



# VEU Performance Report 2020

October 2021



**An appropriate citation for this paper is:**

Essential Services Commission 2021, VEU Performance Report 2020: October

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## From the chairperson



I am pleased to provide you with the latest performance report on Victoria's energy efficiency program – the largest of its kind in Australia.

Despite the continuing challenges presented by the coronavirus pandemic, **Victorian Energy Upgrades** has been able to maintain its objective of reducing greenhouse gas emissions, while at the same time helping Victorians reduce their energy costs.

During 2020, the program delivered over 328,530 energy efficiency upgrades across 204,429 households and businesses.

Participating households saved an estimated average of \$229 off their annual energy bills, while businesses who underwent an upgrade could save an estimated \$3,114 on average.

### **Reducing greenhouse gas emissions since 2009**

Around 1.88 million households and 114 thousand businesses have participated in the program since 2009 – enjoying energy savings and helping cut greenhouse gas emissions by up to 63 million tonnes. And while 2020 presented significant challenges to everyone involved, the program still met its targets.

Our team supported program participants through almost five months of restrictions. We held forums remotely and sought feedback on how we could assist with recovery. We took participants' questions to government departments to clarify rules and we revised deadlines to give participants greater flexibility in meeting their program obligations.

Despite the limitations, the program continued to generate success stories with over six million certificates registered in 2020.

The number of accredited businesses increased slightly from 216 to 220 while around 7 per cent of existing businesses expanded into new activities.

From the chairperson

## **Maintaining program integrity**

The integrity of the program was maintained during lockdown by continuing a clear focus on compliance but with a shift from field audits to desktop audits.

Our compliance efforts led to the largest regional investigation ever conducted under the program resulting in enforcement action against two companies.

Another case involving alleged manipulation of invoices ultimately led to a referral to police for alleged fraud. After a five-month investigation, we issued a formal warning to an accredited provider under the program after we obtained evidence to suggest the company had unknowingly submitted falsified certificate claims to the value of \$620,000.

We also imposed conditions requiring the company to conduct independent audits to ensure any certificates they create comply with the program's legislation.

This case was just one of 42 investigations conducted during the year demonstrating that even though we couldn't be on the ground in 2020, our compliance program was active and effective.

From the many thousands of households and businesses who benefited from energy efficiency upgrades during 2020 to the estimated 63 million tonnes cut to greenhouse gas emissions, the program continues to deliver for all Victorians.

### **Kate Symons**

Chairperson

## About this report

This report details our regulatory and administrative actions under the Victorian Energy Efficiency Target (VEET) Act 2007 (the Act) for the 2020 reporting year.

The Act established the creation of the VEET scheme, known as the Victorian Energy Upgrades (VEU) program (the program) and charged the commission with its implementation from 1 January 2009.

This report provides information on key aspects of the program for the 2020 calendar year including:

- Our assessment of applications for new accounts and accreditation applications.
- Our assessment of the creation of Victorian energy efficiency certificates (VEECs)
- Our assessment of project-based activities and product submissions
- Our compliance and audit activities and findings on the compliance of accredited persons and relevant entities.
- Other key work activities and projects we delivered to maintain the integrity of the program and to prepare for its future

This report provides information required under section 67 of the Act and is published in accordance with section 7(3) of the Act. Information required to be published for the 2020 year is shown in Table 1.

Table 1 Information required to be published for the 2020 year

Information to be published	Total
Relevant entities that had an energy efficiency certificate shortfall	2
Total of energy efficiency certificate shortfalls	35,808
Certificates created in 2020 (1 January to 31 December)	6,098,415
Certificates surrendered by relevant entities for the 2020 compliance year	6,538,562
Certificates surrendered by accredited persons in 2020 (1 January to 31 December)	65,555

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# A year in review - the program in 2020

## Key performance outcomes for the program

The Victorian Energy Upgrades program successfully delivered over 328,530 energy efficiency upgrades across 204,429 residences and businesses in Victoria in 2020 – a challenging year for all Victorians given the impact of living with COVID restrictions.

## Key outcomes for Victoria under the program



**204,429 residential and business consumers** benefited from energy efficiency upgrades.



**63 million tonnes of greenhouse gas** have been saved since the program commenced in 2009.



**5.5 million MWH of electricity savings** expected to be generated from upgrades undertaken in 2020.



**6,053,663 certificates** were registered from upgrades undertaken in 2020



**29 out of 31 energy retailers** successfully met their certificate surrender obligations, with **6,538,562** certificates surrendered.



**21 businesses** were accredited to participate or had their accreditation expanded, bringing the total to 220.



**66 new businesses** registered to own, trade, and surrender certificates.



**1,377 new energy-efficient products** were approved for use, bringing the total to 17,411.



**1,333 audits** were undertaken, including 42 investigations.



**270 complaints were received**, all of which were resolved. Complaints decreased by 25 per cent from 2019.

## **Coronavirus impacts on the program**

The coronavirus pandemic created many challenges for the program and its participants. The lockdown restrictions impacted on accredited providers' ability to generate leads and undertake upgrades under the program. In response, accredited providers pivoted away from residential to commercial lighting upgrades, and from metropolitan to regional upgrades. There was also an increase in the delivery of other activities, particularly water heating.

