departmental advice on changes to the program did not address the issue of the continued appropriateness of the NSSP objectives in light of the changes to the program.

[77] For example, in a departmental briefing to the Minister on suspending the program in October 2009, the expected impact on the renewable energy industry is not mentioned. The Clean Energy Council (CEC) was informed of the decision to suspend the program once it had been made. Further, under the NPA agreed between the Commonwealth and states and territories finalised in late 2011, supporting the growth of the renewable energy industry is not included as an objective or outcome for the Agreement.

Key performance indicators

2.13 In accordance with the Australian Government's budget reporting framework, agencies are required to publish in their Portfolio Budget Statement (PBS) program objectives, expenses, deliverables and key indicators for each 'program'.[78] Deliverables represent the goods and services produced and delivered by the program in meeting its objective, while key performance indicators represent the primary means by which agencies address and achieve a government outcome.[79]

2.14 The audit examined DCCEE's PBS in relation to NSSP to determine the extent to which this formed the basis for an effective performance information framework for government, parliament and the public. In DCCEE's 2011–12 PBS, the NSSP forms part of DCCEE's Outcome 1, which involves:

> Reduction of Australia's greenhouse gas emissions, adaptation to the impacts of climate change, and negotiation of an effective global solution, through the development and implementation of a national response to climate change; and bilateral, regional and multilateral engagement internationally.

2.15 DCCEE's Outcome 1 consists of four programs, including Program 1.2, which involves:

> Improving Australia's energy efficiency, with the objective of significant improvements in Australia's energy efficiency performance and greater use of distributed and renewable energy.[80]

2.16 Under the Outcomes and Programs Framework, key performance indicators are required to demonstrate the performance of the program in achieving its objective and contributing to its respective outcome.[81] The 2011–12 DCCEE PBS contains one key performance indicator in relation to the NSSP:

- National Partnership Agreements in place with all states and territories for the delivery of funding to government schools under the National Solar Schools Program (NSSP), which offers grants to eligible

[78] The term 'program' under the Government's Outcomes and Programs Framework usually covers a range of deliverables, of which a program such as the NSSP may only be one element.

[79] Outcomes focus on changes effected in the community as a result of the grant activity. This is by way of comparison with outputs, which involve the extent to which the granting activity's operational targets or milestones have been achieved.

[80] DCCEE, *Portfolio Budget Statement 2011–12,* 10 May 2011, p. 19.

[81] Department of Finance and Deregulation, *Guidance for the Preparation of the 2011–12 Portfolio Budget Statements*, March 2011, p. 37.

primary and secondary schools, and implementation of the 2011–12 funding round.[82]

2.17 As with many of the DCCEE stated key performance indicators for Outcome 1.2 in the 2011–12 PBS, the NSSP key performance indicator is task descriptive in nature and linked to a relatively short timeframe; for an outcome objective that is medium to longer term. In this regard, it is not evident that recent NSSP key performance indicators have been sufficiently focused to allow the effective ongoing tracking of performance and progress in achieving program objectives.[83] In this context, in April 2012 DCCEE advised ANAO that initiatives to form an agency-wide approach to the development of meaningful and measureable key performance indicators are being progressed within the portfolio.

Program evaluation

2.18 To date, a formal evaluation plan for the program has not been developed. Ideally, evaluation plans should be developed early in a program's lifecycle in order to develop key performance information that would assist in a program's evaluation. This approach can assist the development of a robust measurement framework, including the establishment of credible baseline data and metrics to distinguish the impact of the specific policy measure for evaluation from broader drivers.[84]

2.19 Notwithstanding the absence of a planned approach to evaluation, an interim evaluation was commissioned by DCCEE in late 2011. The timing was viewed as appropriate given the program was at the half-way mark of its planned duration. A final evaluation is planned following the NSSP's closure in 2013.

2.20 The purpose of the interim evaluation was to assess the extent to which the NSSP has achieved its planned objectives to date and to analyse any lessons learned in order to inform future climate change program and policy development. It was undertaken by consultants chosen through a selective

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82 DCCEE, op. cit., p. 27.

83 ANAO Audit Report No.5 2011–12, *Development and Implementation of Key Performance Indicators to Support the Outcomes and Programs Framework*, Canberra, 8 September 2011, identified that most entities have scope to improve the development of effectiveness key performance indicators and reporting against them.

84 DCCEE has advised that a number of corporate processes are being amended to include program evaluation as a standard program business practice.

request for proposal arrangement. The interim evaluation work involved data analysis, stakeholder interviews and use of the results of a survey and case studies.

2.21 The interim evaluation report was provided to DCCEE in December 2011.[85] It included analysis of the performance to date of the program against each element of the program objectives, and made 11 key recommendations based on its findings.[86]

Program guidelines

2.22 As outlined in the ANAO's Better Practice Guide, grant program guidelines play a central role in the conduct of effective, efficient and accountable grants administration.[87] To improve the design and administration of grants programs, a key obligation under the enhanced grants policy framework is for all grants programs to have guidelines in place, with the guidelines representing one of the policy requirements that grants must be consistent with in order to be approved under the program.

2.23 To date, three sets of guidelines have applied (July 2008, July 2010 and July 2011) during the course of the NSSP's operation, reflecting policy and administrative changes to the program over this period. The July 2008 guidelines were approved on 17 June 2008 by the then Minister for the Environment, Heritage and the Arts. Under Finance Minister's Instructions issued in December 2007, guidelines for any new grant programs were to be considered by the ERC of Cabinet. However, ERC consideration of the guidelines did not occur.[88]

2.24 In accordance with the CGGs requirements, the NSSP's July 2010 and July 2011 guidelines were approved by Cabinet. For the purposes of the audit, the NSSP's July 2010 and July 2011 guidelines have been assessed against the policy and principles set out in the CGGs and other better practice guidance.[89]

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85 Grosvenor Management Consulting, *National Solar Schools Program Interim Evaluation Report*, 15 December 2011.

86 Findings of relevance to this audit are discussed in Chapter 5, from paragraphs 5.40 through to 5.60.

87 ANAO Better Practice Guide, p. 51.

88 The development and approval of grant program guidelines, including the frequency with which the approval of guidelines did not occur in accordance with enhancements made to the grants administration framework commencing with the December 2007 Finance Minister's Instructions, was examined in ANAO Audit Report No. 36 2011–12, *Development and Approval of Grant Program Guidelines*, Canberra, 30 May 2012.

89 Commonwealth Grant Guidelines, pp. 22–23 and ANAO Better Practice Guide, pp. 59–66.

Both versions of the program guidelines included details on program objectives; determinants of applicant eligibility and funding; eligible project items; application assessment criteria and approval processes; installation requirements; reporting and acquittal arrangements; and compliance and safety requirements.[90]

2.25 In respect to each of the July 2010 and July 2011 versions of the program guidelines, an associated administrative arrangements document available to applicants provided further information, including details for unsuccessful proponents wishing to appeal the Minister's decision not to approve grant funding.[91] The first version of the administrative arrangements document was published in August 2010, the month after the relevant program guidelines were released. The next version was issued in July 2011, the same month that the revised program guidelines were issued.

2.26 The material in the administrative arrangements documents provided important information on the assessment of competing applications, including the weightings applied to each of the selection criteria, that was not otherwise included in the program guidelines. However, including important information of this nature in a document other than the program guidelines does not sit comfortably with the CGGs. In this respect, the CGGs state that:

> Clear, consistent and well-documented grant guidelines are an important component of effective and accessible grants administration. A single reference source for policy guidance, administrative procedures, appraisal criteria, monitoring requirements, evaluation strategies and standard forms, helps to ensure consistent and efficient grants administration.[92]

July 2010 program guidelines

2.27 As outlined in Chapter 1 at paragraph 1.7, Government decisions in July 2010 saw some significant changes made to the NSSP. The key features agreed by the Government for a redesigned NSSP were reflected in the new

[90] DCCEE, *National Solar Schools Program Guidelines July 2011*.

[91] DCCEE, *National Solar Schools Program Administrative Arrangements Document August 2010* and DCCEE, *National Solar Schools Program Administrative Arrangements July 2011*.

[92] Commonwealth Grant Guidelines, p. 22.

guidelines published in July 2010. Significant elements involved:

- capped annual grant funding allocations by state and territory and within this, government and non-government school sectors[93];
- the application of merit-based assessment criteria (value for money[94], educational benefits and environmental benefits);
  - unsuccessful schools would be eligible to reapply for a grant in a subsequent year;
  - DCCEE would provide the Minister with a list of schools proposed to be funded in the annual funding round for approval and announcement[95];
- a $15 000 eligible items limit would apply to schools already having received other Australian Government funding for solar power systems since 1 July 2008, and that could not provide evidence that they had re-scoped their project to remove solar power prior to the date of the announcement of the new arrangements for the NSSP on 15 July 2010[96];
- eligible items for grant funding were revised, with the exclusion of roof, ceiling or wall insulation (in light of safety issues that had emerged with the Australian Government's Home Insulation Program);
- data collection, storage and visualisation systems for renewable energy projects needed to be sourced from an approved components list; and
- the introduction of arrangements for the payment of grants to government schools through an NPA with states and territories, while non-government school grants were to be provided through Block Grant Authorities (BGAs).[97] [98]

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93 This is discussed further under the section Program funding and delivery model, at page 59.

94 In the case of applications from schools in remote locations or low socio-economic areas, adjustments to their value for money (VFM) assessment score were to be made so that they were not disadvantaged in their ability to achieve VFM in comparison to schools in other areas. See DCCEE, *NSSP Administrative Arrangements Document August 2010*, pp. 3–4.

95 Under the NPA on the NSSP the assessment and approval of government school projects is the responsibility of each state and territory, commencing with the 2011–12 funding round.

96 The Department of Education, Employment and Workplace Relations (DEEWR) initially advised that 1820 schools included solar power in their Building the Education Revolution application form, although this proved to be overstated.

97 BGAs are not for profit organisations that have been used by DEEWR to administer capital works funding for non-government schools for over 20 years.

2.28 Nevertheless, other major features of the NSSP remained unchanged, including:

- grant funding of up to $50 000 for schools installing a minimum two kilowatt solar system and other eligible items (and grants of up to $30 000 for schools with non-solar power projects, or systems of less than two kilowatts); and
- grant funding of up to $100 000 for multi-campus schools with a combined campus population of 1000 or more full-time enrolled students for projects involving solar power systems.

2.29 On 14 July 2010, the then Minister for Climate Change, Energy Efficiency and Water announced the reopening of the NSSP, with applications for the 2010–11 funding round opening on 15 July 2010 and closing on 20 August 2010.[99] Available grant funding for the round was capped at $51.6 million.

July 2011 program guidelines

2.30 The July 2011 program guidelines incorporated the following changes to the operation of the program:

- grant funding of up to $50 000 for multi-campus schools (previously, up to $100 000);
- the ability of state and territory education departments to request that the maximum funding amount available to government schools in their jurisdiction be reduced to allow more schools to receive a grant; and
- amendments to some weights in assessment scoring.

2.31 On 1 August 2011, the Parliamentary Secretary for Climate Change and Energy Efficiency announced the opening of the NSSP 2011–12 funding round to applications from 1 August 2011 until 30 September 2011.[100] Available grant funding for the round was capped at $25 million.

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[98] NPA arrangements are discussed later in this report under the section Program funding and delivery model at page 59.

[99] Senator the Hon Penny Wong, Minister for Climate Change, Energy Efficiency and Water, *National Solar Schools program re-opens*, Media Release, 14 July 2010. The Minister's media release was followed up by DCCEE through contacting a range of key stakeholders, including schools, about the NSSP's reopening and the new arrangements.

[100] The Hon Mark Dreyfus QC MP, Parliamentary Secretary for Climate Change and Energy Efficiency, *$25 million for National Solar Schools Program*, Media Release, 1 August 2011.

2.32 The July 2011 program guidelines also apply to the 2012–13 funding round, for which applications opened on 13 February 2012.

Program funding and delivery model

2.33 The two key elements of the program's funding and delivery model involve state and school sector funding allocations and the differing mechanisms that have been used to fund and deliver the program in government and non-government schools.

Funding allocations

2.34 Funding allocations were designed on the basis that over the life of the program, each state and territory, and the government and non-government sectors should receive a share of funding which is consistent with their shares of the national number of schools eligible for an NSSP grant.[101] State shares for government schools have been embedded further through the detailing of indicative funding for the remainder of the program in the NPA on the NSSP.

2.35 While the jurisdictional share is one approach to funding allocation, the reasoning behind this approach compared to other options such as a national funding pool for competitive applications which drew upon the highest value national projects, was not explicitly considered in departmental advice on the redesign of the program.[102] The implications of this in terms of the funding of applications in certain states and sectors that received a low aggregate score in terms of the assessment criteria are further examined in Chapter 4.

Grant funding mechanisms

2.36 The NSSP has operated through a number of funding mechanisms since its commencement. The concurrent operation of these arrangements has added to the managerial complexity of the program.

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[101] Under the NSSP, each year's total funding budget is allocated between government and non-government school sectors based on the proportion of eligible schools in each sector. Funding for government schools and non-government schools in each state and territory is then allocated on a similar proportional basis, taking into account grants already awarded to schools in each state and territory. The intention is that each state and territory (government and non-government sectors) will receive a proportional share of funding over the life of the program.

[102] Prior to the May 2011 decisions in respect to the program, it was expected that every school would over time receive an NSSP grant. However, the May 2011 Budget announced that the NSSP would finish two years earlier than originally planned (30 June 2013) with savings of $156.4 million to be redirected meant that there would be some eligible schools that would never receive a grant under the NSSP.

2.37 Until the NSSP's movement to annual competitive funding rounds in July 2010, the program used two funding mechanisms during its demand-driven design phase:

- individual funding agreements generated by a claim from an eligible school[103]; and
- cooperative funding agreements (CFAs) with state education departments covering a number of government schools.[104]

2.38 At the time of this ANAO performance audit, all projects with grants in 2008–09 and 2009–10 had been completed and the required reports provided, with only a small number of project acquittals outstanding. DCCEE has advised that debt recovery action is being undertaken where there has been a failure to provide the required acquittal documentation.[105]

2.39 The program's redesign to an annual competitive funding round model in July 2010 has seen the establishment of two funding mechanisms for successful applications:

- individual funding agreements with non-government schools; and
- a NPA with state and territory governments for government school projects.

2.40 The level of prescription set out in the two types of funding agreements differs considerably. The Commonwealth has direct oversight and responsibility for grant funding arrangements for non-government school projects. This is reflected in the level of project detail used to hold the grant recipient accountable against specific project features. One off grant payments are made from DCCEE administered funds, once a funding agreement has been signed.

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[103] Some 1479 NSSP government and non-government school projects involving $75.6 million in grant funding have been covered through this funding mechanism.

[104] Some 1148 NSSP government school projects involving $40.2 million in funding to five states (NSW, Queensland, SA, Victoria and WA) have been covered through this funding mechanism. The CFAs set out the schools covered by each agreement, the scope of project work to be undertaken and the timeframes. Payments to the states were against achieved milestones. They were also required to provide various reports and an acquittal declaration to the Commonwealth.

[105] A DCCEE internal audit of the NSSP (KPMG, June 2011) found that of a sample of 36 projects, only five had their funding acquitted. The audit found that the time taken for acquittal of Queensland CFA projects was 541 days (from the date the delegate signed the CFA to the date of final acquittal). Subsequent action by DCCEE addressed the backlog of acquittals for projects funded prior to the 2010–11 funding round.

2.41 By way of comparison, government school projects are being delivered through the states and territories, which have responsibility for all aspects of project implementation under the recently established NPA. Consistent with the reforms introduced in 2009 to federal financial relations, the NPA the Commonwealth entered into with the states and territories on the NSSP focuses on higher level objectives, outcomes and outputs.[106] Nevertheless, the NPA still enables a degree of Commonwealth oversight through state reporting on each funding round; a compliance regime for government school projects; and DCCEE's NSSP web application which is used by states and territories to manage projects and report to the Commonwealth. The Commonwealth Treasury makes payments to state and territory treasuries based on the completion of certain milestones under the NPA. Fifty per cent of each state and territory's annual funding amount is provided once they have provided a list of approved government projects for the funding round. The remaining 50 per cent in funding is to be provided once the Commonwealth has accepted an end of annual funding round report from the state or territory.

Conclusions

2.42 As part of DCCEE's program governance framework, a range of key governance documentation has been developed for the NSSP. In addition, advice on program performance is provided as part of monthly reporting on solar programs to the Parliamentary Secretary for Climate Change and Energy Efficiency and Minister for Climate Change and Energy Efficiency. Effective program oversight has been further promoted through the conduct of a comprehensive interim evaluation of the extent to which the NSSP has achieved its objectives to date.[107]

2.43 Program objectives were developed when the NSSP was first established as a demand-driven grant program, and remain unchanged. Significant work was undertaken to redesign and implement the changes to move the program from a demand-driven arrangement to a competitive, merit-based selection process, although the program objectives were unchanged.

[106] Council of Australian Governments, *National Partnership Agreement on the National Solar Schools Program* (Victorian government signed copy, 28 November 2011), p. 4.

[107] A final evaluation, at the conclusion of the program, is also to be conducted.

2.44 To address the matter of over-subscription that led to the demand-driven NSSP being suspended, the redesigned program involved an annual cap on program funding with funding to be awarded to those applications on the basis of merit. This has proven to be an effective response.

2.45 In addition to the annual funding cap, each year's total funding budget is allocated between states and territories based on the proportion of eligible schools in each sector. Funding for government schools and non-government schools in each state and territory is then allocated on a similar proportional basis, taking into account grants already awarded to schools in each state and territory. The intention was that each state and territory (and government and non-government sectors) will receive a proportional share of funding over the life of the program.

2.46 Together with an associated administrative arrangements document that has also been published, the July 2010 published program guidelines provided generally clear and effective guidance to schools and other stakeholders on the redesigned NSSP and its operation. The program guidelines were updated and re-published in July 2011 to reflect further changes to the design and operation of the program. A further version of the separate (but also published) administrative arrangements document was released at the same time. However, including important program information in a document other than the program guidelines does not sit comfortably with the CGGs.[108] In this respect, as outlined in a cross-portfolio ANAO audit on the development and approval of grant program guidelines[109]:

- where practical, agencies should seek to develop a single program guidelines document that represents the reference source for guidance on the grant selection process, including the relevant threshold and assessment criteria, and how they will be applied in the selection process; or
- where more than one document is produced and each outlines important aspects of the grant selection process, it is important that

[108] In this respect, the CGGs state (on page 22) that: 'Clear, consistent and well-documented grant guidelines are an important component of effective and accessible grants administration. A single reference source for policy guidance, administrative procedures, appraisal criteria, monitoring requirements, evaluation strategies and standard forms, helps to ensure consistent and efficient grants administration.'

[109] See further in ANAO Audit Report No.36 2011–12, *Development and Approval of Grant Program Guidelines*, Canberra, 30 May 2012, pp. 88–89.

agencies recognise that collectively, all these documents constitute the program guidelines for the purposes of the CGGs and, accordingly, should collectively be subject to the grant program approval requirements and made available to stakeholders.

3. Application Assessment

This chapter examines the assessment of applications received in the 2010–11 and 2011–12 funding rounds.

Introduction

3.1 In the 2011–12 NSSP funding round almost 2000 schools applied for grants, with 784 school projects successful in obtaining NSSP funding. In the earlier 2010–11 funding round almost 2200 schools applied for grants, with 1226 school projects successful in obtaining NSSP funding.

3.2 In order to demonstrate fairness and to select those projects that represent the strongest value for money, it is essential that all applications are assessed consistently against the eligibility and selection criteria for the program. It is also important that the assessment and selection process is transparent and free from the risk of claims of political or other bias.

3.3 Against this background, clear and transparent administrative arrangements have been developed and implemented for the scoring of eligible applications lodged by schools. Of particular note was that, in addition to the published program guidelines and the related administrative arrangements document (see earlier at paragraph 2.24), in August 2010 DCCEE finalised an internal document that provided further detail on how applications would be scored against each assessment criterion, leading to an overall score and ranking within each state and sector. A similar document was finalised in October 2011 for the assessment of applications for the 2011–12 funding round. Further, in February 2012, DCCEE documented how the scoring algorithm had been applied in the 2010–11 and 2011–12 funding rounds.

3.4 Apart from some changes in the scoring of applications, the most significant change in the assessment arrangements between the 2010–11 and 2011–12 funding rounds related to state governments assuming responsibility for the assessment of applications from government schools in their state. DCCEE officials continued to assess applications from non-government schools. The threshold and eligibility criteria were the same for all applications.

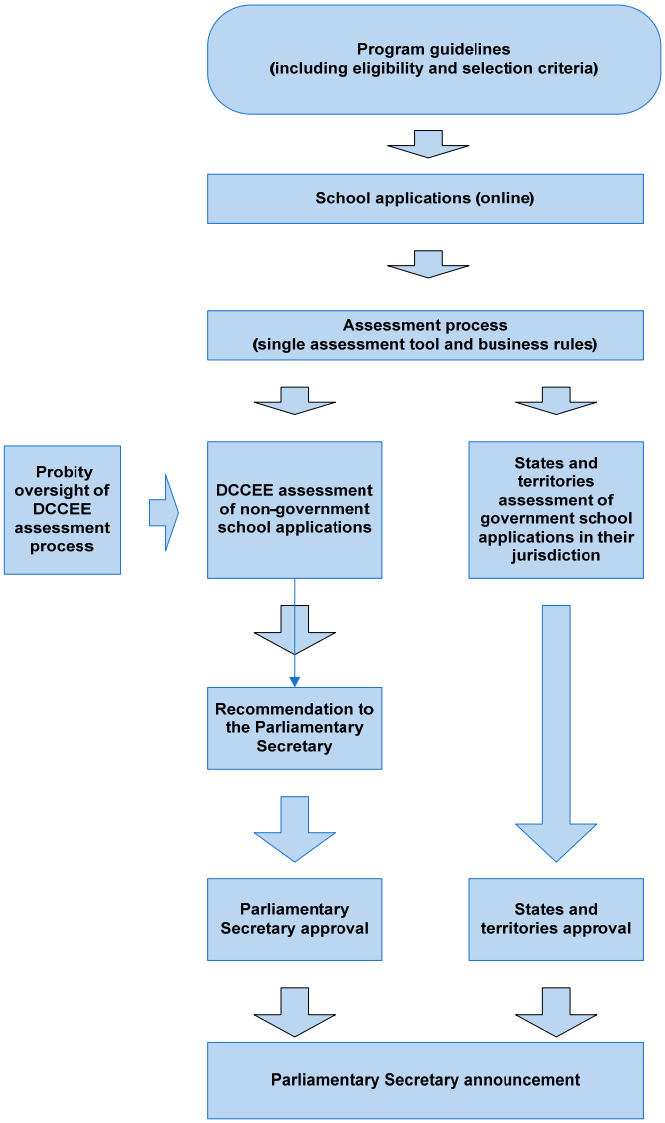
3.5 In examining DCCEE's assessment of NSSP applications, the ANAO analysed the development and application of the program selection criteria

and the operation of scoring arrangements against each of the criteria for the 2010–11 and 2011–12 funding rounds.

