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INTEGRITY REVIEW OF THE ROOFTOP SOLAR PV SECTOR

SMALL-SCALE RENEWABLE ENERGY
SCHEME REGULATORY FRAMEWORK
AND PROCESS REVIEW



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Summary Report

Preface

Overview of the Small-scale Renewable Energy Scheme and issues

The rooftop solar photovoltaic (PV) sector has seen unprecedented growth since 2016 with the combined capacity of rooftop solar PV, now almost 13 gigawatts, representing one of the biggest generators in the electricity grid. The total annual installations of rooftop solar PV systems has increased from 750 megawatts (MW) across 133,000 installations in 2016 to an expected 2,900 MW across 370,000 installations in 2020.

This phenomenal growth has been driven by consumers wanting to take control of their electricity bills, a competitive market, falling technology costs and both Commonwealth and state and territory incentives. Any market growing this strongly has the potential to attract some poor performing participants and result in quality and other issues for consumers and integrity issues for the Small-scale Renewable Energy Scheme (SRES). The total value of small-scale technology certificates (STCs) in 2020 will be approximately \$1.6 billion. This cost is borne by all electricity users so scheme integrity and value for consumers is critical.

The SRES is a voluntary¹ sub-scheme of the Renewable Energy Target (RET)². The SRES provides a financial incentive for households and businesses to install small-scale renewable energy systems, predominantly rooftop solar PV³, through the creation of STCs where the number of certificates relates to the generation capacity of the installation. The SRES is phasing out; each year there are fewer certificates for a given capacity. The SRES will phase out completely at the end of 2030⁴.

The eligibility requirements give the Clean Energy Council (CEC) a co-regulatory role in the SRES with the Clean Energy Regulator (the Regulator), as the legislation relies on the CEC developed and administered installer accreditation scheme and guidelines, and component approval and listing process. However, this co-regulatory arrangement has the potential to lead to role confusion⁵. One aspect this review considers is whether this is the most efficient and effective arrangement given the current scale of the SRES and the consumer and scheme integrity issues being encountered.

There are many participants in the rooftop solar PV sector, including the retailer who sells the system, the accredited installer⁶ and the registered agent (the agent) who creates the STCs. The retailer is in control of both the sale of the system to the consumer and arranging for the installation to be carried out, either by contracting a party to do so or using its own employees. However, the retailer is the one key party in the supply chain not held accountable in the current SRES regulatory framework.

When the scheme finishes at the end of 2030, the additional integrity requirements imposed on rooftop solar PV systems claiming STCs will no longer apply and the only requirements will be those covered by state and territory electrical safety laws. It is timely to ensure clarity of the roles and responsibilities of Commonwealth versus state and territory regulators and consider transition arrangements.

¹ For clarity, it is not compulsory for a rooftop solar PV system to claim STCs. If the STC incentive is not claimed, then only state and territory electrical safety laws apply.

² The RET is established through the [Renewable Energy \(Electricity\) Act 2000](#) (the Act) and the [Renewable Energy \(Electricity\) Regulations 2001](#) (the Regulations).

³ Other eligible small-scale renewable energy systems include solar water heaters and air source heat pumps, and small-scale wind and hydro. Battery storage systems are not incentivised under the SRES.

⁴ Systems installed up to and including 31 December 2030 are eligible for STCs.

⁵ More information on roles and responsibilities in the SRES and the rooftop solar PV industry can be found in [Chapter 3](#).

⁶ An accredited installer (already a licenced electrician) undertakes training and testing required by the CEC to become accredited.

The Regulator has identified two significant integrity issues in the SRES over the past year:

- A material number of CEC accredited installers have signed written statements for eligibility of systems for STCs when they had not been onsite during installation⁷ and this has led to compliance action by the Regulator and the CEC. The Regulator has also found evidence that some installations may have been undertaken by persons undertaking electrical work without a relevant electrical licence as required under state and territory laws.
- The integrity and accuracy of serial number data supplied by a manufacturer to the voluntary [solar panel validation](#) (SPV) system, and questions over whether some panels met the eligibility requirements set by the CEC⁸. This has also led to compliance action by the Regulator.

In addition, there have been a range of reports of consumer issues (including financing), fly-by-night retailers, defective installations, quality concerns and other issues in the rooftop solar PV sector. The Australian Competition and Consumer Commission's (ACCC) submission (see [Appendix D](#)) to the review outlines around 30 areas of concern, including but not limited to:

- retailers and salespeople making false and misleading claims on panel origin, quality, output and price.
- consumers experiencing faults are referred to multiple different parties, who all dispute liability in the warranty process.
- use of high-pressure sales tactics and unconscionable conduct targeting vulnerable consumers.
- failure to connect the system in a timely manner resulting in financial loss through missed tariffs and paying for a system that is not operating.
- solar retailers phoenixing to avoid obligations under the Australian Consumer Law (ACL).

The Regulator has also identified, through its investigations, instances of counterfeit panel installations that claimed STCs with one particular instance brought to the Regulator's attention by a CEC accredited installer. More information on this case and other case studies on consumer issues can be found in [Chapter 3](#).

Hence, the Hon Angus Taylor MP, Minister for Energy and Emissions Reduction (the Minister) requested the Regulator, with support from the Department of Industry, Science, Energy and Resources, conduct a review into the rooftop solar PV sector.

This review examines appropriate changes that may be needed to the SRES to improve the integrity of Commonwealth entitlements under the scheme and consumer issues, including financing. **It is not a review of the level of the Commonwealth incentive.**

The Terms of Reference for the Rooftop Solar PV Sector Review are to consider:

1. The effectiveness of the accreditation process of installers, including ongoing compliance arrangements, to ensure systems are installed by persons who are appropriately trained, competent and operate with integrity.
2. The effectiveness of the approval process for key components (i.e. solar PV panels and inverters), including ongoing compliance arrangements, to ensure components comply with relevant product standards.
3. The effectiveness of the SRES legislative framework and processes in ensuring the compliance of solar PV retailers and installers with their obligations under the scheme and protecting consumers against inappropriate sales and installation practices including financing.

⁷ A rooftop solar PV system must be installed by a CEC accredited installer to be eligible for STCs and that accredited installer must be present at job set up, mid-installation check-up and at testing and commissioning as stipulated by the CEC's installation guidelines. Compliance action by the Regulator has resulted in some installers losing their accreditation.

⁸ There is a current [enforceable undertaking](#) relating to this issue.

4. The need for amendments to the SRES regulatory framework and processes to improve integrity, accountability and consumer protection measures in the rooftop solar PV sector.

Executive summary

Summary of key proposed changes

It is recommended that the Australian Government set all scheme eligibility requirements in Regulations and through the Clean Energy Regulator. Also, that all enforcement be undertaken by the Regulator, including in relation to accredited installers, retailers and component manufacturers.

This would replace the current co-regulation arrangement with the CEC. However, this would still allow for an industry body (or bodies) to administer installer accreditation and component listing, with accountability to the Regulator.

The SRES is an Australian Government scheme and the Government is accountable for managing risks from the scheme. Hence, the Australian Government should be in control of setting all scheme eligibility criteria and enforcing compliance.

It is the Regulator's view that the CEC has undertaken its regulatory roles diligently over a long period, including being open to suggestions from the Regulator.

However, it is difficult for the CEC to undertake enforcement against accredited installers and component manufacturers when it doesn't have, and cannot be given, the statutory investigation powers of a Commonwealth regulator. As its primary role is as an industry representative body, it doesn't have all the investigative, intelligence and in-house litigation capability of a regulator. There may be the perception of a conflict of interest with an industry body trying to take enforcement action against parties who may be its members.

A single regulator with the typical statutory powers and capability of a Commonwealth Regulator will be a stronger deterrent to non-compliant behaviour and enable more effective enforcement. This position was supported by the majority of stakeholders engaged with during the review. Further information is available in the "[Summary of insights from review engagement](#)".

There were varying views amongst stakeholders on whether it would be preferable to have a single body, or multiple bodies, to administer installer accreditation and component listing. The Regulator proposes this point should be consulted on more widely as part of the consultation on proposed amendments to regulations.

Poor performing system retailers should be held to account

It is proposed that system retailers be held accountable in the STC claim process and the Regulator be given the power to publicly list poor performing retailers as ineligible to sell solar PV systems and claim STCs. This will provide a powerful economic disincentive to some of the poor retailer consumer practices detailed in the ACCC's and Consumer Action Law Centre (CALC) submissions⁹.

Rooftop solar PV retailers sell the system to the consumer and either undertake or contract out the installation. Information provided by the ACCC during engagement for this review, supported by many other stakeholders engaged with and the Regulator's own investigations, highlights that poor performing retailers are typically the cause of both issues for consumers and integrity issues in the SRES.

The Regulator has identified that business practices employed by solar retailers encourage and enable unscrupulous behaviour within the industry (see Case Studies in [Chapter 3](#)). Consequently, it is recommended that the system retailer be required by law to make a written statement when they provide the registered agent with the accredited installer's written statement and the STC assignment form signed by the system owner. This new statement would include that the system will perform to

⁹ For more information please refer to [Chapter 3](#) and [Chapter 4 – Part C](#).

the quote provided to the consumer (bar extenuating circumstances outside the retailer's control), and that the system is complete, connected and generating.

It is further proposed that the Regulator would have the power to refuse to accept a statement from a retailer with an unacceptable history of making false statements, or a retailer making a false statement that has caused serious harm to consumers and/or the scheme and failed to offer rectification.

This would mean that the relevant retailer could no longer provide a statement as part of the process for claiming STCs and could not legitimately offer a discount that reflected the value of STCs. The Regulator would publish a list of ineligible retailers. If directors or owners of ineligible retailers attempt to phoenix¹⁰, the Regulator would have the power to add the new entity to the ineligible list. Retailers would have the normal procedural fairness and review rights under Commonwealth law.

The ACCC agrees that the proposed new written statement by retailers, coupled with the listing of ineligible retailers, would set a very strong deterrent to unscrupulous operators. The proposed retailer written statement will make it easier for the Regulator, ACCC and ACL regulators to work together to stop the harm caused by retailers who breach SRES eligibility requirements and consumer laws. Hence, this should benefit consumers.

There will be no material burden in this change for most of the retailers who do the right thing as the statement will be short and simple and the Regulator will seek streamlined technological solutions and potentially incorporate this within SPV.

Retailers who are also registered agents (who create STCs), or where the registered agent is a related entity to a retailer, may have a conflict of interest. It is suggested that proposed regulation amendments consider how such conflicts should be managed.

Accredited installers must prove they have been onsite to make the written statement of STC eligibility – and the statement to be made simpler and clearer

It is proposed that accredited installers will be held accountable by the Regulator, rather than the CEC, should they make false written statements. They will be required to actively prove they have been onsite during installation and the Regulator will consult on technology options to make proof easy and certain.

The Regulator has evidence of a material number of CEC accredited installers (6% responsible for 37% of installations) signing written statements of STC eligibility when they were likely not onsite during many installations, which is contrary to the CEC's current guidelines. This is further discussed in [Chapter 2](#).

The Regulator, and some state and territory electrical safety regulators, have evidence of installations being carried out without an electrician being onsite. This is contrary to state and territory electrical safety laws which require certain electrical work to be performed by licenced electricians. This practice is unacceptable and could lead to unsafe systems as well as workplace health and safety (WH&S) risks.

While states and territories are responsible for enforcing their electrical safety laws (and workplace health and safety legislation), requiring the accredited installer (who must be a licenced electrician) to prove they have been onsite in order to make the STC eligibility statement will give consumers comfort that a licenced electrician (specifically trained in solar PV installation) has been onsite during the installation and that may also reduce WH&S risks.

In addition, it is proposed that the written statement provided by the accredited installer be simplified with clear statements that the installer was onsite, the system was installed in accordance with state and territory electrical safety laws and any additional SRES eligibility criteria have been met. Accredited

¹⁰ In this report, 'phoenixing' relates to a retailer that has been listed as ineligible for STCs by the Regulator. This proposed new requirement only relates to STCs and ends in 2030. ASIC and other state and territory ACL regulators are also looking at phoenixing.

installers will also be required to undertake training on their responsibilities in making the written statement, including the consequences to them of making a false statement.

This package of proposed changes has proactive elements to prevent non-compliance, benefit consumers and will allow for effective enforcement against any who make false statements.

Increased component quality checks and stronger accountability for component manufacturers

It is proposed that the component listing process will have a greater focus on manufacturers providing the Regulator with positive assurance that the components they supply meet Australian Standards and are therefore eligible under the SRES. Also, that there be increased component sampling and testing (of products being sold in the Australian market) at the manufacturer's cost. The Regulator will hold manufacturers to account if they have provided false assurances or random testing of their components shows they do not meet required standards.

It is also proposed to mandate that solar panel manufacturers provide all serial numbers of panels they assure meet Australian Standards either to a current SPV verification service or to the Regulator. There will be no material increase in regulatory burden for manufacturers from this as 96% of panels sold in the Australian market by manufacturers already provide data to a SPV verification service.

In 2020, approximately 8 million solar panels will be installed that claim STCs. The Regulator has found issues with the integrity of some data supplied to the voluntary SPV initiative. It has also found both counterfeit solar panels and parallel imports where it is uncertain whether they are of the make and model approved by the CEC, comply with Australian Standards and come with the manufacturer's warranty. The current CEC approval process is primarily focussed on initial testing of panels and paperwork checks, with limited real-world sampling of components brought in for sale.

This current upfront approval process, together with the current co-regulatory arrangement, can blur accountability for the supply of components meeting Australian Standards which should rest with manufacturers. Moving to positive assurance declarations to a Commonwealth Regulator, and higher levels of testing of components in the market, places greater responsibility on manufacturers to ensure they are providing quality products that meet Australian Standards.

State and territory electrical safety laws require solar panels and inverters to meet Australian Standards, but they do not require testing of same.

For consumers, the panels are out of sight and there is generally low consumer awareness of panel and inverter brands. They typically only know there is a problem when the system ceases to work, or generation falls materially. If their panels are counterfeits or parallel imports, and if the system retailer is unscrupulous or has gone out of business, consumers will find it difficult to make a successful warranty claim.

Requiring manufacturers to provide the Regulator with positive assurance that components meet Australian Standards, and provide the eligible serial numbers of solar panels that must be scanned and verified onsite, will assure consumers they are getting components that meet Australian Standards and are backed by manufacturer warranty where claims are made for STCs. Enforcement of false assurance claims by a Commonwealth Regulator will again set a strong deterrent (to manufacturers supplying the market with products that don't meet Australian Standards) and enable effective enforcement.

Financing arrangements

It is proposed that the appropriate regulators¹¹ continue to monitor behaviour in the industry including the effects of Buy Now, Pay Later (BNPL) arrangements, with a specific focus on the solar industry if evidence of harm is occurring.

¹¹ These include the ACCC, ACL regulators and ASIC.

The report does not make specific recommendations in relation to financing arrangements as this has already been the subject of other recently completed and continuing inquiries and work by relevant bodies including regulators. The case studies from the CALC noted in this report highlights some of the risks to consumers.

However, the following suggestion was received by the Clean Energy Finance Corporation (CEFC) in relation to BNPL:

The CEFC would prefer to see full disclosure of all amounts being paid to the vendor, both in dollar and percentage of equipment purchase price as mandatory disclosure in the customer finance contract. We also think it is appropriate for the customer contract to disclose an effective interest rate in the same manner as the NCCP requires disclosure of comparison rates.

There appear to be no proposals from any Australian Government entity to further regulate BNPL arrangements at this time. However, the Minister could consider whether discussions with the Treasurer on this matter, including potentially considering the suggestion from the CEFC is worthy of further exploration.

The Regulator is proposing to have further discussions with the ACCC on the potential for broad consumer education involving ACL bodies on buying solar PV. Should this proceed, the Regulator will request such education include assisting consumers to understand their rights and the questions they should ask if considering BNPL finance.

Further information on consumer issues and financing can be found in [Chapter 4 – Part C](#).

Recommendations

This section contains recommendations for the Minister to consider. Most of the recommendations can be implemented through regulation change relatively quickly. If implementation of the recommendations for regulation change fails to achieve the desired improvement in integrity, amendments to the Act may need to be considered, for example in relation to infringement powers or unilateral recovery of STCs.

