

# Summary and recommendations

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## Background

1. The Renewable Energy Target was introduced in 2001, through the *Renewable Energy (Electricity) Act 2000* (the Act), to encourage additional generation of electricity from sustainable and renewable resources and reduce greenhouse gas emissions in the electricity sector (section 3 of the Act). The Act does this by creating a market for renewable energy certificates, to drive investment in renewable energy. On the supply side of the market, participants in the Renewable Energy Target scheme (the scheme) create certificates for each megawatt hour of renewable energy generated or displaced (no longer required from the electricity grid). On the demand side, electricity retailers source these certificates to meet their share of renewable energy in proportion to the total electricity sold to their customers.
2. In January 2011, the Renewable Energy Target was split into the Large-Scale Renewable Energy Target (LRET) — the establishment or expansion of renewable power stations — and the Small-scale Renewable Energy Scheme (SRES) — the installation of small generation units (primarily solar photovoltaic systems) and solar water heaters/air source heat pumps. In January 2018, the Minister for Energy announced that the legislated LRET target of 33,000 gigawatt hours of additional electricity from renewable energy sources by 2020 would be achieved.
3. In administering the scheme, the Clean Energy Regulator (the regulator) validates scheme participants' creation, and monitors electricity retailers' surrendering, of renewable energy certificates. The Clean Energy Council has a co-regulatory role under the scheme to maintain a list of approved components for solar photovoltaic systems and to accredit designers and installers of solar photovoltaic systems. The regulator engages with other state and territory regulatory agencies and industry peak bodies (including the Smart Energy Council and Master Electricians Australia).

## Creation and validation of renewable energy certificates

4. Participants in LRET must first have their large-scale renewable energy power stations accredited under the scheme by the regulator before being able to create large-scale generation certificates. A total of 711 power stations were accredited over the period from 2001 to 2017, with a further 433 power stations projected to be accredited in 2018.
5. Between 2011 and 2017, the regulator validated an average of 16.2 million large-scale generation certificates created each year for electricity generated from accredited renewable energy power stations. The quantity of certificates validated in 2018 is projected to increase to 24 million.
6. SRES participants, or their assigned agents<sup>1</sup>, can create small-scale technology certificates for up to 12 months after the date small-scale systems are installed. The regulator validates the small-scale technology certificates created within the Renewable Energy Certificate (REC) Registry — a secure system for creating, surrendering and trading renewable energy certificates.

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<sup>1</sup> System owners often assign their right to create small-scale technology certificates to agents when entering into system purchase arrangements.

7. Since 2011, an average of about 286,500 small-scale systems have been installed each year involving the creation of over 210.5 million small-scale technology certificates in total over the period from 2011 to 2018.

### **Surrender of certificates by liable entities**

8. Liable entities are wholesale purchasers of electricity, mainly electricity retailers that are the first to acquire electricity in a grid with an installed capacity of 100 megawatts or more. The legislation provides for liable entities to surrender a certain number of large-scale generation certificates and small-scale technology certificates in proportion to the amount of electricity (less exemptions) they acquire during the year.

9. The proportions applicable to all liable entities (the renewable power percentage under LRET and small-scale technology percentage under SRES) are determined annually by the Minister, a year in advance. Liable entities that do not surrender enough certificates are required to pay a shortfall charge of \$65 (non-tax deductible) for each certificate not surrendered.<sup>2</sup> Adherence with certificate surrender obligations has remained high under SRES, but less so under LRET. Since 2016, a small number of liable entities have decided to pay significant shortfall charges in preference to surrendering the required number of large-scale generation certificates.

### **Rationale for undertaking the audit**

10. The Renewable Energy Target scheme is one of the Government's key measures to encourage investment in renewable energy sources and reduce Australia's greenhouse gas emissions. The scheme underpins a market for renewable energy certificates worth in excess of \$1.5 billion annually rising, involving a broad spectrum of participants from large energy retailers through to large and small businesses and householders. The audit aimed to provide assurance over the robustness of the scheme's operation and the achievement of its objectives.