3.6 Against this background, Figure 3.1 outlines the main elements of the NSSP assessment and selection process for the 2011–12 funding round.

Figure 3.1

2011–12 funding round application, assessment and selection process



Source: ANAO analysis of information provided by DCCEE.

Applications

3.7 Schools are required to register with the program in order that advice can be provided by DCCEE on their eligibility for funding and the funding limit available to the school. At the completion of the 2011–12 funding round, more than 8000 schools, or around 85 per cent of all eligible schools, had registered with the program.

3.8 Following the eligibility advice from DCCEE, schools are then in a position to seek quotes from suitably qualified designers and installers for major components and to prepare project plans.

3.9 Once the annual grant funding round opens, schools can lodge an online application form via the NSSP website. An examination of the website prior to each funding round shows extensive guidance to assist schools in completing the application form. This advice typically cross-references the NSSP guidelines and other supporting material.

3.10 ANAO's Better Practice Guide notes[110] that an important consideration in establishing the due date for applications is whether the time allowed between the calling of applications and the deadline for submission is adequate to provide potential applicants with a reasonable opportunity to develop proposals that are robust and comprehensively respond to the published guidelines. In this respect, the period for which the NSSP has been open to school applications has progressively increased with each funding round; from five weeks in the first funding round, nine weeks in the second funding round and 14 weeks in the final 2012–13 funding round.

Selection criteria

3.11 As outlined in ANAO's Better Practice Guide, selection criteria form the key link between a program's stated objectives and the outcomes that are subsequently achieved from the funding provided.[111] Accordingly, they are important in attracting good potential schools to apply to the program and encouraging schools that are unlikely to be successful not to invest unnecessary resources in preparing an application.

3.12 In this context, the selection criteria fall into two main groups, as follows:

[110] ANAO, Better Practice Guide, p. 60.

[111] ibid., pp. 61–62.

- threshold criteria are the criteria that a proposal must satisfy in order to be considered for funding. These are also variously expressed as 'eligibility criteria', 'mandatory criteria', 'compliance criteria' or 'gateway criteria'; and
- assessment criteria are the criteria against which all eligible, compliant proposals will be assessed in order to determine their merits against the program objectives and, for competitive programs, other competing applications.[112]

Threshold criteria

3.13 The NSSP guidelines detail that government schools are eligible for a grant if they are officially recognised by their state or territory government education authority as a school providing primary and/or secondary education. Non-government schools are eligible for a grant if they are in receipt of Australian Government grants for recurrent expenditure under the *Schools Assistance Act 2008*.[113] A school's eligibility in this regard is established by the program from data supplied by the Department of Education, Employment and Workplace Relations.

3.14 A further threshold for grant funding in the 2010–11 application round was that proposed projects could only cover eligible items and activities as detailed in the guidelines. The inclusion of ineligible items in the application resulted in the project being deemed ineligible. For the 2011–12 funding round, changes in the handling of ineligible items and activities had a less significant impact on a proposed project's eligibility. Where an application included an ineligible item or activity, the item would not be considered for funding, with the application assessed on the basis of eligible items only.[114]

3.15 Finally, in tandem with the above threshold criteria, the maximum level of NSSP grant funding for a school project is determined by:

- the items in the project (up to $50 000 grant funding for installing a minimum two kilowatt solar power system, otherwise up to $30 000 for

[112] ibid.

[113] Under the July 2008 guidelines, government and non-government schools' eligibility for a grant required that they are state registered primary and/or secondary schools and eligible to receive Australian Government general recurrent grants payments under the *Schools Assistance (Learning Together - Achievement Through Choice and Opportunity) Act 2004*.

[114] DCCEE, *National Solar Schools Program Administrative Arrangements July 2011*, p. 6.

installing a solar power system less than two kilowatt or no solar power system);

- whether approval has been provided under any other Australian Government program for a school to receive funding for a solar power system since the NSSP commenced (up to $15 000 in NSSP funding was available in these circumstances);
- any previous funding under the Green Vouchers for Schools program; and
- state and territory request on the maximum funding amount available to government schools in their jurisdictions.

Assessment criteria

3.16 Under the demand-driven period of the program (July 2008 to October 2009), the assessment framework outlined in the program guidelines simply required applicants to seek value for money for the grant, and recommended that applicants contact at least three suppliers for the major components of the project. The NSSP's program management developed cost benchmarks for solar power systems and water tanks to assist in its assessment of projects' value for money.

3.17 With the establishment of a competitive merit-based funding round model for the program in July 2010, a more extensive assessment framework was put in place, which is outlined in the program guidelines. More specific details about the assessment criteria have been included in documentation to assist schools in preparing their applications. Table 3.1 summarises the assessment criteria published for use in the 2010–11 and 2011–12 funding rounds.

Table 3.1

Summary of funding round assessment criteria and the relevant sub-criteria

Assessment criteria	2010–11 funding round sub-criteria	2011–12 funding round sub-criteria
Value for Money *(Total weighting 45%)*	The cost of items will be assessed for value for money by comparing them to the costs of items in the same funding round.	The cost of items will be assessed for value for money by comparing them to the costs of items in other applications.
	The extent to which the school demonstrates that costings have been determined through a competitive market process.	Identical sub-criteria to 2010–11.
	The extent to which the school has demonstrated a financial contribution to the project.	Sub-criteria removed for the 2011–12 funding round.[115]
Environmental Benefit *(Total weighting 40%)*	The environmental benefit of each item, or group of items, in a school's project will be assessed.	Identical sub-criteria to 2010–11.
	Evidence that the project has the capacity to deliver the maximum environmental benefit based on the recommendations of a recent independent professional environmental audit.	Identical sub-criteria to 2010–11.

[115] In the 2010–11 funding round assessment, this sub-criteria's score was based on the percentage of the community contribution compared to the total grant amount. When validating the rank list of projects, DCCEE found that the weighting for the sub-criteria was excessive as it resulted in schools with better value for money being ranked below schools with poorer value for money but large community contributions. As a result, the score was adjusted from 25 per cent of the value for money score to 10 per cent, equivalent to the weighting provided for an energy audit report. This change resulted in schools with better value for money being scored more highly and as a result was seen by DCCEE as an appropriate change to the scoring.

Assessment criteria	2010–11 funding round sub-criteria	2011–12 funding round sub-criteria
Educational Benefit *(Total weighting 15%)*	The extent of the educational activities planned in association with the project, including whether the school: a) is registered with the Australian Sustainable Schools Initiative – participation in a national sustainability program b) is incorporating the project into sustainability education material through lesson plans c) is holding an open day or launch event to provide educational opportunities for the local community as well as the students and teachers at the school d) any other educational activities related to the project.	Identical to 2010–11 sub-criteria with the exception of: • sub-criterion (b) which was amended to remove the words 'through lesson plans'; and • sub-criterion (d) which was amended to add the words 'has a commitment to' at the beginning of the sub-criterion.

Sources: DCCEE, *National Solar Schools Program Administrative Arrangements July 2011*, p. 2 and DCCEE, *National Solar Schools Program Administrative Arrangements Document August 2010*, p. 3.

3.18 The key output of the application of the assessment criteria to competing applications was the calculation of an assessment score. For the 2010–11 funding round, the maximum assessment score was 1000, calculated with two digits precision. For the 2011–12 funding round, the maximum assessment score was 130, calculated with three digits precision.

Schools located in remote or low socio-economic areas

3.19 In announcing that applications for the 2011–12 funding round were open, the Parliamentary Secretary for Climate Change and Energy Efficiency stated that:

> Applications are assessed using merit-based criteria, meaning schools have to demonstrate value for money, as well as environmental and educational benefits. Applications from schools located in remote or low socio-economic areas will receive additional weighting to allow remaining funding to be directed to schools most in need.[116]

[116] The Hon Mark Dreyfus QC MP, Parliamentary Secretary for Climate Change and Energy Efficiency, *$25 million for National Solar Schools Program*, Media Release, 1 August 2011.

3.20 Consistent with this announcement, both the July 2011 version of the program guidelines and the related administrative arrangements document stated that:

> Additionally, to allow funding to be directed to schools in most need, applications from schools located in remote or low socio-economic areas will receive additional weighting.[117]

3.21 However, both the guidelines and the administrative arrangements document continued to state that there would be the existing three assessment criteria (of value for money, environmental benefit and educational benefit) and did not outline the way in which schools located in remote or low socio-economic areas would receive additional weighting, or the extent of any such weighting.

3.22 The approach taken by DCCEE in assessing applications for the 2011–12 funding round was to, in effect, add a fourth assessment criterion. In addition to being allocated a score of up to 45 points for value for money, up to 40 points for environmental benefits and up to 15 points for educational benefits, each application was allocated a score of up to 30 points according to whether it was located in a remote or low socio-economic area. The factors taken into account in arriving at this score were as follows:

- schools located in the lower 30 percentile of the Australian Bureau of Statistics' *Index of Relative Socio-economic Disadvantage* were to receive a maximum of an extra 29.5 points on a sliding scale (those schools with a percentile of 30 were to receive 15 points and those with a percentile of 1 were to receive the maximum of 29.5 points);
- those schools located in remote areas (as defined in the Accessibility/Remoteness Index of Australia) were to receive 15 points and those located in a very remote area were to receive 30 points; and
- schools that were identified as both remote/very remote and located in a low socio-economic area would have their weighting points added,

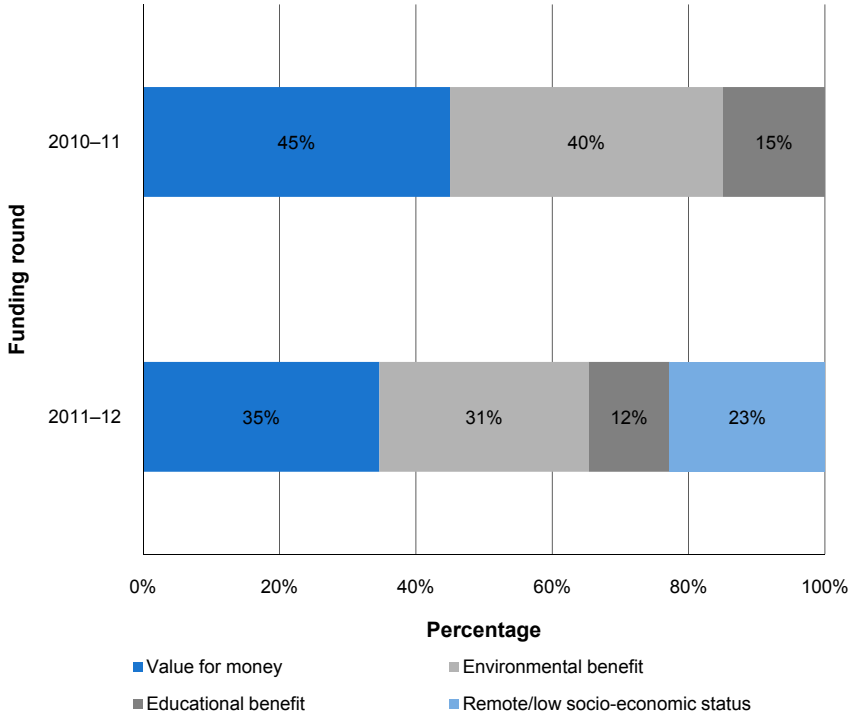
[117] The administrative arrangements document also outlined that preference would be given to remote schools and those located in low socio-economic areas in circumstance where a group of applications receive the same score, and that score crosses over the funding cut-off point for that state and sector. Specifically, in these circumstances, a tie break would be applied to resolve the issue, using a predetermined framework with the first two factors relating to schools located in low socio-economic areas being ranked higher than other schools and then schools located in remote or very remote areas being ranked higher than other schools.

with a cap of 30 points on the total score that could be achieved under this criterion.

3.23 In effect, the approach taken reduced the weighting for the three published assessment criteria. Specifically, as illustrated by Figure 3.2, value for money factors were now weighted at 35 per cent (rather than 45 per cent), environmental benefits were now weighted at 31 per cent (rather than 40 per cent) and educational benefits were now weighted at 12 per cent (rather than 15 per cent). A school's assessed level of remoteness/low socio-economic status was rated at 23 per cent, making it a more important consideration in the selection of successful applications than the assessed level of educational benefits.

Figure 3.2

Relative importance of factors used to rate and rank applications



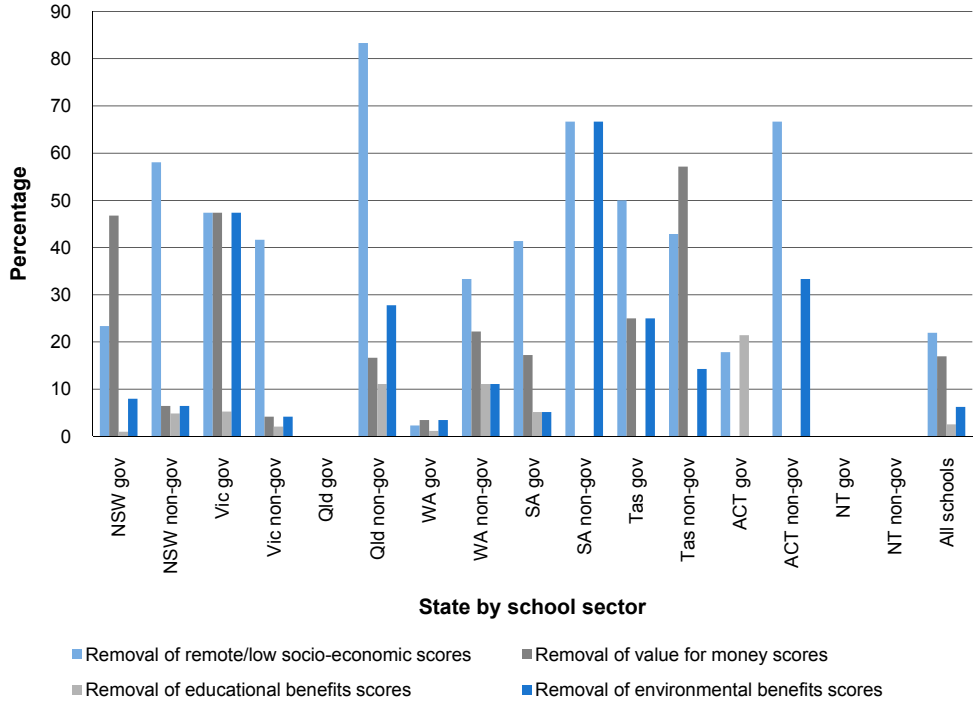
Source: ANAO analysis of DCCEE data.

3.24 The significant role played by the remote/low socio-economic status in the selection of projects for funding in the 2011–12 round is illustrated by Figure 3.3. On average, across all states and sectors, nearly 22 per cent of the

approved applications would not have been funded had the assessment criteria not included one for remote/low socio-economic status weighted at 23 per cent of the total score. This figure would have been higher except for the situation in the government school sectors in Queensland, Western Australia and the Northern Territory, where all or almost all applications were awarded funding. As is also illustrated by Figure 3.3, other criteria did not, in general, have the same degree of effect on the funding outcomes in most states and sectors.

Figure 3.3

Percentage of approved school projects that would not have been approved for funding with the removal of each assessment criteria score in the 2011–12 funding round



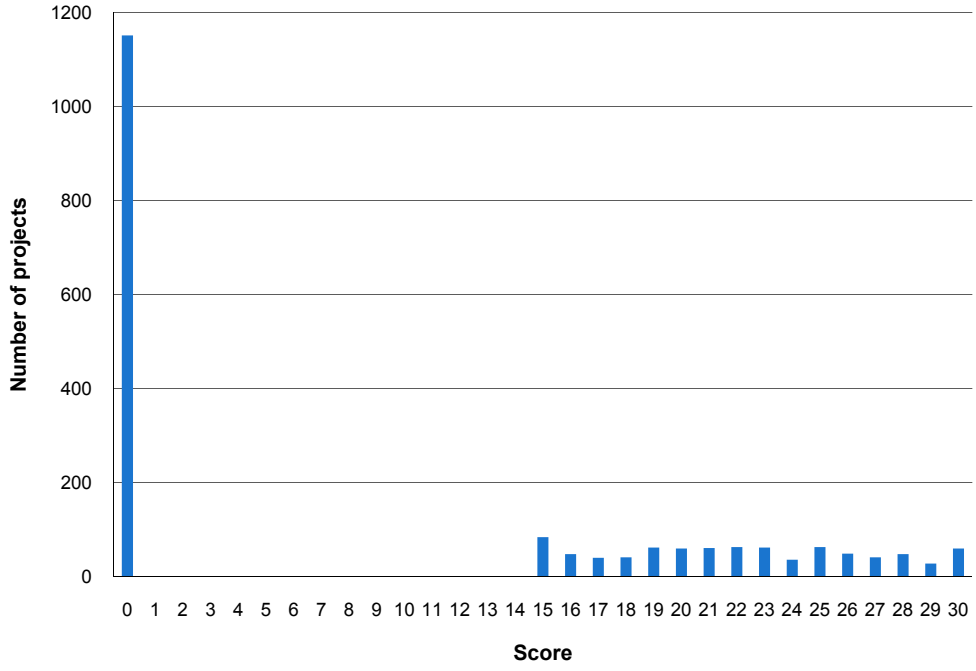
Source: ANAO analysis of DCCEE data.

3.25 A significant factor in the effect the remote/low socio-economic criterion had on the assessment results related to the scoring approach adopted. By design, schools could either receive a high score against this criterion, or no score against the criterion. Specifically, it was not possible for a

school to record a score of between 1 and 14. Figure 3.4 illustrates that the actual assessment outcomes reflected this design feature.[118] By way of comparison, scores against the other three criteria were able to be more evenly distributed, and this was reflected in the assessment scoring results.

Figure 3.4

Distribution of school project scores against the remote/low socio-economic status criterion in the 2011–12 funding round



Source: ANAO analysis of DCEE data.

3.26 Against this background, and consistent with the seven key principles of grants administration outlined in the CGGs, the published program guidelines and administrative arrangements document should have clearly identified that four criteria were being applied to the assessment of applications, with the relative weight of the four criteria being clearly communicated to schools.

[118] Nearly 58 per cent of eligible applications received a score of zero against this criterion.

Assessment scoring

3.27 Applications are scored against each criterion. These individual scores are then scaled to reflect the overall rating of each criterion. For the 2010–11 funding round, each eligible application was allocated a score out of a maximum of 1000. For the 2011–12 funding round, a different scale was used, with each application allocated a score out of a maximum of 130.

3.28 Eligible applications were then ranked on the basis of their assessment score and funding was granted on the rankings (highest to lowest) until the funding allocation for the state and sector was fully committed.[119] A ranked reserve list for eligible schools below the funding allocation line was also produced, to be drawn upon as necessary to ensure, as far as possible, that the annual funding allocations are fully committed. Against this background, the approach taken to the scoring of eligible applications against each criterion was the key input to the implementation of a merit-based assessment process.

Assessment process

3.29 A significant proportion of the NSSP assessment process is automated. Specifically, the NSSP's Web Application Assessment module automatically calculates the value for money, environmental benefit and components of educational benefit scores based on data provided by schools in their applications. A remaining component of the project's expected educational outcomes is calculated through manual assessment.[120]

3.30 In addition to examining controls over system changes and the security arrangements, ANAO analysed the business rules and guidelines in place for the assessment module. A model was then created to replicate the business rules and guidelines. Through this process ANAO was able to confirm that the scores and rankings for the schools had been calculated in accordance with the documented assessment framework.

[119] Applications are only assessed against those in the same state and school sector so that, for example, a non-government school in Victoria is only assessed against other Victorian non-government schools.

[120] In addition, manual checks are undertaken on a number of areas of application data to confirm accuracy and compliance with the NSSP guidelines (for example, that the project only covers eligible items or activities). The Web Application Assessment module also identifies data for manual checking which appears to be incorrect and could impact on the assessment score.

Government school project assessments

3.31 As part of the NSSP's NPA arrangements, the 2011–12 funding round represented the first time states were responsible for the assessment of government school projects in their jurisdiction. A number of measures were put in place to ensure a consistent national approach to project assessment including:

- DCCEE training of state assessors on the merit assessment process, web application assessment module and operating procedures;
- all government school assessments being conducted through DCCEE's Web Application Assessment module[121], and viewable to DCCEE;
- the provision of common documentation on business rules and standard operating procedures to support the assessments; and
- a formally submitted list of approved and reserve list school projects from the state to DCCEE, with a state official expected to certify that applications had been assessed using the Web Application Assessment module.

Assessments against the value for money criterion

3.32 As noted in Table 3.1 and Figure 3.2, the value for money criterion was the highest weighted of the assessment criteria both for the 2010–11 funding round and the 2011–12 funding round. The major element of the assessment against this criterion (involving 87 per cent of the scoring points available under this criterion[122]) involved comparing the major cost components of each application with the average cost of other schools planning to install similarly-sized items.[123] In this respect, applications where the costs were:

- more than one standard deviation above the average were to be awarded no score;

[121] In April 2012, DCCEE advised ANAO that: 'states chose to use the Commonwealth assessment tool (which they played a role in developing) as part of the NPA negotiations. This prevented them from having to develop their own processes. States could have chosen to develop their own method as long as this was consistent with the NSSP.'

[122] The remainder of the score against the value for money criterion was determined according to the number of quotes that had been obtained (three quotes provided maximum points) or where a tender process had been employed (in which case maximum points were awarded). In addition, for the 2010–11 funding round, points were also awarded depending on the extent of any partner contributions to the cost of the project.

[123] For the 2011–12 funding round, modified 2010–11 funding round averages were used.

- more than one standard deviation below the average were to be awarded the maximum score; and
- within one standard deviation of the average were to receive a score on a sliding scale.

3.33 This approach was adopted for the four most common eligible items applied for by schools being solar power systems, solar/heat pump hot water systems, rainwater tanks and energy efficient lighting. However, for the 2.5 per cent of applications that did not apply for any of the four most common eligible items, the approach taken by DCCEE was to award the application the mid-point of the available score for those other items.[124] Schools were not advised of this situation in either the published program guidelines or the associated administrative arrangements document. DCCEE's documented rationale for this approach, as outlined in its internal document on the assessment process, was as follows:

> We are unable to assess value for money for these items due to the small number of schools that install them.