Part A – Installer accreditation scheme

Recommendations

Reference	Recommendation
R. A-1	The Clean Energy Regulator is given responsibility for setting the rules and framework for an installer accreditation scheme.
R. A-2	The Clean Energy Regulator is given the power to approve eligible installer accreditation schemes. This approval should allow for one or more bodies to be selected to administer these from a competitive process conducted by the Clean Energy Regulator. To remain eligible, the accreditation body (or bodies) will be accountable to the Clean Energy Regulator for service and quality standards, fees charged and public reporting. The Clean Energy Regulator may remove an accreditation scheme or body where the relevant service or quality standards are not met.

R. A-3	<p>The compulsory written statements under Regulation 20AC, required from the accredited installer, should be simplified to state that:</p> <ul style="list-style-type: none"> • the certificate of electrical safety has been issued under state or territory laws, and • the accredited installer was onsite as required to install or supervise the installation, and • the installation was carried out in accordance with state or territory laws, and • the system was installed in accordance with the design and will perform (generate) consistent with the quote provided or contract entered by the person who sold the system, and • the statement is true and correct.
R. A-4	The Clean Energy Regulator require additional training for accredited installers on their legal obligations in making a written statement of eligibility for STCs.
R. A-5	The Australian Government consider mechanisms to augment the Regulator’s powers to take administrative and compliance action against accredited installers who make false written statements, including to suspend or cancel their accreditation.
R. A-6	Options be explored, including legislation and technology, to require an accredited installer to prove they were onsite during the installation of the rooftop solar PV system.

Part B – Component listing

Recommendations

Reference	Recommendation
R. B-1	The Clean Energy Regulator is given responsibility for setting the rules for listing key solar PV components (solar panels and inverters) as eligible for Commonwealth entitlements in the form of STCs.
R. B-2	<p>If R. B-1 is accepted, the Clean Energy Regulator should modernise and streamline the component listing process through the use of assurance declarations by manufacturers, audit arrangements and increased component testing.</p> <p>The Clean Energy Regulator may seek third party providers to assist with listing, compliance, audit and sampling as it does in its administration of other schemes.</p>
R. B-3	<p>That eligibility to create STCs be dependent on manufacturers providing eligible component serial numbers to the Clean Energy Regulator, or a party nominated by the Clean Energy Regulator, electronically.</p> <p>Solar panels will be the focus initially. This would only be extended to inverters if issues are found that warrant this.</p>
R. B-4	The Australian Government consider mechanisms to allow the Clean Energy Regulator to take administrative and compliance action against solar panel and inverter manufacturers who fail to meet eligibility requirements, including to suspend or cancel their listing(s).

Part C – Consumer protection and financing issues – solar retailer behaviour

Recommendations

Reference	Recommendation
R. C-1	<p>New scheme eligibility requirements be introduced compelling system retailers to make a short-written statement (to accompany the accredited installer’s statement) to state:</p> <ul style="list-style-type: none"> the system installed will perform to the quote provided to the consumer (bar extenuating circumstances outside the retailer’s control), and that the system is complete, connected and generating. the statement is true and correct. <p>The Clean Energy Regulator should be given the power to disqualify retailers, including key management and officers, who make a false written statement from making further statements in the STC creation process. Those retailers, including key management and officers, will not be able to sell solar PV systems eligible for Commonwealth entitlements in the form of STCs. There should be provisions to allow the Clean Energy Regulator to disqualify new retailers created that are linked to other disqualified retailers.</p> <p>Where a retailer is also a registered agent for the creation of STCs, or where they are related parties, amendments to regulations should consider mechanisms to ensure any potential conflicts of interest are properly managed.</p>
R. C-2	<p>Buy Now, Pay Later finance arrangements continue to be monitored by the relevant regulators with a view to increased education regarding consumer rights, the implementation of the Australian Finance Industry Association Code, and the potential for greater transparency in financing arrangements.</p>
R.C-3	<p>The Australian Government requests the Clean Energy Regulator and the Australian Competition and Consumer Commission, in conjunction with state and territory fair trading bodies, to consider conducting a campaign encouraging consumers to carry out thorough research, and obtain multiple competitive quotes, before contracting to install a rooftop solar PV system.</p>

Next steps

The Regulator proposes the following to smoothly transition to the new regulatory framework if the recommendations are accepted and supporting regulation amendments drafted:

1. Develop and implement, with the ACCC, a targeted communication program for solar retailers on expected behaviours, under both ACL and the SRES, if they intend to offer a STC discount¹² as part of their business.
2. Negotiate a Memorandum of Understanding (MoU) with the CEC to implement some of the proposed arrangements (to the extent possible before amendments to the Regulations are made) with respect to accreditation of installers and listing of components using the CEC’s current powers under the Regulations.

¹² Or other arrangements in lieu of assigning the right to create STCs to a registered agent of the retailer’s choice.

- » This will have a strong focus on accredited installers giving truthful written statements including being onsite as required under current CEC guidelines, and consultation on technology options to assist them in complying.
 - » Detailed consultation with component manufacturers on proposed changes to require positive assurance declarations and eligible serial numbers, streamline the application process and increase the level of sampling and testing of components.
3. Involve agents and all renewables industry representative bodies in the above. This would include consultation with relevant industry bodies, many of whom the Regulator has engaged with as part of this review (see [Appendix A](#)).

Finally, the SRES is a **voluntary scheme** (where STCs can be claimed up to 12 months after installation) which will effectively phase out before the scheme ends in 2030¹³. While the STCs are dependent on complying with state and territory laws, those electrical safety laws are primarily based on a ‘self-regulatory model’ where the licenced electrician signs the certificate of electrical safety.

It is recommended the Minister consider writing to relevant state and territory Ministers providing a copy of the report, and the Government’s response, encouraging them to consider whether or not they should make changes to their regulatory frameworks prior to the SRES losing its 100% capture at some time before the scheme close at the end of 2030¹⁴. The intent is that quality and consumers do not suffer after the SRES and its associated controls end.

Without limiting what the states and territories may wish to consider, the following are some matters arising from this review:

- Whether specific training on the installation of rooftop solar PV ought to be part of electrical apprenticeships.
- Whether and how they might require proof that electrical work was undertaken by a licenced electrician.
- Whether solar panels and inverters should be integrated into the Electrical Equipment Safety System (EESS) and added to the current check testing regime for other electrical components.
 - » The EESS is a regulatory framework aimed at increasing consumer safety for household electrical equipment. It is currently established through an inter-governmental arrangement between participating jurisdictions. Not all jurisdictions currently participate¹⁵.
- Whether there is a need to continue with a program of statistically significant inspections (currently undertaken by the Regulator under Commonwealth law) post-SRES.

The Regulator proposes at the end of the SRES it would make available to the states and territories, and the industry, any of the technology it has and further developments around SPV should that assist with quality to consumers beyond the SRES.

Summary of insights from review engagement

Throughout the review process the Regulator conducted targeted engagement with many stakeholders (see [Appendix A](#)) and received information directly from interested parties. All stakeholders agreed that most installers and retailers are doing the right thing, but it is important to enhance protections

¹³ In 2029 there will be only 2 years’ deeming of STCs and one year in 2030. In 2020, there are 11 years’ deeming, or more than 5 times the level of STC incentive in 2029. The market will decide the point at which the cost of claiming the incentive is equal to or more than the incentive.

¹⁴ While it is not possible to accurately predict when the value of STCs per system will reduce to the point it is no longer financially viable to claim them, it is anticipated the proportion of systems that include a STC claim will start to decrease in approximately 2028.

¹⁵ Currently Victoria, Queensland, Western Australia and Tasmania participate in the EESS. New South Wales runs its own scheme.

for consumers and the SRES against those who are not. The key insights from the engagement process are:

- The ACCC and ACL regulators found that, “while high volumes of complaints are received [regarding rooftop solar PV sales and installations], the complaints are generally individual issues relating to small, localised traders. The complaints are often involving single, rogue employees and there is little evidence of systemic company non-compliance by national traders”.¹⁶
 - » However, the ACCC submission at [Appendix D](#) and the CALC’s [Sunny Side Up report](#)¹⁷ highlight a very wide range of serious issues for consumers who have contracted with an unscrupulous retailer. These range from lack of transparency of BNPL finance interest rates and other costs, through to systems not working at all or failing to meet promised generation. This is further discussed in [Chapter 4](#).
- All the stakeholders agreed that the training approach of the current CEC installer accreditation scheme is valuable, considering specific training and experience on rooftop solar PV installations is not mandatory for electricians to obtain a state or territory electrical licence.
 - » There was general agreement that the CEC’s focus on continuous professional development (CPD) over the past 12 months has led to improved quality and relevance for installers.
 - » Such ongoing professional development could be further enhanced through a more formal link to the outcomes of the Regulator’s inspection program.
- Some stakeholders indicated that the CEC’s approved product lists were helpful to identify whether panels and inverters are eligible for STCs.
- Some state and territory electrical safety regulators stated that electrical work on rooftop solar PV installations is being carried out by persons who are not licenced electricians as required by their laws.
- Most stakeholders highlighted the issue of some retailers selling systems and contracting installations based on prices that are too low, resulting in cutting corners.
 - » There was general agreement that some retailers are causing integrity issues in the SRES and retailers should be accountable in the regulatory framework if selling systems based on the STCs.
- There was a general acknowledgement that the CEC had endeavoured, in its SRES roles, to improve industry standards and look after the interests of consumers.
 - » Some expressed the CEC may be conflicted in its enforcement roles as a co-regulator and industry advocate.
 - » Some expressed concerns that the CEC may have achieved a monopoly position for itself through its SRES regulatory roles in addition to its voluntary retailer code and industry representative role.
- There was broad agreement that the Regulator should set the standards for accreditation of installers and product listing to qualify for STCs and have appropriate powers to take action to disqualify installers, retailers and manufacturers from being participants in the process that leads to STCs.
 - » This should provide a stronger deterrent for unscrupulous operators and make their removal from the scheme more efficient.
 - » It was also agreed that accredited installers should receive training on their legal obligations to provide a true written statement and consequences for providing false statements.

¹⁶ Pers Comms, Deputy General Manager Enforcement, ACCC – see [Appendix D](#).

¹⁷ CALC, [Sunny Side Up Report](#), April 2019, accessed 20 October 2020.

- There was agreement by all parties consulted that the accreditation process for installers and product approval and listing processes could be undertaken by a party (or parties) external to the Regulator and that could be an industry body (or bodies).
 - » There were differing views on whether the accreditation and listing processes should be retained by the CEC or for the services to be provided by more than one body. Some expressed the view that more than one body would provide competitive tension and improve service, others expressed the view more than one body may lead to a lack of consistency and increased complexity.
 - » There was agreement the party (or parties) should be accountable to the Regulator.
- There was consensus that technology options ought to be explored to require accredited installers to positively prove they were onsite during the installation and that they personally signed the written statement for STC eligibility.
 - » This would give consumers comfort that an electrician with specific training on solar PV installation has been on the site during installation.

Areas requiring further exploration

There were several additional useful suggestions from stakeholders engaged with during the review that do not require regulation amendments that the Regulator proposes to explore further. These include but are not limited to:

- An improved feedback loop between the Regulator's inspections program and ongoing training for accredited installers, linking findings from the Regulator's inspections program to CPD requirements.
 - » This could be achieved by reinstating the Renewable Energy Target Inspections Advisory Committee (RIAC) as the mechanism for this.
- Information sharing between the Regulator and state and territory electrical regulators could be enhanced through MoUs to provide for matters such as two-way exchange of data and information, referrals and joint investigations.



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Supporting chapters

Acronyms and abbreviations

Term	Definition
ACCC	Australian Competition and Consumer Commission
ACL	Australian Consumer Law
ANAO	Australian National Audit Office
BNPL	Buy Now, Pay Later
CALC	Consumer Action Law Centre
CEC	Clean Energy Council
ERAC	Electrical Regulatory Authorities Council
NCCP	<i>National Consumer Credit Protection Act 2009</i>
The Act	<i>Renewable Energy (Electricity) Act 2000</i>
The Regulations	Renewable Energy (Electricity) Regulations 2001
Residual Risk Report	<i>Analysis of Small-scale Renewable Energy Scheme Inspection Data to Assess Photovoltaic System Residual Systemic Electrical Safety Risks</i>
STC	Small-scale technology certificate
The Regulator	Clean Energy Regulator

Chapter 1: Introduction and background

The Regulator, with the support of the Department of Industry, Science, Energy and Resources, has been asked by the Minister for Energy and Emissions Reduction to lead a review into the rooftop solar PV sector.

This follows a range of reports of consumer issues, defective installations, misuse of installer accreditations, safety and quality concerns, and other issues in the sector.

The Terms of Reference for the review were agreed by the Minister on 9 September 2020 and include:

1. The effectiveness of the accreditation process of installers, including ongoing compliance arrangements, to ensure systems are installed by persons who are appropriately trained, competent and operate with integrity.
2. The effectiveness of the approval process for key components (i.e. solar PV panels and inverters), including ongoing compliance arrangements, to ensure components comply with relevant product standards.
3. The effectiveness of the SRES legislative framework and processes in ensuring the compliance of solar PV retailers and installers with their obligations under the scheme and protecting consumers against inappropriate sales and installation practices including financing.
4. The need for amendments to the SRES regulatory framework and processes to improve integrity, accountability and consumer protection measures in the rooftop solar PV sector.

In 2018, the Australian National Audit Office (ANAO) undertook a performance review of the Regulator's [administration of the RET](#). The ANAO review concluded that the Regulator has effectively administered the RET and made 4 recommendations, which have all been actioned. They are:

1. 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.
2. 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.
3. 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.
4. The Clean Energy Regulator refine the design of its performance measurement and reporting framework to ensure it is addressing the requirements of the Australian Government performance framework to demonstrate progress against its purpose using relevant, reliable and complete performance criteria.

In response to the first recommendation, the Regulator published the *Analysis of SRES Inspection Data to Assess Photovoltaic System Residual Systemic Electrical Safety Risks* (the Residual Risk Report) in June 2020¹⁸. This Residual Risk Report found that the rate of unsafe solar electrical work was similar to other electrical work with the exception of rooftop DC isolators, which is a unique requirement to rooftop solar PV installations in Australia. The Residual Risk Report is useful additional information and this review does not seek to cover the technical electrical safety issues dealt with in that report.

The rooftop solar PV sector review provides opportunities to improve the integrity of existing controls in the SRES and clarify roles and responsibilities across jurisdictions, while delivering benefits to

¹⁸ Clean Energy Regulator, [Analysis of Small-scale Renewable Energy Scheme Inspection Data to Assess Photovoltaic System Residual Systemic Electrical Safety Risks, Clean Energy Regulator](#), June 2020, accessed 20 October 2020.

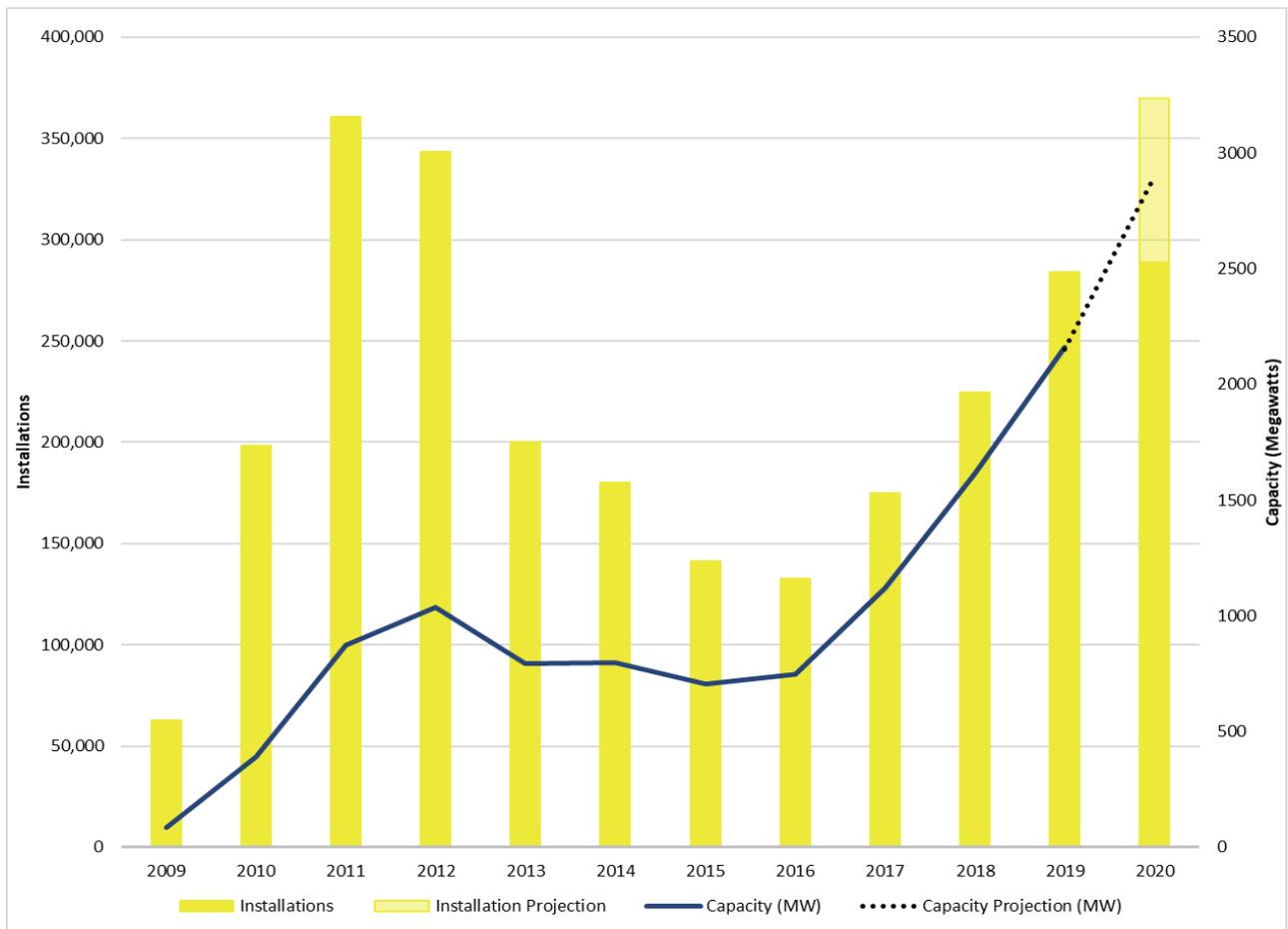
consumers. The review also provides an opportunity to consider the phase out of the SRES and plan for a smooth transition post-2030.