### **Audit objective and criteria**

11. The objective of the audit is to assess the effectiveness of the Clean Energy Regulator's administration of the Renewable Energy Target scheme. To form a conclusion against the audit objective, the ANAO applied the following high level audit criteria:

- Has the regulator established appropriate arrangements to register renewable energy systems and validate renewable energy certificates?
- Is the regulator effectively monitoring the surrender of renewable energy certificates by liable entities?
- Is the regulator effectively monitoring scheme compliance and responding to non-compliance?
- Has the regulator established appropriate governance arrangements to manage the risks, operation and performance of the Renewable Energy Target scheme?

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2 Liable entities acquire large-scale generation certificates and small-scale technology certificates on the open market (at forward-contract rates or spot prices) or through power purchase agreements (often long-term contracts) with renewable power station owners/operators. Liable entities are able to carry forward a large-scale generation certificate shortfall of 10 per cent or less from one year to the next without incurring the shortfall charge.

## Conclusion

12. The Clean Energy Regulator has effectively administered the Renewable Energy Target scheme, except for the enforcement activities of its investigations unit.

13. The regulator has established effective arrangements to register renewable energy systems and validate renewable energy certificates. Scheme participants received appropriate assistance to register renewable power stations and create certificates. Large-scale power stations are accredited and registered after effective assessments, in line with scheme requirements. Certificates created by scheme participants are appropriately validated by the regulator.

14. The regulator is effectively monitoring the surrender of renewable energy certificates by liable entities. The regulator correctly calculated and imposed shortfall charges on those liable entities that did not meet their surrender liabilities.

15. The regulator has mostly effective compliance monitoring and enforcement arrangements for the scheme. Scheme intelligence and data analysis has helped in the targeting of compliance monitoring and enforcement activities. Scheme compliance risks are being addressed through compliance monitoring activities. While administrative actions have been appropriately handled by the SRES compliance team, governance of the regulator's investigations unit has been insufficient to ensure that its investigation procedures and processes are satisfactory, consistently applied and result in timely investigations.

16. The regulator has established appropriate governance arrangements to manage the risks and operation of the scheme. Effective oversight arrangements have been established for the scheme, with scheme implementation documented in multiple business and support plans. Annual certificate surrender targets have been calculated consistent with legislative requirements. The regulator's external reporting for the scheme is supported by an established performance management framework.

## Supporting findings

### Renewable energy system registrations and certificate validations

17. The regulator appropriately assisted scheme participants to register renewable energy systems and create renewable energy certificates.

18. Fit and proper person assessments have been undertaken effectively, consistent with legislative requirements. Large-scale renewable energy power stations have been accredited and registered by the regulator after undergoing assessments that met legislative requirements, although assessment procedures and documentation could be improved.

19. The regulator effectively validates the power stations' creation and calculation of large-scale generation certificates against electricity generation data throughout the year. The REC Registry has an effective on-line portal to register small-scale system installations and validate small-scale technology certificates. The maintenance of SRES integrity would be better demonstrated were the regulator to develop a strategy or plan outlining the validation tasks that should be undertaken, taking into account other external controls and activities. Where undertaken, the regulator appropriately finalised the assigned certificate validation tasks.

## **Surrender of certificates by liable entities**

20. The regulator accurately determined the renewable energy certificate surrender liabilities of liable entities. Processes to identify new liable entities, and assess exemption certificates are effective. Assessments of ‘relevant acquisitions’ of electricity would be more robust were they to better address standard operating procedures.

21. The regulator has effective mechanisms in place to monitor over time the position of liable entities to meet their certificate surrender liabilities when they fall due.

22. Where liable entities do not meet their certificate surrender liabilities, the regulator accurately calculates and imposes a shortfall charge, and publishes their names on the regulator’s website. The regulator is actively managing the recovery of overdue shortfall charge debts.

## **Compliance monitoring and enforcement**

23. The regulator has sound arrangements to collect and disseminate externally sourced intelligence relevant to scheme participants to those responsible for scheme entry, operations and compliance and enforcement activities. The regulator undertakes analysis of intelligence data that has helped in the targeting of its compliance monitoring and enforcement activities. Improvements to compliance risk assessments and plans would better position the regulator to demonstrate that scheme risks are being appropriately managed.

24. Compliance risks with the potential to reduce the integrity of the scheme are being addressed by the regulator’s compliance monitoring activities. The regulator should formally assess the extent of any residual electrical safety risks from small generation unit installations under the scheme and inform those stakeholders in the best position to effect further treatments.