3.34 However, there were other ways open to DCCEE to assess whether the costs of an application were reasonable. For example, there are construction industry publications available that provide benchmark prices, for comparative purposes, including in respect to eligible items for NSSP funding (such as ceiling fans). It is also possible to obtain expert advice (such as from a quantity surveyor) as to whether the stated cost of items for which funding is being sought is reasonable in the circumstances. If these steps were not seen by DCCEE as reasonably practical, then it would have been consistent with the principles for grants administration outlined in the CGGs for the published program information to have clearly articulated to schools that schools seeking funding for certain items were unable to achieve a maximum value for money score.

3.35 Against this background, ANAO analysis is that the approach taken to assessing the value for money offered by applications seeking funding for items for which an 'average' score was allocated had an adverse impact on the ability of such applications to secure funding. In this respect, relatively few projects in these categories have been approved for funding.

[124] Approximately 20 per cent of applications applied for one or more of the four most common eligible items as well as other items which received mid-point scores.

3.36 A noteworthy feature of the scoring against the value for money criterion was the significant difference in performance by government schools compared with non-government schools. For example, in respect to the 2011–12 funding round:

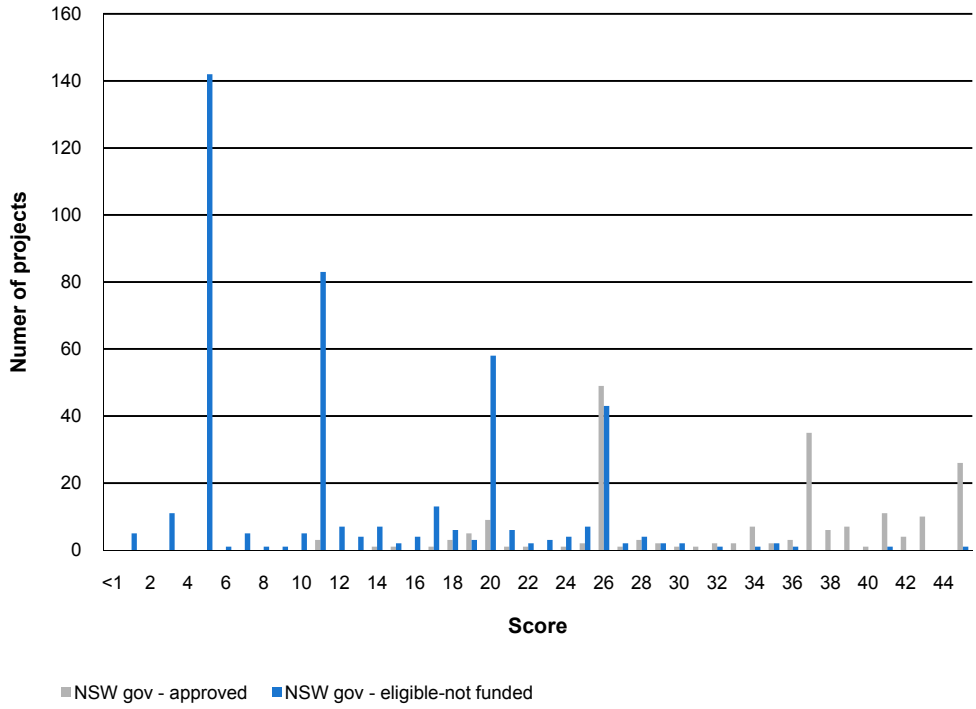
- the significant majority (77 per cent) of non-government schools achieved a score in the 80th percentile or higher, but only 39 per cent of government schools scored at this same high level; and
- one-third of government schools scored less than half of the maximum attainable under the value for money criterion[125], with fewer than eight per cent of non-government schools scoring this low.

3.37 Differences in value for money scores for government schools were particularly evident in New South Wales. This is illustrated by Figure 3.5. In particular, Figure 3.5 highlights the benefits to the Australian Government of explicitly addressing value for money when assessing and ranking eligible applications. Specifically, 94 of the 201 (47 per cent) New South Wales government schools that were approved for funding in the 2011–12 round would not have been successful had the value for money criterion not been included in the design of the program.

[125] This was most particularly the case in respect to New South Wales government schools, where nearly 61 per cent of applications in respect to government schools in that state achieved a value for money score below half of the maximum that was attainable.

Figure 3.5

Distribution of New South Wales government school project scores against the value for money criterion in the 2011–12 funding round



Source: ANAO analysis of DCCEE data.

3.38 Paragraphs 5.20 to 5.22 analyses the relative costs between government schools and non-government schools for solar power systems[126], the single largest item on which NSSP funding has been spent.

Assessments against the environmental benefit criterion

3.39 Scoring of eligible applications against the environmental benefit criterion was designed and implemented in a way that favoured projects with greater environmental benefits over those that could be expected to provide less benefit. For example, the environmental benefit of applications that involved the installation of solar power systems was assessed by calculating the amount of energy, in kilowatt hours, that the system was expected to

[126] In the 2011–12 funding round, there was only an average $145 (around three per cent) cost difference per kilowatt in favour of non-government schools, where government and non-government schools were planning to install 5 to 10 kilowatt solar power systems.

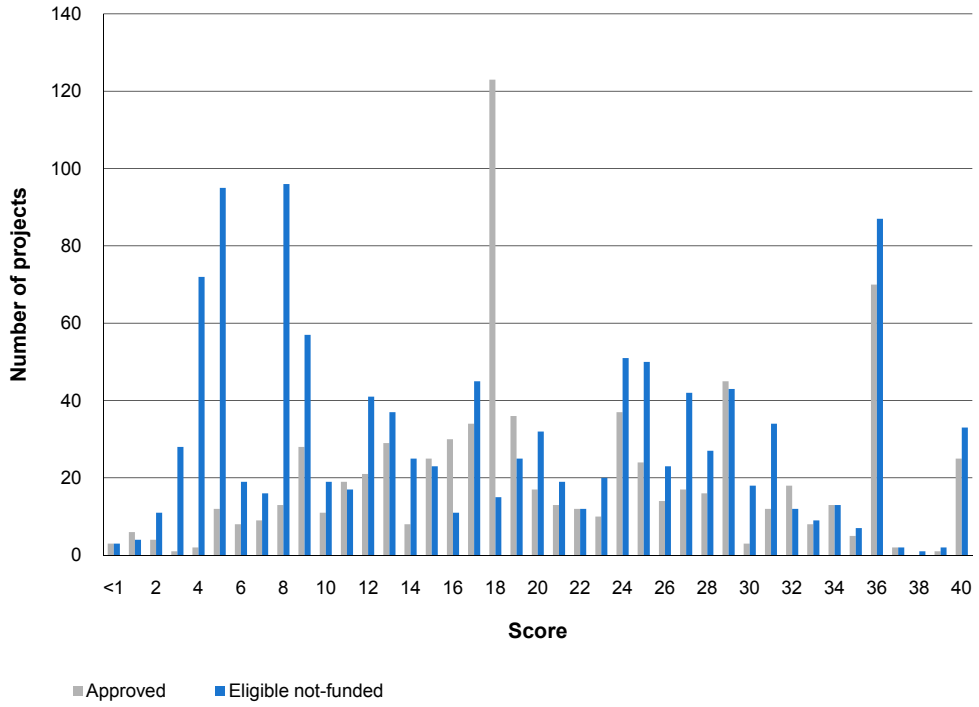
produce. In turn, this depended upon the size of the system (bigger systems produce greater power) and the geographical location of the school.[127]

3.40 In both the 2010–11 and 2011–12 funding rounds, scores against the environmental benefit criterion were distributed across the range of possible scores (see Figure 3.6 in respect to the 2011–12 funding round). This indicates that the scoring against this criterion was effective in discriminating between eligible applications in terms of the environmental benefits they offered. However, Figure 3.6 also illustrates that high scores against the criterion did not necessarily translate to a greater likelihood that an application would be successful, or that a low score would necessarily reduce the application's likelihood of being successful. As is outlined further in Chapter 4, this was due in large part to the effect of the state/sector funding allocations which meant that, in states/sectors where there were insufficient or barely sufficient applications to fully allocate the available funding, all or nearly all applications were awarded funding.

[127] The Office of the Renewable Energy Regulator (ORER) has determined four zones in Australia based on climate and solar radiation levels and has defined each zone by reference to the postcodes contained in it. These zones were used to calculate the amount of energy that could be produced by the solar power system that was the subject of an eligible application.

Figure 3.6

Distribution of school project scores against the environmental benefit criterion in the 2011–12 funding round



Source: ANAO analysis of DCCEE data.

Assessments against the educational benefit criterion

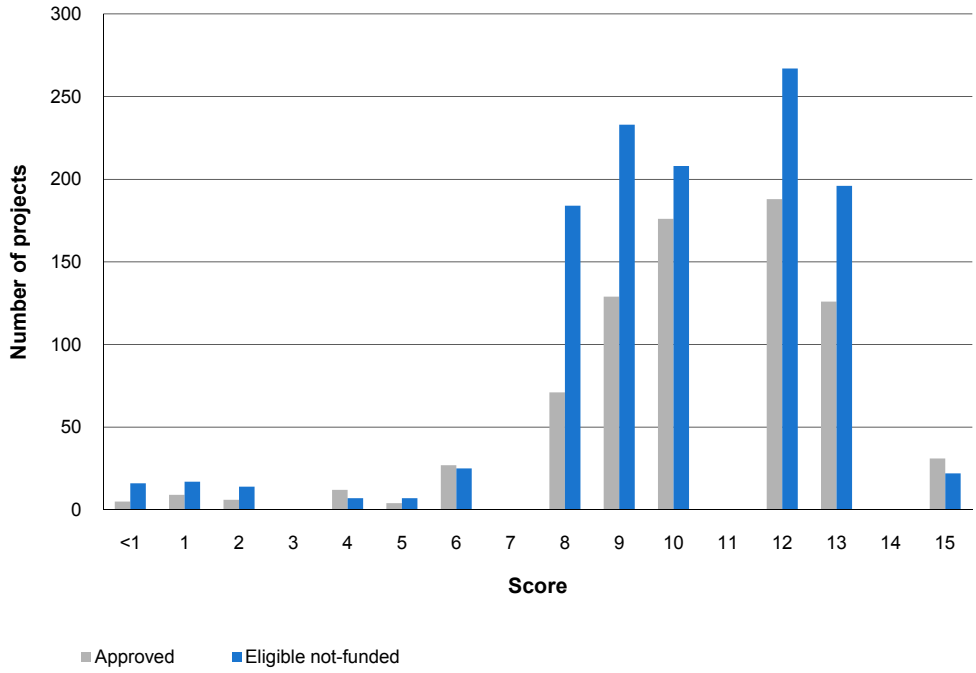
3.41 The published guidelines outlined that applications would be more competitive where they 'strongly demonstrate how the proposed measures will assist students to improve their understanding of climate change and renewable energy'. Compared to assessments of value for money and environmental benefits, data to support an assessment against the educational benefits criterion was more of a challenge to identify and score. In this respect, the approach taken involved allocating 'points' according to whether the school is registered with the Australian Sustainable Schools Initiative[128], advice from schools concerning the content of their lesson plans, the extent of any events planned as a way of promoting the environmental and educational benefits of their NSSP project and any other activities a school advised that it

[128] The Australian Sustainable Schools Initiative is detailed further at footnote 220.

planned to undertaken to achieve the project's educational outcomes. In this context, Figure 3.7 shows that nearly 90 per cent of scores against the educational benefits criterion in the 2011–12 funding round were clustered between a score of eight (53 per cent of the maximum) and 13 (87 per cent of the maximum).

Figure 3.7

Distribution of school project scores against the educational benefit criterion in the 2011–12 funding round



Source: ANAO analysis of DCCEE data.

Conclusions

3.42 Overall, the assessment approach for the NSSP was consistent with the preference expressed in the CGGs for competitive, merit-based selection processes based upon clearly defined selection criteria to be used in Commonwealth grants programs.[129]

3.43 The program guidelines outlined the program eligibility requirements. Together with an associated administrative arrangements document that was

[129] Commonwealth Grant Guidelines, p. 29.

also published, the guidelines also outlined that three assessment criteria would be applied. Each eligible application was to be scored with the aggregate score against all criteria to be used to rank eligible applications. Both the guidelines and the administrative arrangements document outlined that this merit-based, competitive assessment process would be used to determine which applications best met the assessment criteria and would be offered funding (within each state and sector).

3.44 Both the 2010 and 2011 program guidelines stated that there were three assessment criteria: value for money; environmental benefit; and educational benefit. The nominated assessment criteria were directed at the identification of applications that both represented value for money and could be expected to best contribute to the achievement of the program objectives (within the limits of the amount of funding allocated to the government and non-government school sectors in each state). This was further aided by the department publishing, through the administrative arrangements document, weightings for each of the assessment criteria, thereby providing potential applicants with a clear understanding of the relative importance to the program of the factors that will be taken into account in selecting the successful applications.[130]

3.45 The inclusion of a criterion for value for money demonstrated the benefits of administering agencies explicitly considering this matter in the assessment of applications to grant programs.[131] In this respect, a noteworthy feature of scoring against the value for money criterion was the considerably better performance by non-government schools compared with government schools. This had a significant effect on the 2011–12 funding round outcomes in the New South Wales government sector (the state with the largest allocation of funding in that year) where nearly half of the successful applications would not have been awarded funding had value for money not been included as an assessment criterion. In other words, the assessment process favoured those applications that had demonstrated better value for money. However, the

[130] The publication of weightings also helps in situations, such as with the NSSP, where a program has an objective with a number of elements. In this respect, the published assessment score weightings emphasised the importance of environmental benefits (weighted at 40 per cent of overall score) over educational benefits (weighted at 15 per cent of overall score). The remaining published criteria related to value for money, which was weighted at 45 per cent of the overall score.

[131] This issue has been raised in a number of ANAO audit reports. See, for example, ANAO Audit Report No. 7 2011–12, *Establishment, Implementation and Administration of the Infrastructure Employment Projects Stream of the Jobs Fund*, Canberra, 22 September 2011 and ANAO Audit Report No. 27 2011-12, *Establishment, Implementation and Administration of the Bike Paths Component of the Local Jobs Stream of the Jobs Fund*, Canberra, 20 March 2012.

published program materials did not inform schools that applications for other than the four most common eligible items applied for by schools were unable to achieve a high score against this criterion.

3.46 A significant change was made to the assessment criteria for the 2011–12 and 2012–13 funding rounds. Specifically, the guidelines were revised to state that, in selecting the successful applications, additional weighting would be given to applications from schools located in remote or low socio-economic areas so as to allow remaining funding to be directed to schools most in need. However, the extent of this weighting was not made clear in any of the published material. The approach taken meant that there were four assessment criteria used in the 2011–12 funding round examined by ANAO (the published program guidelines had continued to state that there were three criteria). A school's remoteness/low socio-economic status was the third most heavily weighted criterion (higher than educational benefit) with this relatively heavy weighting having a reasonably significant impact on the selection of successful applications. Further, given the nature of this criterion and the scoring approach adopted, the impact it had on the selection of successful applications was greater than any of the other criteria.

Recommendation No.1

3.47 To enhance its administration of grant programs, ANAO recommends that the Department of Climate Change and Energy Efficiency clearly identify in the published program guidelines:

(a) all assessment criteria and, where relevant, the relative weighting applying to each of these criteria; and

(b) any categories of applications, or features of individual applications, that are to be preferred or otherwise ranked more highly in the assessment process.

3.48 **DCCEE response:** Agreed. DCCEE advised ANAO that:

> With reference to (a), the Administrative Arrangements published with the Guidelines specifies that applications are assessed based on value for money (45 percent), environmental benefit (40 percent) and educational benefits (15 percent). Further, the 2011–12 Guidelines and Administrative Arrangements specify that extra weighting will be applied for low socio-economic and remote school applications to direct remaining funding to schools most in need. The Department recognises that incorporating the percentage weighting allocated to schools in most need in the Guidelines would have provided greater clarity to program participants.

Secondly, in regard to (b), the Department acknowledges that, where applicable, 'scoring limits' applied to less common eligible items will be published in future program guidelines.

3.49 For the 2010–11 and 2011–12 funding rounds examined by ANAO, a robust and appropriately documented assessment process was implemented. In this respect, school applications were assessed in accordance with the published program guidelines, the published administrative arrangements document and internal departmental scoring procedures.[132] Eligible applications were scored against each criterion, and an overall score allocated (out of a maximum of 1000 in the 2010–11 funding round, and out of a maximum of 130 in the 2011–12 funding round). Eligible applications were then ranked in each state and sector on the basis of their overall assessment score.

[132] An important element in the assessment of applications was use of DCCEE's Web Application Assessment module. This application calculated the value for money, environmental benefit and components of educational benefit scores based on data provided by schools in their applications.

4. Decision-making and Funding Distribution

This chapter examines the ranking of eligible applications and the related processes by which funding decisions were made in the 2010–11 and 2011–12 funding rounds.

Introduction

4.1 ANAO's Better Practice Guide notes that an important element in designing a robust governance framework for a grant program is obtaining clarity as to who will be undertaking the role of decision-maker in relation to the awarding of grants.[133] In this respect, in order to clearly define program roles and responsibilities, and avoid unnecessary processes, the question of who will be the decision-maker, and how compliance with the associated statutory and policy obligations will be achieved in a cost-effective manner, is best considered (and documented) at an early stage.

4.2 The published program guidelines have clearly identified the decision-making arrangements for the NSSP. Specifically:

- for the 2010–11 funding round, the July 2010 guidelines stated that the Minister for Climate Change and Energy Efficiency had 'the final approval following consideration of each application round's assessments'; and
- the July 2011 guidelines, which apply to the 2011–12 and 2012–13 funding rounds, state that:

  The Minister for Climate Change and Energy Efficiency is responsible for approving grant funding under the National Solar Schools Program for non-government schools.

  The approval of funding for government schools is outlined in the National Partnership Agreement for the delivery of the National Solar Schools Program.[134]

[133] ANAO, Better Practice Guide, op. cit., p. 27.

[134] That Agreement outlined that states and territories are responsible for assessing applications from government schools in their jurisdiction for the 2011–12 and 2012–13 funding rounds and providing the list of approved government schools to the Commonwealth for announcement. See further commencing at paragraph 4.10.

4.3 In this context, the Commonwealth's grants administration framework requires a department to provide advice to a Minister on the merits of a proposed grant.[135] Meeting this obligation requires a department to provide a clear recommendation to the Minister whether or not funding should be approved under the particular program guidelines.[136] This does not affect a Minister's right to decide on the awarding of grants, but is intended to ensure that, where Ministers decide to assume a decision-making role, they are well informed about the departmental assessment of the merits of the grant applications against the program guidelines, and any other relevant considerations.

4.4 In examining the processes by which funding decisions were made under the program, the ANAO analysed DCCEE advice to the Parliamentary Secretary for Climate Change and Energy Efficiency, including in relation to whether the proposed grants represented an efficient and effective use of public money.

2010–11 funding round briefing

4.5 As noted at paragraph 4.2, for the 2010–11 funding round, the program guidelines stated that the Minister for Climate Change and Energy Efficiency would be the approver of NSSP grants.

4.6 Particular issues arise when advising Ministers on the merits of competing applications to a competitive grant program. As is outlined in ANAO's Better Practice Guide, an appropriately conducted competitive, merit-based grant selection process involves all eligible, compliant applications being assessed in the same manner against the same criteria, with the outcome of these assessments then being used to rank each application in priority order.[137] This ranking then forms the basis of the agency's recommendations as to which applications should be approved and which should be rejected. These recommendations, together with the ranking and underlying assessment information, are provided to the decision-maker for his or her consideration.[138]

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[135] Commonwealth Grant Guidelines, p. 10.

[136] ANAO, Better Practice Guide, p. 70.

[137] ibid., p. 75.

[138] ANAO Audit Report No.21 2011–12, *Administration of Grant Reporting Obligations*, Canberra, 24 January 2012, p. 55.

4.7 Departmental advice to the Parliamentary Secretary for Climate Change and Energy Efficiency on the outcome of the 2010–11 funding round was provided on 5 November 2010.[139] The briefing included an overview of the application and assessment processes that had been employed, with more detailed information included in an attached assessment report. The briefing also:

- recommended that the Parliamentary Secretary agree the lists of recommended schools and authorise the department to allocate the funding via the National Partnership Agreement (for government schools) and individual funding agreements (for non-government schools). In this respect, the Parliamentary Secretary had been provided with:
  - a ranked list of all applications eligible for a grant of up to $15 000 that were recommended for funding identifying the school name, suburb, postcode, state, sector (government or non-government), its overall assessment score, the funding payable and total project value; and
  - ranked lists, by state and sector of applications eligible for a grant of up to $50 000 (with the same information as that provided for applications eligible for a grant of up to $15 000).
- included a ranked list of 'reserve' applications, again sorted by state and sector, with the Parliamentary Secretary asked to agree that the department could allocate a grant to the next school on the reserve list if an approved school decides to withdraw its application, cannot meet the conditions for funding or seeks a project variation that significantly reduces the competitiveness of the application;
- included a list of ineligible applications; and
- asked the Parliamentary Secretary to sign a letter to the Finance Minister advising of the approval of grants within his electorate and that of the Minister for Climate Change and Energy Efficiency.

[139] A revised brief was provided on 3 December 2010 in order to address the situation where a number of schools within a state had submitted the same application and, under the merit assessment process, received the same score. The assessment report was updated, and revisions made to the merit ranking of applications.

4.8 The Parliamentary Secretary for Climate Change and Energy Efficiency agreed to each of the DCCEE recommendations.

4.9 Following the availability of an additional $0.25 million to fund non-government schools in the 2010–11 funding round, on 23 May 2011 the Parliamentary Secretary agreed to a further six non-government schools (the five highest reserve list schools in Tasmania, as this state had the lowest percentage of non-government schools funded; and the highest reserve list school from Victoria, which had the next lowest percentage of schools funded). Subsequently, a further five government schools in New South Wales were approved in September 2011 to received grant funding as the result of a reduction in eligible grant funding for three schools that were found to have Building the Education Revolution solar power systems already installed, while an additional non-government school in the Australian Capital Territory was approved for funding in January 2012.