Eight principles were developed by the Regulator and the Department of Industry, Science, Energy and Resources to support the review. These are:

1. Targeted engagement instead of public consultation (due to limited timeframe for the review and that the risks and issues are well understood).
2. Seek opportunities to strengthen the integrity of Commonwealth entitlements while delivering benefits to consumers.
3. Clearly delineate the roles and responsibilities of various regulatory bodies.
4. Commonwealth entitlements are only given where state and territory requirements are met.
5. Leverage technology where possible, including SPV.
6. Appropriate enforcement powers should reside with the Regulator to effectively administer the SRES.
7. Where practical encourage market competition.
8. Consider sustainable transition options that support a smooth scheme phase out.

Since 2016, the rooftop solar PV sector has seen extraordinary growth with the combined capacity of rooftop solar PV representing one of the biggest generators in the electricity grid. In 2020, the Regulator anticipates approximately 2,900 MW will be installed across 370,000 installations, more than double the number of installations in 2016 and nearly 4 times the total capacity.

Figure 1: Small-scale solar PV installations and capacity, 2009 to 2020



Rooftop solar PV growth has been driven by a combination of Commonwealth and state and territory government incentives, declining system costs¹⁹, a range of financing options and consumers wanting to control their electricity bills. For consumers, choosing the size and configuration of their rooftop solar PV system (including the brand of panels and inverter) can be more difficult than other major purchases such as large electronic appliances or a new car.

This level of growth has brought with it many new entrants to the industry, including solar system retailers, CEC accredited solar installers, electricians and labourers. This has resulted in increased risks for both the integrity of the scheme and for consumers. The Regulator has sought to mitigate these risks through increased use of technology to automate processes and protect scheme integrity, including the voluntary SPV initiative aimed at addressing integrity issues the Regulator has found in the past related to ineligible solar panels including parallel imports and counterfeit panels.

However, over the past year the Regulator has identified two significant integrity issues in the scheme:

- A material number of CEC accredited installers signing the written statement when they had not installed or supervised the installation of the system as required in the CEC guidelines. That includes:
 - » Installers who were overseas at the time of the installation, and
 - » Installations undertaken without the involvement of a licensed electrician.
- Serial number data integrity supplied by a manufacturer to SPV, and questions over whether some panels met the eligibility requirements set by the CEC.

The cases above and a range of consumer concerns with the rooftop solar PV sector, combined with the rapid growth in recent years, raised questions about the effectiveness of the current regulatory framework and process. This review provides an opportunity to improve the integrity of claims for STCs and in the process provide collateral benefits for consumers.

¹⁹ Driven by both the falling costs of key components and a competitive market.

Chapter 2: Small-scale Renewable Energy Scheme

To understand what opportunities there may be to improve the integrity of the rooftop solar PV sector, it is firstly important to understand:

- how the SRES operates, including the regulatory framework and process,
- the respective roles of the Regulator and CEC,
- how the supply chain works,
- the role of state and territory electrical safety regulators and fair-trade bodies,
- the role of solar industry peak bodies, and
- the interplay between all these parties.

The SRES is a **voluntary** Australian Government scheme administered by the Regulator. Rooftop solar PV systems may be eligible for STCs where they meet the eligibility requirements. STCs can be created for eligible rooftop solar PV installations up to 100 kilowatts²⁰. The number of STCs is based on the size of the system, its geographical location and the deeming period. The number of STCs is equal to the estimated generation—in megawatt hours—over the deeming period²¹ until the end of 2030 (the end of the scheme). No pre-approval is required for STCs. Sometime after the installation has occurred the Regulator will receive the claim for STCs²².

The key policy principle for the SRES is Commonwealth entitlements are only available if state and territory laws are complied with. For example, one eligibility requirement is that a certificate of electrical safety has been issued under state and territory electrical safety laws, however this does not give either the CEC or the Regulator power to enforce state and territory electrical safety laws.

The current scheme design requires that the installation be supervised by a CEC accredited installer and the solar panels and inverters be approved by the CEC as meeting Australian Standards. These eligibility requirements give the CEC a co-regulatory role in the SRES.

Claiming the incentive

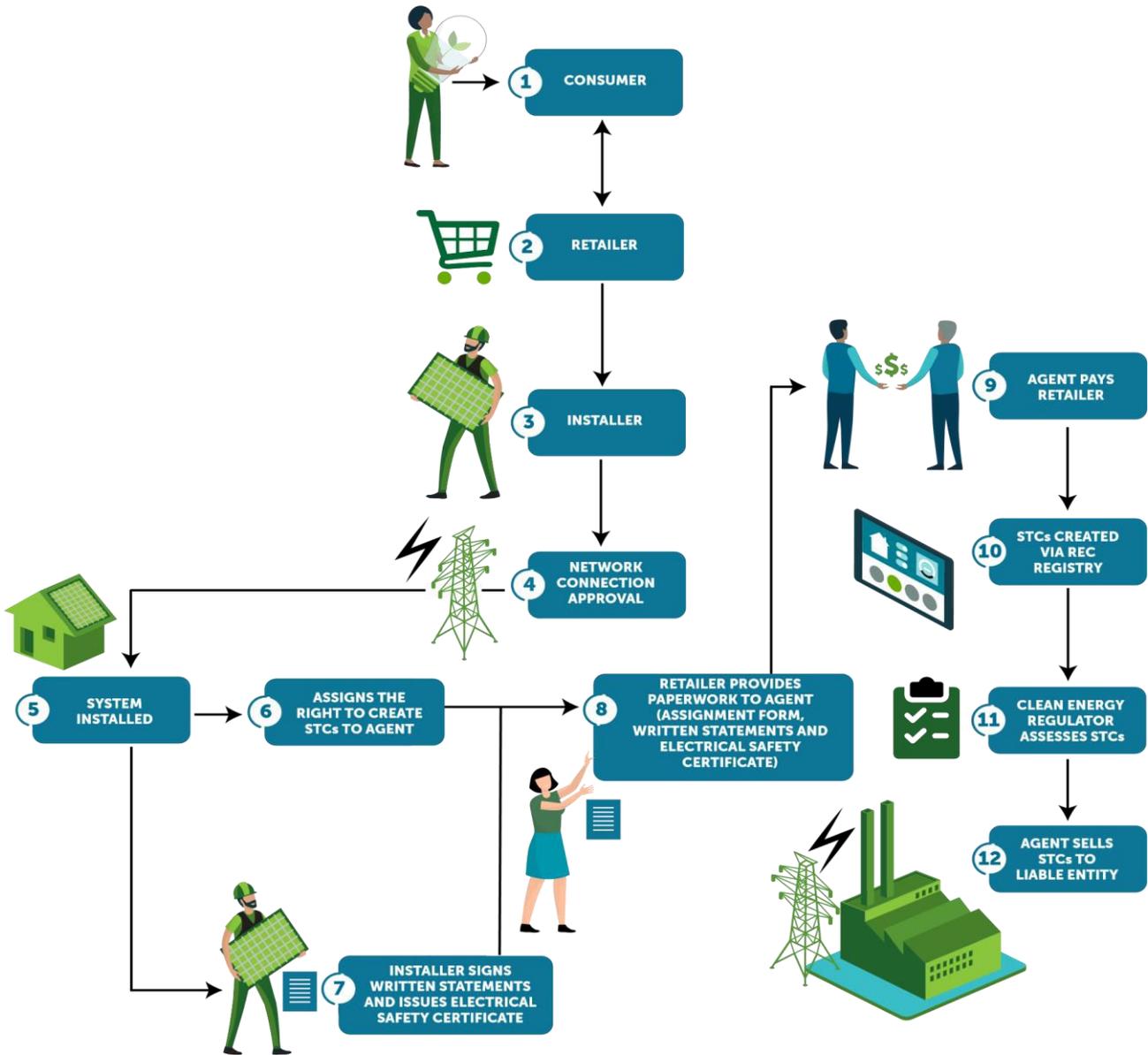
The current level of subsidy provided by the STCs is approximately one third of the total system cost. The owner of the system, at the time it is capable of producing electricity, is eligible to create STCs or can assign the right to create STCs to an agent. Approximately 99% of STCs are created by registered agents. The process generally works as follows:

²⁰ Clean Energy Regulator, *Small-scale systems eligible for certificates*, February 2019, accessed 20 October 2020.

²¹ STCs may be created over one or five years, or a single maximum deeming period. The majority of system owners choose the single maximum deeming period. The deeming period for solar PV (since 2016) decreases by one year, every year until 2030. This reduces the number of STCs that can be created for an eligible system.

²² Almost 90% of claims are submitted within 30 days of installation but can be submitted up to 12 months after the system is installed.

Figure 2: How the SRES works



STCs can be created up to 12 months after the system has been installed. If it is subsequently found (after the STCs are approved) that the creation was ineligible the Regulator can request that an equivalent number of STCs are surrendered voluntarily but cannot enforce the unilateral recovery of STCs.

Installation requirements

Regulation 20AC of the Regulations sets out the installation requirements for rooftop solar PV, including:

- that the unit must be designed and installed by an appropriately accredited person accredited by the CEC
- that the electrical wiring associated with the installation was undertaken by an electrical worker with an unrestricted licence for electrical work issued by the state or territory authority where the installation occurred
- that all, local and state and territory government requirements (i.e. siting and attachment of the system and grid connection) have been met

- that the installer provides written statements stating:
 - » the name and accreditation number of the designer and installer of the system
 - » that the installer has appropriate public liability insurance
 - » that the installer
 - › is bound by and has complied with the CEC’s Code of Conduct which includes adhering to the design and install guidelines
 - » the system complied with relevant local, state and territory requirements for the siting, attachment and grid connection of the system
 - » that the PV modules and inverter used in the installation are on the CEC’s approved products list at the time of installation
 - » that the installation complies with the relevant Australian Standards in force at the time of installation.

These conditions must be satisfied before STCs can be created in respect of a rooftop solar PV system. This includes an accredited installer adhering to the CEC’s Code of Conduct and following the CEC guidelines. The CEC guidelines stipulate that an accredited installer shall only sign off on systems if they have undertaken the installation themselves or supervised the installation by others. Supervision includes attending the site at job set up, mid-installation check-up and testing and commissioning. A CEC accredited installer is already a licenced electrician, as such they may carry out any other electrical work states and territories require to be done by licenced electricians.

The Regulator and the CEC, depending on the circumstances, may be able to act against parties responsible for the provision of false and misleading information that is used in the creation of STCs. This could include the Regulator commencing legal action against parties or suspending agents from the scheme. The CEC may suspend or cancel an installer’s accreditation, this prevents them from participating in the SRES but does not limit their ability to perform other electrical work. The CEC may also de-list products approved for use in the scheme.

While the CEC’s training requirements and guidelines for accredited installers relate to safe installation, neither the CEC nor the Regulator have powers in relation to electrical safety, this is the role of state and territory electrical safety regulators.

For the sake of clarity, one eligibility requirement to be a CEC accredited installer is being an electrician licenced by a state and territory. Should the CEC cancel the accreditation of an installer, that person can no longer sign the written statement which is essential to claim the certificates. The person can, however, continue to do electrical work generally, including installation of solar PV systems, unless the relevant state or territory electrical safety regulator suspends or cancels the person’s electrical licence.

Clean Energy Regulator inspection program

The Regulator engages contractors to inspect a statistically significant sample of installations, generally within one year of the installation date. This represents approximately 1% of installations. Inspections are conducted to ensure that the selected systems meet all the installation requirements of the SRES and were eligible for STCs at the time the system was installed. The results are provided to state and territory electrical safety regulators and the CEC to act on any issues found during the inspection.

The Residual Risk Report²³ provides analysis on 28,041 inspections for systems installed from 2010 to 2018. The overall conclusion of the report was that safety risks from electrical work associated with rooftop solar PV installations were generally at a low level and similar to what would be expected in other electrical work. The exception was a higher level of potentially unsafe installations owing to

²³ Clean Energy Regulator, [Analysis of Small-scale Renewable Energy Scheme Inspection Data to Assess Photovoltaic System Residual Systemic Electrical Safety Risks, Clean Energy Regulator](#), June 2020, accessed 20 October 2020.

water ingress into DC isolator switches. To address this increased risk, the Residual Risk Report made 3 recommendations for states and territories to consider:

1. State and territory governments consider whether the potential safety risks from the requirement for a rooftop DC isolator outweigh the benefits and pursue this in the current review of AS/NZS 5033.
2. State and territory governments consider whether the requirement for a DC isolator near the inverter should be changed to require the isolator be inside the inverter and pursue this in the current review of AS/NZS 4777.
3. State and territory governments consider whether any of the recommendations for PV system inspections in AS/NZS 5033 should be mandated or education programs implemented to encourage owners to engage qualified persons to do regular inspections.

Clean Energy Regulator compliance outcomes

STC creations for rooftop solar PV systems require a CEC accredited installer conducts the installation and fulfils their obligations under the CEC guidelines. A key feature of the guidelines is that an accredited installer must be present at the start, middle and end of an installation. The guidelines also state an installer may carry out a maximum of 2 installations per day.

During 2019-20, the Regulator conducted a major data analysis exercise which found that 6% of the 7,500 CEC accredited installers carried out 37% of rooftop solar PV installations under the SRES. While the daily numbers of installations by this 6% were generally within the limits set by the CEC, analytics over distance travelled confirmed this 6% were at high risk of signing written statements of STC eligibility without having been on all sites.

Where an installer is not onsite, it presents the risk of an installation being of poor or unsafe quality and undermines the integrity of the SRES through the improper creation of STCs.

The Regulator identified 94 installers as particularly high-risk. The Regulator established beyond reasonable doubt that 51 were signing written statements of STC eligibility while out of the country. Given that, pre COVID-19, a large proportion of the working population never travelled internationally, it is the Regulator's view that its analytics model has been proven and that up to 37% of installations could have written statements signed by accredited installers who have not been onsite.

The Regulator referred 51 persons to the CEC, and, to date, the CEC has cancelled the accreditation of 32 installers, with a further 19 placed under review. The Regulator has entered into Enforceable Undertakings with 2 installers requiring inspection and rectification work and has multiple active criminal investigations underway, expecting to refer briefs of evidence to the Commonwealth Director of Public Prosecutions (CDPP). The potential charges, if laid and proven, could attract custodial sentences.

The above highlights the need for the Commonwealth to have greater control over who can participate in the SRES and create eligibility for STCs. Despite identifying the issues, the Regulator could not itself exit the installers from the SRES.

Giving the Regulator the power to determine the requirements for scheme entry and STC eligibility, and the power to take appropriate compliance action will protect the integrity of the SRES and benefit consumers. It will also mean accredited installers and manufacturers will be clear on review and appeal options should they wish to contest the Regulator's decision.