25. Scheme non-compliance matters that are likely to result in administrative action have been determined consistently by the SRES compliance team. For serious scheme non-compliance cases, the governance of the regulator’s investigations unit has been insufficient to ensure that all mandated investigation requirements are contained in standard operating procedures, the procedures are consistently applied and that investigations are undertaken in a timely manner.

## **Governance**

26. Effective arrangements have been established to oversee the implementation of the Renewable Energy Target scheme.

27. Scheme implementation is currently documented in multiple business plans at the corporate, divisional, branch and section level and support plans. An overarching map for the scheme would better ensure that recent organisational structure and scheme operational changes integrate and contribute to the efficient and effective management of the scheme.

28. The regulator has an established risk management framework to guide the development, implementation and monitoring of the organisation’s risk management plans. Improved alignment between scheme and strategic risks, and better maintenance of the risk register’s currency, would aid the regulator’s risk management.

29. The renewable power percentage and small-scale technology percentage that determine annual certificate surrender targets are set annually by the Minister consistent with legislative requirements, based on the recommendations of the regulator. The percentages are calculated using formula inputs from robust sources.

30. The regulator has an established performance management framework to monitor internally and report internally and externally on the Renewable Energy Target scheme's achievements. Overall, the performance indicators used by the regulator to report under the Commonwealth performance framework require further development to be relevant, reliable and complete. The regulator's other annual external performance reporting mechanisms at the scheme- and entity-based level aid the transparency of, and accountability for, the scheme's achievements.

## Recommendations

**Recommendation no.1**  
**Paragraph 4.44** The Clean Energy Regulator assess the extent to which its Renewable Energy Target scheme data shows any residual systemic electrical safety risks for small generation units installed under the scheme and inform those stakeholders in the best position to effect further treatments.

**Clean Energy Regulator response:** *Agreed*

**Recommendation no.2**  
**Paragraph 4.76** The Clean Energy Regulator establish governance mechanisms to manage its investigations function that ensure mandated investigation requirements are contained in standard operating procedures, the procedures are consistently applied and that investigations are undertaken in a timely manner.

**Clean Energy Regulator response:** *Agreed*

**Recommendation no.3**  
**Paragraph 5.11** The Clean Energy Regulator develop an overarching map to document and link the various elements of the operation and governance of the Renewable Energy Target scheme.

**Clean Energy Regulator response:** *Agreed*

**Recommendation no.4**  
**Paragraph 5.39** The Clean Energy Regulator refine the design of its performance measurement and reporting framework to ensure it is addressing the requirements of the Commonwealth performance framework to demonstrate progress against its purpose using relevant, reliable and complete performance criteria.

**Clean Energy Regulator response:** *Agreed*

## Summary of entity response

31. The proposed report was provided to the regulator, which provided a summary response that is set out below. The response from the regulator is provided at Appendix 1.

The Clean Energy Regulator welcomes the Australian National Audit Office's (ANAO's) proposed report and agrees to all four recommendations.

Activity in the Large-scale Renewable Energy Target and the Small-scale Renewable Energy Scheme (under the Renewable Energy Target) continue to grow beyond original expectations. The 2020 large-scale target will be exceeded and strong growth in rooftop solar photovoltaic is continuing. In response to the unprecedented growth in the Renewable Energy Target, the agency continues to refine and automate its controls to adapt and keep pace.

In this context, the agency appreciates the ANAO's generally favourable commentary on the administration of the Renewable Energy Target. Work has commenced to implement improvements consistent with the recommendations.

## Key messages from this audit for all Australian Government entities

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

### **Governance and risk management**

- A central document to guide program administration ensures that all aspects of the program are considered and addressed cohesively.
- Entities should assess their exposure to material extra-jurisdictional risks and, where necessary, inform those stakeholders in the best position to effect further treatments.

### **Policy/program implementation**

- An effective intelligence and data analytics capability can assist regulators to target compliance monitoring and enforcement activities.
- Sample-based application assessments are best undertaken using a risk-based targeting approach.
- Well-designed IT systems capture and retain data relevant to program operations and enable reporting of program performance.
- Establishing appropriate governance arrangements for a regulator's investigation and enforcement function is important to ensure its activities are effective and timely.

### **Performance and impact measurement**

- Relevant, reliable and complete performance criteria should be designed to address the accountability needs of the Parliament and the public, focusing on the achievement of entity purpose.