Like many organisations, we adopted flexible remote working arrangements to protect the health of our staff, participants, and the broader Victorian community. We supported our staff in balancing work, family, and other responsibilities, as well as assisting program participants through the disruptions caused by the pandemic.

Despite these challenges, the program successfully registered over 6 million certificates during the year, providing the program with sufficient certificates to meet the program target for 2020.

We adapted and responded to the challenges of 2020 by:

- reprioritising work activities to support program participants throughout the coronavirus restrictions period
- delivering our forums remotely and seeking feedback from our participants on how we could help with recovery
- working together with other Victorian government agencies to provide participants with clarification on the implications of coronavirus restrictions on the program
- making changes to deadlines to provide participants greater flexibility in meeting their program obligations

## **How we maintained the integrity of the program**

During 2020 we validated upgrades in compliance with both program requirements and COVIDSafe practices. We pivoted away from field audits and expanded our desktop audits, while maintaining a consistent level of certificate claim assessment and investigation.

Our risk-based assessments identified and resolved over 2,975 creation claims with potential compliance issues as part of our pre-registration assessment process. Our audit and compliance activities led to the surrender of 65,555 certificates by accredited providers during the year, which represents approximately one per cent of total certificates created for the year.

We conducted one of the largest regional non-compliance investigations which required the surrender of 28,066 certificates by two accredited providers in 2021.



We also undertook a five-month investigation into alleged misconduct by an accredited provider which required the surrender of 20,894 certificates.

Over six and a half million certificates were surrendered by liable energy retailers to meet their obligations for the 2020 compliance year. There was a high level of compliance by energy retailers, with 29 retailers (out of 31) surrendering enough certificates to meet their liability under the program.

## **How we engaged with program stakeholders and consumers**

During 2020 we continued to prioritise working with program participants to deliver improved compliance outcomes. We also focused on building productive relationships with industry and other key stakeholders to deliver the following objectives:

- Assisting our participants in their economic recovery post-coronavirus.
- Working with other government agencies to promote uptake of program activities
- Strengthening the alignment of the program in consultation with other jurisdictions.

We held two online forums during the year with our participants and stakeholders.

We consulted with industry on three separate occasions regarding making changes to our administrative requirements for the building-based lighting upgrade activity (activity 34).

During the year we received 270 consumer complaints, resolving all of these by working together with the accredited provider and consumer.

## **How we worked towards improving the program**

We continued to refine our program in response to emerging issues, delivering an effective and efficient program. During 2020, we released six program updates and 22 system changes to the Victorian Energy Upgrades registry to improve system performance and usability.

We continued work on developing a new IT system to replace the existing Victorian Energy Upgrades registry system.

We worked closely with the Department of Environment, Land, Water and Planning to consider and scope potential reforms to the program. We also worked with other government agencies to address compliance issues and strengthen alignment of the program with other energy efficiency schemes.

## About the program

### **The program is a key mechanism for reducing greenhouse gas emissions**

The Victorian Energy Upgrades program is a major part of the Victorian Government's objective in achieving greenhouse gas emission reduction outcomes.<sup>1</sup> It is the largest energy efficiency program in Australia.

The program helps reduce Victoria's greenhouse gas emissions by providing access to discounted energy-saving products and activities via accredited providers. When these businesses undertake an eligible energy upgrade, they create Victorian energy efficiency certificates (VEECs) under the program. Each certificate represents one tonne of greenhouse gas saved.

Energy retailers are required to acquire and surrender these certificates to meet annual targets set in Victorian legislation. The target set for the 2020 year was 6.5 million certificates.

63 million tonnes of greenhouse gas emissions have been saved by the program from its beginning in 2009 to December 2020, which is equivalent to taking over 19 million cars off the road for a year.

Our key role in the program is to regulate the creation, registration and surrender of certificates under the program. See appendix A for more information on our program responsibilities and our compliance and enforcement framework.

### **The program delivers savings for participating consumers**

Since 2009, over 1.88 million households and 114 thousand businesses have benefited from energy upgrades that reduce Victoria's greenhouse gas emissions.

In 2020, approximately 189,536 households and 14,893 businesses benefitted from energy upgrades through the program in Victoria. Upgrades undertaken by these consumers is expected to generate approximately 5.5 million MWh of electricity savings and over 591 thousand GJ of gas savings over the lifetime of the upgrades.

Based on these energy savings, households that undertook an upgrade in 2020 would save an average of \$229 on their annual energy bills<sup>2</sup>, while businesses would save an average of \$3,114<sup>3</sup>.

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<sup>1</sup> Victoria's Climate Change Framework, Department of Environment, Land, Water and Planning 2016

<sup>2</sup> Assuming an electricity price of \$0.24 per kWh and 15 years lifetime for the upgrades

<sup>3</sup> Assuming an electricity price of \$0.25 per kWh and 15 years lifetime for the upgrades

## Consumer savings from lighting upgrades under the VEU program

Lighting upgrades are the dominant activity under the VEU program. In 2019 and 2020, 670,465 lighting upgrades were carried out in households, which is expected to generate over 4.7 million MWH of electricity savings over the lifetime of the upgrade. This translates to an average annual saving of \$186 on the electricity bills of these participating households<sup>2</sup>.