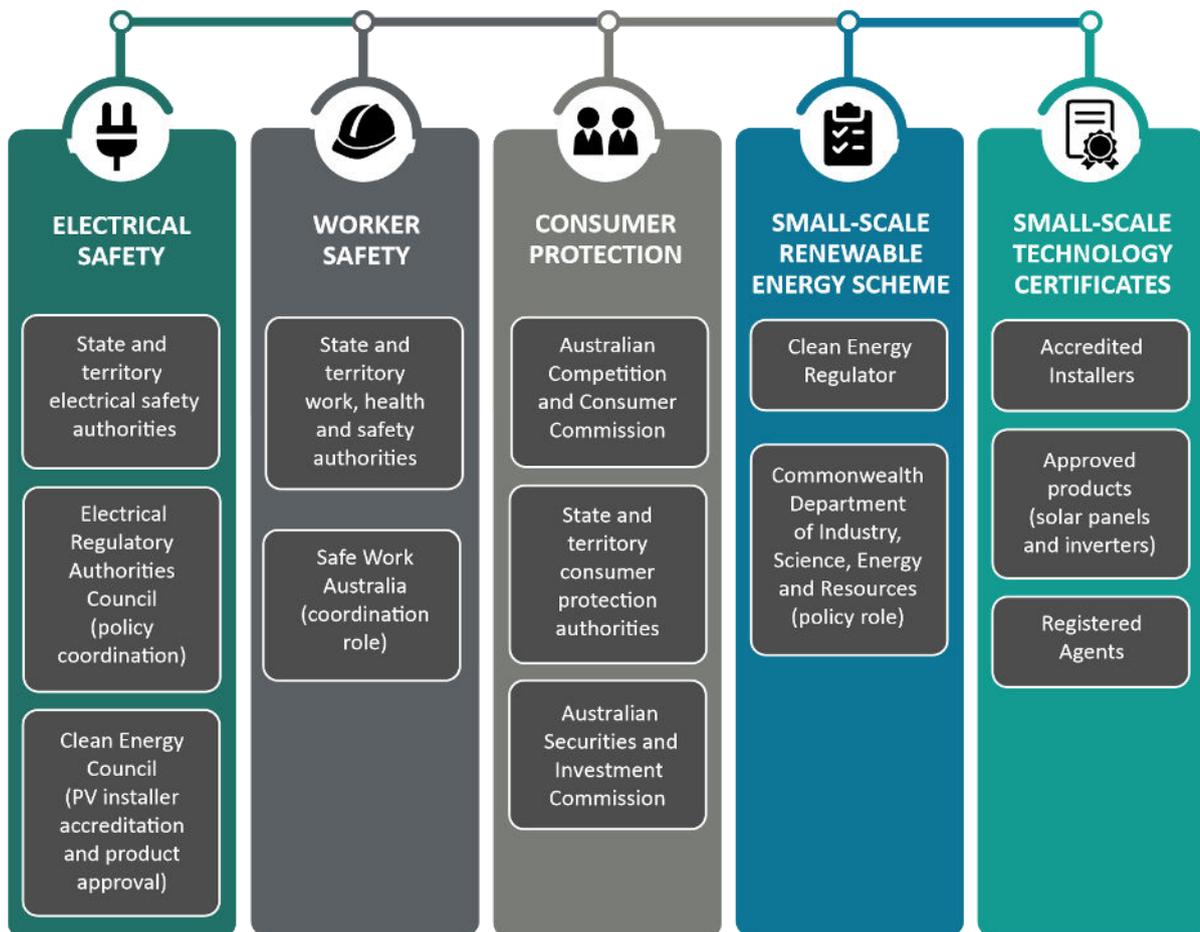
Chapter 3: Rooftop solar PV roles and responsibilities

Accountability and responsibility

CEC accredited installers, component manufacturers and registered agents are the parties who can currently be held accountable by CEC or the Regulator under current laws for ineligible STC claims. The CEC can hold some parties accountable if they breach their terms and conditions or codes of conduct. The system retailers who sell the system are currently not accountable for ensuring the integrity of STCs claims. This review will explore whether these current arrangements are the most efficient and effective to prevent, deter, detect and enforce non-compliance in the SRES.

Electrical safety and electrical licencing requirements are a state and territory function. Licenced electricians are regulated by state and territory electrical regulators. Similarly, issues with consumer law and system warranties are the responsibility of the ACCC and ACL regulators (state and territory fair trading bodies).

Figure 3: Roles and responsibilities, SRES



Clean Energy Regulator

The Clean Energy Regulator is an independent statutory authority responsible for administering Australian Government schemes to reduce greenhouse gas emissions and increase the use of renewable energy. The Regulator was established in 2012 to administer the Australian Government’s climate change policies including the RET and its sub-scheme the SRES. The Regulator has all the in-house capability expected of a Commonwealth Regulator, including an intelligence section, high end data analytics, investigative functions and legal and litigation capability.

Its role is to assess and approve STC claims created by registered agents and persons. STC claims must meet all scheme eligibility requirements, including that the CEC accredited installer has given all the necessary assurances in the written statement and installed CEC approved components. If the Regulator, through its data analytics and other assessments, determines the claim is not eligible the claim will be failed.

The Regulator regulates agents and persons who create STCs. This includes an initial and ongoing fit and proper person assessment. Agents are also required to complete SRES Smart, an online tool that provides evidence and assurance to the Regulator that an agent understands their responsibilities, expected capabilities and standards of practice. Where the Regulator refuses to approve an agent or proposes to temporarily or permanently suspend an agent, it follows Commonwealth regulatory natural justice processes and a delegate's decision is subject to internal review and external appeal rights under the law.

The Regulator is subject to standard Commonwealth accountability and scrutiny practices such as ANAO audits and Senate Estimates. This also includes rules by the Department of Finance on fee setting.

Clean Energy Council

The [Clean Energy Council](#) (CEC) is a not-for-profit, membership-based industry body for clean energy in Australia. The CEC represents and works with its members to accelerate the transformation of Australia's energy system to one that is smarter and cleaner. The CEC places focus on raising standards and maintaining integrity in the industry.

The CEC has a co-regulatory role in the SRES as the Regulations 'underpin' the CEC installer accreditation scheme, installer code of conduct, guidelines and approved component lists. The CEC is responsible for setting the requirements for these and administering and enforcing the requirements.

The CEC, unlike the Regulator, is completely independent of government. It is not accountable to any other body, apart from its Board, in exercising its powers and setting its application and renewal fees²⁴. It is not subject to Commonwealth audits or reporting obligations nor can it be directed by the Minister or the Regulator. The CEC installer accreditation and product approval schemes also form part of various state incentive and rebate program eligibility criteria such as the Solar Homes program in Victoria and the Empowering Homes program in New South Wales.

The CEC is responsible for:

- Accrediting installers – the CEC sets the accreditation process (including relevant training units), develops and maintains design and installation guidelines, a code of conduct and a continuous professional development program. The CEC can suspend or cancel an installer's accreditation through a demerit points process. This role of the CEC is part of the eligibility criteria for the SRES.
- Approving components – the CEC sets the component approval process, develops and maintains checks and balances to verify whether a component meets requirements as well as terms and conditions of listing. The CEC can delist components that do not meet eligibility requirements. This role of the CEC is part of the eligibility criteria for the SRES.
- Approving solar retailers – the CEC sets the framework for the approved solar retailer (ASR) program. It is an ACCC approved program that aims to provide a better standard of service within the solar and storage industry. The CEC can suspend a retailer from the program if that retailer has breached the program's code of conduct. The ASR is a voluntary program and does not form part of the eligibility criteria for the SRES.
- Advocacy – the CEC represents and works with the renewable energy and storage industry to further the development of clean energy in Australia. It does this through working to improve

²⁴ For more information about the CEC's fee structure go to [accreditation fees](#) and [application fees](#).

industry standards, providing a voice for its members, developing and driving policy and working with all levels of government to increase demand for clean energy.

As both advocate for renewable energy and co-regulator of the SRES, concerns have been raised by some stakeholders engaged in this review on whether the CEC has a potential conflict of interest that affects its ability to effectively exercise its required SRES compliance and regulatory administration functions.

The accreditation of installers and approval of components are key components of SRES eligibility. The Regulator relies on the information contained in the installer and product lists to determine STC eligibility.

The CEC installation guidelines are called up in current regulations. In the main, these guidelines assist interpretation of Australian Standards, which are called up by state and territory electrical safety laws. This has the potential to create some confusion between the CEC's role and that of state and territory electrical safety regulators. Meeting state and territory regulatory requirements is a critical hurdle to be eligible for a Commonwealth incentive; any **additional** requirements should be clear.

The Regulator believes guidelines can be very useful. However, these should not be the basis of eligibility requirements. For the purpose of SRES eligibility requirements, the Regulator believes it would be preferable to be very clear that firstly state and territory laws must be complied with and consider whether a small number of matters in the CEC guidelines ought to be additional requirements for STC eligibility.

The CEC does not have the capability typical to a Regulator, including data analytics and investigative functions and powers. As such, it relies on information provided by the Regulator, state and territory agencies and complaints from the public to identify possible compliance breaches.

Should Regulator intelligence and investigations detect CEC accredited installers making false declarations and/or using components not listed as eligible for STCs, then the Regulator needs to request the CEC to act to exit the inappropriate actors.

Registered agents

Registered agents operate as a key control to help protect the integrity of the SRES.

The agent is responsible for ensuring that the system meets all relevant requirements and is eligible to receive STCs. An agent must obtain all relevant information and documentation prior to the creation of STCs and provide these, upon request, to the Regulator to evidence their eligibility.

In addition to complying with the legal obligations of the Act and Regulations, agents are expected to have certain capabilities that support their suitability to participate in the scheme. These include:

- Complete SRES Smart, an online program that tests expected capabilities and standards of practice to participate in the scheme.
- Documented procedures and records to prevent improper creation of STCs, including:
 - » Good record keeping procedures to collect, secure and store documents that ensure credibility of, and support, each creation of STCs.
 - » Documented procedures to report improper creation of STCs within 72 hours.
 - » Provide procedures and records on request.
- Maintain up-to-date knowledge and ensure business practices meet their responsibilities under relevant legislation, including:
 - » Provide retailers and installers with clear information about the scheme.
 - » Identify their business risk exposure and exposure to third party fraud and apply due diligence in checking the background and capabilities of business partners, contractors and clients.

- » Maintain a training and monitoring system that ensures staff follow procedures to ensure proper creation of STCs.

Agents are responsible for maintaining their fit and proper person status and can be temporarily or permanently suspended from participating in the scheme if they are found to have breached the legislation and are no longer fit and proper. Agents may seek a review of a decision made by the Regulator where applicable.

Retailers who are registered agents (or related parties) may have a conflict of interest as in their retailer role they may intentionally install systems that do not meet the SRES eligibility requirements yet then create the STCs in their key control role. Regulation amendments should seek to ensure any conflict of interest is managed.

Accredited installers

CEC accredited installers play an important role in the integrity of the SRES through the installation of compliant rooftop solar PV systems as well as the written statements they are required to make under the Regulations. An installer must be accredited at the time of installation for the system to be eligible for STCs.

CEC accredited installers:

- Are licenced electricians that complete specific solar design and installation training, as specified by the CEC.
- Apply and pay a fee to the CEC to become accredited.
- Once accredited, are subject to and bound by terms and conditions and a code of conduct set by the CEC.
- Are subject to CPD that must be completed annually to maintain accreditation.
- Utilise and abide by the CEC's design and installation guidelines for rooftop solar PV.
 - » As licenced electricians they also utilise and abide by the relevant Australian Standards.
- Are subject to state and territory electrical safety regulations and licencing requirements and rules for electrical work they conduct.

An installer may have their accreditation suspended or cancelled²⁵ if they are issued with sufficient demerit points by the CEC. If suspended, they may prove competency and regain their accreditation. Installers may seek a review of their suspension or cancellation through a CEC administered process.

A CEC accredited installer's installation may be selected for a random inspection through the Regulator's inspection program. A Regulator appointed inspector will conduct the inspection and provide a report to the installer, they then have 2 weeks to respond. The Regulator may declare an installer ineligible for a period of 12 months if they are subject to an adverse finding in an inspection report on 3 separate occasions²⁶. Installers, unless they are also agents, cannot create STCs for systems they install.

Electrical safety regulators can suspend or cancel an electrician's licence for poor and non-compliant work on solar PV under electrical safety laws. This means 3 bodies may consider taking action against an electrician who is a CEC accredited installer. This can lead to confusion over who is the most appropriate body to act.

²⁵ If cancelled, an installer may be able to apply for their accreditation to be reinstated after 12 months.

²⁶ [Renewable Energy \(Electricity\) Regulations 2001, Regulation 47.](#)

Manufacturers

Manufacturers are typically international entities that design and manufacture solar PV modules and inverters. These products are then exported and installed on rooftops or as part of large-scale solar farms.

Manufacturers seeking to have their components eligible for STCs must:

- Design and manufacture panels and models to meet relevant International Electrotechnical Commission (IEC) standards (and Australian Standards if seeking to export to and sell in Australia).
 - » Components must be certified by an accredited body and certified to IEC standards.
- Apply to the CEC to have their products listed.
 - » Once approved and listed the products installed are eligible for STCs.
- Meet and comply with importation requirements.
- Meet Commonwealth, state and territory consumer laws – particularly in relation to warranties.
- If the manufacturer is a participant of SPV, follow the rules set out in the deed.
 - » Manufacturers that breach the deed can be removed from SPV.
 - » Removal from SPV is not removal from the CEC approved products list or removal from participation in the SRES.

Electrical safety

Electrical safety is the responsibility of each state and territory electrical safety regulator. The detail can vary in each jurisdiction. However, the following are generally key features:

- Largely de-regulated where licenced electricians take accountability for their work.
- Governed by electrical safety legislation.
 - » Electrical safety regulators take a risk-based approach to compliance and their approach is subject to resourcing.
 - » Addressing non-compliant electrical work is the purview of the state or territory electrical safety regulator. They can act against non-compliance, including suspending or cancelling electrical licences.
- Electrical safety laws call up various Australian Standards, including for the installation of solar panels and inverters. However, these laws do not require proof that the installed solar panels and inverters have been approved by any specific body as meeting Australian Standards.
- Where a certificate of electrical safety is required to be issued for electrical work (which is the case in all jurisdictions for solar PV installations), it is issued by the licenced electrician, not by the electrical safety regulator.
- Inspections of rooftop solar PV installations are undertaken by the electrical safety regulator in Victoria, the Australian Capital Territory and Tasmania. These inspections are generally at ground level and limited to easily accessible components such as the inverter and meter box.
 - » Other jurisdictions do sample inspections at varying rates.
- Some eligibility requirements under the SRES are additional to state and territory electrical rules, for example CEC installer accreditation and approved components.

State and territory electrical safety laws are mandatory for all solar PV installations and these are administered by a regulator in each jurisdiction.

Licensed electricians

Licensed electricians are subject to state and territory electrical safety rules and regulations. They:

- must have completed an electrical apprenticeship and received a Certificate III in Electrotechnology (or equivalent)
- must follow the Australian Standards
- are subject to state and territory electrical safety regulations and licensing requirements, and
- are not required to complete extra training to install rooftop solar PV systems under state and territory requirements.
 - » If a licensed electrician wants rooftop solar PV systems they install to be eligible for STCs, they must become a CEC accredited installer²⁷.

Consumer protection and financial integrity

The solar industry is regulated by various consumer protection laws and agencies at both Australian Government and state and territory level. The regulation relates to the sale and supply of goods and services and the provision of financial services to assist with the purchase of systems.

The main consumer protection legislation is the ACL that forms part of the *Competition and Consumer Act 2010* (Cth). The ACL is administered and enforced at a national level by the ACCC and by various state and territory bodies (a 'one law, multiple regulators' model). The ACL covers a wide range of matters, including false and misleading information, unconscionable conduct and faulty products.

Financing arrangements take a variety of forms, but BNPL is a very popular option. By way of summary, BNPL arrangements are generally not subject to the same regulations and consumer protection measures as other loan products, including the *National Consumer Credit Protection Act 2009* (Cth) (NCCP). However, as the Australian Competition Tribunal recently noted:

*the supply of BNPL finance is regulated by a range of strong consumer protection laws under the Australian Consumer Law and the [Australian Securities and Investments Commission Act 2001]. The supply of BNPL finance is also subject to ASIC's product intervention powers in Part 7.9A of the Corporations Act [2001] and will become subject to the design and distribution obligations to be imposed by Part 7.8A of [that] Act (which will commence in October 2021).*²⁸

Phoenixing activity is regulated in various ways. In some cases, phoenixing activity will entail unlawful attempts to avoid debts and responsibilities. Remedies can be enforced via debt recovery and criminal laws. The Regulator is a member of the Australian Taxation Office (ATO) led Phoenix Taskforce comprising 38 agencies.