Approval processes for government school applications for 2011–12 and 2012–13 funding rounds

4.10 The federal financial framework consisting of the *Federal Financial Relations Act 2009* (FFR Act), the *COAG Reform Fund Act 2008* and the corresponding Intergovernmental Agreement was introduced on 1 January 2009.[140] Under this framework, payments classified as payments to and through the states for general and specific purposes are made centrally through the Department of the Treasury (Treasury). The federal financial framework provides ongoing financial support for the delivery of services by the states through:

(a) general revenue assistance, including GST payments and other general revenue assistance, to be used by the states for any purpose; and

(b) payments for specific purposes, comprising:

- National Specific Purpose Payments to be spent by the states in key service delivery sectors (examples of which include healthcare, schools, skills and workforce development, affordable housing and disability services); and

[140] The FFR Act commenced on 1 April 2009 and applied to payments in the 2008–09 financial year payable from 1 January 2009. Guidance on the operation of the new federal financial framework was issued by the Department of the Treasury on 3 April 2009 (see Federal Finances Circular No. 2009/03).

– National Partnership payments to support the delivery of specified outputs or projects, to facilitate reforms or to reward the states for nationally significant reforms.[141]

4.11 The correct classification of payments is important as it determines how each payment is reported in the Australian Government's budget and related papers, and which Commonwealth agency is responsible for making and reporting the payment in financial statements.[142] Payments are classified as either:

- payments to and through the states and territories for general and specific purposes, which are made centrally by Treasury through the federal financial framework arrangements and reported in Budget Paper No.3, Australia's Federal Relations; or
- Commonwealth own-purpose expenses (COPEs), which are expenses made by the Australian Government in the conduct of its own general government sector activities. COPEs may involve payments to other levels of government, in which case the payments are made and reported by the responsible agency.

4.12 For project-specific payments to a state government entity that are in the nature of a grant, the issue of classification is of particular importance in determining the governance arrangements that will apply to the payment. Specifically:

- payments that are classified as payments to or through the states must be delivered through the federal financial relations framework. In the case of project-specific payments, this will usually occur through an NPA. Such payments are currently excluded from the coverage of the grants administration framework[143]; whereas
- payments that are classified as COPEs are not captured by the federal financial relations framework, regardless of whether the funding recipient is a state government entity. Such payments are subject to the

[141] Department of Finance and Deregulation, Finance Circular 2010/02, *Classification of Payments to the States and Territories and Commonwealth Own-Purpose Expenses*, 14 October 2010.

[142] ibid.

[143] FMA Regulation 3A(2) stipulates a number of arrangements that are taken not to be grants and to which, therefore, the CGGs do not apply. This includes a payment to a state or territory that is made for the purposes of the FFR Act, including General Revenue Assistance, Other General Revenue Assistance, National Specific Purpose Payments and National Partnership Payments.

grants administration framework and are able to be delivered through a legally enforceable funding agreement.

4.13 Two criteria are used to determine whether payments made to other levels of government are recognised as COPEs, being:

- contestability: where the funding is contestable, in that it is available to all sectors of the economy, payments will be classified as COPEs. By way of comparison, where the funding is restricted to other levels of government or particular entities in areas of state government responsibility (such as public hospitals, schools and local councils), it is classified as payments to or through the states or direct to local government[144]; and
- the nature of the transactions: where other governments have responsibility for the activity, the payments will not typically be considered to be a COPE.[145]

4.14 Against this background, it is evident that NSSP payments do not meet the criteria to be classified as COPEs. In particular, the NSSP funding is not contestable but, rather, is restricted to schools (an area of state government responsibility).

4.15 In July 2010, the Government decided that a NPA would be developed for the NSSP.[146] The adoption of a NPA was one of several changes to be made to the administrative arrangements for the operation of the NSSP. The stated objective of these changes was to improve management of the demand for program funding and minimise the scope for over-subscription in any given financial year.

4.16 Reflecting the July 2010 Government decisions, the July 2011 version of the guidelines, which apply to both the 2011–12 and 2012–13 funding rounds, outlined that different decision-making arrangements would apply to non-government and government school applications, as follows:

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144 Payments to local government entities are only excluded from the coverage of the grants administration framework where they involve a payment that is made for the purposes of the *Local Government (Financial Assistance) Act 1995* (see FMA Regulation 3A(2)(i)).

145 Finance Circular 2010/02, op. cit.

146 Transitional arrangements were agreed to at the time of this decision, such that DCCEE would conduct the assessment of applications from government and non-government schools for the 2010–11 funding round, and application assessments in subsequent funding rounds would then be conducted by each state for government schools in their jurisdiction and the BGAs for non-government schools.

The Minister for Climate Change and Energy Efficiency is responsible for approving grant funding under the National Solar Schools Program for non-government schools.

The approval of funding for government schools is outlined in the National Partnership Agreement for the delivery of the National Solar Schools Program.

4.17 In this respect, the NPA was finalised in November 2011 and provides that:

- the Commonwealth is responsible for advising each state of its funding allocation for each annual round;
- the states are responsible for assessing applications from government schools in their jurisdiction for the 2011–12 and 2012–13 funding rounds using the NSSP Web Application assessment module and providing the list of approved state schools to the Commonwealth for announcement[147]; and
- funding from the Commonwealth Treasury to the state treasuries would be equal to the value of state approved projects in each jurisdiction for their government schools.

4.18 The Government's July 2010 decisions in relation to the redesign of the NSSP had similarly envisaged that BGAs would undertake the assessment of applications from non-government schools in their jurisdiction, with funding for successful non-government schools similarly being provided through the BGAs.[148] However, this approach was not subsequently adopted due to the relatively small amount of money involved following the Government's May 2011 Budget announcement that the NSSP would finish two years earlier than originally planned (30 June 2013) with program funding reduced by $156.4 million.

Application of the CGGs

4.19 As payments under the NPA are National Partnership Payments made for the purposes of the FFR Act, they are excluded from the coverage of the CGGs. Consequently, despite both government and non-government school projects being identified for funding through a similar process, and all projects

[147] Via a media release issued on 24 January 2012, the Parliamentary Secretary for Climate Change and Energy Efficiency announced the outcome of the 2011–12 funding round for both government and non-government schools.

[148] The role of BGAs is outlined at footnote 97.

being assessed against the same criteria through the same Web Application assessment module, the NSSP now consists of a mixture of grants that are subject to the CGGs (being those approved for projects delivered by non-government schools) and grants that are not subject to the CGGs (being those approved for projects delivered by states).[149] Specifically:

- 630 (80 per cent) of the approved projects for 2011–12 related to government school projects, with the approval and administration of these grants not being subject to the CGGs; and
- 154 (20 per cent) of the approved projects for 2011–12 related to non-government school projects, where the approval and administration of these grants is required to comply with the CGGs.

4.20 Issues associated with the interaction of the grants framework and payments made under the FFR Act were first raised by ANAO in Audit Report No. 30 2009–10, *Management of the Strategic Regional Program/Off-Network Program*.[150] More recently, the Joint Committee of Public Accounts and Audit in Report 427 *Inquiry into National Funding Agreements* commented that it:

> …shares the concerns of the Auditor-General regarding the interaction between the IGA FFR and the enhanced framework for the administration of grant programs. The Committee recommends that the Department of Finance and Deregulation re-examine the interaction of the two frameworks and take steps to address any inconsistencies.[151]

4.21 The Government response to the Committee's report is due in May 2012. In addition, against the above background, in April 2012 Finance advised ANAO that:

> As stated in ANAO's Better Practice Guide on grants administration, where '…a single grant program may involve payments that, while similar in most substantive respects, differ as to whether they are subject to the CGGs… it will

[149] Notwithstanding that the CGGs do not apply, DCCEE has included details of individual 2011–12 government school NSSP grants within its public website reporting of grants (this reporting is required by the CGGs). See further at: <http://www.climatechange.gov.au/en/government/initiatives/national-solar-schools/~/media/publications/national-solar-schools/approved_11_12_schools-PDF.pdf> [accessed 15 March 2012].

[150] Issues concerning the classification of payments and, therefore, the applicability of the federal financial framework to a grants program were also raised in ANAO Audit Report No. 7 2011–12, *Establishment, Implementation and Administration of the Infrastructure Employment Projects Stream of the Jobs Fund*, Canberra, 22 September 2011, pp. 182–192.

[151] Joint Committee of Public Accounts and Audit, *Inquiry into National Funding Agreements*, Report 427, November 2011, p. 23.

be important that agencies accurately identify the obligations attached to the administration of each payment and design the program's administrative arrangements accordingly.' Finance acknowledges that, in the case of the NSSP, it appears that agency documentation could have more clearly reflected the processes and responsibilities under the program. Finance also acknowledges that it has an ongoing and important role in providing guidance and education to enable agencies to understand their responsibilities under the financial management framework.

2011–12 funding round briefing

4.22 Departmental advice to the Parliamentary Secretary for Climate Change and Energy Efficiency on the outcome of the 2011–12 funding round was provided on 14 December 2011. The briefing included an overview of the application and assessment processes that had been employed, with more detailed information included in an attached assessment report.[152] The briefing also recommended that the Parliamentary Secretary:

- approve the recommended non-government schools to receive funding in the 2011–12 funding round, as listed in an attachment to the brief (sorted by state/territory and in order from highest assessment score to lowest assessment score), with the department authorised to enter into individual funding agreements for those projects on the basis of the Minister's FMA Regulation 9 approval;
- approve the reserve list for non-government schools, as listed in an attachment to the brief, and agree that DCCEE could allocate a grant to the next non-government school on the reserve list[153] if an approved school wished to withdraw its application, could not meet the conditions for funding or sought a project variation that significantly reduces the competitiveness of the application;
- note the appeals process established for the 2011–12 funding round;
- note that the NPA had been signed by all states and territories, and that all states and territories had provided their list of approved schools for the 2011–12 funding round, as required by the NPA. The lists of

[152] The assessment report, amongst other things, outlined changes to the competitive assessment process from the 2010–11 funding round.

[153] The list of reserve projects was sorted by state/territory and in order from highest assessment score to lowest assessment score.

approved and reserve (if any) applications in each state and territory were attached to the brief;

- authorise the payment of 50 per cent of annual funding to each state and territory, in accordance with the NPA (the milestone requirement of the NPA was the provision of a list of approved projects to the Commonwealth); and
- note that DCCEE would consult with both the Parliamentary Secretary's Office and the Minister's Office in relation to the announcement of successful applications and that, after this announcement, DCCEE would advise both successful and unsuccessful applicants of the outcome of the round and publish the list of successful schools on the program website.

4.23 On 16 December 2011, the Parliamentary Secretary agreed to each of the DCCEE recommendations.

Efficient, effective, economical and ethical use of public money

4.24 Part 4 of the FMA Regulations, *Commitments to spend public money*, sets out a hierarchy of requirements that must each be satisfied, in the appropriate sequence, in order for a commitment to spend public money to be lawfully entered into. These requirements regulate the process to be applied in determining whether or not to approve a spending proposal, including those relating to grants, and control the capacity for any person to lawfully enter into any arrangement under which public money may become payable. In particular:

- Regulation 3:
  - defines a 'spending proposal' as a proposal that could lead to entering into an arrangement (defined as an arrangement, including a contract or agreement, under which public money is payable or may become payable); and
  - regulates who has authority to act as an approver of a spending proposal and in what circumstances, stipulating that an 'approver' means a Minister; a Chief Executive; or a person authorised by or under an Act to exercise a function of approving proposals to spend public money;

- Regulation 9 prohibits an approver from approving a spending proposal unless satisfied, after undertaking reasonable inquiries, that giving effect to the proposal would make efficient, effective, economical and ethical use of the Commonwealth resources that is not inconsistent with the policies of the Commonwealth; and
- Regulation 8 prohibits a person from entering into an arrangement unless a spending proposal has been approved under Regulation 9 and, if required, written agreement has been given under Regulation 10.[154]

4.25 Since December 2007, where a Minister exercises the role under FMA Regulation 9 of a financial approver relating to grants, the grants administration framework has required the relevant agency to provide advice to the Minister on the merits of each proposed grant relative to the guidelines for the relevant program.

4.26 In this context, FMA Regulation 9 provides that an approver (including a Minister) must not approve a spending proposal unless the approver is satisfied, after reasonable inquiries, that giving effect to the spending proposal would be a 'proper use' of Commonwealth resources. 'Proper use' is defined in the FMA Act to mean 'efficient, effective, economical and ethical use that is consistent with the policies of the Commonwealth'. In turn, the CGGs outline that the policy requirements of the Commonwealth to be considered in terms of FMA Regulation 9 in respect to grant spending proposals include:

- the CGGs themselves, which are the core policy of the Commonwealth relating to grants administration; and
- the guidelines applying to granting activities, such as the relevant grant program guidelines.[155]

4.27 As is reflected in advice from Finance to agencies[156], FMA Regulation 9 establishes a single test, comprising a number of elements, which must be applied by an approver. Under FMA Regulation 12, in addition to recording

[154] Regulation 10 stipulates that if a person proposes to enter into an arrangement and the relevant agency has insufficient appropriation to meet expenditure that might be payable under the arrangement, the person must not enter into the arrangement unless the Finance Minister has agreed, in writing, to the expenditure that might become payable under the arrangement. Subject to nominated conditions, the Finance Minister has delegated the power to give written agreement for the purposes of Regulation 10 to agency Chief Executives.

[155] Commonwealth Grant Guidelines, p. 9.

[156] ibid., p. 7 and Finance Circular 2011/01, op. cit., 31 March 2011, p. 20.

the terms of an approval[157], the written record of the approval of a grant must address each element of the Regulation 9 test, being:

- the reasonable inquiries that were undertaken to inform the decision; and
- why the spending proposal was considered to be an efficient, effective, ethical and (from March 2011) economical use of Commonwealth resources; and
- how the conclusion was reached that the grant was not inconsistent with the policies of the Commonwealth.[158]

4.28 In addressing their obligations under Regulation 12, where Ministers or other decision-makers agree with the agency funding recommendation, they are able to point to the agency assessment and advice as representing the reasonable inquiries they have made as required by Regulation 9, as long as:

- they are satisfied that the assessment was conducted with rigour and in accordance with the program guidelines; and
- the inquiries that were undertaken by the agency, and the reasons why the agency has concluded that the spending proposal represents a proper use of public money based on those inquiries, are recorded in the advice.

Application scoring and funding allocation model

4.29 In July 2010, at the same time as an annual program funding cap was introduced, allocations to government and non-government schools in each state were made within the overall cap. This meant that, rather than seeking to fund the best applications nation-wide each year, there would be grants approved in sectors of each state and territory each year. However, advice to Ministers did not draw attention to the challenges in operating a competitive, merit-based grants program alongside funding allocations by state and sector. There was also no recognition in the design or administration of the program

[157] The terms of an approval relate to factual matters including who the approved recipient is, how much has been approved and the purpose for which the funding has been approved.

[158] The written record of the basis for the approval may be made by the approver or, where the departmental advice recommends that funding be approved and has outlined the basis for concluding that the proposed grant satisfies the requirements of FMA Regulation 9, the approver may, if he or she agrees with the reasons outlined in the departmental advice, rely upon that document as the written record of why the proposal was considered to satisfy the requirements of Regulation 9.

of the risks to the program objectives of awarding funding to applications that had achieved low scores against the assessment criteria.

4.30 A range of variables affect the score, including the amount of funding that is sought. Applications seeking the maximum available funding are better able to achieve a higher score as they can achieve economies of scale (and therefore achieve a higher score against the value for money criterion) and larger environmental outcomes (and therefore achieve a higher score against the environmental benefits criterion.[159] In addition, higher scores are achieved where a school plans to use the project to demonstrate energy efficiency benefits.[160]

4.31 Against this background, the clear and transparent scoring of eligible NSSP applications through the application of predetermined and weighted assessment criteria, together with a well documented assessment methodology, provided a sound basis for compliance with the requirements of FMA Regulation 9. In particular, applications assessed as scoring highly against the assessment criteria demonstrably represented, in terms of the published program guidelines, an efficient, effective and economical use of public money. However, neither the design of the program nor DCCEE's advice to the Parliamentary Secretary for Climate Change and Energy Efficiency on funding round outcomes addressed how eligible applications that scored poorly against the assessment criteria could be seen to represent an efficient and effective use of public money (in terms of FMA Regulation 9).

4.32 The interrelationship between application scoring and the allocation of funding to sectors and states grew in importance following the May 2011 Budget announcement that the NSSP would finish two years earlier than originally planned, with program funding reduced by $156.4 million. This meant that there would be a significant number of eligible schools that would not receive an NSSP grant.[161] Accordingly, if the program outcomes were to be

[159] Collectively, these two criteria comprised 85 per cent of the aggregate score that could be achieved in the 2010–11 funding round and 65 per cent of the aggregate score that could be achieved in the 2011–12 funding round. Other factors that affect scoring against these two criteria include the quality, type and size of the product to be installed, its location and the competitiveness of the pricing offered by potential suppliers.

[160] In addition, commencing with 2011–12, additional scoring points are awarded where a school is located in a remote or low socio-economic area.

[161] As outlined in paragraph 1.2, the original design of the NSSP was premised on all eligible schools receiving a grant over an eight-year period. The July 2010 decision to introduce an overall annual program funding cap was made to prevent annual oversubscription of the NSSP. Nevertheless, at that time, the program remained sufficiently resourced to provide funding over time to all eligible Australian schools.

maximised, the award of program funding would need to be focused on eligible applications with the highest assessed merit. However, there was no review by DCCEE of the continuing suitability of the funding allocation model, which was based on the proportion of eligible schools by state and sector, rather than relating to promoting the environmental objectives of the NSSP.

Consideration and approval of individual projects: 2010–11 round

4.33 For the 2010–11 funding round, a spending proposal (in terms of FMA Regulation 9) existed in relation to each grant that was proposed to be awarded to both government and non-government schools as a result of the application and assessment processes undertaken as part of each round of the NSSP.[162] This was reflected in the departmental briefing prepared by DCCEE.[163]

4.34 In addition, and consistent with the requirements of the grants administration framework, the assessment briefing provided by DCCEE to the Parliamentary Secretary for Climate Change and Energy Efficiency in respect to government and non-government applications to the 2010–11 funding round included a clear recommendation that the Minister award funding to projects listed in the attachments as recommended. Those attachments ranked each eligible and recommended project in terms of its overall assessment score. Greater detail on the assessment process undertaken was included in a separate detailed attachment to each brief (in the form of an assessment report for the round).

4.35 The briefing to the Parliamentary Secretary for Climate Change and Energy Efficiency also drew his attention to a number of 'issues/sensitivities' concerning the number of schools that were successful and unsuccessful, and assurance activities undertaken by the department concerning the integrity of the application and assessment processes. However, neither in this section of the brief nor anywhere else in the briefing did DCCEE draw the Parliamentary Secretary's attention to the relatively low scores achieved by a number of the

[162] This was reflected, for example, in the 2011–12 funding round with DCCEE seeking the Parliamentary Secretary's approval (in terms of FMA Regulation 9) for the individual grants to be awarded to successful non-government school applicants.

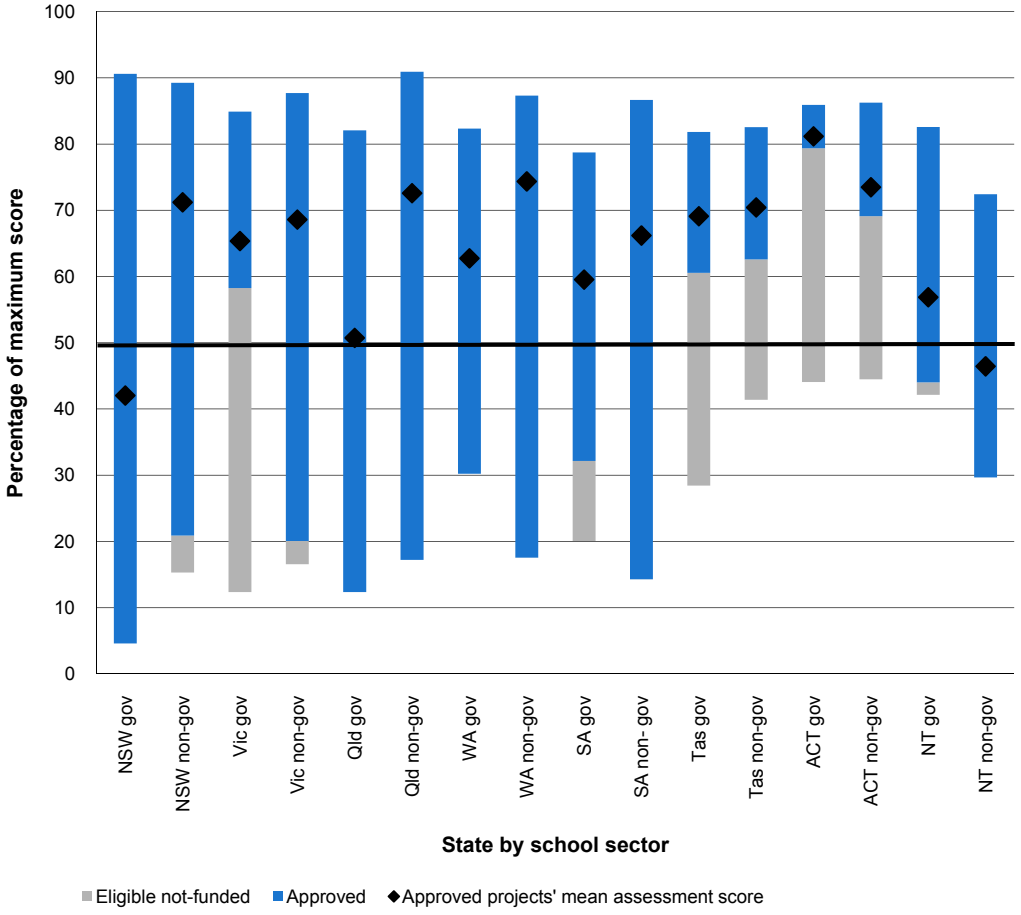
[163] Specifically, the briefing for the 2010–11 round recommended that the Parliamentary Secretary 'authorise under the FMA Act for the Department to allocate the appropriated grant funding for the 2010–11 financial year to the recommended schools in Attachment C via the National Partnership Agreement with states and territories for government schools and via individual funding agreements for non-government schools'.

applications that were recommended for approval under FMA Regulation 9, or how approving funding for such applications could be seen to represent an efficient, effective and economical use of public money. For example, as illustrated by Figure 4.1:

- in the government sectors of New South Wales, Queensland and Western Australia and both sectors of the Northern Territory, applications that had an aggregate score below 50 per cent of the maximum that could be attained were approved for funding;
- due to insufficient applications being received to fully allocate the available funding in the Queensland government sector, Western Australian government sector and Northern Territory non-government sector all eligible applications were funded irrespective of their score; and
- there were a significant number of projects in other states and sectors assessed as meeting the published criteria to a high degree that were not funded. For example, while all eligible applications from government schools in Western Australia were funded irrespective of their score (including a number with scores of less than 40 per cent of the maximum that was attainable), any non-government school in that state that scored less than 72 per cent of the maximum attainable score was not awarded funding.