In 2019 and 2020, 23,349 businesses undertook lighting upgrades which is expected to generate over 4.8 million MWH of electricity savings over the lifetime of the upgrade. This translates to an average annual saving of \$3,580 on the electricity bills of these participating businesses<sup>3</sup>.

## The program delivers net benefits for Victorians

All Victorian energy consumers benefit from the program, even if they do not participate. More efficient use of energy by consumers:

- reduces wholesale prices and delays the need for investment in new generation and transmission infrastructure
- can reduce energy demand at peak times and improves energy security.<sup>4</sup>

Since 2009, the program has helped introduce more than 17,000 energy-saving products to the market, establishing commercial opportunities for more than 220 new businesses and 4,700 trade professionals.

The program has also contributed to creating economies of scale for lighting products, which has transformed the lighting industry. Production costs of high efficiency lights has significantly reduced because of the wide scale upgrades of lighting products under the program.<sup>5</sup>

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<sup>4</sup> Regulatory Impact Statement (Victorian Energy Efficiency Target Regulations), Department of Environment, Land, Water and Planning, 2018

<sup>5</sup> Regulatory Impact Statement (Victorian Energy Efficiency Target Amendment (Prescribed Customers and Targets) Regulations 2020, Department of Environment, Land, Water and Planning, 2019

## Program performance in 2020

### Victorian Energy Upgrades program targets met

There were just under 6.1 million certificates created by accredited persons during 2020, of which we approved and registered over 6.053 million as shown in Table 2.

These registered certificates, combined with the surplus from previous years, were sufficient to meet the program's 2020 certificate surrender target of 6.5 million certificates.

Over 470 thousand certificates were withdrawn by accredited persons because of our pre-registration checks.

Over 65 thousand certificates were surrendered by accredited persons because of our compliance and audit efforts during the year.

Table 2 shows the number of certificates created, registered, withdrawn, and surrendered, both in 2020 and since the start of the program in 2009.

Table 2 Certificates created, registered, withdrawn, and surrendered

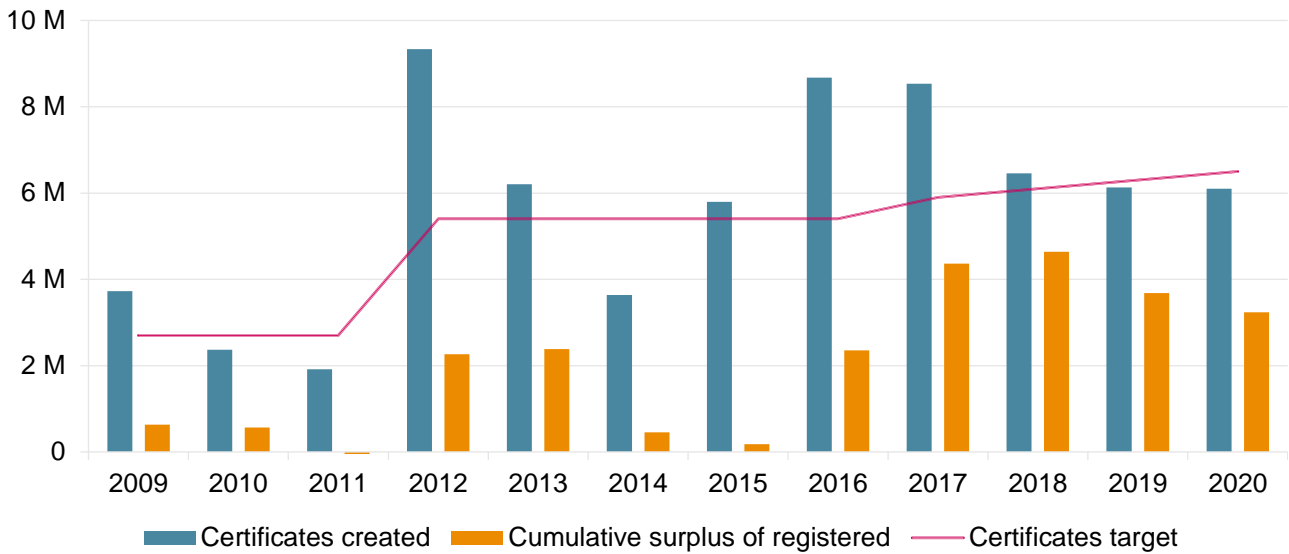
Certificate transactions in 2020	2020	Total (2009 – 2020)
Certificates created	6,098,415	68,860,493
Certificates withdrawn by accredited persons <sup>6</sup>	470,929	4,782,043
Certificates registered	6,053,663	63,138,708
Certificates refused registration	-	117,355
Certificates surrendered by accredited persons	65,555	361,943
Certificates surrendered by relevant entities	6,538,562	59,751,985

Figure 1 shows that the program has consistently delivered enough certificates to meet annual program targets since its commencement in 2009. The program maintained a registered certificate surplus at the end of in 2020 of over 3.2 million certificates, going into the 2021 compliance year.