Case studies

The following case studies are drawn from ASIC's publicly available [Review on Buy Now Pay Later Arrangements](#), the CALC's [Sunny Side Up report](#) and investigations and information received by the Regulator as part of their normal operations or during the course of this review. The names in each case study have been changed to deidentify consumers.

²⁷ Multiple licensed electricians may be present onsite, however, the electrician that signs the written statements and is named in the STC claim must be a CEC accredited installer.

²⁸ Australian Competition Tribunal, [Application by Flexigroup Limited \(No 2\) ACompT 2](#), 15 September 2020, accessed 20 November 2020.

Case Study 1 – Sold goods that the consumer didn't need

The following case study comes from ASIC's [Review on Buy Now Pay Later Arrangements](#).

John received a carer's pension. He was cold-called by a merchant who sold him a solar power system financed through Certegy Ezi-Pay. John said he did not have a job at the time and the salesperson said that he would write down John's last job. 18 months later, he owed over \$6,100. John also owed over \$7,000 on a loan and \$3,000 in other debt.

John said he started using Afterpay in early 2018 and now owes them \$960. He said he doesn't recall being asked about his expenses when he signed up for this arrangement.

Better education and awareness of the pitfalls of purchasing solar PV systems will help improve consumer outcomes and protect them from harm.

Case Study 2 – Unscrupulous sales practices and financing arrangements

The following case study comes from the CALC's [Sunny Side Up report](#).

Juan is a 72-year-old aged pensioner who lives alone in rural Victoria. A salesperson came to Juan's house and started talking to him about solar panels. Juan stated he was not interested but the salesperson was insistent and let himself into Juan's home.

Despite Juan's objections and reluctance, he followed the salesperson into the house. Over the next hour, the salesperson talked Juan through various features of the system and how they could reduce his energy costs, insisting Juan could save a lot of money. Juan continued to state that he did not want solar panels but became increasingly intimidated by the salesperson, describing himself as "shaking and shivering" and unable to handle the situation. Juan asked the salesperson to leave several times but was refused as the salesperson continued to talk Juan through the paperwork relating to the sale. Juan did not understand the technical details of what was being offered to him.

The salesperson offered Juan a finance contract to pay for the solar panels. Juan stated he could only afford a small amount per week. The salesperson arranged the paperwork and contacted the Finance Company on Juan's behalf, not allowing Juan to speak to the Finance Company directly. The Finance Company did not have a licence under the NCCP and was therefore unregulated under that Act. Juan eventually signed up for a 12-panel solar system. Juan said that he signed up to get rid of the salesperson and that he felt stupid, but it sounded like a good deal.

Shortly afterwards, Juan received a letter saying that he must make 87 fortnightly payments of \$103.87 per fortnight (with the first monthly payment adding a \$3.50 account fee) to the Finance Company, adding up to \$9,040. Juan found the repayments to the Finance Company difficult to repay, as he could not afford it. He would often have no money left for food at the end of the fortnight. Juan didn't try to cancel the arrangement because he did not know there was a cooling off period.

Despite the salesperson's claims, Juan was not saving much on his energy usage at all, and certainly not the amount that the salesperson said he would. After a period of time, Juan's relative, who lives next door to him, contacted Consumer Action on Juan's behalf. With assistance, Juan was able to terminate the agreement, and received a full refund of all monies he had paid up to the date of termination.

Case Study 3 – Faulty and damaged products

The following case study was received by the Regulator as part of the rooftop solar PV sector review process.

In 2017, Giovanni purchased a 5 kilowatt solar PV system (including 20 solar panels and an inverter) through a CEC Approved Solar Retailer. Giovanni had done a significant amount of research—including researching the appropriate size of the system for his and his family’s needs and talking with neighbours—and considered themselves well informed prior to the purchase. The system was installed as designed however, due to the timing of the install, SPV was not an option.

In early 2020, Giovanni noticed system degradation issues through rising electricity bills. He contacted a licenced electrician who inspected the system and identified a number of faulty and damaged panels which had burnt out, stating Giovanni was lucky as the system could have caught fire. Shortly after this, Giovanni’s neighbour also mentioned a number of his panels had the same issue. Giovanni was advised to turn the system off completely due to the risk of fire.

Giovanni contacted his retailer—who initially failed to respond—seeking confirmation the system was safe to leave on. The retailer demanded Giovanni provide evidence of system performance requiring photographs before acting on the safety issue.

After a period of back and forth, the retailer processed the warranty claim. The component wholesaler inspected the system and determined only some of the panels warranted replacement. During the replacement, the CEC accredited installer, who did not install the initial system, identified the panels as faulty and damaged.

Recommendations made in Chapter 4, Part B will help address these issues. Particularly, requiring the manufacturer to provide a positive statement to the Regulator stating the components meet the standards, and will work as quoted. In addition, requiring serial numbers of components as an eligibility criterion for STCs will help support consumer confidence in the SRES.

The Regulator has both past and active investigations related to non-compliance with scheme requirements where there has been consumer harm. These include where retailers have intentionally breached scheme requirements (imported panels they know not to be on the CEC approved list).

Case Study 4 – Solar retailer business practices

The following case study comes from investigations conducted by the Regulator.

As part of several past and current investigations the Regulator has found solar retailers who have installed systems where the accredited installer was not onsite. Looking at this business model they sell on price, contract on price and allow their subcontractors to further subcontract out. This all occurs without exercising quality control and quality assurance processes and ensuring an accredited installer was onsite. This practice can lead to low quality products, poor quality installations and consumer harm.

Communication with sub-contractors is often undertaken via email only, and sub-contractors are driven to lower their prices to win the work and continue to be engaged by the retailer. This pursuit of lowest cost installations encourages sub-contractors to find alternative pathways to remain profitable. This includes accepting multiple contracts which are then completed by unqualified installers. The retailer may try to remain at arms-length if any issues arise, deferring the issues to the installer of the system.

Recommendations made in this review will help address these issues. Particularly, by giving the Regulator greater power to take compliance action against unscrupulous retailers making them ineligible for STC claims. The inclusion of training for accredited installers on responsibilities in making the written statement for STC eligibility, including the consequences to them of making a false statement will also assist in addressing these issues. Also, proving they were onsite.

Case Study 5 – Counterfeit panels

The following case study comes from an investigation conducted by the Regulator.

In May 2014 the Regulator received a report from a CEC accredited installer about the use of counterfeit panels in a solar PV installation.

The Regulator investigated a Queensland-based solar system retailer that had gone into liquidation. The retailer had sourced and supplied counterfeit solar panels, mislabelled them as approved Tier 1 solar panels with the name of a reputable manufacturer, and installed them on 182 premises in New South Wales and Queensland.

Through the retailer, homeowners assigned the right to create certificates to an agent. That agent paid the retailer around \$500,000 for the right to the certificates, approximately 14,000 STCs were then improperly created based on the false information provided by the retailer.

The Regulator recognised the impact on the solar marketplace, and particularly on consumers, of what appeared to be a deliberate act by the retailer to mislead system owners and the agent about the authenticity of the panels. The agent entered into an enforceable undertaking²⁹ with the Regulator and undertook to replace the counterfeit solar panels, a good outcome for consumers. The well-known panel manufacturer assisted the agent to ensure consumers received the quality brand they expected.

Recommendations made in this review will help address these issues. Particularly, giving the Regulator greater power to take compliance action over unscrupulous retailers and requiring the manufacturer to provide a positive statement to the Regulator stating the components meet the standards, and will work as quoted. Also, mandating the provision of eligible serial numbers.

²⁹ Clean Energy, Regulator, [Enforceable Undertaking – Greenbank Environmental Pty Ltd](#), November 2015.

Chapter 4: Analysis and key findings

Part A – Installer accreditation scheme

The CEC installer accreditation scheme is a key eligibility requirement for STCs under the SRES. The CEC accredited installer must comply with various Australian, state, and territory government requirements and is responsible for providing a written statement that is a key component of STC eligibility for rooftop solar PV systems. The registered agent and Regulator rely on the accuracy of the statement in creating and approving STCs.

To be accredited by the CEC, a licensed electrician must follow the CEC's [accreditation process](#) and complete the mandatory training units. These are determined by the CEC and vary depending on the [type of accreditation](#). There are different types of accreditation, including design and installation for on and off grid systems. There are several registered training organisations (RTOs) that offer the units required for accreditation. The units required for accreditation have a strong focus on the technical aspects of installing rooftop solar PV systems. These units omit other installer obligations including, for the purposes of the SRES, understanding the legal implications of providing a written declaration to the Australian Government and the consequences of providing false information.

Successful completion of the training modules permits an electrician to apply to become a provisionally accredited installer. Electricians submit an online application form with prerequisite evidence and pay the application fee. When the provisional application has been approved a set of online assessments must be completed, once completed a CEC installer accreditation number is issued. It is at this point the electrician can begin working as a CEC accredited installer. Provisional accreditation expires three months from the date it is awarded. Before expiry, the installer must complete a practical installation assessment to demonstrate competency. When this has been completed, assessed and approved the installer can [apply](#) to upgrade to full accreditation.

Full accreditation lasts for 12 months and must be renewed via CPD. Installers need to complete 100 points of eligible training and professional development each year. CPD aims to ensure installers keep up to date with changes in the industry and that accredited installers have all the information required to comply with the necessary standards. Additional training courses, attendance at conferences and CEC organised events and webinars all count towards the 100-point CPD obligation³⁰. Renewal fees apply. At the time of writing, there are approximately 7,500 CEC accredited installers, with approximately 75% completing installations so far in 2020.

Some industry groups have alleged during stakeholder engagement that the CEC prioritises CPD points unfavourably. That is, the CEC offers more points to attend a CEC information session than some training courses offered by other industry organisations. Industry groups say this effectively gives the CEC a monopoly on industry relevant training. In the timeframe available for this review, the Regulator has not tested these allegations.

Solar specific training

Most stakeholders engaged with during the review supported the CEC accreditation requirement for specific training of electricians in the installation of solar PV systems. Standard training for apprentice electricians has little content specific to rooftop solar PV, despite the sector's growth and involving elements that are technical and complex. Some bodies have made representations to electrical safety regulators calling for solar PV system training to be a mandatory unit for apprentice electrician training.

Similarly, most stakeholders engaged with agreed on the need for ongoing professional development for accredited installers, with some calling for a national approach to CPD for all electricians. It was

³⁰ Clean Energy Council, [Continuous Professional Development](#) training courses, accessed 30 October 2020. New courses and training organisations can be added to the program on request.

suggested there should be a more formal link between the results of the Regulator’s inspection program and the nature and content of the ongoing training required. This includes a greater emphasis on the non-technical elements of the installation and the SRES requirements.

It is the view of the Regulator that training for accredited installers must include the importance of the contents of the written statement (that forms part of the eligibility requirements for STCs) being true, and ensuring the installer understands the implications and consequences if it is not.

It is a CEC requirement that the accredited installer must either carry out the installation or supervise it at the start, middle and end of the process. Through a targeted compliance campaign utilising data and records from regulatory partners, the Regulator has established that a material proportion of accredited installers are signing the written statement without having been onsite. In extreme cases, the Regulator has identified installations that may have been done without a licenced electrician undertaking the electrical work. These findings have been shared with the relevant electrical safety regulator in that jurisdiction.

As the results of the Regulator’s compliance program attest, there is need for additional options in confirming the accredited installer is adhering to the onsite requirement. Most stakeholders engaged with in this review expressed the view that the accredited installer should be the lead person in the install crew who carries out the installation, is onsite for the duration of the installation and signs the certificate of electrical safety. The Regulator and CEC are both currently exploring technology options, including the possible use of biometrics³¹, to establish that the accredited installer named in the STC claim was onsite during the installation. This is seen as a positive enhancement to the scheme and sector.

The written statement from the CEC accredited installer is required under Regulation 20AC of the Regulations. It includes, among other elements, a declaration that an installer with the necessary accreditation type has designed and installed the system in accordance with state or territory requirements and CEC design and install guidelines. The written statement requirements are convoluted, and installers have historically been willing to sign the statements without fully understanding that they constitute law. The installer, while required to provide the statement, is not required to declare the statement is true and correct. The written statement can be simplified to include:

- that the statement is true and correct
- a certificate of electrical safety has been issued under the relevant state or territory laws by an appropriately licenced person, preferably the accredited installer who provides the written statement
- that any additional SRES requirements have been met.

The CEC’s design and installation guidelines help installers interpret and apply the Australian Standards³² that are called up by state and territory electrical safety laws. While the CEC acknowledges the guidelines are not the ultimate set of rules for system installation, and must be read in conjunction with the Standards, the CEC requires installers to follow the guidelines. The guidelines are also called up by Regulation 20AC, as such adherence to the guidelines is an eligibility requirement for STCs. In some cases, the guidelines go above and beyond the Standards. Many stakeholders saw value in the design and installation guidelines developed by the CEC, particularly aspects that can reflect changes in best practice in advance of the Australian Standards which can be very slow to update. However, as the electrical safety regulators can only enforce the Standards, some stakeholders thought it useful for the Regulator to be able to specify additional technical eligibility requirements for the purpose of SRES

³¹ ‘Biometrics’ in the context of the report includes such technology options as facial or thumb print recognition to unlock the app that geo-locates an installer to the site. It may also include the option that the installer must “check-in” through taking a photograph of themselves onsite at different times during the installation process. This could then be matched to a database of installer photos. Privacy concerns would need to be addressed in implementation.

³² Relevant standards include AS 4509 *Stand-alone power systems*, AS/NZS 5033 *Installation of photovoltaic (PV) arrays*, AS/NZS 3000 *Electrical Wiring Rules*, AS 4777 *Grid Connections of Energy Systems via Inverters*, AS 1768 *Lightning Protection*, AS/NZS 1170.2 *Wind Loads* among others.

eligibility where the Regulator's inspection program suggests a need and electrical safety regulators agree. This would enable faster adaptation to issues than is allowed through the current Australian Standards process.

However, guidelines should be there to assist interpretation of standards and the law; and it can be problematic calling guidelines up as regulatory requirements. The Regulator believes a smaller number of clear eligibility requirements is preferable.

Options analysis

For background, the Act provides for the Regulations to cover a wide range of matters in relation to systems, their installation and function for the purpose of STC eligibility. The Act contemplates that the Regulations may impose conditions to be complied with in relation to a system after its installation.

Renewable Energy (Electricity) Act 2000

23A When a certificate may be created

(1) If a small generation unit is installed on or after 1 April 2001, certificates may be created after the small generation unit is installed.

Note: For offences and civil penalties related to the creation of certificates, see Subdivision C.

(1A) The regulations:

(a) may provide that certificates cannot be created in relation to a small generation unit unless particular conditions are satisfied in relation to the small generation unit or its installation; and

(b) without limiting paragraph (a), may:

(i) require information or documents to be given to the Regulator in relation to a small generation unit or its installation; and

(ii) provide that information or documents required to be given to the Regulator must be verified by statutory declaration.

(1B) To avoid doubt, regulations under subsection (1A) may impose conditions to be complied with in relation to a small generation unit after its installation.

Note: For example, conditions may be imposed so that certificates cannot be created in relation to a small generation unit unless the unit remains functional.

(2) The regulations may make provision in relation to the time at which a small generation unit is taken to have been installed.

(3) The regulations may make provision in relation to:

(a) the time when a right to create certificates in relation to a small generation unit arises; and

(b) the period within which certificates may be created in relation to a small generation unit.

This report makes several recommendations to improve the integrity and robustness of the installer accreditation scheme. These include opening the installer accreditation scheme to market competition, strengthening the role of the Regulator to set the rules of the scheme and giving the Regulator appropriate enforcement powers. Under this recommendation, the role of the CEC and the Australian Business Council for Sustainable Energy is removed from the Regulations and replaced with a new process.

Under the new process, the Regulator should be given responsibility for determining which accreditors and accreditations will be acceptable for the purposes of STC creation. This should include the ability for the Regulator to determine the necessary expertise, competence and performance that will be required to be maintained to be able to grant and hold accreditations. The accreditor could be selected through a competitive approach to market or appointed by the Regulator. The accreditor will be required to report to the Regulator annually on such relevant information as determined by the Regulator, including compliance activities undertaken during the reporting period. The Regulator may

also determine to set, review or approve the fee schedule for accreditation and ongoing administration.