Figure 4.1

Approved and eligible-not funded application score ranges by state and sector in the 2010–11 funding round



Source: ANAO analysis of DCCEE data.

Note: In a number of state/sectors there are approved projects that have a lower assessment score than the highest assessment score for eligible-not funded projects (NSW government — 85 projects; NSW non-government — seven projects; Vic non-government — six projects; Qld non-government — two projects; WA non-government — three projects; SA government — 16 projects; and SA non-government — three projects). This is in part due to a separate 2010–11 funding allocation set aside for schools that had been approved for funding for a solar power system under any other Australian Government program from 1 July 2008. In this case, eligible NSSP project funding was generally up to $15 000. For the purposes of clarity in the above figure, the lowest approved assessment score is presented, although there may be eligible-not funded project assessment scores above this approved project score.

4.36 It is well recognised that the assumption underlying the production of an aggregate score from a numeric scale is that a higher score indicates more satisfaction of the criteria than a lower score.[164] It is for this reason that aggregate scores are commonly used to rank competing applications. It also necessarily follows that applications that receive a low aggregate score need to be carefully considered in terms the extent to which they can be expected to contribute towards the program objectives, and satisfy the statutory requirement that public money only be approved where the proposed expenditure represents an efficient, effective and economical use of resources.

4.37 In this context, by way of comparison to the approach adopted for the NSSP of advice to the decision-maker not specifically addressing how low scoring applications can be considered to represent an efficient, effective and economical use of public money, ANAO is currently auditing the Private Irrigation Infrastructure Operators Program (PIIOP) in New South Wales[165] where the second funding round included the merit ranking of applications based on application scores. The briefing for the second round of the PIIOP included identifying to the Ministerial decision-maker the overall score for each application (out of a maximum of 200), with applications ranked on the basis of this score (an approach similar to that adopted for the NSSP). Each of the five PIIOP applications received a score but, overall, the scores were not high. Specifically, four applications achieved an aggregate score between 47 per cent and 52 per cent of the maximum that was achievable. One achieved a significantly lower score (19 per cent of the maximum achievable).

4.38 The departmental briefing for the PIIOP also drew the Minister's attention to the 'low scores for individual criteria' for each of the applications as well as overall concerns about the extent to which the various criteria had been addressed. Nevertheless, the PIIOP briefing and associated materials outlined to the Minister that the department had concluded that the four higher scoring applications met the requirements of FMA Regulation 9 and, therefore, were recommended for funding approval.[166] The PIIOP briefing also explicitly outlined the basis on which the department had concluded the

[164] ANAO Better Practice Guide, pp. 75–76. Similar guidance was included in the 2002 version of ANAO's grants administration Better Practice Guide.

[165] The Private Irrigation Infrastructure Operators Program in New South Wales is administered by the Department of Sustainability, Environment, Water, Population and Communities.

[166] ANAO's audit of that program examines the basis for the department's conclusion that the scores achieved by those four applications were sufficient to support a recommendation that funding be approved.

lowest scoring application should not be approved for funding. These recommendations were agreed to.

Consideration and approval of individual projects: 2011–12 round

4.39 As noted at paragraph 4.17, the states are responsible for assessing applications from government schools in their jurisdiction for the 2011–12 and 2012–13 funding rounds using DCCEE's NSSP Web Application assessment module and providing the list of approved state schools to the Commonwealth for announcement. In this respect, April 2012 advice to Finance from the Australian Government Solicitor was that:

> In our view, approval under FMA Regulation 9 was required (and was properly obtained[167]) at the stage of preparation of the National Partnership Agreement for the program.
>
> We do not consider that further FMA Regulation 9 approvals were required to be obtained in relation to each grant proposed to be awarded to a *[government]* school as a result of the application and assessment procedures undertaken by the states and territories under the program. This is because we do not consider that the states and territories, in undertaking the assessment process and approving schools for the purpose of the program, are making decisions regarding the application of public money within the meaning of the FMA Act. Rather, the states and territories are making decisions regarding the application of money which, when paid by them, is not 'public money' within the meaning of the FMA Act.

4.40 Accordingly, and notwithstanding that government school applications are submitted and assessed in the manner specified by DCCEE using the same criteria and methodology[168] as that applied by DCCEE to non-government school applications, while Part 4 of the FMA Regulations applies to individual applications from non-government schools, these Regulations do not apply to individual applications from government schools. The program administrative arrangements also do not otherwise provide any capacity for either DCCEE, or the Parliamentary Secretary for Climate Change and Energy Efficiency, to decline to fund any government school applications where concerns might be

[167] This approval was provided in August 2011 by a DCCEE official.

[168] In this respect, the 2011–12 funding round briefing advised the Parliamentary Secretary for Climate Change and Energy Efficiency that: 'The same merit assessment process has been applied by the states and territories in assessing government school applications'.

held about whether the project represented an efficient, effective, economical and ethical use of public money.[169]

4.41 This situation was reflected in the terms of the departmental briefing to the Parliamentary Secretary for Climate Change and Energy Efficiency on the outcome of the 2011–12 funding round. Specifically, the terms of the departmental briefing for the 2011–12 funding round differentiated between non-government and government school applications in that it recommended that the Parliamentary Secretary:

- 'authorise, under the FMA Act, for the department to allocate the appropriated grant funding for the non-government school sector for the 2011–12 financial year to the recommended non-government schools in Attachment A, via individual funding agreements, on the basis that you are satisfied that the spending proposal represents a proper use of public monies in accordance with Regulation 9'; and
- 'note that all states and territories have provided their list of approved schools for the 2011–12 funding round, as required under the *[National Partnership]* Agreement.'[170] [ANAO emphasis]

4.42 By way of comparison to the 2010–11 funding round, for the 2011–12 funding round there were fewer instances of eligible applications being awarded funding notwithstanding that they had achieved an aggregate assessment score below 50 per cent of the maximum that was attainable. This reflected that, overall, more applications were scored highly than had been the case in the 2010–11 funding round. Nevertheless, the program continued to award funding to eligible applications with a low aggregate score whilst applications in other states/sectors with a high score remained unfunded. In this respect, and as illustrated by Figure 4.2:

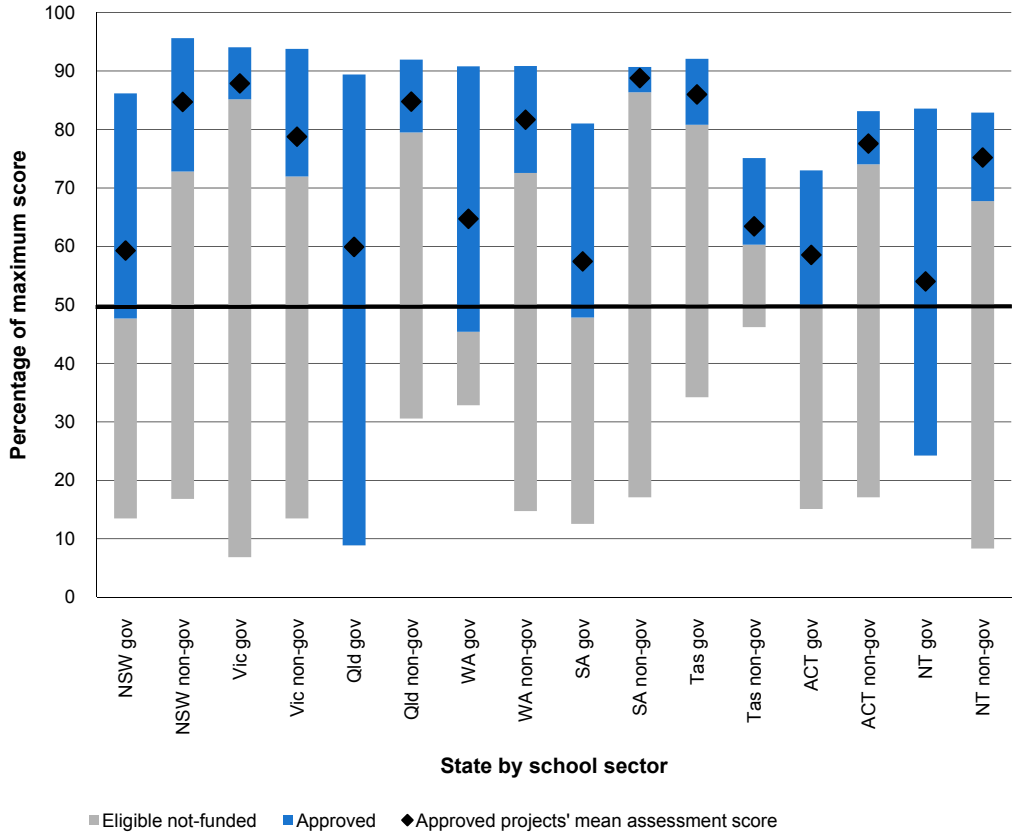
[169] Had the program proceeded to devolve to Block Grant Authorities assessment responsibilities and a role in the distribution of funds to successful non-government schools (see further at paragraph 4.18), the FMA Regulations would also not have applied to non-government schools such that (commencing in late November 2011) no applications under the NSSP would have been subject to FMA Regulation 9 considerations.

[170] Similar to the approach taken for the 2010–11 funding round, the briefing materials included attachments listing the non-government school applications that were recommended for Parliamentary Secretary for Climate Change and Energy Efficiency approval, as well as attachments outlining the government school applications to the 2011–12 funding round that had been approved in each state. Each of the lists was sorted in order of highest to lowest aggregate assessment score.

- all eligible applications from the government sectors in Queensland and the Northern Territory government sectors were again funded, irrespective of their score;
- applications with an aggregate assessment score of less than 50 per cent of the maximum were funded in the government sectors of New South Wales, Western Australia and South Australia; and
- applications scored at 75 per cent or more of the maximum attainable aggregate score were not funded in the government sectors of Victoria and Tasmania as well as the non-government sectors of Queensland and South Australia.

Figure 4.2

Approved and eligible-not funded application score ranges by state and sector in the 2011–12 funding round



Source: ANAO analysis of DCCEE data.

Grants reporting requirements

4.43 As part of the introduction of an enhanced grants administration framework, certain reporting requirements were introduced commencing in December 2007.[171] Table 4.1 summarises the three key grant reporting obligations that have been in place since the NSSP commenced operating through competitive, applications-based rounds.

Table 4.1

Grant reporting obligations

Area	Nature of reporting	Information to be reported
Approval by Ministers of grants the agency recommended be rejected.	Annual reporting to the Finance Minister by Ministers (by 31 March each year for the preceding calendar year).	Ministers are to report on all instances where they have decided to approve a grant which the relevant agency has recommended be rejected. The report is to include a statement of reasons (i.e. the basis for the approval for each grant).
Grants approved by a House of Representatives Minister in their own electorate.	Reporting to the Finance Minister by Ministers each time a relevant grant is approved.	The Minister is to write to the Finance Minister advising of the details of the grant each time such an approval is given. Where the agency did not recommend that the grant be rejected, this requirement is to be met either by copying the Finance Minister into the correspondence with the grant recipient or by the Minister writing to the Finance Minister advising of the decision as soon as practicable after it is made. Where the agency had recommended the grant be rejected, the Minister is to also include a brief statement of reasons (i.e., the basis for the approval).
Web-based reporting of individual grants.	Specified details are to be published on agency websites no later than seven working days after the relevant funding agreement takes effect, and be retained on the website for at least two financial years.	The information to be published in respect to each grant, and template to be used for reporting purposes, is outlined in a Finance Circular published in June 2009. The CGGs stipulate the requirements that are to apply where agencies either seek an exemption from the requirements or are otherwise unable to comply with them (e.g. due to the volume of grants that would need to be reported).

Source: Commonwealth Grant Guidelines, July 2009.

4.44 There were no instances in either the 2010–11 or 2011–12 funding rounds where the Parliamentary Secretary for Climate Change and Energy

[171] See further in ANAO Audit Report No.21 2011–12, *Administration of Grant Reporting Obligations*, Canberra, 24 January 2012.

Efficiency approved a grant that DCCEE had recommended be rejected. Accordingly, no such grants have been reported to the Finance Minister.

4.45 In the case of the 2010–11 funding round, the Parliamentary Secretary for Climate Change and Energy Efficiency was briefed on ministerial requirements in relation to the awarding of grants within portfolio ministers' own electorates. Accordingly, the Parliamentary Secretary for Climate Change and Energy Efficiency wrote to the Finance Minister in December 2010 advising that he had approved two grants in his electorate of Isaacs and ten grants in Charlton, the electorate of the Minister for Climate Change and Energy Efficiency.

4.46 As a result of the application and assessment processes for the 2011–12 funding round, the Parliamentary Secretary was not required to consider the approval of non-government school grants in his or the portfolio Minister's electorate. In this round, four government school projects were approved in the Minister for Climate Change and Energy Efficiency's electorate of Charlton but as the approval for these projects was not provided by either the Parliamentary Secretary or the Minister, no reporting to the Finance Minister was required.

4.47 The public announcement of NSSP grant approvals has been undertaken by the Parliamentary Secretary for Climate Change and Energy Efficiency and the Minister for Climate Change and Energy Efficiency. Each ministerial media release[172] announcing the grant approvals has provided a link to the DCCEE's NSSP website listing the individual grants that have been approved.[173] DCCEE has also had arrangements in place to notify all applicants of the funding round outcomes, and unsuccessful schools are advised of the reason why they have been unsuccessful.

Funding distribution

4.48 As noted, under the NSSP, each year's total funding budget is allocated between government and non-government school sectors based on the

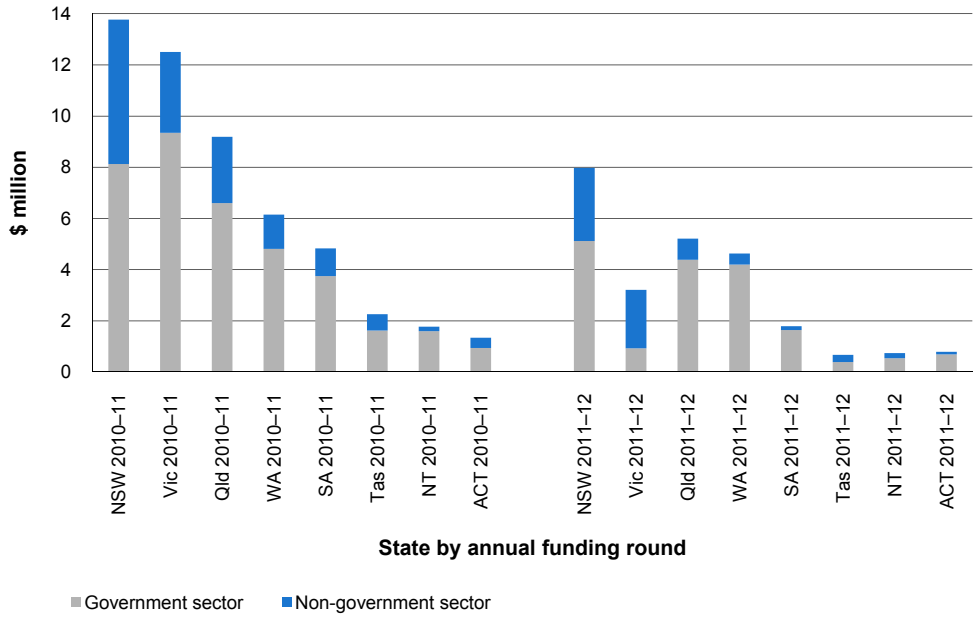
[172] See: The Hon Greg Combet AM MP, Minister for Climate Change and Energy Efficiency and the Hon Mark Dreyfus QC MP, Parliamentary Secretary for Climate Change and Energy Efficiency, *More schools go solar with Federal Government grants*, Joint Media Release, 15 December 2010; and The Hon Mark Dreyfus QC MP, Parliamentary Secretary for Climate Change and Energy Efficiency, *More schools to save on electricity and water*, Media Release, 24 January 2012.

[173] The DCCEE's NSSP website provides a list of all approved projects since the program's commencement.

proportion of eligible schools in each sector. Funding for government schools and non-government schools in each state and territory is then allocated on a similar proportional basis, taking into account grants already awarded to schools in each state and territory. The intention is that each state and territory (government and non-government sectors) will receive a proportional share of funding over the life of the program. In this context, Figure 4.3 presents data on the level of NSSP funding provided by state, and government and non-government school sectors.

Figure 4.3

NSSP funding by state and sector for the 2010–11 and 2011–12 funding rounds



Source: ANAO analysis of DCCEE data.

Electorate distribution

4.49 The information provided to the Parliamentary Secretary for Climate Change and Energy Efficiency to inform his funding decisions for the 2010–11 and 2011–12 funding rounds (non-government schools only) has not included any information concerning the electorate in which individual applications have been located. In addition, as outlined at paragraphs 4.8 and 4.23, the Parliamentary Secretary has not overturned any of DCCEE's funding recommendations, which reflected the ranking of individual eligible applications as assessed against the published criteria.

4.50 Against this background, and as illustrated by Table 4.2, application and approval rates in respect of those projects approved for funding have been broadly consistent with the proportion of electorates held by the major parties, independent members and Australian Greens.[174]

Table 4.2

Applications and project approvals for 2010–11 and 2011–12 funding rounds by political party

Political party	Electorates held	Applications by political party electorates		Projects approved by political party electorates	
	(%)	# (%)	Funds bid $m (%)	# (%)	Funding $m (%)
Australian Labor Party	48	1804 (43)	69.2 (44)	793 (40)	30.9 (40)
Coalition	48	2168 (52)	81.6 (52)	1081 (54)	41.6 (54)
Independent Members	3	198 (5)	6.7 (4)	123 (6)	4.2 (5)
Australian Greens	1	14 (0.3)	0.6 (0.4)	4 (0.2)	0.1 (0.2)
Total	**100**	**4184**	**158.1**	**2001**	**76.8**

Source: ANAO analysis of Parliament of Australia and DCCEE data.

Conclusions

4.51 Decision-making arrangements for the NSSP have been clearly communicated to schools and other stakeholders through the published program documentation. Specifically, the Parliamentary Secretary for Climate Change and Energy Efficiency approved individual grant applications for both government and non-government school applications in the 2010–11 funding round and non-government school applications in the 2011–12 funding round. Government school applications to the 2011–12 funding round were approved by state government officials, in line with devolved assessment and decision-making arrangements reflected in the NPA finalised in November 2011.

[174] Analysis of applications and approvals by electorate, broken down separately for the 2010–11 and 2011–12 funding rounds, shows that while the 2010–11 funding round shares were broadly in proportion to the political parties shares of electorates, in the 2011–12 funding round Coalition and independent members had a noticeably higher proportion of approved projects. The Coalition had 55 per cent of approved projects; independent members eight per cent of approved projects; and the ALP had 36 per cent of approved projects.

4.52 The assessment briefings provided by DCCEE to the Parliamentary Secretary in respect of government and non-government applications to the 2010–11 funding round and non-government applications to the 2011–12 funding round included a clear recommendation that the Minister award funding to projects listed in attachments as recommended. Those attachments ranked each eligible and recommended project in terms of its overall assessment score.[175] Greater detail on the assessment process undertaken was included in a separate detailed attachment to each brief (in the form of an assessment report for the round). In addition, specific mention was made of the requirements of the FMA Act.

4.53 As well as addressing the requirements of the published program guidelines, including an assessment against the published assessment criteria, grants decision-making arrangements are required to be conducted in accordance with the statutory framework governing the expenditure of public money. Of particular importance in this regard is the FMA Regulation 9 requirement that funding not be approved unless the approver is satisfied, after undertaking reasonable inquiries, that giving effect to the spending proposal would be an efficient, effective, economical and ethical use of Commonwealth resources that is consistent with the policies of the Commonwealth.

4.54 In the context of the NSSP, the aggregate assessment score of each application outlined the extent to which the application met the published assessment criteria and therefore also provided a key input to decide whether the application represented an efficient, effective and economical use of Commonwealth resources.[176] In this context, the clear and transparent scoring of eligible NSSP applications through the application of predetermined and

[175] Attachments were also included for government school applications to the 2011–12 funding round, with the list of projects approved in each state again sorted in order of highest to lowest aggregate assessment score.

[176] This was reflected in the program guidelines and administrative arrangements document which, respectively, stated as follows:

- 'A merit-based, competitive assessment process will be used to determine which applications best meet these criteria and will be offered funding'; and
- 'This merit-based, competitive assessment process is used to determine which applications best meet these criteria and will be offered funding. …Applications will be scored against each criterion with an additional score allocated to schools located in remote or low socio-economic areas. Applications will be ranked on the basis of those scores and funding will then be granted based on the rankings (highest to lowest) until the funding allocation for that state and sector is fully committed.'

weighted assessment criteria together with a well document assessment methodology provided a sound basis for compliance with the requirements of FMA Regulation 9. In particular, applications assessed as scoring highly against the assessment criteria demonstrably represented, in the terms of the published program guidelines, an efficient, effective and economical use of public money. However, neither the design of the program nor DCCEE's advice to the Parliamentary Secretary on funding round outcomes addressed how eligible applications that scored poorly against the assessment criteria could be seen to represent an efficient and effective use of public money (in terms of FMA Regulation 9).

4.55 Instead, funding has been awarded to eligible grants in each state/sector on the basis of the assessment rankings (from highest to lowest) up to the limit of the funding available in that state/sector for the year, but with no minimum score specified that an application needed to meet. Consequently, a significant number of applications were approved for funding in the 2010–11 and 2011–12 funding rounds notwithstanding that the application received a low overall score against the assessment criteria. In this context, there was no recognition in advice to government on program design, or in departmental advice on individual funding round outcomes, of the likely reduced level of achievement against the program objectives that could be expected to result from awarding funding to applications that had achieved low scores against the assessment criteria.

Recommendation No.2

4.56 In designing and administering competitive, merit-based grants programs that involve the scoring of grant proposals, ANAO recommends that the Department of Climate Change and Energy Efficiency clearly identify in program documentation advice to decision-makers the interrelationship between the level of score that an application achieves and the assessment required to demonstrate that proposals represent an efficient, effective and economical use of public money.