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<sup>6</sup> Withdrawn certificates may be resubmitted by an accredited person and registered at a later date where the organisation is able to provide us with sufficient evidence to satisfy our pre-registration checks

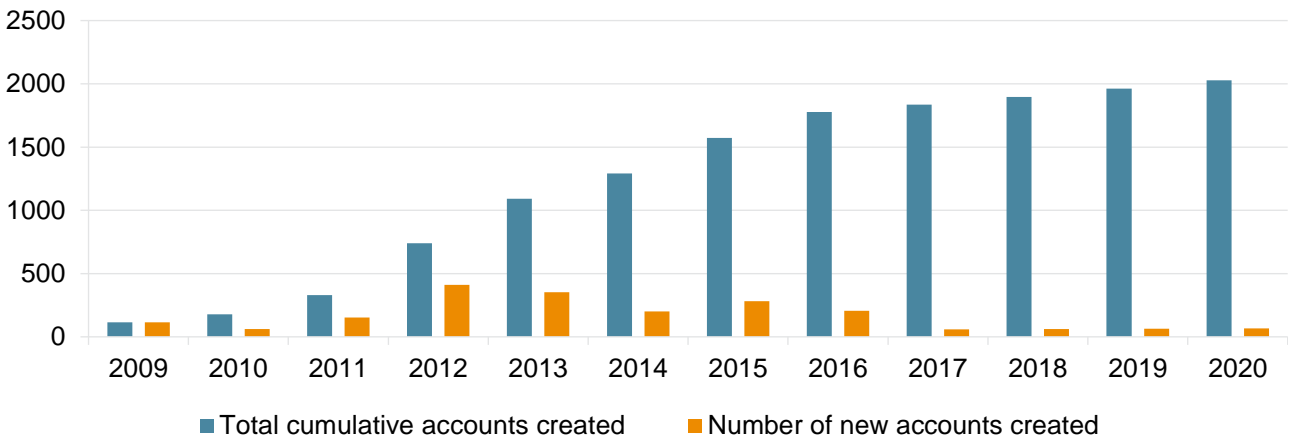
Figure 1 Certificate target, certificates created, and surplus certificates registered (in millions) by year – 2009 to 2020



### Continued growth in account creation and accreditation

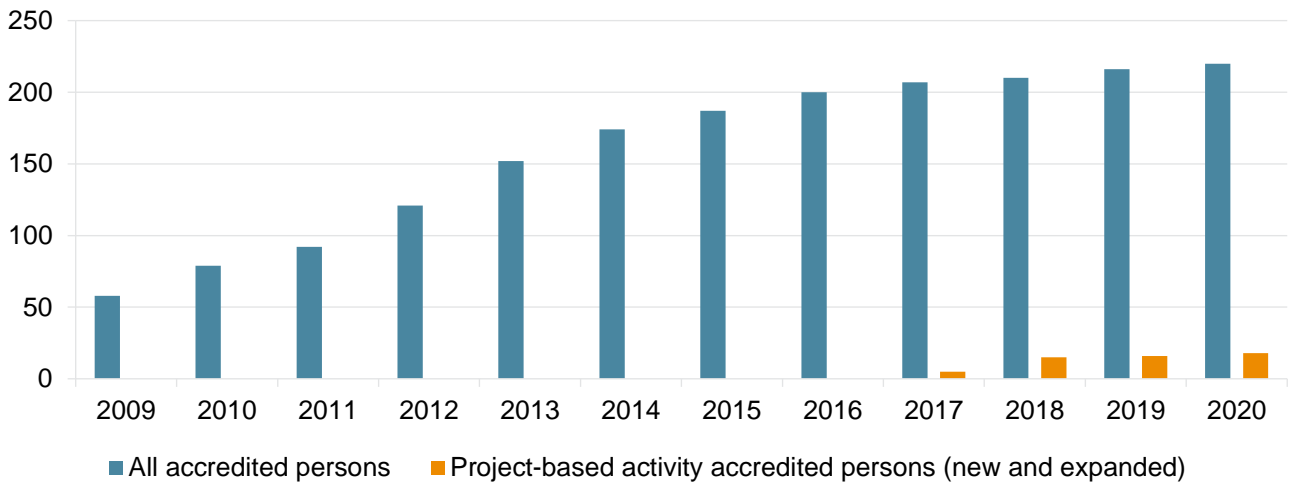
VEU account holders are able to own, trade and surrender certificates, whereas only accredited persons can create certificates under the program. There was a marginal increase in the total number of accounts and accredited persons in the program over 2020, as shown in Figure 2 and Figure 3. A total of 66 new accounts were created during 2020, bringing the total to 2,028.

Figure 2 Cumulative number of VEU accounts by year – 2009 to 2020



Four new accredited persons were approved, bringing the total number of accredited persons to in the program to 220 in 2020 as shown in Figure 3. We also approved 17 expanded accredited person applications, enabling accredited persons to undertake additional activities under the program.