To be accredited, a licensed electrician would need to complete mandatory training courses offered through RTOs³³ covering the technical aspects of designing and installing rooftop solar PV systems (and other small generation unit types eligible for STCs), as well as providing the electrician with a greater understanding of their obligations and competency requirements under the SRES. The requirement for CPD will continue with training to be more closely aligned to the findings from the Regulator inspection program. Accreditation (or the right to provide statements in support of STC creation) could be removed for poor performance.

Additional and appropriate powers should be given to the Regulator in the Regulations to allow appropriate administrative and other compliance action against installers that fail in their obligations under the SRES. Stronger enforcement measures will act as a clear deterrent against non-compliant systems and poor installer behaviour.

This approach removes the perceived conflict of interest that exists under the current regulatory framework, as well as improving accountability and role clarity across agencies, and giving installers greater access to natural justice provisions inherent in government decision making. As the SRES phases out, the installer accreditation scheme could be transitioned to state and territory electrical licencing regimes if the jurisdictions see value in continuing it³⁴.

If the additional powers through the Regulations do not satisfactorily resolve integrity in the installer accreditation scheme and statements, consideration should be given to amending the Act to provide the power for the Regulator to require certificate surrender for the installation from either the installer, or other key persons in the supply chain including the solar retailer.

The review considered several alternative options for installers, including:

- maintaining the current accreditation requirements
- removing the need for additional training, and
- allowing licenced electricians to give effect to the written statement of eligibility for STCs.

These alternatives were not considered practicable as they do not satisfactorily address the issues at hand, nor improve the integrity of the SRES. Stakeholder engagement highlighted that the Australian Government should set the scheme entry and eligibility requirements and that additional training for rooftop solar PV installations is a necessity. Allowing a licensed electrician to give effect to the written statement of eligibility for STCs would not provide additional assurance over the certificates as, without the additional training elements of an accreditation scheme, safety concerns may still exist.

Key findings and recommendations

Findings

All stakeholders agreed the Australian Government, through the Regulator, should set the rules for participation in the SRES. This includes appropriate powers to take compliance action against participants found to be acting in a manner that is outside the rules. Most stakeholders also noted that administration of the accreditation scheme is a time consuming and lengthy process and is best placed with an external body—some suggesting only one, others up to 3.

³³ For example, TAFE or other industry bodies registered to deliver the relevant training.

³⁴ The Regulator cannot accurately predict when the scheme is likely to stop having complete coverage. However, it is anticipated participation rates may fall sometime after 2028.

All stakeholders agreed in the value of additional technical training required before an installer can become accredited. This should be supplemented with training on the importance of giving a declaration to the Regulator, and the consequences of giving a false declaration.

All stakeholders agreed the need for ongoing continuous professional development of installers. Members of the Electrical Regulatory Authorities Council (ERAC) suggested training should focus on common areas of fault within the industry. This could be linked to the findings from the Regulator’s inspection program. Some ERAC members, as well as other stakeholders, called for a national approach to CPD to provide consistency across jurisdictions.

Several jurisdictions have found evidence of installations being completed without licenced electricians onsite, contrary to state and territory electrical safety rules. Enhanced use of technology to link an installer to a site on a specific day will help to mitigate this behaviour.

Recommendations

The Clean Energy Regulator recommends that:

Reference	Recommendation
R. A-1	The Clean Energy Regulator is given responsibility for setting the rules and framework for an installer accreditation scheme.
R. A-2	The Clean Energy Regulator is given the power to approve eligible installer accreditation schemes. This approval should allow for one or more bodies to be selected to administer these from a competitive process conducted by the Clean Energy Regulator. To remain eligible, the accreditation body (or bodies) will be accountable to the Clean Energy Regulator for service and quality standards, fees charged and public reporting. The Clean Energy Regulator may remove an accreditation scheme or body where the relevant service or quality standards are not met.
R. A-3	The compulsory written statements under Regulation 20AC, required from the accredited installer, should be simplified to state that: <ul style="list-style-type: none"> • the certificate of electrical safety has been issued under state or territory laws, and • the accredited installer was onsite as required to install or supervise the installation, and • the installation was carried out in accordance with state or territory laws, and • the system was installed in accordance with the design and will perform (generate) consistent with the quote provided or contract entered by the person who sold the system, and • the statement is true and correct.
R. A-4	The Clean Energy Regulator require additional training for accredited installers on their legal obligations in making a written statement of eligibility for STCs.
R.A-5	The Australian Government consider mechanisms to augment the Clean Energy Regulator’s powers to take administrative and compliance action against accredited installers who make false written statements, including to suspend or cancel their accreditation.

R. A-6

Options be explored, including legislation and technology, to require an accredited installer to prove they were onsite during the installation of the rooftop solar PV system.

Part B – Solar PV components listing

The CEC approves and maintains a list of components (solar PV modules and inverters) for use in the SRES. To be eligible to claim STCs, only those components approved and listed by the CEC can be used.

Manufacturers, through their Australian representatives, apply to have products included on the CEC approved products list. Modules and inverters must meet Australian Standards—the minimum requirements for use under state and territory electrical safety laws—and have been tested by an accredited testing laboratory approved to test modules and inverters to these standards under the [IEC System of Conformity Assessment Schemes for Electrotechnical Equipment and Components](#) (IECEE) scheme. A list of [National Certification Bodies](#) is on the IECEE website. There are currently no accredited laboratories in Australia.

Despite the above requirements, the Regulator has found examples of counterfeit solar panels³⁵ that are unlikely to meet Australian Standards being sold for use in the SRES. It has also detected instances of parallel importing of panels. Parallel imports pose a consumer risk as the provenance is unknown and it is unclear whether these panels are approved by the CEC and if they carry the same warranty as makes and models sold explicitly for the SRES incentive.

Given these issues, the Regulator co-designed SPV³⁶ with several industry participants without legislative change. SPV aims to protect the integrity of the SRES and give industry and consumers an easy way to check and confirm that solar panels:

- are backed by manufacturer warranties
- meet Australian Standards for quality and performance
- are eligible for STCs.

The Regulator has generally found record keeping issues with respect to proving whether installed solar panel modules meet CEC listing requirements. SPV has helped control the risk of counterfeit and ineligible panels being used to claim STCs. It is, however, voluntary and does not have full capture of all CEC approved panels³⁷. The Regulator has also detected ineligible serial numbers being provided to a SPV verification service³⁸. SPV has helped control these risks – over 60% (and growing) of weekly claims for STCs include validation of panels through SPV.

With approximately 8 million solar panels expected to be installed under the SRES in 2020, mandating tighter requirements to provide eligible serial numbers should be considered. This includes the Regulator being able to exit manufacturers from the scheme if they supply (and provide the serial numbers of) modules which do not meet Australian Standards.

To date, the Regulator has not detected issues with inverters installed each year under the SRES not meeting Australian Standards.

External to the SRES, at a state and territory level, the EESS is a regulatory framework aimed at increasing consumer safety when interacting with household electrical equipment. The EESS is established through an inter-governmental arrangement between participating jurisdictions. The EESS

³⁵ Panels and modules labelled with the incorrect model and power ratings.

³⁶ The [solar panel validation initiative](#) allows installers and consumers to verify the panels being installed on households are backed by manufacturer warranties, meet Australian standards for quality and performance and are eligible for STCs.

³⁷ SPV includes approximately 96% of all CEC listed panels. The list of [participating brands](#) is available on the Clean Energy Regulator website.

³⁸ Clean Energy Regulator, [Enforceable Undertaking – Trina Solar \(Australia\) Pty Ltd](#), May 2020.

conducts check testing which focusses on random sampling and testing rather than an up-front approval. The EESS does not currently include solar panels and inverters. New South Wales has its own separate scheme³⁹ which also does not provide testing of panels and inverters.

Changing the current CEC program to a system that more closely resembles the EESS will signal to states and territories that they should consider how to bring solar panels and inverters into the EESS or similar schemes prior to the SRES losing its 100% capture at some time before the scheme close at the end of 2030.

Options analysis

This report makes several recommendations to improve the process for approving key components for STC eligibility. These include giving the Regulator the power to set the requirements for scheme participation and STC eligibility, modernising the approval process to streamline and reduce regulatory burden, and giving the Regulator appropriate powers to take compliance action. Under these recommendations, the role of the CEC would be removed from the Regulations and replaced with a new approval and listing process established by the Regulator.

The Regulator should be given responsibility for determining how manufacturers may list their components eligible to participate in the SRES and claim STCs and outsource the operation to one or more external service provider(s). The external provider could be selected through a competitive approach to market or a more limited process and appointed by the Regulator. The service provider(s) will be required to report to the Regulator annually on such relevant information as determined by the Regulator including compliance activities undertaken during the reporting period. The Regulator may also determine to set the fee schedule for product approval.

To have products approved as eligible for STCs, manufacturers would need to provide a declaration of positive assurance (to the Regulator or the party selected through the process described above) that their modules and inverters have been tested to relevant IEC standards, meet the Australian Standards and come with an appropriate warranty recourse along with any other requirements determined by the Regulator. Manufacturers would be required have their products tested and audited on a sample basis. The Regulator should look to require manufacturers to provide serial numbers for modules and panels to SPV or a similar service.

Additional and appropriate powers should be given to the Regulator in the Regulations to take administrative and other compliance action against parties found to be making false declarations or failing in their obligations under the SRES. Stronger enforcement measures will act as a clear deterrent against non-compliant components and poor behaviour.

This approach removes the perceived conflict of interest that exists under the current regulatory framework where the CEC may be unwilling to remove a manufacturer that is also a member, as well as reducing burden on manufacturers. Requiring an explicit positive statement that components meet Australian Standards will give states and territories more control over the components used in their jurisdiction as the SRES moves to a natural phase out.

The Regulator considered maintaining the current CEC approach, which puts more weight on initial approval than tracking serial numbers and real-world testing. However, with installation of approximately 8 million solar panels in 2020, the issues of parallel imports and counterfeit panels, and some confusion over whether non-compliance with listing requirements is simply poor paperwork or panels that do not comply with Australian Standards, this option was not considered suitable for current times.

³⁹ Currently Victoria, Queensland, Western Australia and Tasmania participate in the EESS.

Key findings and recommendations

Findings

All stakeholders agreed the Australian Government, through the Regulator, should set the rules for participation in the SRES. This includes the appropriate powers to take compliance action against scheme participants that are found to be acting in a manner that is outside the rules.

Eligibility requirements could include a requirement for manufacturers to provide serial numbers of components to the Regulator or another service. This would give greater assurance to installers the components they are signing off in their written declaration meet the Australian Standards and are eligible for STCs.

Most stakeholders agreed there was scope to modernise the process for components to be eligible to receive STCs. Many saw the process of moving to a declaration from the manufacturer and onshore sample audits and testing as strengthening the market and giving state and territory regulators a strong foundation for future administration of their requirements.

Recommendations

The Clean Energy Regulator recommends that:

Reference	Recommendation
R. B-1	The Clean Energy Regulator is given responsibility for setting the rules for listing key solar PV components (solar panels and inverters) as eligible for Commonwealth entitlements in the form of STCs.
R. B-2	If R. B-1 is accepted, the Clean Energy Regulator should modernise and streamline the component listing process through the use of assurance declarations by manufacturers, audit arrangements and increased component testing. The Clean Energy Regulator may seek third party providers to assist with listing, compliance, audit and sampling as it does in its administration of other schemes.
R. B-3	That eligibility to create certificates be dependent on manufacturers providing eligible component serial numbers to the Clean Energy Regulator, or a party nominated by the Clean Energy Regulator, electronically. Solar panels will be the focus initially. This would only be extended to inverters if issues are found that warrant this.
R. B-4	The Australian Government consider mechanisms to allow the Clean Energy Regulator to take administrative and compliance action against solar panel and inverter manufacturers who fail to meet eligibility requirements, including to suspend or cancel their listing(s).

Part C – Consumer protection – solar retailer and installer compliance

The SRES has driven demand for rooftop solar PV to the point of retail market saturation. Retailers can only improve their market share by taking away business from their competitors. In the absence of substantial technological advancement, undercutting price is the fastest way to achieve this. Selling lower cost components coupled with the substantial financial benefits of the SRES has led to the emergence of some unscrupulous players.

A rooftop solar PV system is often a “top 3” lifetime purchase for many consumers behind a house and a car. As consumers seek out lower prices, retailers must find lower price components and cheaper installation methods to stay competitive. This can lead to higher demand for lower quality components, including ineligible and substandard components, which may deliver inadequate outcomes for consumers.

Solar retailers are often the first point of contact, and main source of information, for consumers. Ensuring they are acting with integrity is vital in safeguarding consumer protections and rights. With reports of dishonest and deceitful sales practices⁴⁰, and the number of complaints against solar retailers increasing substantially in recent years⁴¹ there is an opportunity to implement stronger controls over retailers participating the SRES.

Retailers are not regulated by the Regulator. Retailers are however regulated under the consumer protection framework administered by the ACCC and state and territory fair trading authorities.

The CEC has an Approved Solar Retailer program (ASR)⁴² authorised by the ACCC as a way for solar retailers to show their commitment to responsible sales and marketing activities and industry best practice. The ASR is a voluntary program administered through an application process. It is underpinned by the CEC’s Solar Retailer Code of Conduct (the Code)—a voluntary code of conduct aiming to promote best practice for marketing and sales of solar PV systems. The CEC states it actively monitors compliance of retailers with the Code and investigates all reported breaches. The CEC can suspend a retailer’s approval for breaches of the Code and publishes compliance outcomes on their [website](#). However, it must be noted the ASR only covers about 40% of retailers within the industry, and suspension from the program may not impose any material disadvantage on a retailer. That is, a retailer does not have to be a signatory to the Code to sell solar PV systems that are eligible for STCs under the SRES.

A recent improvement, the New Energy Tech Consumer Code (NETCC), has been developed by several parties in the industry⁴³. Authorised by the ACCC in December 2019 and varied by the Australian Competition Tribunal in September 2020, the NETCC sets minimum standards of good practice and consumer protection in relation to solar generation systems including sales and finance. The NETCC is also a voluntary code and aims to provide consumers with added protections and more information to help them make better informed decisions around what can be complex purchases. The CEC has been appointed interim administrator for the NETCC with an expected implementation within the next 12 months.

It is not recommended the Regulator require system retailers to be signed to one of these codes in order to access STCs.

Options analysis

The preferred option is to require the retailer to provide a written statement in conjunction with the accredited installer’s written statement and the STC assignment form, to the registered agent. This could include matters such as stating the system will perform in accordance with the generation stated in the quote to or subsequent contract with the consumer and that it is connected and generating.

- Where the retailer is also the registered agent, it is suggested new disclosure of material relationship provisions be included in amendments to regulations.

⁴⁰ ABC News, ‘[Solar power customers complain of high-pressure sales tactics for buy now, pay later deals](#)’, 18 August 2020, accessed 19 October 2020

⁴¹ Econnect Solar, ‘[What the dishonest solar salesman isn’t telling you](#)’, 11 June 2019, accessed 19 October 2020
Choice ‘[How to find quality solar panels and installation](#)’, Choice website 26 October 2020, accessed 3 November 2020

⁴² The Code was initially authorised by the ACCC in October 2013. In April 2015, minor amendments were made to the Code with the ACCC re-authorising it for a period of five years in October 2015. The updated Code is currently under consideration by the ACCC with a final determination expected in November 2020.

⁴³ The NETCC working group included representatives from the Australian Energy Council, CEC, CALC, Energy Consumers Australia, Energy Networks Australia, Public Interest Advocacy Centre, Renew and the Smart Energy Council.

The options considered were either 'no change' (i.e. no additional requirements for retailers) or call up being a signatory to a voluntary industry code of conduct. No change wasn't considered suitable as retailers are in control of both the sale and the installation and there are unscrupulous operators. It was considered inappropriate to call up a voluntary code as a regulatory requirement.

A solar PV system is an expensive, complex purchase with many factors for consideration. Predatory financing arrangements, including opaque BNPL finance arrangements, and "after-quote" price increases can leave consumers paying significantly more than they intended or that is appropriate in the circumstances.

Clearer rules around sales and marketing techniques, and better consumer awareness will help buyers avoid rushed decisions from door to door sales and offers that "won't last". In this competitive market, net prices to consumers have continued to decline every year.