4.57 **DCCEE response:** Agreed. DCCEE advised ANAO that:

> Briefing material to decision makers will in future more clearly explain how applications that received a low score were an efficient and effective use of public money.
>
> The Department is satisfied that all funding paid represents an efficient, effective and economical use of public money. The Department and the states and territories, responsible for delivery of government school projects, have

appropriate controls in place to ensure that all funding awarded under the program represents proper use of Commonwealth funds. Each individual application is carefully reviewed, clarification is sought from schools where applicable and quotes obtained to support project costs (a sample of quotes were obtained in the 2010–11 round and all applications required a supporting quote in the 2011–12 round). Analysis and checks performed on individual projects will in future be summarised into a single report to strengthen the documentation and support clearer advice to decision makers.

5. Progress Towards Program Objectives

This chapter examines NSSP progress to date against its stated objectives, and discusses the more significant issues in relation to this progress.

Background

5.1 Within the last two years the ANAO has conducted three performance audits into various Australian Government energy efficiency and climate change programs.[177] The two most recent audits (of the Home Insulation Program (HIP) and the Green Loans Program (GLP)[178]) were each undertaken in response to concerns expressed by Parliamentarians and other stakeholders with the administration of those programs, including significant safety issues with the HIP.

5.2 As with the NSSP, both the GLP and the HIP were initially administered by DEWHA, and then transferred in March 2010 to DCCEE. There were also some design similarities between these two programs and the NSSP, as each commenced operation with demand-driven funding arrangements that proved financially unsustainable. All three programs were also initially subject to a lack of senior departmental oversight.

5.3 However, there were a number of important differences between the NSSP and the HIP and GLP that has assisted the NSSP to avoid the significant program delivery challenges experienced by those other two programs. The key differences are:

- the seven-year NSSP was not under the same program delivery time pressures as the HIP, which was an economic stimulus program;

[177] The performance audits are: ANAO Audit Report No.9 2010–11, *Green Loans Program*; ANAO Audit Report No.12 2010–11, *Home Insulation Program*; and ANAO Audit Report No.26 2009–10, *Administration of Climate Change Programs*, (which examined the administration of five programs being the Greenhouse Gas Abatement Program, Solar Cities, Solar Homes and Communities Plan, Renewable Remote Power Generation Program and the Low Emissions Technology Demonstration Fund which was administered by the Department of Resources, Energy and Tourism).

[178] The GLP was a result of the ALP's 2007 election commitment outlined in its *Solar, Green Energy and Water Renovation Plan for Australian Households.* The $300 million program operated from July 2009 until July 2010, when it was carried over to a new Green Start program. In the case of the HIP, the $2.5 billion program was designed to generate economic stimulus in the wake of the 2008 global financial crisis. The program operated from February 2009 until its premature termination in February 2010 and replacement with the Foil Insulation Safety Program and the Home Insulation Safety Program.

- the NSSP had the benefit of drawing upon the operational learnings from, and administrative support of, a predecessor program. In addition, particularly since the program moved to a competitive, merit-based funding model in 2010, there has been evidence of skills and experience in program management being brought to bear;
- state education departments have assisted with a large component of the management and delivery of the NSSP; and
- there were existing standards and state/territory regulation applying to the solar power installation industry[179], as well as a history of quality inspection audits being undertaken where the Australian Government has funded the installation of solar power systems.[180]

5.4 In this chapter, the ANAO has examined key measures of progress against the program's stated objectives, as well as the extent to which the program is providing value for money.[181]

Progress with delivery of projects

5.5 The program guidelines outline that the NSSP is intended to help Australian schools take practical action to tackle climate change by offering eligible schools the opportunity to compete for funding to install solar power systems, rainwater tanks and a range of renewable energy and energy efficiency measures. At the time of the audit, a substantial proportion of the NSSP's project activity has either been approved or completed.[182] Specifically, over 4600 NSSP projects had been approved, of which over 2800 (61 per cent) had been reported to DCCEE as being completed. In addition, around 90 per cent of NSSP's total administered funds had either been paid or covered under a funding approval. Table 5.1 details the progressive rollout of projects over the last four years and the number of completions to date.

[179] Solar system designers and installers are accredited by industry, and the states/territories regulate electrical standards.

[180] For example, quality inspections were undertaken under the Solar Homes and Communities Plan program that operated between 1999 and 2009.

[181] Achieving value with public money is one of the key principles for grants administration established by the CGGs.

[182] The results of the final NSSP funding round for 2012–13 are expected to be announced in July or August 2012.

Table 5.1

Annual number of approved projects and advised completed projects

	2008–09	2009–10	2010–11	2011–12
No of approved projects	1434	1188	1224	784
No of the projects advised as completed	1433	1169	*274	0

Source: DCCEE advice, April 2012.

Note: *This figure relates to the number of non-government project completions (a total of 283 non-government projects were approved in the 2010–11 funding round). In relation to government school projects in the 2010–11 funding round under the NPA, states are expected to complete all projects by mid-June 2012 and provide the Commonwealth with an end of 2010–11 round report.

5.6 Although the approved projects for the 2010–11 funding round were announced in December 2010, work on delivering the 2010–11 government school projects was delayed due to the longer than expected time taken to finalise the NPA with the states and territories to cover funding for the projects. The agreement of all jurisdictions was not secured until November 2011 and, as a result, the NPA provides that states and territories are expected to have completed the 2010–11 government school projects by June 2012.

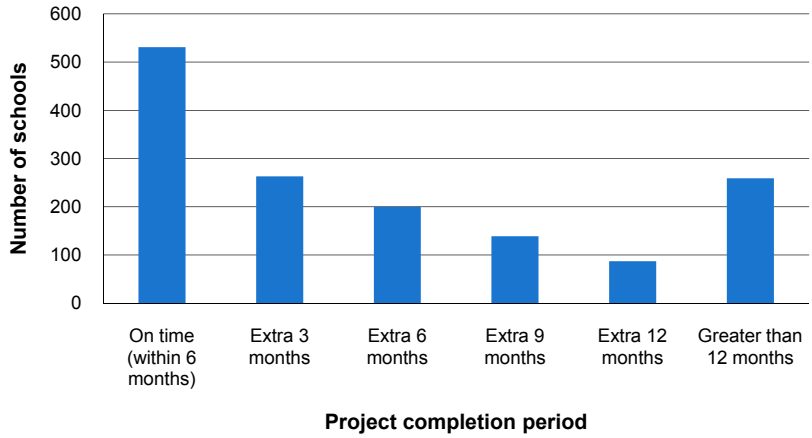
Time to complete projects

5.7 The program guidelines provide that schools have six months from receipt of the grant to complete their project.

DCCEE data for 2008–09 and 2009–10 covering almost 1500 projects making direct claims on the program shows that almost two-thirds of schools took greater than six months to complete the project, with 18 per cent taking greater than 12 months to complete (Figure 5.1).

Figure 5.1

Schools' advised project completion time for 2008–09 and 2009–10 NSSP claims



Source: ANAO analysis of DCCEE data.

5.8 Taking into account later data on project completion times for non-government schools in the 2010–11 funding round[183], generally around 60 per cent of the projects with direct funding agreements with DCCEE are taking longer than six months to complete the project.

5.9 DCCEE has advised that the common reasons cited by schools for the delays have included:

- school plans to install the solar power system on a new building awaiting completion under the Building the Education Revolution;
- missing school holiday periods for installation;
- non-availability of installers and/or components; and
- energy provider timings for connection to the electricity grid.

5.10 The timing for the completion of over 1100 projects under cooperative funding agreements between DCCEE and state education authorities has also shown a degree of slippage against the original planned completion dates. Table 5.2 shows that the completion dates for all projects under the cooperative funding agreement for each state were delayed between six months and

[183] DCCEE data shows that around two-thirds of non-government school projects in the 2010–11 funding round were completed within six months of receiving the grant.

16 months against the completion dates required at the outset of the funding agreements.

Table 5.2

Projects' completion time under cooperative funding agreements with states

State	Original no of projects	Start date	Original completion period (months)	Completed within 12 months (%)	Completed within 18 months (%)	Actual completion period (months)
NSW	260	June 2009	10	53	89	26
Qld	605	June 2009	11	63	100	17
SA	89	June 2009	11	89	95	19
Vic	53	May 2009	9	0	100	15
WA	128	June 2009	12	69	96	25

Source: DCCEE advice, April 2012.

Note: Under DCCEE administrative arrangements, government school projects under cooperative funding agreements are not considered complete until 100 per cent of projects are completed.

5.11 The NPA provides that states and territories have until June 2012 to complete government school projects funded under the 2010–11 funding round.

Value for money

5.12 As is reflected in the CGGs, it is expected that value for money will be a core consideration in determining funding recipients under a grant program.[184] For competitive application-based grant programs, value for money analysis is typically undertaken by comparing the relative merits of all eligible, compliant proposals. While the particular measures that are applicable will vary depending upon the type of project involved, a value for money assessment of a proposal, based on consideration of the outcomes proposed for the amount

[184] 'Achieving value with public money' is one of the seven key principles for grants administration established by the Australian Government, with the CGGs stating: 'Achieving value with public money should be a prime consideration in all aspects of grants administration' (Commonwealth Grant Guidelines, p. 30).

of funding sought, is an important consideration in determining grant recipients.

5.13 Consistent with the principle of proportionality outlined in the CGGs, a key consideration in deciding upon the approach to be taken to seeking value for money in a grants program is the size of individual grants. In this context, individual grants under the NSSP are relatively small in comparison to many Australian Government grant programs that fund installation and construction work. In this respect:

- while the NSSP is broadly characterised as providing grants of up to $50 000 for school projects, the impact of different funding eligibility levels under the program (for example, a $15 000 NSSP grant funding limit for schools that have already received funding for solar power systems under any other Australian Government program) has resulted in the level of funding available for successful schools averaging up to $42 773; and
- the value of an NSSP grant averages $41 557, representing approximately 86 per cent of the average total cost of a project.[185] Within this measure, non-government school projects have a higher average value NSSP grant ($52 481) compared to government school projects ($37 398).[186]

Items funded under the NSSP

5.14 The program guidelines list the items available for funding under the NSSP. Reflecting the situation outlined in the audit of the Building the Education Revolution[187], the involvement of individual schools in deciding on

[185] The cost of a project may be greater than the NSSP grant due to other financial contributions to the project from state and territory programs and/or local community support. Co-contributions total $31.8 million to NSSP projects, up to and including the 2011–12 funding round.

[186] The lower grant value for government school projects reflects a number of factors. In particular, the June 2009 cooperative funding agreement) with Queensland covering over 600 government schools earmarked a notional $23 000 per school as the NSSP shared cost with the state for installing 4 kilowatt solar power systems. With the NSSP's early closure, this has meant that the NSSP's initial contribution for many of these projects may become the final NSSP contribution level.

[187] ANAO's audit of the Building the Education Revolution Program noted that it is important to understand how school systems differ in terms of the level of authority delegated to principals to make decisions at the school level. Specifically, some systems (mostly government) tend to have more centralised decision-making structures, while in others (such as is mostly the case in the independent sector) schools are predominantly managed at a local level by school principals, under the oversight of a school board. See further in ANAO Audit Report No.33 2009–10, *Building the Education Revolution—Primary Schools for the 21st Century,* Canberra, 5 May 2010, p. 163.

which items to seek NSSP funding for varied considerably. In a number of cases, NSSP items for government school projects have been determined as a matter of state education department policy.[188] In other cases, schools advised that their choice in items reflected local priorities such as energy cost savings, expectations from the school's broader community or direct educational needs for students as part of a broader sustainability program within the school.

5.15 Against this background, Table 5.3 details the percentage of projects installing the major items and the share of project funding for each item.[189] [190] Among other things, Table 5.3 shows that solar power systems represent the major item of installation and cost under the program, with approximately 92 per cent of projects involving the installation of a solar power system, which accounted for more than 83 per cent of the total cost of installed items.

Table 5.3

NSSP major eligible items

Major eligible items	Approved projects with this item (%)*	Items' share of total items cost (%)
Solar power system	92.3	83.4
Energy efficient lighting	19.9	5.9
Rainwater tanks	15.8	6.0
Sensors, timers and thermostats	10.4	1.1
Shade awnings	4.2	1.0
Solar hot water system	3.7	0.7
Window fittings	1.7	0.5
Skylights	1.8	0.3
Ceiling fans	1.5	0.2
Insulation	1.2	0.2
Door closers	1.1	0.2

Source: ANAO analysis of DCCEE 2008–09 to 2011–12 data.

Note: * This column will add to more than 100 per cent as many projects have more than one item.

[188] In the Australia Capital Territory for example, NSSP funding has only been used to help meet the cost of installing 10 kilowatt solar power systems in all government schools.

[189] The major change to the range of eligible items under the program occurred with the exclusion of insulation in walls, floors and ceilings in 2010.

[190] Delivery and installation costs are included in the item costs.

Value for money analysis

5.16 In respect to value for money, the program guidelines have advised potential applicants that:

> …schools will need to have obtained competitive pricing for the measures they propose to install with their National Solar Schools Program grant. One way to ensure that your school gets value for money for its project is to obtain several quotes.[191]

5.17 Consistent with this guidance, the associated administrative arrangements document published by DCCEE informs potential applicants of two sub-criteria under the value for money criterion, as follows:

a) The cost of items will be assessed for value for money by comparing them to costs of items in other applications.

b) The extent to which the school demonstrates that costings have been determined through a competitive market process.[192]

5.18 Against this background, as part of the audit ANAO analysed cost data for solar power systems, energy efficient lighting and rainwater tanks. Collectively these three items represent almost 80 per cent of the items planned or installed in schools, and over 95 per cent of the total approved funding.

Size and cost of solar power systems

5.19 The mean size of solar power systems installed or planned to be installed by NSSP school projects has increased each year. Over the course of the program, the mean solar power system size has almost doubled, to reach just over eight kilowatts in the 2011–12 funding round. Within this 2011–12 mean, system sizes for government schools are noticeably smaller (6.9 kilowatts) due to a number of jurisdictions reducing the maximum NSSP grant funding level for government school projects in 2011–12.

5.20 A significant driver in the increased size of solar power systems has been an overall market trend in recent years of a reduction in the cost of

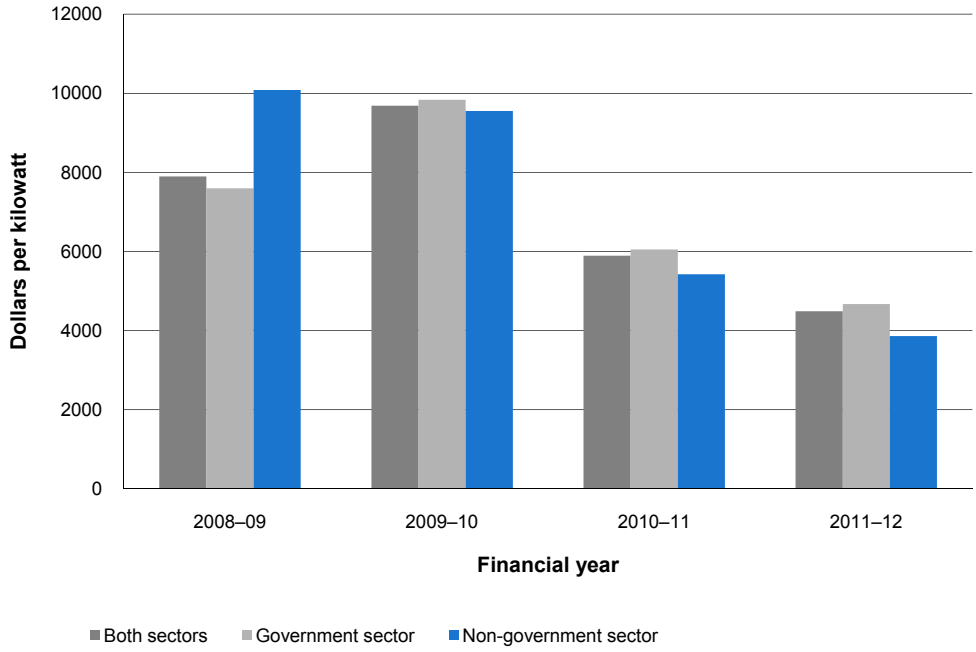
[191] DCCEE, *National Solar Schools Program Guidelines July 2011*, p. 14.

[192] DCCEE, *National Solar Schools Program Administrative Arrangements July 2011*, p. 2.

small-scale solar power systems.[193] This downward cost trend has been reflected in the cost of solar power systems under the NSSP (see Figure 5.2).

Figure 5.2

Mean cost per kilowatt of solar power installation by grant year and school sector



Source: ANAO analysis of DCCEE data.

Notes: (1) Where a project has been completed, data on the final installed solar power capacity has been used.
(2) Costs are GST exclusive.

5.21 The data shows that, on average, non-government schools over the last three years have been able to obtain lower cost solar power systems, compared to government schools. For the 2011–12 grant year, the cost difference was approximately 20 per cent ($808 per kilowatt of solar power installation). The major contributing factor to this difference is that economies of scale operate, such that the cost of solar power systems per kilowatt decrease as system sizes increase. With a higher average value NSSP grant (see paragraph 5.13), non-government schools on average have installed larger solar power systems,

[193] CEC, *Review of the Australian solar PV industry 2011*, p. 22. The review cites a number of factors for decreasing PV costs including government stimulus programs, competitive market forces, increased market scale, favourable foreign exchange rates, decreasing manufacturing costs, increasing system size and a correlation between the Australian market being 'hot' and other markets being 'cool'.

which enable the achievement of slightly lower per unit costs.[194] This highlights that program funding and administrative arrangements that encourage a large number of relatively small-size solar power systems involves a cost premium to the program, with a detrimental impact on overall value for money.

5.22 A number of state governments have operated government school procurement panel arrangements that cover NSSP items, including solar power systems.[195] ANAO analysis indicates no discernible difference in the mean per kilowatt cost of government schools in these states compared to states not using procurement panels. Rather, the states with panel arrangements have emphasised that the panel arrangements provide the benefit of a whole-of-system approach. This included the importance of taking on the role of an informed buyer for a large number of schools, and the benefits of ensuring consistency in product, installation, warranties and workmanship.

5.23 The cost of solar power systems under the NSSP broadly align with general levels and trends within the small-scale solar power industry. In this respect, Table 5.4 outlines NSSP solar power costs per kilowatt for systems up to five kilowatts in size, against an industry based Australian PV Association benchmark.

Table 5.4

Comparison of NSSP and typical solar power system (up to 5 kilowatts) costs per kilowatt, by year

	2007–08	2008–09	2009–10	2010–11	2011–12
NSSP 5 kilowatt and less average cost per kilowatt	-	$9692	$10494	$7342	$5216
NSSP average cost per kilowatt across all systems	-	*$7897*	*$9685*	*$5896*	*$4213*
Typical industry 5 kilowatt and less cost per kilowatt [calendar year]	$12000 [2007]	$12000 [2008]	$9000 [2009]	$6000 [2010]	Data not yet available

Sources: DCCEE data; and Australian PV Association, *PV in Australia 2010*, May 2011, p.28.

[194] For example, in the 2011–12 funding round, there was only an average $145 (around three per cent) cost difference per kilowatt in favour of non-government schools, where government and non-government schools were planning to install 5 to 10 kilowatt solar power systems.

[195] Procurement panel arrangements have operated in the Australian Capital Territory, New South Wales, Queensland, South Australia and Western Australia.

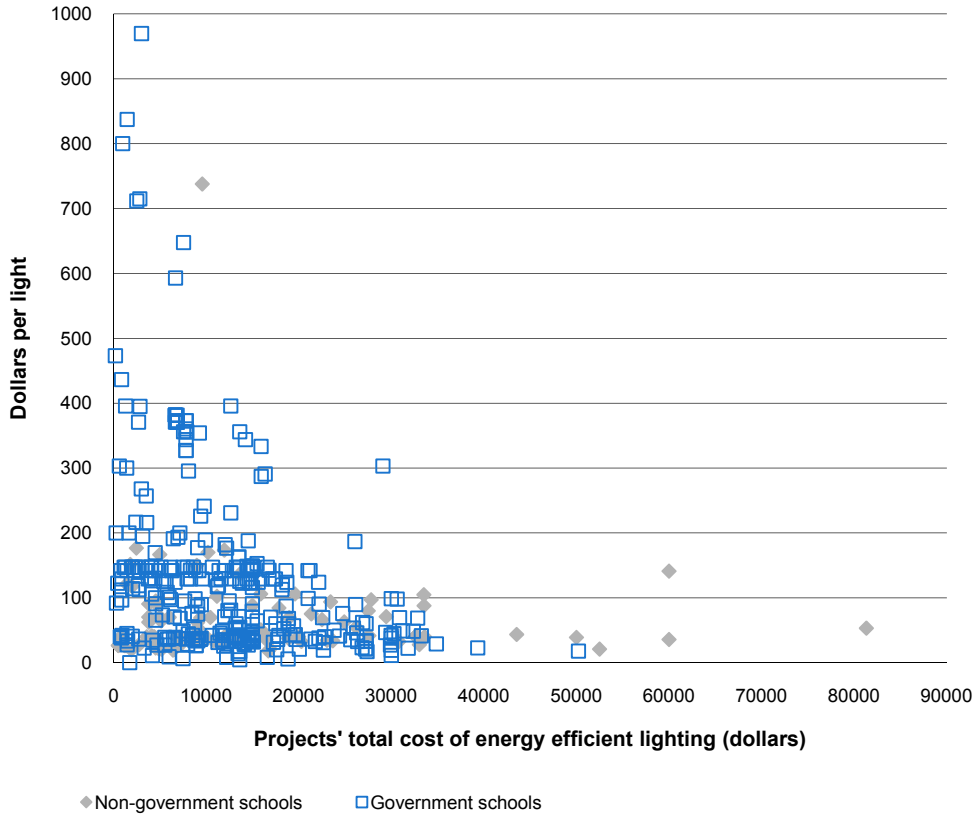
Energy efficient lighting

5.24 The average cost for installing energy efficient lighting for a project with this item in the 2010–11 and 2011–12 funding rounds was $12 973 (median cost $11 195). Data provided by schools in their application indicated that on average, schools seeking funds to install energy efficient lighting proposed to replace around 225 lights (median 110), at a cost of around $58 per light.[196] However, there was considerable variation in the range of prices paid by schools as part of the project, as shown in Figure 5.3. In instances of significant cost variation from the norm, DCCEE has either highlighted this to states for attention in the case of government school projects or contacted schools for further details in the case of non-government school projects.

[196] ANAO fieldwork data indicated that typically, T8 lights were replaced with more energy efficient T5 lights. Industry data indicates T5 lights are around two to three times more expensive than T8 lights, in addition to installation costs.

Figure 5.3

Cost per light replaced by projects' total energy efficient lighting cost for government and non-government schools



Source: ANAO analysis of DCCEE 2010–11 and 2011–12 funding round data.