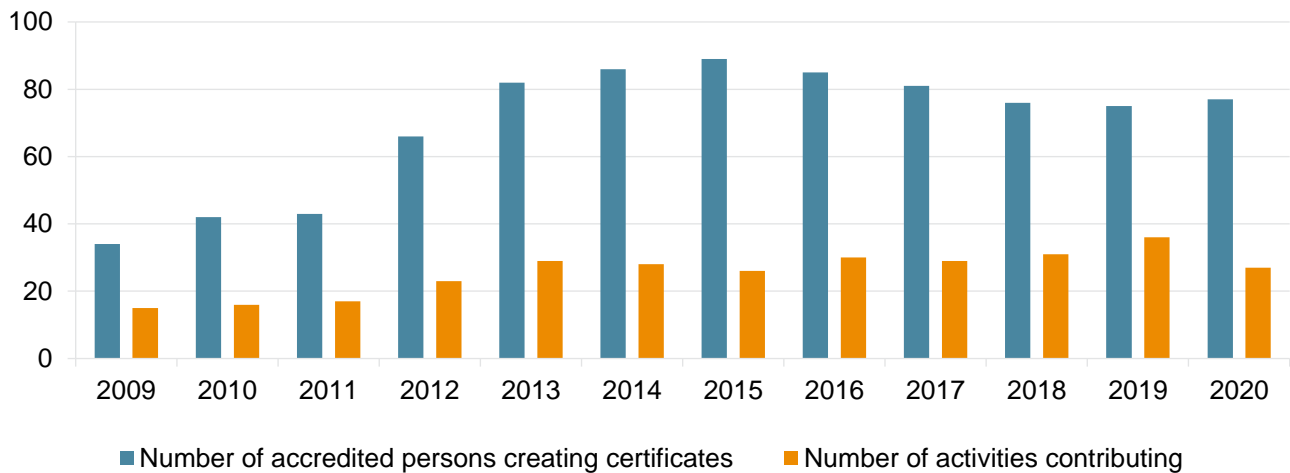
Figure 3 Cumulative number of accredited persons by year – 2009 to 2020



The number of active accredited persons increased from 75 in 2019 to 77 in 2020. As shown in Figure 4, we saw a decrease in the variety of activities delivered by accredited persons under the program, from 36 activities in 2019 to 27 in 2020.

Both active accredited persons and the number of activities contributing to certificate creation are above the program’s yearly average.

Figure 4 Number of accredited persons creating certificates and the number of activity types that contributed to those certificates – 2009 to 2020

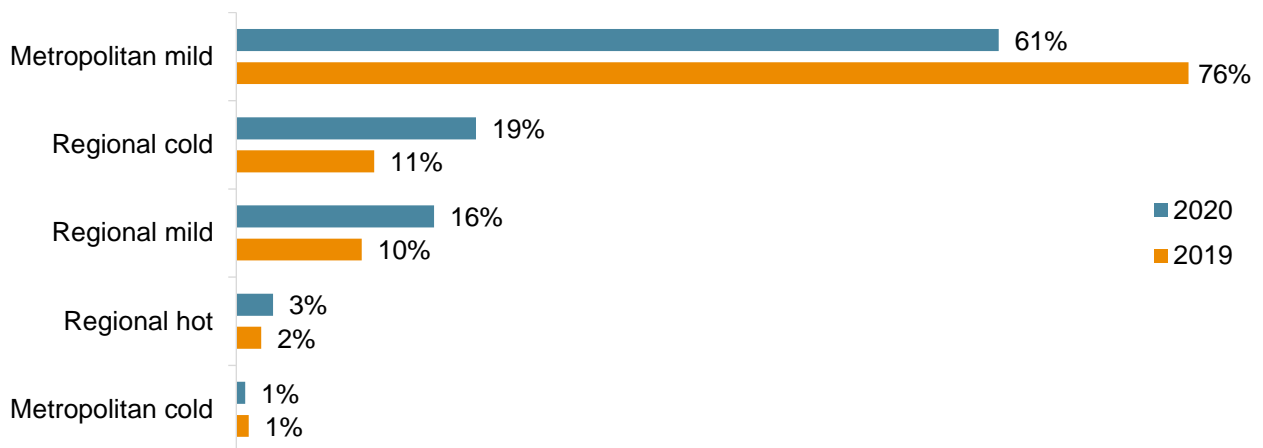


## Growth in regional certificate creation

In 2020, the program continued to deliver more certificates from upgrades in metropolitan Melbourne, with 61 per cent created in metropolitan premises. However, the gap between metropolitan and regional upgrades under the program decreased from 2019.

In 2020, there was substantial growth in the volume of certificates created in regional areas, as shown in Figure 5. This change represented a 15 per cent increase in certificates created in regional areas compared to 2019.

Figure 5 Percentage of certificates created in metropolitan Melbourne and regional Victoria by climate region – 2019 and 2020



## Majority of upgrades continued to be in residential premises

In 2020, most upgrades occurred within residential premises (93 per cent of upgrades). However, as shown in Figure 6, certificate created between business and residential premises was a 60/40 split with 60 per cent of certificates created from business upgrades. This is a result of larger amounts of certificates being created on average for upgrades undertaken in business premises compared to residential premises.