The main issues identified by the various regulators have been:

- Misrepresentations regarding system components – relating to country of origin of products, generation capacity and output.
- Financial costs and benefits – the price of systems increasing between quote and completion, the cost of financing, the rebate or tariff rates that consumers can expect to receive for exported electricity, and the effective rate of return on investment.
- False testimonials and pressure applied to provide positive reviews or remove negative reviews.
- Warranty and repair claims – where consumers are misled as to their rights or the responsibilities of sellers.
- Faulty products and installations, including failure to connect to the grid and failure to install the system in a timely fashion or at all (after a deposit has been paid).
- High pressure sales techniques and unlawful practices.
- Fly-by-night operators who leave consumers stranded by exiting the market or going insolvent (including phoenixing).
- Financing where capacity to pay is questionable or consumers are not properly informed of the terms of the financing.

Other concerns have been noted by other bodies, including the CALC. CALC raises, for example, in its [Sunny Side Up Report](#):

- confusion as to who has responsibility for ensuring that systems can and are connected to the grid (leading to ACL issues);
- BNPL offers and arrangements, including inflated prices where finance is used.

These are matters that are, and should continue to be, monitored and regulated by the relevant consumer protection bodies. The Regulator has, and will continue to, assist these bodies consistent with the SRES law. Both the Regulator and consumer protection bodies are legally permitted to share relevant information to protect consumers and enforce the law.

The recommendation to require retailers and/or installers to state whether or not the systems have been installed as claimed and are functional (i.e. able to be switched on, generate and, if to be grid connected, are either connected or ready for connection) will not only ensure that STCs are properly claimed, but that consumer rights are supported. Similarly, recommendations related to the supply of information from manufacturers will have both scheme integrity and consumer protection benefits.

In relation to phoenixing activity, the Regulator is a member of the ATO led [Phoenix Taskforce](#) that brings together 38 agencies to combat illegal phoenix activity. The Regulator monitors for phoenixing activity via various methods and provides data and information to other agencies when it is detected and of relevance. The Regulator is particularly vigilant of phoenixing and related entity activity when

considering whether to register people and companies to create STCs (the legislation requires the Regulator to consider the fitness and propriety of anyone who wishes to create STCs).

BNPL arrangements have recently been considered by both the [Commonwealth Senate Select Committee on Financial Technology and Regulatory Technology](#) and an Australian Competition Tribunal case relating to the NETCC⁴⁴. The Senate Select Committee has delivered an [interim report](#). The Australian Competition Tribunal published its reasons on 28 September 2020. ASIC has also prepared two reports dated [November 2018](#) and [November 2020](#).

There are clearly a variety of perspectives on appropriate behaviour in, and regulation of, the BNPL industry. It is generally accepted, and the Australian Competition Tribunal has observed, that BNPL financing is a popular and useful product in the small-scale solar market⁴⁵. However, there are concerns that BNPL may be causing harm to some consumers⁴⁶. Specifically, concerns have also been raised by various parties regarding the extent to which there is transparency of the terms of finance, the cost of the relevant system (including the potential of inflated prices due to BNPL arrangements) and the practices of some retailers who offer BNPL products. These varying views have been the subject of submissions and evidence to the various inquiries and addressed in the reports referred to above.

On 11 November 2020, the Australian Financial Industry Association (AFIA) announced that a new BNPL industry Code would be published and operational by 21 March 2021. AFIA stated that the Code is being developed:

*in response to recommendations in the Australian Securities and Investment Commission's (ASIC's) Report 600 and by the Senate Economics Reference Committee. The Senate FinTech and RegTech Inquiry's September 2020 interim report also strongly supported the BNPL industry's efforts to self-regulate and raise standards, and called out the Code as a clear example of industry working constructively together to respond to stakeholder concerns.*⁴⁷

During consultation, the CEFC stated:

The CEFC would prefer to see full disclosure of all amounts being paid to the vendor, both in dollar and percentage of equipment purchase price as mandatory disclosure in the customer finance contract. We also think it is appropriate for the customer contract to disclose an effective interest rate in the same manner as the NCCP requires disclosure of comparison rates. We are of the view that the CER and other regulators use their powers to encourage the AFIA Code of Practice to reflect the above and that providers of buy now pay later finance in the solar space comply with that code of practice.

Having regard to the various interests, views and issues, it may be appropriate for relevant regulators to continue to monitor behaviour in the industry, with a specific focus on the solar industry if evidence of harm is occurring. Monitoring could be undertaken of:

- the potential inflating of prices
- transparency of financing arrangements (including contractual terms) and the yield from these arrangements (that may be recovered across the wider market, meaning that all consumers are carrying the cost, irrespective of the manner in which they pay for their purchase)
- the net overall cost to the household of the system (many claims relate to the costs savings on energy bills, but do not factor in the cost of purchasing or repaying the system).

This report makes several recommendations in relation to consumer protection and financing. In effect, the recommendations are intended to ensure that the system receives the correct number of

⁴⁴ [Australian Competition Tribunal Determination – Application by Flexigroup Limited \(No 2\) \[2020\] ACompT 2](#), [Page 33], 28 September 2020, accessed 22 October 2020

⁴⁵ [Australian Competition Tribunal Determination – Application by Flexigroup Limited \(No 2\) \[2020\] ACompT 2](#) [paragraph 289], 28 September 2020, accessed 22 October 2020

⁴⁶ Australian Securities and Investments Commission, [ASIC releases latest data on buy now pay later industry](#) [media release], 16 November 2020, accessed 17 November 2020

⁴⁷ Australian Finance Industry Association, [AFIA appoints BNPL code compliance committee chair and confirms new publication date](#) [media release], 11 November 2020, accessed 19 November 2020

STCs by requiring installers, retailers and manufacturers to provide relevant, legally binding statements. These statements require affirmation of certain claims before STCs will be issued. These are the same claims that are made to consumers in relation to the capacity of their PV system and the quality of both the installation and the componentry. This information can be passed on to relevant consumer protection regulators via specific legislative authority.⁴⁸ Unscrupulous practices, including illegal phoenixing activity will continue to be monitored and actioned (either via administrative action by the Regulator to remove actors or by referral of information to the ATO and partner agencies via the Phoenix Taskforce).

The report does not make specific recommendations in relation to financing arrangements as this has already been the subject of other completed and continuing inquiries and work by relevant bodies including regulators. However, ongoing monitoring by relevant bodies is advisable.

⁴⁸ The [Clean Energy Regulator Act 2011](#) (Cth) (including s 49) and the [Clean Energy Regulator Regulations 2018](#) (Cth) authorise the sharing of information with Commonwealth and state and territory bodies that deal with fair trading or consumer protection.

Key findings and recommendations

Findings

Stakeholders agreed that bringing retailers into the SRES regulatory framework through explicit actions would provide significant benefit to consumers and the industry more broadly.

Recommendations

The Clean Energy Regulator recommends that:

Reference	Recommendation
R. C-1	<p>New scheme eligibility requirements be introduced compelling system retailers to make a short-written statement (to accompany the accredited installer’s statement) to state:</p> <ul style="list-style-type: none">• the system installed will perform to the quote provided to the consumer (bar extenuating circumstances outside the retailer’s control), and• that the system is complete, connected and generating.• the statement is true and correct. <p>The Clean Energy Regulator should be given the power to disqualify retailers, including key management and officers, who make a false written statement from making further statements in the STC creation process. Those retailers, including key management and officers, will not be able to sell solar PV systems eligible for Commonwealth entitlements in the form of STCs. There should be provisions to allow the Clean Energy Regulator to disqualify new retailers created that are linked to other disqualified retailers.</p> <p>Where a retailer is also a registered agent for the creation of STCs, or where they are related parties, amendments to regulations should consider mechanisms to ensure any potential conflicts of interest are properly managed.</p>
R. C-2	<p>Buy Now, Pay Later finance arrangements continue to be monitored by the relevant regulators with a view to increased education regarding consumer rights, the implementation of the Australian Financial Industry Association Code, and the potential for greater transparency in financing arrangements.</p>
R. C-3	<p>The Australian Government requests the Clean Energy Regulator and the Australian Competition and Consumer Commission, in conjunction with state and territory fair trading bodies, to consider conducting a campaign encouraging consumers to carry out thorough research, and obtain multiple competitive quotes, before contracting to install a rooftop solar PV system.</p>

Appendix A: Stakeholder engagement

Stakeholder	Primary contact
Clean Energy Council	Kane Thornton - CEO
Smart Energy Council	John Grimes - CEO
REC Agents Association	Ric Brazzale
Master Electricians Australia	Malcolm Fraser
Electrical Regulatory Authorities Council	Jason St Martin (Western Australia) Robin Smith (Northern Territory) Nathan Grogan (New South Wales) Henry Hodgson (Tasmania) Brian Richardson (Queensland)
National Electrical and Communication Association	Carl Copeland
Solar Victoria Department of Environment, Land Water and Planning Electrical Safety Victoria	Stan Krpan Terissa Small Neil Fraser
Clean Energy Finance Corporation	Richard Lovell Simon Brooker
Australian Competition and Consumer Commission	Nicholas Heys
Brighte	Katherine McConnell
Electrical Trades Union	Trevor Gault
Commonwealth Scientific Industrial Research Organisation	Dr Chris Fell
PV Lab	Michelle McCann Lawrence McIntosh

Stakeholder engagement was conducted over a three-week period from late September 2020. Owing to the short timeframes for this review, the Regulator did not actively call for formal public submissions. However, the Regulator undertook targeted engagement with key stakeholder bodies

including obtaining consumer complaint data from statutory bodies that investigate and deal with such matters. The engagement provided a broad range of robust views covering the 4 points of the Terms of Reference.

The Regulator, with assistance from the Department of Industry, Science, Energy and Resources discussed the current regulatory framework highlighting areas of concern and recognising where the industry is working well. Stakeholders had the opportunity to present their views on the rooftop solar PV sector, with strong arguments for and against any changes being made.

Overall, there was high levels of agreement in some areas—the Regulator should have the power to set the requirements for STC eligibility, solar specific training for installers should remain mandatory and additional controls should be placed on retailers—while views differed across several discussion areas. These included how the accreditation of installers should be administered and ongoing testing and compliance of components.

Engagement with the CEC was productive. While the CEC was strongly against several ideas discussed during the review process, it was open to the concepts of a single regulator. It expressed a preference for a single accrediting and listing body for consistency. It also expressed the view that it should keep that role given the capability it has built and its view that its services are valued by installers and manufacturers. Should these recommendations be accepted, the CEC has expressed a willingness to enter into a Memorandum of Understanding with the Regulator to hasten the change ahead of any legislative updates.

In addition to the targeted engagement, the Regulator also received a small number of submissions from the public offering their experience with the rooftop solar PV sector. These submissions were largely focused on negative system performance and poor retailer experiences. While these submissions were often out of the scope of the review, the Regulator has found them useful in helping shape the framing for the SRES moving forward. Members of the public who provided submissions were referred to the relevant state or territory body for potential resolution.

The Regulator thanks those involved in the engagement process. The time, energy and thought brought to the process is appreciated. Special thanks to Kane Thornton and staff at the Clean Energy Council for their open and productive conversations during this process.

Appendix B: Comparison of similar Australian Government programs

Examples of accreditation schemes

Australian Health Service Safety and Quality Accreditation Scheme

Under the *National Health Reform Act 2011*, the Australian Commission on Safety and Quality in Health Care (the Commission) is responsible for the formulation of standards relating to health care safety and quality matters. This includes formulating and coordinating the Australian Health Service Safety and Quality Accreditation Scheme (the AHSSQA Scheme).

In Australia, all public and private hospitals, day procedure services and most public dental practices must be accredited. To become accredited, health service organisations must pass external assessments to show they have implemented all of the requirements of the standards. The assessments are conducted by independent accrediting agencies, approved by the Commission.

The AHSSQA Scheme provides for the national coordination of accreditation processes and sets out the responsibilities of accrediting agencies in relation to implementation of the National Safety and Quality Health Service (NSQHS) Standards.

The Commission is responsible for approving accrediting agencies seeking to assess health service organisations against the:

- NSQHS Standards
- the Department of Veterans' Affairs Trauma Recovery Programme (TRP) Standards, and
- any other set of standards that may be developed by the Commission.

Applications for accrediting agencies are opened every 2 to 3 years. Applications are assessed by a panel which includes representatives from the public and private health care sectors, as well as senior Commission staff. There are currently 7 approved accrediting agencies for the NSQHS Standards and 4 for the TRP Standards.

The approved accrediting agencies are accredited by an internationally recognised body, such as the International Society for Quality in Health Care or the Joint Accreditation Scheme of Australia and New Zealand.

The NSQHS Standards were developed by the Commission in collaboration with the Australian Government, state and territories, the private sector, clinical experts, patients and carers. The primary aims of the NSQHS Standards are to protect the public from harm and to improve the quality of health care provision.

Diagnostic Imaging Accreditation Scheme

Established through the [Health Insurance Act 1973](#), the Diagnostic Imaging Accreditation Scheme (DIAS or the Scheme) was developed to ensure safety and quality standards for diagnostic imaging practices. All diagnostic imaging practices intending to render any diagnostic services (e.g. radiology, ultrasound, angiography) for the purpose of 'Medicare benefits' must be accredited under DIAS.

Practices that are not accredited under DIAS cannot provide Medicare funded diagnostic imaging services and must inform clients prior to carrying out these services.

Accreditors approved for the DIAS are appointed by the Minister for Health and are named in subordinate legislation. There are currently only 3 approved accreditors—one of which is the National Association of Testing Authorities Australia.

Accreditors accept applications for accreditation, perform desk-top audits and grant accreditation. They also advise the Department of Human Services of practices' accreditation status and liaise with the Department of Health as required.

The National Association of Testing Authorities, Australia (NATA) is Australia's national accreditation body for the accreditation of laboratories, inspection bodies, calibration services, producers of certified reference materials and proficiency testing scheme providers throughout Australia. NATA has a Memorandum of Understanding with the Australian Government and various state and territory governments that recognise its key role in Australia's technical infrastructure. The Australian Government recommends the use of NATA-accredited facilities whenever this is an option and encourages state and territory governments and other instrumentalities to do likewise.

Appendix C: History of legislative changes

Key changes to the requirements for the creation of certificates for solar small generation units.

Date	Event	Description
2001		<p>MRET</p> <p>Mandatory Renewable Energy Target (MRET) scheme commenced</p> <ul style="list-style-type: none"> Small generation units (SGU) can either create certificates annually or upfront in bundles of 5 years.
2005	November	<p>Amendment Regulation</p> <p>SGUs have option to create certificates upfront for period of 15 years</p>
2007	October	<p>Amendment Regulation</p> <p>SGUs required to be designed and installed by a person accredited under either the Australian Business Council for Sustainable Energy or CEC accreditation schemes.</p> <ul style="list-style-type: none"> Requirement is limited to units which create certificates upfront for a 15 year period. <p>Persons creating certificates for small-scale systems required to provide information about certificates in annual returns</p>
2010	June	<p>Expanded RET</p> <p>Expanded national RET scheme commences.</p>
2010	June	<p>Amendment Regulation</p> <p>Additional support for small-scale solar provided through 'solar credits' multiplier (phases out ending in Jan 2013).</p> <p>Introduction of specific requirements to create certificates for SGUs:</p> <ul style="list-style-type: none"> Accreditation requirements expanded to all SGUs regardless of deeming period. Explicit requirement that electrical wiring must be carried out by a licenced electrician. Explicit requirement that system complies with applicable load and state or territory building, siting and grid connection requirements. Obtain written statements from the installers stating: <ul style="list-style-type: none"> names and accreditation number of designer and installer of the unit that unit meets all local, state or territory government requirements. Requirement that a copy of any documentation required by jurisdiction certifying that installation of unit complies with laws relating to safety and technical standards be provided to the owner.