Rainwater tanks

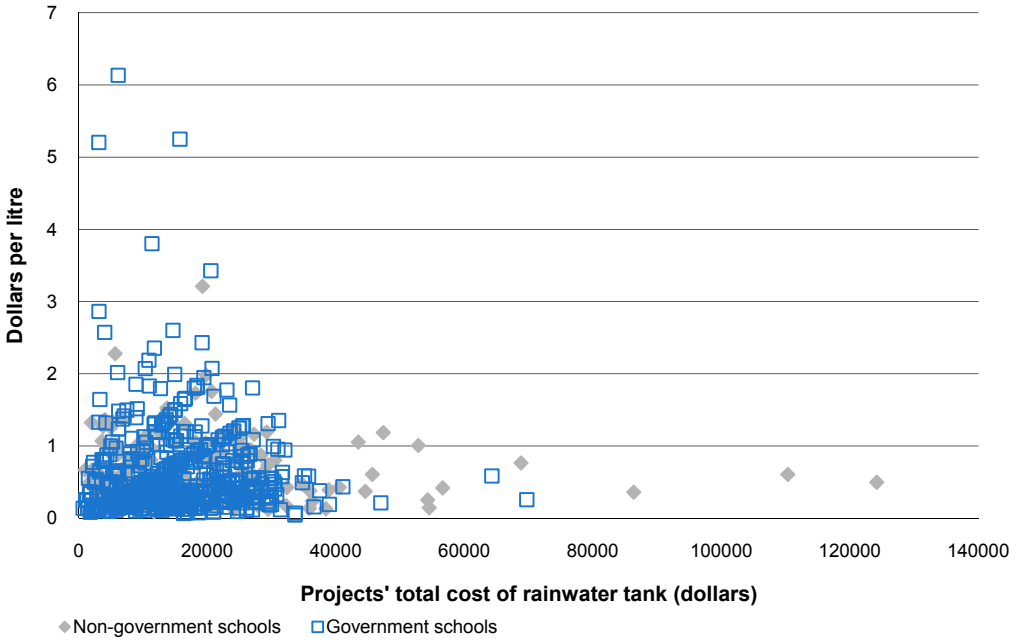
5.25 The average cost of installing rainwater tanks for a project with this item over the 2008–09 to 2011–12 funding period was $ 16 439 (median cost $14 727), with the average size of installed capacity around 48 000 litres (median capacity 27 500 litres). As might be expected, analysis indicates that as the size of water tanks increases, the unit cost of the tank decreases (see Figure 5.4).[197] ANAO analysis also did not show any significant difference between the cost per litre installed for government and non-government schools ($0.32 and $0.40 respectively), although there were a small number of

[197] The installation of rainwater tanks under the NSSP may involve the installation of more than one tank.

'outliers'. As detailed in paragraph 5.24, in instances of significant cost variation from the norm, DCCEE has either highlighted this to states for attention in the case of government school projects or contacted schools for further details in the case of non-government school projects.

Figure 5.4

Cost per litre by projects' total rainwater tank cost for government and non-government schools



Source: ANAO analysis of DCCEE 2008–09 to 2011–12 data.

NSSP and the cost of carbon abatement

5.26 The cost of carbon abatement is a relevant indicator in the wider consideration of a program's cost-effectiveness in contributing to emissions reductions. However, estimating the cost of abatement for a particular program is inherently difficult. For a program that funds solar power installations, this is because the price of photovoltaic systems is changing as the technology improves. At the same time, there is a mix of photovoltaic and other passive solar features making the calculation more difficult again, and this mix may vary from location to location and from region to region.

5.27 In the context of this audit, DCCEE estimated that the resource cost of abatement for PV installation[198] under the NSSP during the period 2008–09 to 2010–11 was $284 per tonne[199] of carbon dioxide equivalent (t CO_2-e).[200] This estimate of the cost of abatement is less than that identified in respect to some other abatement programs[201], but is nevertheless high in the context of estimates of the likely long-term cost of abatement.[202] The abatement estimate for the NSSP is also expensive when compared with the price of $23 per tonne carbon price under the first three years under the Australian Government's Clean Energy Plan.[203]

5.28 The high cost of the estimated abatement under the NSSP should also be considered in the context of work undertaken by the Productivity Commission. Through this work the Productivity Commission concluded that policies to subsidise solar photovoltaic were inherently costly when compared to other abatement options.[204]

Program objectives relating to environmental benefits

5.29 Three of the five elements of the program objective relate to the environmental benefits. Specifically:

- allowing schools to:
  - generate their own electricity from renewable sources;

[198] While the NSSP covers other renewable energy and energy efficiency measures, these were not included by DCCEE as the number of these measure installed under the program were not considered as significant.

[199] DCCEE sensitivity analysis of changes in key parameters (systems lifetime, discount rate and attributable administrative costs) produced a resource cost of abatement estimate range of $154 – $469/t CO_2-e for the program.

[200] Dollars are reported in terms of the base year, which is 2009. Resource cost is the total of the private costs (costs and savings borne by schools and state governments) and fiscal costs (direct costs incurred by the Australian Government).

[201] In 2010, ANAO reported that the estimated the cost of abatement for the Solar Homes and Communities Program was $447/t CO_2-e. See further in ANAO Report No.26 2009–10, *Administration of Climate Change Programs*, p. 17.

[202] In calculating an Australian cost curve for greenhouse gas reduction, McKinsey and Company expected that the long term marginal cost of abatement was likely to be close to $60–$70/t CO_2-e. McKinsey and Company, *An Australian Cost Curve for Greenhouse Gas Reduction,* 15 February 2008, p. 15.

[203] From 1 July 2015, the carbon price is to be set by the market.

[204] Productivity Commission, *Carbon Emission Policies in Key Economies: Responses to Feedback on Certain Estimates for Australia*, Supplementary Research Report, December 2011, p. 1.

- improve their energy efficiency and reduce their energy consumption; and
- adapt to climate change by making use of rainwater collected from school roofs.

5.30 As noted in Table 3.1, the assessment of the environmental benefit offered by individual applications was weighted at 40 per cent, slightly lower than the weighting allocated to the value for money criterion (45 per cent) and significantly higher than the weighting allocated to educational benefits (15 per cent). In respect to the assessment of environmental benefits, applicants were informed that:

- the environmental benefit of each item, or group of items, in a school's project would be assessed; and
- consideration would be given to evidence that the project has the capacity to deliver the maximum environmental benefit based on the recommendations of a recent independent professional environmental audit.

5.31 In this latter respect, the program guidelines encouraged schools to conduct professional energy and water use efficiency audits to help plan and inform their projects. For the 2011 program the guidelines stated that:

> It is in your school's best interests that you research project options so that your school gets the best value from its grant. Schools are encouraged to conduct energy and water use efficiency audits to assist them with planning their projects. These audits are not eligible for funding by your National Solar Schools Program grant. State and territory government education authorities may be able to assist with audits, or schools may choose to conduct a self-audit.…
>
> **For environmental benefit,** the assessment process will consider the size of the solar power system to be installed with the grant funding, and the level of solar radiation available in the school's geographic area. Applications that include rainwater tanks will be scored on how much water can be harvested. The environmental benefit of energy efficiency items will be assessed using a range of methods. The application will be more competitive if the school has recently undertaken an energy efficiency audit. *[emphasis as per original]*

5.32 However, only 26 per cent of successful 2010–11 application round schools and 29 per cent of successful 2011–12 application round schools

reported undertaking a professional energy audit prior to their application.[205] With the exception of the Australian Capital Territory, the Northern Territory and South Australia, a higher proportion of non-government schools in the remaining states reported undertaking energy audits, compared to government schools.[206]

5.33 An improved approach to focusing funding on those projects likely to provide the largest improvement in energy efficiency for the available funds is evident in the February 2012 guidelines published by DCCEE for the Community Energy Efficiency Program. In respect to assessments against the energy efficiency merit criterion (weighted at 30 per cent), the guidelines state that:

> Applicants should indicate merit by demonstrating the potential of the project to achieve improved efficiency or a reduction in energy use.
>
> As part of their application, applicants must provide:
>
> - a baseline measure of the energy usage and efficiency of the building, facility or site proposed for upgrade or retrofit based on:
>   - if the building is occupied, energy usage data for the most recent 12 month period prior to the planned commencement of the proposed project, or
>   - if the building is unoccupied, an estimate of the likely energy usage over a 12 month period made by an appropriately qualified energy efficiency expert
> - an estimate of the projected energy efficiency improvement to be achieved by the proposed upgrade or retrofit
> - an outline of the methods or tools used to derive the energy use and energy efficiency improvement estimates.

5.34 In addition, whereas the NSSP did not permit the cost of energy efficiency audits to be paid for with program funds, the guidelines for the Community Energy Efficiency Program include as eligible items:

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[205] The cost of conducting an energy audit, particularly for small government schools, was raised as an inhibiting factor during ANAO fieldwork. Industry advice has indicated that energy audits may cost between $1500 to $6000 depending on the size of the school and the level of audit.

[206] Consistent with this data, ANAO observations during the course of visits to schools for the audit indicated that non-government schools were generally clearer about the rationale for including particular items in their NSSP project, compared to government schools.

- the cost of one energy audit or energy efficiency assessment per building, facility or site conducted prior to the signing of the funding agreement (but within the previous 12 months), capped at $3000 per assessment; and
- the cost of one energy audit or energy efficiency assessment per building, facility or site conducted during the project period.

5.35 In regard to future DCCEE programs covering the costs of an energy audit, the department advised ANAO in April 2012 that it is not proposed that a general rule be applied but, rather, this will be considered in the context of program objectives, grant recipients and the size of grant funding.

Ability of schools to generate their own electricity from renewable resources

5.36 Three NSSP items enable school projects to generate their own electricity from renewable resources, comprising solar power systems, small wind turbines, and small hydro power generators. While solar power systems comprised the significant majority of approved projects and funding (see Table 5.3 above), only a small number of NSSP projects have involved wind or hydro power generation as a grant item.[207]

5.37 To date, 4259 projects with solar power have been approved. While almost all solar power system installations from the first two years of the program have been completed, delays with the NPA covering government schools in the 2010–11 funding round mean a significant proportion of projects with the solar power systems from this round have yet to be reported to DCCEE as completed (see Table 5.1). Table 5.5 provides further information on reported progress with the installation of solar power systems.

[207] The NSSP has provided funding for 43 projects with wind turbines, and one project with hydro power generation.

Table 5.5

Installation of solar power systems

Measures	2008–09	2009–10	2010–11	2011–12
Total projects with solar power (No.)	1378	1140	1070	671
Total solar power systems cost ($m)	45.4	52.7	44.8	22.9
Total solar power capacity for installation (kilowatt)	6070	5758	8365	5460

Source: DCCEE advice, April 2012.

Solar power generation

5.38 In the design and implementation of the NSSP, monitoring systems to measure overall power generation from NSSP solar power projects were not established. This would have involved, at the outset of the program, working with states, the non-government school sector and energy providers to develop a national approach to key baseline and outcomes data, including such measures as actual solar power production.[208] As a result of this situation, readily accessible NSSP solar system performance data is limited and of variable quality.

5.39 Some limited insight into the relative importance of solar power generation in schools' electricity consumption is available from historical data related to just over 150 Queensland government schools funded in 2008–09 and 2009–10 under NSSP arrangements, and generating electricity in 2010–11. The mean size of the systems was four kilowatt. Data analysis for 2010–11 showed that, on average, school-generated solar electricity accounted for 3.6 per cent of annual grid electricity consumption. While the mean size of solar power systems has increased since this time, the systems still account for a relatively small share of schools' electricity consumption.

5.40 More broadly, DCCEE estimates of the cost of abatement (see paragraph 5.27) prepared during the course of this audit noted that the PV installations funded by the NSSP were estimated to deliver abatement of 0.3 million t CO_2-e over a 15-year system lifetime. However, this estimate needs to be treated with some caution, given the inherent limitations of such

[208] As part of a school's application to the NSSP, baseline data is requested from a school concerning annual electricity and water consumption for the year prior to the application. DCCEE has advised that this data can be subject to a degree of error and is not validated against other sources.

estimates[209] and evidence that some NSSP-funded installations are not performing to the expected standard. In this respect, the interim evaluation of the NSSP observed that:

> Not all PV installations perform in line with ORER's solar production estimate. PV system performance is influenced by a range of factors such as PV orientation, shading and local variances in annual solar radiation.
>
> …The analysis indicates that performance of systems installed in Queensland under NSSP was above the ORER deemed Zone 3 median performance of 3.79 kWh/kWp/day. The tail end of performance drops away more steeply than the lead end, meaning that the average performance is below ORER's deemed performance. Whereas the lead end of performance is physically limited by technology and maximum available sunlight, the tail end of performance is impacted mostly by installation location and quality.
>
> However, NSW depicts a different picture with the performance of over 75 per cent of PV systems falling short of ORER's deemed standard.
>
> No conclusive case was identified for the discrepancy between system performance in Qld and NSW schools, but the issue certainly warrants further investigation.

Improved energy efficiency and reduced energy consumption

5.41 A range of eligible items such as energy efficient lighting, sensors to control the use of lighting and external shade awnings (see Table 5.3 for major eligible items) can contribute to the NSSP's objective of improving energy efficiency and reducing energy consumption. However, a relatively small amount of funding (just over 10 per cent of the cost of all project items) has been used for the installation of energy efficiency items. Table 5.6 provides an overview of the number of NSSP projects installing energy efficiency items and the total cost over the last four funding years.

[209] The NSSP database contains a listing of schools by state. To determine output from installed systems, ORER's zone ratings were used by DCCEE (four ratings apply to all of Australia). While several zones apply in some states and territories, the zone rating for each capital city was applied to all installations in any one state or territory.

Table 5.6

Installation of energy efficiency items

Measures	2008–09	2009–10	2010–11	2011–12
No of projects with energy efficiency items (No)	378	397	525	264
Total energy efficiency items cost ($) million	4.6	5.7	6.2	2.2

Source: ANAO analysis of DCCEE data.

Outcomes to improved energy efficiency and reduced energy consumption

5.42 While NSSP energy efficiency items can reasonably be expected to have had some impact on improving energy efficiency among schools, a lack of program data makes it difficult to establish the magnitude of the improvements that have been achieved and what can be attributed to the NSSP. In this context, the extent to which the NSSP can demonstrate a contribution to reduced energy consumption has not been a matter that DCCEE has sought to monitor as part of the administration of the program. While establishing causality to changes in energy consumption is difficult, establishing sound data to begin modelling/differentiating impacts would be a first step.[210] Such work would necessarily involve close cooperation between DCCEE and state education departments and the non-government school sector to better inform any future programs in this area.

5.43 In this respect, the NSSP interim evaluation conducted for DCCEE by consultants suggested that Queensland data indicates that, while energy efficiency has improved in NSSP schools, and some of this can be attributed to the installation of solar power systems and energy efficient lighting, a more significant proportion appears to have been delivered through other factors such as behavioural change and seasonal factors. Accordingly, at best, the impact of the NSSP on reducing energy consumption is likely to be small for an average size school. More often, the impact is likely to be a degree of assistance in offsetting other factors driving schools' increased energy consumption.[211] [212]

[210] During ANAO visits to schools, the point was made a number of times about behavioural change within a school as equally important, if not more important, in reducing energy consumption.

[211] During audit fieldwork with schools, increasing electricity consumption was attributed to a number of factors including the impact of new Building the Education Revolution facilities, expansion in air conditioning and heating and greater IT intensity within schools.

5.44 In this context, in April 2012, DCCEE advised ANAO that:

> The interim evaluation examined the reduction in energy consumption via Queensland data and the survey. DCCEE will be working with states and territories and the non-government sector to obtain a more complete dataset to measure energy consumption pre and post NSSP projects. This will be examined in the final evaluation.

Use of rainwater collected

5.45 An objective of the NSSP is to allow schools to adapt to climate change by making use of rainwater collected from school roofs. The program provides funding towards the purchase of rainwater tanks for non-potable use for toilet flushing, laundry use and small scale irrigation.[213]

Installation

5.46 Table 5.7 provides an overview of the number of NSSP projects installing rainwater tanks, the total cost and the tank capacity approved over the last four funding years.

Table 5.7

Installation of rainwater tanks

Measures	2008–09	2009–10	2010–11	2011–12
Projects installing rainwater tanks (No.)	230	229	183	81
Total rainwater tanks cost ($m)	4.3	4.0	2.6	1.0
Total tank capacity approved (million litres)	11.7	10.0	8.9	4.0

Source: ANAO analysis of DCCEE data.

Outcomes

5.47 The extent to which NSSP rain water tanks have offset schools' mains water consumption is unclear, but is likely to be negligible. Estimates undertaken for DCCEE indicate that 70 per cent of NSSP project schools had less than one per cent of their water needs met by the installation on NSSP funded rainwater tanks.[214] [215]

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[212] Queensland electricity consumption data for 572 government schools shows total consumption increased by 6.3 per cent between 2007–08 and 2010–11. During this period, the internal floor area of the schools increased by almost 17 per cent.

[213] An exemption to non-potable use may be granted where mains water is not available.

[214] Grosvenor Management Consulting, op. cit., p. 59.

5.48 Overall, encouraging behavioural change in water consumption could reasonably be expected to deliver greater water savings compared to the NSSP, although water tanks may have a demonstration value in this regard. Further, whether water tanks are the best mechanism to deliver water savings under the NSSP compared to other measures, such as dual flush toilets, is unclear.

Support renewable energy industry growth

5.49 The NSSP objective included supporting the growth of the renewable energy industry. The main areas where the NSSP provides funding for renewable energy items are:

- solar power systems;
- small wind turbines;
- small hydro power systems;
- solar hot water systems; and
- heat pump hot water systems.

5.50 With over 90 per cent of the cost of NSSP items comprising solar power systems, this represents the program's largest area of impact upon the renewable energy industry.

5.51 The solar power industry has shown considerable growth since 2008.[216] This has been driven by a range of factors including:

- state and territory initiatives such as energy generation grid feed-in tariffs;
- Australian Government support through the Solar Homes and Communities Program and upfront subsidies for generation units;
- falls in the cost of solar power systems; and
- extensive marketing by solar power system retailers.

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[215] In some instances, tanks may have encouraged an increase in total water consumption. Prior to the 2010–11 funding round, schools could use tanks to water sports ovals, at a time when water restrictions prohibited this practice with mains water.

[216] Industry data shows that installed photovoltaic capacity in relation to grid connected systems below 100kW in size increased from 80 000kW installed in 2009 to over 380 000kW installed in 2010 (CEC, *Review of the Australian solar PV Industry 2011*, p. 2).

5.52 Against this backdrop, the available data shows that NSSP demand accounts for a small share of industry activity and the growth in the sector. In particular, analysis of ORER data and NSSP data for 2010 indicates that NSSP projects contributed approximately two per cent of the growth in small-scale solar power capacity, and accounted for less than one per cent of the number of small-scale solar power systems installed during the year.[217]

5.53 The main businesses involved in the installation of solar power systems comprise designers, installers and electricians. For example, between 150 to 250 accredited installers have been involved in the program each year. Currently, this represents around five per cent of the number of accredited photovoltaic installers in Australia.[218] Similarly, the December 2011 interim evaluation of the NSSP noted that:

> Only a small percentage of renewable energy providers have obtained industry benefits through NSSP installations. Overall since 2008, 487 PV installers were involved in the NSSP. Approximately a quarter (120) of these installers were responsible for 80 per cent of the work. The NSSP installations have been somewhat concentrated around certain suppliers. However, government (and therefore schools) have high standards for engaging contractors, and it would be natural that suppliers with demonstrated safety, capability and capability track record would be the primary beneficiaries of a program such as the NSSP.
>
> Whilst the NSSP has injected significant funding into renewable energy, (approximately $144 million) NSSP's contribution to the growth of the renewable energy industry is relatively minor. The significant growth in that industry has been driven by the residential market. However, the NSSP has been funding installations that are typically larger than residential, which will be providing some stimulus and experience for the market in installations between two and 20 kW.[219]

5.54 The level of work available to the solar power installation industry under the program has varied with developments in the program. During the audit, sections of the industry indicated frustration with the sudden suspension of the program in October 2009, leaving firms in the position of

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[217] ORER data shows that there were over 196 000 grid connected small-scale (less than 100kW) systems installed in Australia in 2010, creating a rated output of over 380 000kW. NSSP data shows that 1637 projects with grid connected solar power systems advised of their completion in 2010. These projects had a final installed capacity (which will be somewhat higher measure than rated output) of 7480kW.

[218] The number of CEC accredited photovoltaic designers/installers was approximately 4200 in 2011.

[219] Grosvenor Management Consulting, op. cit., pp. 83–87.

having to manage excess solar system stock. The delay in finalising government school projects under NPA was also cited as a further frustration. Nevertheless, given the strong growth in the renewable energy industry overall, the impact of these program issues on the sector would be comparatively minor.

Provide educational benefits

5.55 The NSSP objective included allowing schools to provide educational benefits for school students and their communities. In this context, 'educational benefit' was one of the three published assessment criteria, and was weighted at 15 per cent of the overall assessment score for candidate applications. In relation to this criterion, applicants were informed that:

> Applications will be more competitive where they strongly demonstrate how the proposed measures will assist students to improve their understanding of climate change and renewable energy. This would include linkages with relevant elements of the school curriculum. Schools that are registered with the Australian Sustainable Schools Initiative (AuSSI)[220] would be well placed to meet this criterion, although this is not essential.

5.56 In addition to encouraging schools to register with the AuSSI, the program arrangements also sought to address educational benefits by:

- having schools incorporate NSSP renewable power system generation data into school lesson plans; and
- undertaking launch events, open days or other activities with an educational benefit which promoted the NSSP school project.

5.57 Table 5.8 further details the number of educational activities specifically encouraged or planned under the NSSP over the last two years. The data indicates a high level of intention by schools to conduct events associated with the project. In this respect, a survey undertaken as part of the interim evaluation of the NSSP:

[220] AuSSI is a partnership of the Australian Government and state and territory governments and the Catholic and Independent school sectors. The program aims to provide an integrated approach to environmental sustainability education activities across schools. The program's name varies between states/territories (for example, the program is ResourceSmart in Victoria schools). Around 3000 schools are registered with AuSSI. The program supports the development and dissemination of products, funding and resources to support schools in becoming more sustainable (for example, sustainability websites, audit tools and templates for school environmental management plans); providing facilitators to support schools implementing sustainability activities; seeking to build partnerships within and across schools; and undertaking accreditation of AuSSI schools.