Figure 6 Number of premises upgraded, upgrades undertaken, and certificates created by type of premises in 2020

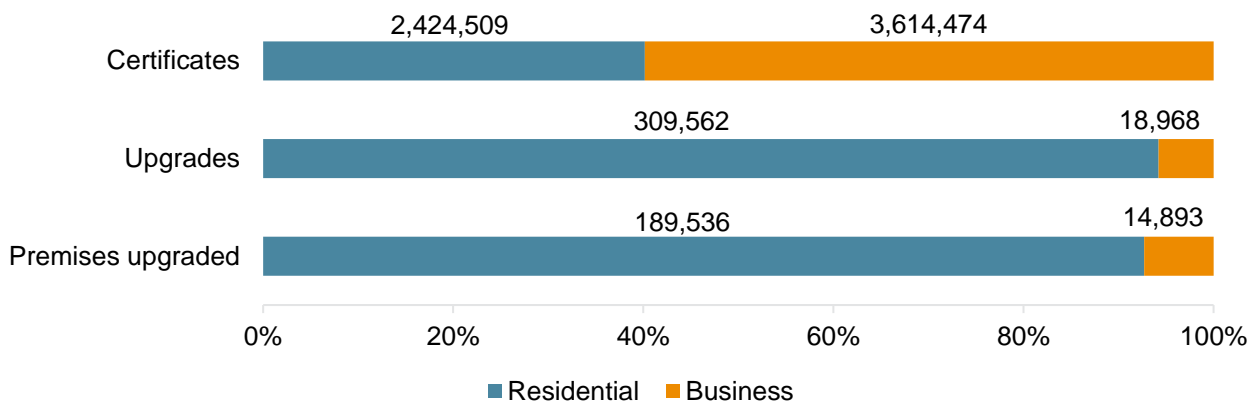
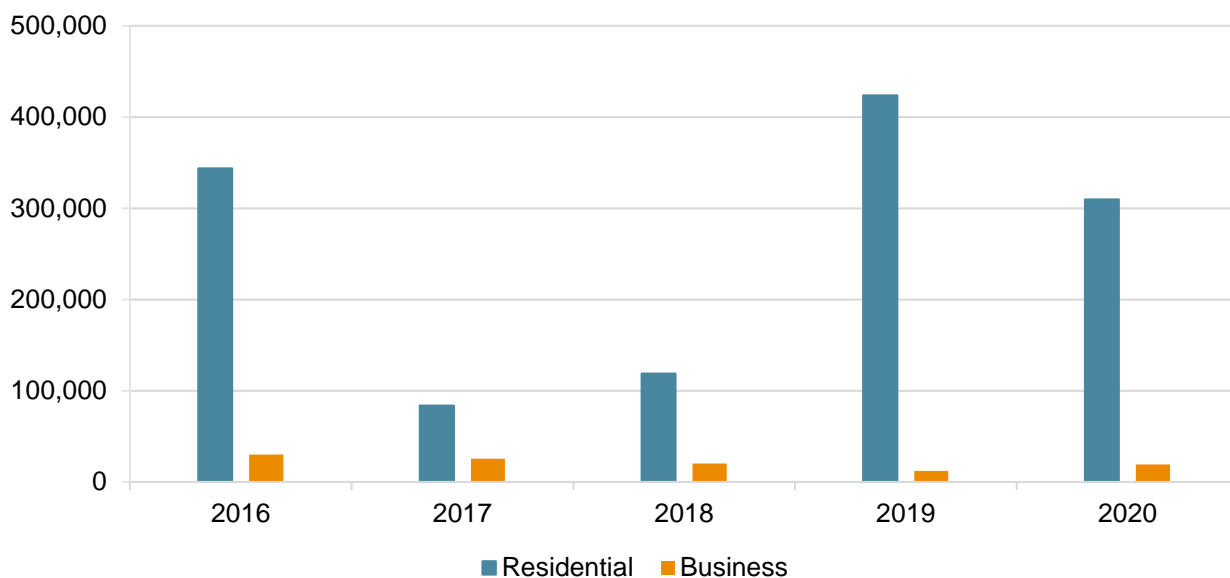


Figure 7 shows the number of upgrades undertaken in residential premises is lower than that undertaken in 2019, but significantly higher than the number of upgrades undertaken in 2017 and 2018 when business lighting upgrades were the dominant source of certificates under the program (see Figure 8 below).

Figure 7 Number of upgrades undertaken by type of premises – 2016 to 2020



### Lighting upgrades continued to be the main program activity

Lighting upgrades continued to dominate certificate creation in the program, delivering 89 per cent of certificate creations in 2020.

Figure 8 shows that between 2019 and 2020, accredited providers pivoted away from residential lighting into business lighting (which includes lighting activities 27, 34 and 35). Business lighting saw a 34 percent increase in certificate creation from 2019 to 2020, an increase of 855,180 certificates.

A significant increase also occurred in water heating activities with a 58 percent increase in certificate creations, from 206,223 certificates in 2019 to 326,322 certificates in 2020.