2010	Sept	Amendment Regulation	<p>Installer required to provide additional written statements stating that:</p> <ul style="list-style-type: none"> • Installer has appropriate public liability insurance. • Installer is bound by and has complied with the CEC's Code of Conduct. • Installation complies with relevant Australian Standards. • PV module and inverter are on CEC approved component lists.
2010	December	Amendment Regulation	<p>Introduction of SGU inspections.</p> <ul style="list-style-type: none"> • Includes power for Regulator to make person ineligible to design and install systems based on inspection results
2011	January	Amendment Regulation	<p>RET split into two schemes – LRET and SRES each creating a different type of renewable energy certificate</p>
2012	December	CCA review	<p>Climate Change Authority (CCA) review considers role of CEC in accrediting installers.</p> <ul style="list-style-type: none"> • Recommend maintaining the CEC as the sole accreditation body for installers under the SRES • State the risks associated with opening up accreditation to multiple bodies in terms of possible poor standards and higher costs of oversight, appear too large to warrant changing the current arrangements of a single national accreditation body at this time.
2012	December	Amendment Regulation	<p>Fit and proper person test introduced for registered persons</p>
2013	June	Amendment Regulation	<p>Phase down of certificate deeming periods introduced.</p> <p>Requirement for persons creating certificates for small-scale system to provide information in annual returns is removed</p>
2018	December	Amendment Regulation	<p>Option for solar SGUs >10kW but ≤ 100 kW to create LGCs instead of STCs is removed</p>
2019	February	Amendment Regulation	<p>Clarification provided on how the boundary of a solar SGU device should be determined when the device is made up of multiple solar PV systems.</p>

Appendix D: ACCC response to engagement



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██████████ ██████████

23 Marcus Clarke Street
Canberra ACT 2601

GPO Box 3131
Canberra ACT 2601

10 November 2020

tel: (02) 6243 1111
fax:(02) 6243 1199
www.accc.gov.au

██████████
Clean Energy Regulator
GPO Box 621
CANBERRA ACT 2601

Dear ██████████

Re: Rooftop Solar Sector Review

The Australian Competition and Consumer Commission (ACCC) welcomes the opportunity to provide the Clean Energy Regulator (CER) with an outline of the consumer protection issues that have been identified for the CER's rooftop solar sector review. The ACCC has received a large volume of complaints concerning the consumer experience with retail solar panels and their installation. We have a limited role in regards to some areas on the sector and have confined our comments to those areas.

ACCC Enforcement Role

As you may be aware, the ACCC is an independent statutory authority whose role is to enforce the Competition and Consumer Act 2010 Cth (CCA), which incorporates the Australian Consumer Law (ACL), with a view to ensuring that Australia's market economy works for the benefit of all Australians. The ACCC is unable to take action on matters that fall outside of the CCA.

The ACCC cannot pursue all matters that come to our attention. The ACCC's role is to focus on those circumstances that will, or have the potential to, impact vulnerable consumers, harm the competitive process or result in widespread consumer or small business detriment. The ACCC exercises discretion to direct resources to matters that provide the greatest overall benefit. When exercising this discretion, we have regard to the principles set out in our [Compliance and Enforcement policy](#).

Under this policy, the ACCC will prioritise matters which fall into our current priorities. We will also give consideration to matters which have the following factors:

- conduct that is of significant public interest or concern
- conduct that results in substantial consumer or small business detriment
- national conduct by large traders, recognising the potential for greater consumer detriment and the likelihood that conduct of large traders can influence other market participants

- conduct involving a significant new or emerging market issue or where our action is likely to have an educative or deterrent effect
- where our action will assist to clarify aspects of the law, especially newer provisions of the Act.

Each year we review our compliance and enforcement priorities. Priorities are determined following external consultation and an assessment of existing or emerging issues and their impact on consumer welfare and the competitive process. They include current priorities and those that we consider to be enduring. The ACCC may also be funded from time to time by the Government to conduct inquiries or work in specific industries or areas.

Compliance and enforcement of the Australian Consumer Law is carried out by the ACCC and state and territory consumer regulators on a 'one law, multiple regulators' model. Some issues may be more appropriately addressed at the state/territory level, especially those that include smaller traders or those localised to one state. Most state and territory fair trading agencies also facilitate dispute resolution between consumers and traders and have enforcement responsibilities under the Australian Consumer Law.

The ACL regulators have formed the Compliance and Dispute Resolution Advisory Committee (CDRAC), which involves national cooperation and coordination for compliance, dispute resolution and enforcement activities in connection with ACL.

The aim of the Committee and any working groups established is to facilitate coordinated, and consistent compliance and dispute action by regulators across Australia for any emerging marketplace concerns. Issues in connection with the marketing, sale and installation of solar panels has been identified by ACL regulators as potential consumer protection concern

Issues Identified in the Solar Industry

The ACCC and the state and territory ACL regulators identified the solar industry issues below after a review of complaint data.

While high volumes of complaints are received, the complaints are generally individual issues relating to small, localised traders. The complaints are often involving single, rogue employees and there is little evidence of systemic company non-compliance by national traders. Representations are often verbal, which causes difficulties in gathering evidence.

In an attempt to identify any systemic issues or patterns of conduct, the ACL regulators categorised reports and complaints under types of allegations. Each ACL regulator undertook a review of complaints data and reports from consumers (and businesses) where there were allegations of misconduct under the ACL.

Misrepresentations

The ACL prohibits conduct that misleads or deceives or is likely to mislead or deceive consumers or other businesses. This law applies even if the business did not intend to mislead or deceive anyone or no one has suffered any loss or damage as a result of the conduct.

In addition to the prohibition against misleading or deceptive conduct, it is unlawful under the ACL for a business to make false or misleading claims about goods or services.

A misrepresentation is a claim or statement that is false or misleading made by one party to another. This includes claims or statements that you make in television or radio advertisements, in catalogues, on labels, on websites, in contracts (or during contract negotiations), over the telephone, in correspondence (such as letters or emails) or in person.

Businesses should ensure they give current and correct information to consumers, check that the overall impression of their advertising is accurate, back up claims with facts and

documented evidence where appropriate, note important limitations or exemptions and be prepared to substantiate any claims.

Companies are liable for non-compliant behaviour by a sales agent, there is no excuse that a third party has been engaged to perform the selling.

Country of Origin

- Both businesses and their salespeople made false representations panels were Australian made.
- There are also false representations that panels are premium European made when they are in fact made in China.

KWh Output

- Salespeople made representations that the systems have a certain electricity output that is not able to be achieved due to various factors such as the weather, temperature or inverter.

Price

- Businesses and salespeople made representations about the price of the systems which is then increased when the consumer elects to pay through finance.
- Representations were also made that the consumer was entitled to a certain rebate or tariff rate, however the consumer later finds they were not in fact eligible or the tariff had changed.
- The consumer was quoted a price but after paying the deposit and work commencing, the consumer was then informed that the price would be significantly more than originally quoted, as more work needed to be completed than anticipated or the original quote was unsuitable for the consumer's needs.
- Salesmen also made misrepresentations about the financial benefits of the solar system, the consumers need for the system and how long special deals or rebates were available.

False Testimonials

Businesses and review platforms that do not remove reviews that they know to be untrue or misleading risk breaching the ACL. Reviews may mislead consumers if they are presented as impartial, but were written by the reviewed business, a competitor, someone paid to write the review who has not used the product or someone who has used the product but written an inflated review to receive a financial or non-financial benefit.

- Businesses published false reviews themselves or offered incentives to consumers for positive reviews.
- Businesses exerted undue pressure on consumers to remove negative reviews or provide a positive review, regardless of the consumer's experience.

Liability for providing remedies

Consumers can claim a remedy from the retailer if the products do not meet any one or more of the consumer guarantees, with the exception of availability of spare parts and repair facilities.

The remedies consumers can seek from the retailer who sold them the products include a repair, replacement, or refund and in some cases compensation for damages and loss. The retailer can't refuse to help by sending the consumer to the manufacturer or importer.

Consumers can claim a remedy directly from the manufacturer or importer if the goods do not meet one or more of the following consumer guarantees, however consumers are only entitled to recover costs from a manufacturer or importer, which include an amount for reduction in the product's value and in some cases compensation for damages or loss.

Generally, it is up to the retailer or supplier to organise a remedy for issues caused by any sub-contractor they employ.

- If a consumer experienced problems they were often informed it is an installation fault and they would need to contact the installer, despite the installer being a subcontractor for the retailer.
- Consumers were also told by installers that the problem is with the panels themselves and refer the consumer back to the retailer.
- Retailers also refer consumers to the manufacturer for a remedy.

Other ACL issues

When consumers buy goods or services which malfunction, don't work or don't perform as generally expected, they have rights under the ACL. The ACL creates a basic set of guarantees for consumers who acquire goods and services from Australian suppliers, importers or manufacturers. These are intended to ensure that consumers receive the goods or services that they have paid for. When consumers have a problem and one of the guarantees has not been met, they are entitled to a remedy.

The type of remedy depends on the circumstances but may include a repair, replacement, refund or having the service performed again.

Faulty Products

- Consumers experience faulty panels, inverters and batteries and were told they are unable to get a remedy outside of the warranty period.
- In some cases consumers were referred to the installer or the manufacturer who dispute liability or find that the retailer has exited the market.

Faulty Installation

- Consumers often find products that are faulty due to poor installation and also experience damages from installations that were not carried out with due care and skill such as broken roof tiles, roof leaks and holes in the roof.
- As mentioned above, the consumers experience difficulties in getting a remedy as the different parties all dispute liability.

High pressure sales techniques

If a business engages in sales methods such as door-to-door sales, telemarketing, or approaching customers in public places such as shopping centres, consumers have additional protections under the ACL. These types of sales are called 'unsolicited consumer agreements' (UCA).

When a business approaches a consumer to try to sell something for \$100 or more, they must tell the consumer who they represent, that they must leave if asked and that the consumer has a 10-day cooling-off period.

If the consumer agrees to the sale, they have a 10-day cooling-off period and can cancel during this period. The seller must not supply the consumer during the cooling-off period.

The seller must also give the consumer a written copy of the agreement. The agreement must meet standards set out by the ACL. For example, the language must be clear and include a form that you can use to cancel during the cooling-off.

As discussed above, companies are liable for non-compliant behaviour by a sales agent.

The ACL also prohibits harassment or coercion by businesses. A business must not coerce consumers, or use undue harassment or physical force, when it is trying to sell or make consumers pay for something. A business may be subjecting a consumer to undue harassment if it uses tactics that intimidate, demoralise or tire you out. A business may try to coerce a consumer into agreeing to a purchase by engaging in aggressive selling practices.

Under the ACL, 'linked credit providers' can be jointly liable with the suppliers under the ACL for the loss or damage someone suffers when that supplier fails to comply with certain consumer guarantees. A linked credit provider may include a finance company to which the business regularly refers people, under an agreement with that company

Businesses also must not engage in unconscionable conduct when dealing with customers (including other businesses). Unconscionable conduct does not have a precise legal definition. It is a concept that the courts have developed over time on a case-by-case basis. A business' actions might be unconscionable if they are particularly harsh or oppressive. They must do something that is more than just unfair—they must do something against good conscience.

Australian courts have found transactions or dealings to be 'unconscionable' when they are deliberate, involve serious misconduct or conduct that is clearly unfair and unreasonable.

- Unsolicited consumer agreements are very common and there are instances where the UCA requirements are breached by the retailer not providing copies of contracts or not providing compulsory cooling off periods.
- There are allegations of unconscionable conduct in relation to unsolicited sales, with reports of vulnerable consumers, such as older Australians or consumers with disabilities, being targeted by salesmen using the high pressure tactics.
- Salespeople also made the false representations outlined above to pressure the consumer into purchasing the product.
- There are ongoing concerns about businesses offering finance for unsolicited consumer agreements, as in the absence of the finance, consumers may have been unlikely to purchase the product.

Failure to connect to grid

- Consumers were not connected to the grid in a timely manner and experience financial losses in the form of missed tariffs and paying for a non-functioning system.
- The different parties such as the retailers, electricity retailer and distributor are all required to fill in forms and often dispute liability for the non-connection.

Wrongly accepting payment

- Consumers pay a deposit or in full to a retailer and then experience long delays in having the system installed. When the consumer attempts to cancel, the retailer informs the consumer they will lose their deposit. There are some instances where the retailer exits the market

Issues Outside of the ACL

The ACL regulators have also identified the following issues that fall outside of the ACL.

Insolvency/Phoenixing

Illegal phoenix activity is when a company is liquidated, wound up or abandoned to avoid paying its debts. A new company is then started to continue the same business activities without the debt. When this happens employees miss out on wages, superannuation and entitlements, other businesses are put at a competitive disadvantage, suppliers or subcontractors are left unpaid and consumers are unable to obtain remedies under the consumer guarantees.

- Many solar businesses have exited the market or gone insolvent. There have been reports that these businesses are phoenixing and are doing this to avoid their obligations under the ACL and other laws.
- By phoenixing, business may also avoid paying supplier or sub-contractors.

Finance

- Consumers enter finance agreements without being properly assessed whether they can afford repayments and therefore go into debt.
- Consumers are also often not properly informed of the terms of the agreement and experience unexpected fees or high interest rates.

New Energy Tech Consumer Code (NETCC)

Where businesses are concerned that their proposed conduct may give rise to a breach of the competition provisions of the CCA, they can seek authorisation from the ACCC. If the ACCC is satisfied that the relevant legal test is met and grants authorisation, this removes the risk of legal action under the competition provisions.

For conduct that involves a potential or actual per se breach of the CCA (conduct that is prohibited outright), such as cartel conduct, the ACCC may grant authorisation only if it is satisfied that the likely public benefit from the conduct outweighs the likely public detriment. This test applies to the entire application for authorisation even if only part of the application is for conduct that may breach a per se provision of the CCA.

For other conduct (conduct that does not involve a breach of a per se provision of the CCA), the legal test has two limbs. The ACCC may grant authorisation if it is satisfied that either:

- the proposed conduct would not be likely to substantially lessen competition or
- the likely public benefit from the conduct outweighs the likely public detriment.

On 30 April 2019, the Clean Energy Council (CEC), the Australian Energy Council (AEC), the Smart Energy Council (SEC) and Energy Consumers Australia (ECA) (together the Applicants) lodged an application on behalf of themselves and future signatory providers of 'new energy tech' (e.g. solar generation systems, energy storage systems, electrical vehicle charging and other emerging energy products and services) for authorisation for the NETCC. The Code's developers sought authorisation because the Code imposes conditions on the sales practices

of competitors and includes sanctions for non-compliance, which risks breaching competition laws.

The NETCC, sets minimum standards that suppliers of New Energy Tech products (e.g. solar panels, energy storage systems and other emerging products and services) must comply with when interacting with customers, including from initial marketing and promotions through to installation and complaints handling. The Code is voluntary but may effectively become mandatory if government rebate schemes require participants to be signatory to the Code.

On 5 December 2019, following extensive consultation, the ACCC granted authorisation subject to certain conditions relating to:

- the requirements that 'Buy Now, Pay Later' (BNPL) finance providers must meet under the Consumer Code in order to provide finance with New Energy Tech products
- the prohibition in the Consumer Code on BNPL finance being offered in unsolicited sales of New Energy Tech products, and
- reporting to the ACCC on the operation of the Consumer Code.

Flexigroup Limited, a BNPL finance provider applied for review of the ACCC's determination on 30 December 2019. It sought to have the ACCC's conditions varied to reduce the requirements that BNPL providers must meet in order for signatories to offer BNPL under the Code. It also sought to remove from the Code a prohibition on BNPL being offered in unsolicited sales of new energy tech products.

The Tribunal heard the matter afresh in June 2020. The Tribunal's determination was that the code did not meet the net public benefit test. Its determination was that the code would meet the net public benefit test and could be authorised if different conditions were imposed.

The Tribunal imposed different conditions of authorisation in relation to the requirements that BNPL finance providers must meet in order for signatories to offer such finance arrangements under the Code, and imposed a condition removing the prohibition on BNPL finance being offered in unsolicited sales of new energy tech. The conditions impose less stringent consumer protection requirements in relation to the offer of BNPL finance compared to the conditions imposed by the ACCC.

The Tribunal's conditions also removed the Code administrators' ability to impose mandatory standards on signatories that would apply to future new energy tech products and services.

Tribunal considered that there was substantial detriment in restricting BNPL finance options from being made available to consumers, and that BNPL was a significant and popular form of finance that provides economic benefits. The Tribunal also considered that any harm which may arise by unlawful selling of these products could be reduced by the consumer protections contained in the Code.

Action by ACL Regulators

The ACCC has taken action against larger solar companies in the past. Public outcomes include True Value Solar in 2011 for false representations of kWh output, Austech Solar in 2011 for false representations that rebates were ending and in 2014, Euro Solar and Australian Solar Panels for false representations as to testimonials and the country of origin of panels.

As many solar retailers are small, local traders, the state ACL regulators are usually more appropriate if enforcement action is required, as discussed above. The state regulators have taken action against various solar retailers in recent years including court action and the issuing of public warning notices.

The ACCC and ASIC have sent joint warning/educative letters to various retailers that use BNPL providers. The letters related to concerns that businesses may be passing on their fees for providing BNPL services in the form of higher prices, without disclosing this to consumers.

Should you wish to discuss this matter further, please contact me [REDACTED] or by [REDACTED] or [REDACTED].

Yours sincerely

[REDACTED]

[REDACTED]
Deputy General Manager
Enforcement