- indicated that over 85 per cent of school respondents promoted their project through an event or activity. In relation to AuSSI registrations, data availability limits an assessment on the degree to which the NSSP triggered schools to register and to what extent they were engaged in the program[221]; and
- found that almost 60 per cent of schools believed that their students were more aware of the need to be more energy efficient and to conserve water as a result of the NSSP and other environmental sustainability initiatives.

Table 5.8

Educational activities specifically encouraged or planned under NSSP: activities by year

Activities	2010–11	2011–12
Schools registered with AuSSI	533	389
Schools planning an NSSP project open day	872	389
Schools planning an NSSP project launch event	971	570
Projects in funding round	1224	784

Source: ANAO analysis of DCCEE data.

Incorporation of project learnings into teaching

5.58 A significant issue for the NSSP in maximising the educational impact of the program is the need to work with states/territories and the non-government sector on incorporating material and learnings from the NSSP into areas of school curricula.[222] This is not an easy task from a national program perspective. In addition, alongside the NSSP, there are a large number of environmental and sustainability programs across the Commonwealth and the states, each often producing a range of material for classroom teaching.

5.59 The program guidelines outlined to applicants that, to advance learning goals, a Data Collection, Storage and Visualisation System (DCSVS) was a compulsory item when installing a solar power or other renewable energy system. The interim evaluation of the NSSP observed that the significant

[221] The fact of registration can not be taken as evidence of involvement.

[222] A number of states operated their own solar power installation program in tandem with the NSSP. This could reasonably be expected to have helped facilitate the greater use of school renewable energy material in school curricula.

majority (98 per cent) of relevant projects had installed a DCSVS, but that a small proportion (two per cent) had not. DCCEE has taken follow-up action to ensure DCSVS are installed in these remaining schools by mid-2012.

5.60 In the 2011–12 funding round, 95 per cent of schools have said they plan to incorporate DCSVS data into curricula, which is similar to the percentage of schools in the 2010–11 funding round that planned to use the data in their curricula. In respect to the educational benefits of the installation of DCSVS', the interim evaluation concluded that:

> The DCSVS is considered to be key in achieving educational benefits for students and the wider community. Only 45 per cent of schools surveyed utilised their DCSVS data in their resource materials/learning plans. Of the schools that did not utilise the data, two thirds were government schools. This may be explained by a discrepancy of resources available between government and non-government schools. Data and feedback from schools also indicated that installation issues contributed to the DCSVS data not being used. Discussions with DCSVS suppliers suggested that many schools encountered challenges with connecting the system to their IT network, especially government schools. The NSSP should work with the states and territories and non-government schools to address the technical or other issues constraining the wider utilisation of DCSVS data requires investigation.

5.61 Similar findings were evident in schools visited by ANAO as part of the audit.[223] In addition, in a number of instances[224], the DCSVS at the school visited by ANAO had not been working for some time, which was cited by teachers as a reason why NSSP data was not being used in teaching.

Compliance with program requirements

5.62 Compliance management focuses on encouraging grant recipients to voluntarily comply with program requirements and deal with contraventions appropriately.

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[223] The audit conducted face-to-face interviews with over forty NSSP school contacts and specifically asked how solar power system data was being used for teaching purposes in the school. Almost one-third of schools made reference to the use of the school's DCSVS data in teaching (usually in maths, science or as part of an environmental studies group). However, primary schools were more likely to teach about solar and renewable energy in a conceptual manner, while secondary schools were more likely to specifically use the DCSVS data from the solar power system to monitor and analyse changes.

[224] Overall, around one-quarter of the NSSP data collection systems were not working at the time of ANAO's school visits.

5.63 Typically, a program will draw upon a suite of compliance activities to address risks to the effective delivery of the program and the intended program outcomes. These activities include:

- educating and supporting grant recipients who want to comply;
- monitoring compliance and taking action against grant recipients who do not comply; and
- taking actions against grant recipients who deliberately breach program requirements.

5.64 The key mechanisms the NSSP uses to educate grant recipients to meet program compliance requirements include:

- the funding agreements, which set out the terms and condition of the grant funding and the approved project activities and budget; and
- DCCEE's NSSP website and direct email contact with schools concerning significant compliance issues.

5.65 In relation to the monitoring of compliance, an effective program would generally involve the following four key elements:

- a compliance strategy that outlines the types of activities to be undertaken; who will undertake them; their frequency and how they will be reported;
- developing and implementing a schedule of compliance activities;
- targeting compliance activities; and
- the timely determination of compliance status.[225]

Compliance strategy

5.66 A compliance strategy for the NSSP received relatively little attention during the program's administration by the then DEWHA.[226]

5.67 In the second half of 2009, DEWHA's Energy Efficiency Taskforce produced a *Compliance and Audit Framework for Solar Programs*, although this was essentially a high-level planning document. DEWHA records also show

[225] ANAO, Better Practice Guide, *Administering Regulation*, March 2007, p. 51.

[226] For example, the *National Solar Schools Program Guidelines July 2008* did not canvas the matter of compliance and safety. Later guidelines do cover this area.

the drafting of a *Photovoltaic Compliance and Audit Risk Management Plan and Risk Register* in late October 2009. Departmental records are unclear as to whether this draft was finalised.

5.68 The transfer of the NSSP and a number of other energy efficiency programs to DCCEE in March 2010 saw the department seeking to apply a more coordinated approach to managing compliance and assurance associated with its energy efficiency programs.[227] In October 2010, DCCEE set out its overarching approach through its compliance and assurance strategy and signalled the development of program specific risk analysis and compliance and assurance plans.

5.69 It was not until July 2011 that an NSSP specific compliance strategy was formally documented, although elements such as site inspections of NSSP projects had begun in November 2010 as part of a solar photovoltaic compliance inspection program (further discussed in paragraph 5.73). Among other things, the strategy details the compliance requirements upon schools; the types of compliance and assurance activities being undertaken at a program level; the respective roles and responsibilities of the program area and the corporately managed program of energy and safety compliance; and compliance reporting arrangements.[228]

5.70 Below this, the roles and responsibilities of the state and territory educational authorities in assisting compliance arrangements are detailed in a compliance plan for government school projects.[229] Specifically, states are to facilitate inspectors' access to school sites; assist schools with faulty installations and, if necessary, draw installation matters to the attention of the appropriate state regulator.

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[227] In June 2010, the then Minister for Climate Change and Energy Efficiency agreed to a strengthen compliance regime of the Renewable Energy Target scheme and the government's solar rebate and grant program. This included agreement to a phased approach to implementing a solar photovoltaic compliance inspection program.

[228] The 2011 compliance strategy for the National Solar Schools Program was produced by the Energy and Safety Program Compliance Branch, with advice from the NSSP program area.

[229] The National Partnership Agreement on the National Solar Schools Program requires that the Commonwealth develop a compliance plan for the NSSP in consultation with the states and territories as assurance that government school projects are installed in accordance with the NSSP guidelines (Part 3, clause 16(g)). Following consultation with the states, this plan was finalised by DCCEE in April 2012.

Compliance activities

5.71 Ensuring that projects comply with program guidelines and business requirements involves a range of activities which provided varying levels of assurance about compliance; from seeking school declarations about the expenditure of funds and installer reports/certifications, to detailed third party site inspections of solar systems' compliance. In focusing its compliance activity, DCCEE has stated that it has applied a risk-based approach to target non-compliance and fraud.[230] While there are standards and state/territory regulation applying to the solar power installation industry, an area of high risk identified by DCCEE has been the likelihood of solar power systems installed under NSSP failing to comply with the guidelines and meet relevant safety requirements.[231]

Solar power system inspections

5.72 A solar photovoltaic compliance inspection program was established by the then DEWHA in 2005 for quality audits of systems which had received government rebates under the Solar Homes and Communities Plan and the Renewable Remote Power Generation Program. The CEC was contracted to conduct the audits.[232]

5.73 Phase two of the inspection program began in October 2010, and included NSSP solar power installations for the first time. In total, 541 inspections of NSSP solar power systems were conducted between November 2010 and August 2011. The sample involved a combination of random and targeted inspections. Targeted inspections were developed with regard to complaints/issues, program intelligence, ensuring a spread of large and small installers, and some hot spot areas uncovered by CEC within previous inspections. The inspections were conducted by three consulting firms and involved, among other things, confirmation of existence of the solar power system, that the system was certified as required by the program guidelines and that the installation met the Australian Standards.

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230 DCCEE, *Compliance Strategy National Solar Schools Program*, July 2011, p. 3.

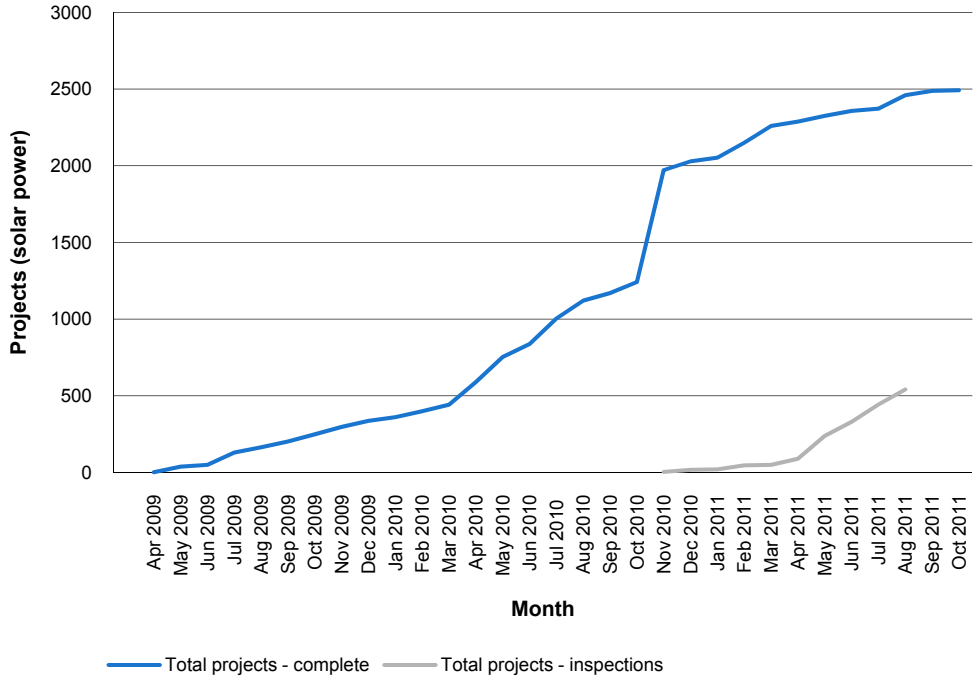
231 For example, the NSSP risk and issues register dated 11 July 2011 identifies poor installation and safety issues as remaining a high risk, even after the program's treatment strategy. Possible factors identified as contributing to this risk include installation by non-accredited installers and installations not meeting standards.

232 Under the first phase of the inspection program from 2005 to 2010, a total of 1193 inspections were conducted with 76 per cent deemed compliant against Australian Standards and 24 per cent found not to comply.

5.74 Despite a time lag in the photovoltaic inspection program, such that over 1200 NSSP solar power projects were advised as completed by the time the inspection program began in October 2010, by August 2011 22 per cent of completed projects had been subject to on-site inspections (Figure 5.5).

Figure 5.5

Accumulated number of completed NSSP solar power projects and on-site inspections by month



Source: ANAO analysis of DCCEE data.

5.75 Under new inspection management arrangements agreed in early 2012, the new Clean Energy Regulator is to deliver an inspection program of solar photovoltaic systems funded under NSSP which have been installed and registered for small-scale technology certificates during the prior 12 months. Inspections are to use a sample of NSSP installations to test compliance with program guidelines and the relevant Australian Standards. This is to involve:

- up to 200 inspections of NSSP solar power projects in 2011–12 for projects approved in 2010–11;
- up to 150 inspections in 2012–13 for projects approved in 2011–12; and
- up to 150 inspections in 2013–14 for projects approved in 2012–13.

Solar power system inspection outcomes

5.76 The outcomes from the solar power inspection program to date show that a relatively high proportion of systems installed under the NSSP have been identified as non-compliant.

Non-compliant (non-hazardous) findings

5.77 DCCEE's solar power inspection program findings include that almost half (49 per cent) of NSSP funded inspected solar power systems were non-compliant (non-hazardous). In this context, non-compliant (non-hazardous) is assessed as not having complied with one or more clauses under the Australian Standards to a level that could lead to equipment or system failure, but would not result in an imminent safety risk. These faults were considered to be medium priority issues and required short to medium-term action to rectify the system.

5.78 The nature of the non-compliant (non-hazardous) solar power system issues included: photovoltaic modules or inverter not on the Clean Energy Council's accredited list; roof penetrations not suitably waterproofed; wiring not clearly labelled; emergency procedures not permanently affixed to switchboard/meter box; polarised direct current isolators that were incorrectly wired or not rated for direct current; and some workmanship issues related to wiring and brackets.

Non-compliant (possibly hazardous) findings

5.79 Approximately nine per cent of the 541 NSSP funded solar power installations inspected to the end of August 2011 had systems assessed as non-compliant (possibly hazardous). Where a system was found to be non-compliant due to possibly hazardous issues, systems were immediately shut down pending rectification by the installer.

5.80 The nature of the safety issues with non-compliant (possibly hazardous) solar power systems that would result in a system being shut down included: system mounting not properly secured; exposed live wiring; loose connections; water ingress; and the system not being properly earthed.

5.81 The NSSP solar power inspection program outcomes indicated that the proportion of non-compliant (possibly hazardous) systems under NSSP is

almost twice the level of non-compliant (possibly hazardous) systems for the solar power inspection program as a whole.[233]

Response to safety inspections

5.82 In advice to the Minister for Climate Change and Energy Efficiency on the final outcomes of the inspection program to the end of August 2011, DCCEE outlined a range of existing and additional measures in response to the high rate of non-compliant, potentially hazardous systems installed. The measures outlined included:

- all non-compliant findings notified to schools and state authorities who are responsible for seeking rectification by the installer;
- work with the CEC to formulate appropriate responses to the issues identified;
- ministerial letters to state counterparts seeking actions to address findings;
- approaches to state regulatory authorities to address non-compliant work;
- broad dissemination of inspection program findings to major NSSP stakeholders; and
- reinforcing to all future NSSP school projects key messages about the inspection program results and industry actions to improve compliance.

5.83 The department advised that, given the range of existing and proposed actions, the NSSP should proceed. While the option of a 100 per cent inspection regime was canvassed by DCCEE, this was not considered appropriate at this time for a number of reasons, including the blurring of roles and responsibilities with state regulatory authorities and industry efforts; the raising of a higher level of concern than may be warranted; and increased risk of calls on the Commonwealth to assist with project rectification costs when this is an area for the responsible parties (schools and installers).

[233] The solar safety inspection program covers two DCCEE solar programs, the former Solar Homes and Communities Plan (SHCP) which was closed in June 2009, and the NSSP. The number of SHCP solar power system inspections to end August 2011 totalled 1961. Six per cent of SHCP solar power systems had significant defects requiring the system to be shut down and 46 per cent were not fully compliant.

5.84 The approach outlined by DCCEE in its brief was agreed by the Minister.

Project acquittal and certification arrangements

5.85 Grant acquittal arrangements are subject to an overarching legislative and policy framework which requires:

- the proper use of Commonwealth resources and ensuring there is no misapplication of public money[234]; and
- reliable, timely and adequate evidence to demonstrate that grant funds have been expended in accordance with the terms and conditions of the funding agreement.[235]

5.86 In support of this framework, DCCEE has two acquittal management plans for the NSSP, which set out policies and processes for the acquittal of those projects funded prior to the program's suspension in October 2009, and the acquittal of non-government projects funded post 30 June 2010.[236] In this latter regard, under NPA arrangements states are responsible for the acquittal of government school projects beginning with the 2010–11 funding round. In April 2012, DCCEE advised ANAO that it is consulting with states to develop a common module in the NSSP web application to help the adoption of similar approaches and procedures in acquittal arrangements for government and non-government projects.

5.87 Where a project is subject to an individual funding agreement with DCCEE, a project's acquittal comprises four parts:

- a signed final report in the format provided by DCCEE within 20 business days after the end of the project period;
- an income and expenditure statement, prepared by a qualified accountant in compliance with Australian Accounting Standards;

[234] FMA Act, sections 44 and 14.

[235] Commonwealth Grant Guidelines, p. 25.

[236] DCCEE, *National Solar School Program (NSSP) and Green Vouchers for Schools (GV): Acquittal Management*, June 2011; and DCCEE, *National Solar School Program (NSSP) Acquittal Management: Non-Government School Projects (post 30 June 2010)*.

- photographs of the completed project; and
- a solar power installation report detailing the system installed and certified by the school, the accredited designer and installer and licensed electrician.

5.88 Once schools have advised DCCEE of their project's completion, schools are required to provide the final report documents for DCCEE's acquittal process within 20 business days of project completion. DCCEE data for the 2008–09 and 2009–10 grant funding years shows that only half the schools that completed their project were providing all final report documentation within the required timeframe. More broadly, the non-return of complete acquittal documentation has been an issue for the program. This reached a point in early 2011 where the NSSP sent an email to over 600 schools requesting the return of acquittal documentation.

5.89 Table 5.9 highlights that around one-fifth of projects from the 2008–09 and 2009–10 grant funding years are still to achieve final acquittal. In the case of individual projects, the main reason for the acquittal delays is schools failing to provide acquittal documentation or insufficient documentation. Other DCCEE priorities have also acted to limit resources available for the timely completion of acquittals.[237] [238]

Table 5.9

NSSP acquittals

	Individual projects in 2008–09 and 2009–10	Cooperative funding agreement projects
Funded schools	1479	1148
Acquittals completed	1429	738
Acquittals outstanding	50	410

Source: DCCEE advice, April 2012.

5.90 While debt recovery on individual projects that have not provided acquittal documentation is an enforcement option, the department has decided

[237] DCCEE, *National Solar School Program (NSSP) and Green Vouchers for Schools (GV): Acquittal Management*, p. 4.

[238] Currently, once DCCEE has received all final report documents around one-half of the projects are acquitted within 30 days.

to take a risk-based approach that may allow the provision of less than complete acquittal documentation in certain circumstances.[239]

5.91 In relation to the acquittal of projects covered by cooperative funding agreements), two of the five states (Queensland and Western Australia) have been in a position to complete the necessary acquittal declarations to DCCEE. The remaining states are progressing a small number of matters in relation to their cooperative funding agreements to enable the completion of their acquittal declarations to DCCEE.

Conclusions

5.92 The NSSP is well advanced in its implementation, with over 4600 projects approved for funding of which more than half have been reported as completed. Nevertheless, there have been some delays with the commencement and completion of projects, reflecting a delay in the finalisation of a NPA to cover funding for government schools from 2010–11 to 2012–13, and some delays with the finalisation of acquittals for some projects. The NPA was finalised in November 2011, and DCCEE has taken action to respond to delays with projects being acquitted.

5.93 While there are standards and state/territory regulation applying to the solar power installation industry, an area identified as high risk by DCCEE has been the likelihood of solar power systems installed under the NSSP failing to comply with the program guidelines and meet relevant safety requirements. To date, the outcomes from solar power safety inspections show that the proportion of non-compliant, potentially hazardous systems under the NSSP is almost twice the level of non-compliant, potentially hazardous systems as for DCCEE's solar inspection program as a whole. In briefing the Minister for Climate Change and Energy Efficiency in late 2011, DCCEE outlined a range of existing and additional measures to address the high levels of non-compliant, potentially hazardous systems installed. At the time of this report, data on the impact of these measures was not available.

5.94 Although not a program objective, a key consideration in the selection of successful applications was the assessment of the value for money likely to be provided by candidate projects. This approach was consistent with the CGGs, which outline an expectation that value for money will be a core

[239] Decisions on acquittal documentation are captured in the NSSP acquittal register.

consideration in determining funding recipients under a grant program. Analysis undertaken by ANAO as part of this audit of the major cost items funded under the program, as well as analysis undertaken by the consultants engaged to perform the interim program evaluation, indicates that the costs of installed items are generally consistent with industry benchmarks and trends. In addition, in general the cost of similar projects in government schools and non-government schools has been comparable.[240]

5.95 Four of the five elements of the program objective related to environmental benefits, and 'environmental benefits' was accorded significant weighting in the assessment criteria advised to schools in the published program documentation. In this context, while there are some shortcomings in the available data, indications are that the program has contributed to schools: generating their own electricity from renewable sources; improving their energy efficiency; and making use of rainwater collected from school roofs. The program has also made a contribution to the growth of the renewable energy industry.[241]

5.96 Of particular note in respect to environmental benefits is that DCCEE has estimated the cumulative abatement effect of NSSP photovoltaic installations at 0.3 million t CO_2-e over the assumed 15-year lifetime of the installed systems. This is a significant figure, as it is more than one per cent of the abatement to be delivered by the Australian Government's Renewable Energy Target by 2020. However, the resource cost of the estimated abatement is significant, being in the order of $284 per t CO_2-e. In addition to the inherent limitations of such estimates, due to some shortcomings with installation work[242]—that DCCEE is aware of and is responding to—the estimate is likely

[240] By a significant margin, the most popular item funded under the NSSP has been the installation of solar photovoltaic (PV) systems. On average, non-government schools over the last three years have been able to obtain lower cost solar power systems, compared to government schools. For the 2011–12 grant year, the cost difference was approximately 20 per cent. The major contributing factor to this difference is that economies of scale operate, such that the cost of solar power systems per kilowatt decrease as system sizes increase. Non-government schools on average have installed larger solar power systems, which enable the achievement of lower per unit costs.

[241] In comparative terms, the NSSP's contribution to the growth of the renewable energy industry has been relatively small. A degree of concentration has occurred around solar power systems being installed by a relatively limited number of suppliers, but this partly reflects procurement panel arrangements for government schools in a number of states.

[242] In particular, there have been issues identified through compliance inspections with the standard of system installations and not all of the installed systems are performing in line with the solar production estimates of the ORER (which were relied upon in preparing the estimate).

to overstate the level of abatement achieved and, therefore, understate the cost of the abatement that has been achieved.

5.97 The program objective also outlines that the NSSP should allow schools to provide educational benefits for school students and their communities. The focus of the program against this part of the objective has centred on creating greater awareness and/or understanding of renewable energy and energy efficiency among students and their community. Maximising the educational benefits from funded projects has been impeded by some system installation issues and variations in the extent to which schools use data from solar power systems in their resource materials/learning plans. Nevertheless, the available data indicates that, as a result of the NSSP and other environmental sustainability initiatives, schools consider their students have a greater awareness of the need to be more energy efficient and to conserve water. However, to date, there is no data available on the extent to which any increased awareness and understanding has been translated into behavioural change.

Ian McPhee
Auditor-General

Canberra ACT
7 June 2012

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