Figure 8 Certificates created by activity types – 2016 to 2020

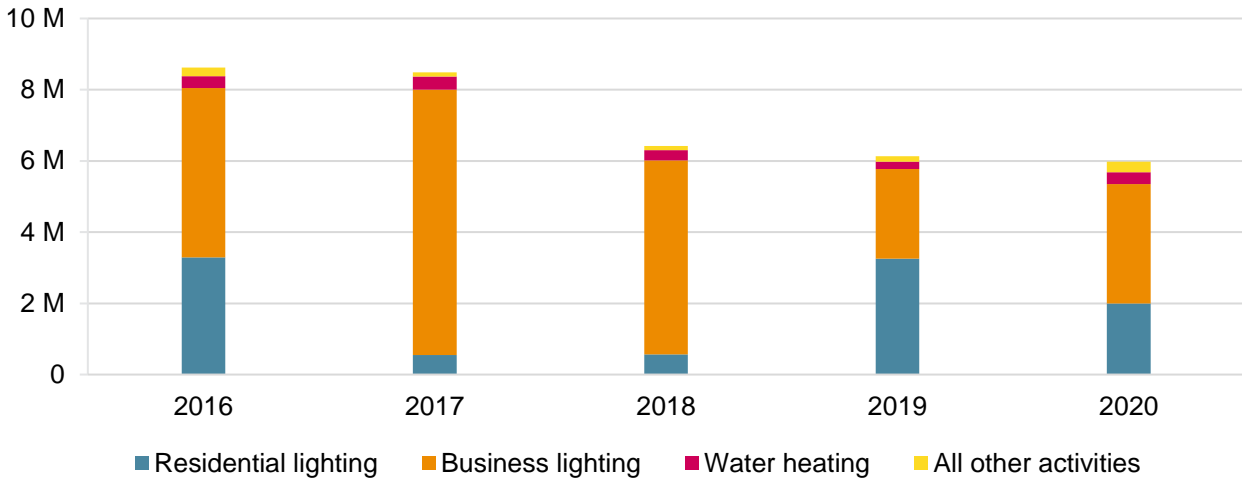
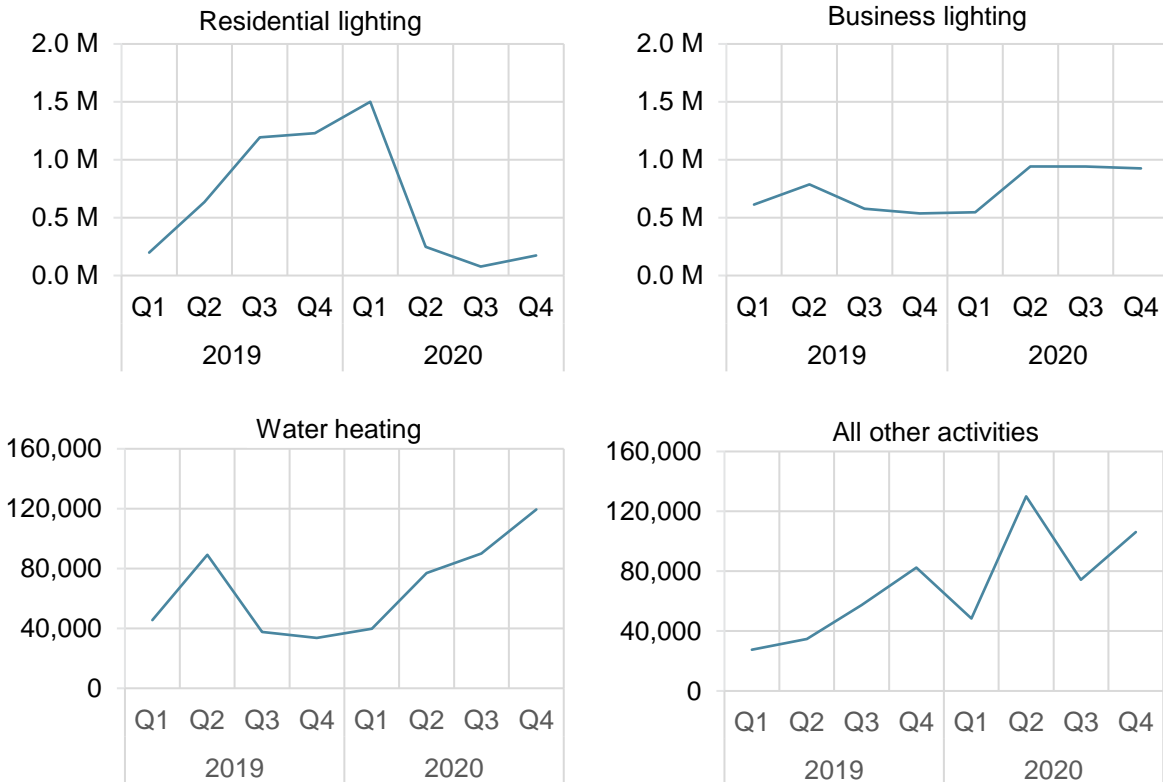


Figure 9 shows that accredited providers pivoted away from residential to business lighting upgrades between Q1 and Q2 of 2020 when lockdown restrictions were announced in Victoria. The impact of coronavirus lockdowns on the program can be seen in the steep decrease in certificates created from residential lighting, with an increase in creations for business lighting, water heating and other activities from Q1 2020.

Figure 9 Certificates created quarterly by activity type – 2019 and 2020



For a full breakdown of certificates created by each activity type see Appendix B.

## Increasing certificate prices during 2020

Figure 10 shows that the certificate spot price<sup>7</sup> varied throughout 2020, increasing from a low of \$30.25 at the end of the financial year in June and July to a high of \$42.30 in December.

Figure 10 Weekly certificate spot price in dollars (\$) for Victorian energy efficiency certificates as reported in 2020



## Increase in products approved for use in the program

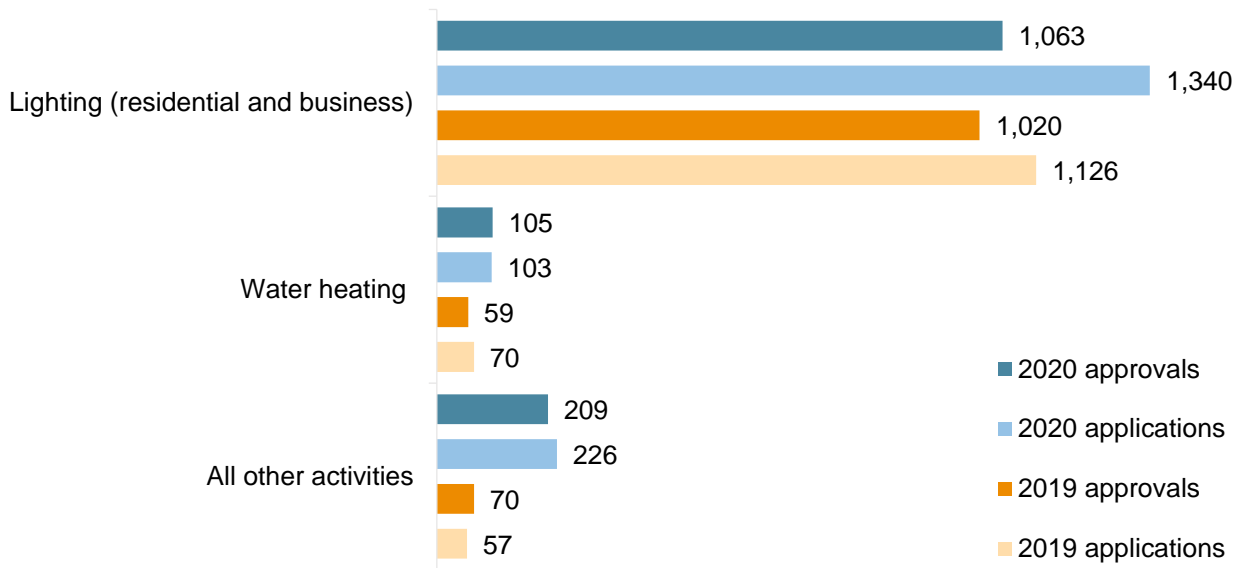
2020 saw a 50 per cent rise in the numbers of products approved for use in the program, increasing from 1,149 in 2019 to 1,717 in 2020. Most product applications and products approved continued to be for lighting products.

2020 also saw an increase in water heating product applications and approvals, as shown in Figure 11. This reflects growth in certificate creations for this activity as mentioned above.

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<sup>7</sup> This price is based on data provided by one financial broker organisation for certificates traded through the broker in the spot market. It may not represent the actual average certificate price over the year. However, it does provide a useful guide to movements in the certificate price over the year.

Figure 11 Summary of product applications and approvals - 2019 and 2020



### Project-based activities delivers more completed projects in 2020

Project-based activities (PBA) help businesses access incentives for large and customised projects. These activities are generally complex and labour-intensive but allow for a wide suite of incentives to be created across different technologies and business settings.

Figure 12 shows a rise in impact reports approved from four in 2019 to six in 2020 which represents the completion of more PBA projects in 2020. Impact reports are submitted by an accredited provider once the project has been implemented to determine the abatement achieved and therefore how many certificates can be created.

Certificates registered in respect of PBA projects have also increased from 20,128 in 2019 to 43,967 in 2020.

There was a decrease in scoping plans<sup>8</sup> and project plans<sup>9</sup> approved from 2019 to 2020.

<sup>8</sup> The scoping plan cover the project’s ownership and purpose and must be approved by the commission before work can start on the project

<sup>9</sup> The project plan builds on the information in the scoping plan and is key to our assessment of a project’s eligibility to create certificates and must be provided to the commission before work can start on the project.

Figure 12 Project-based activities' impact reports, scoping plans and project plans approved

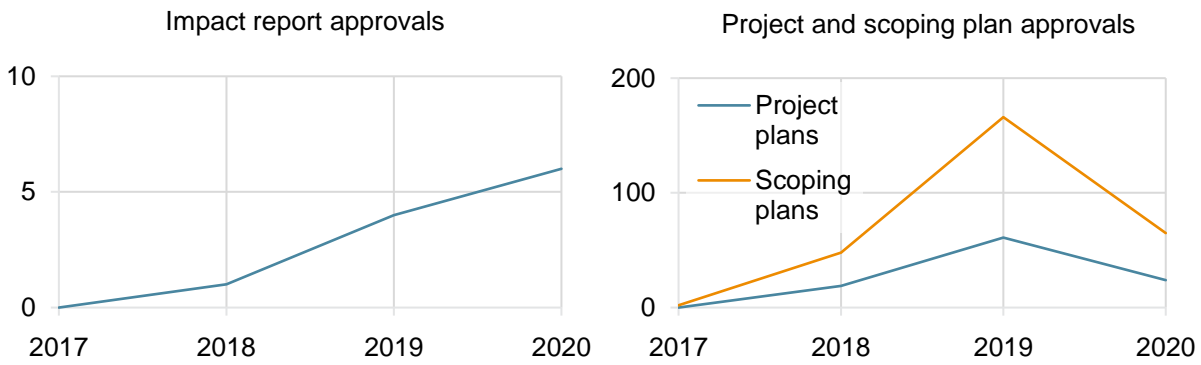
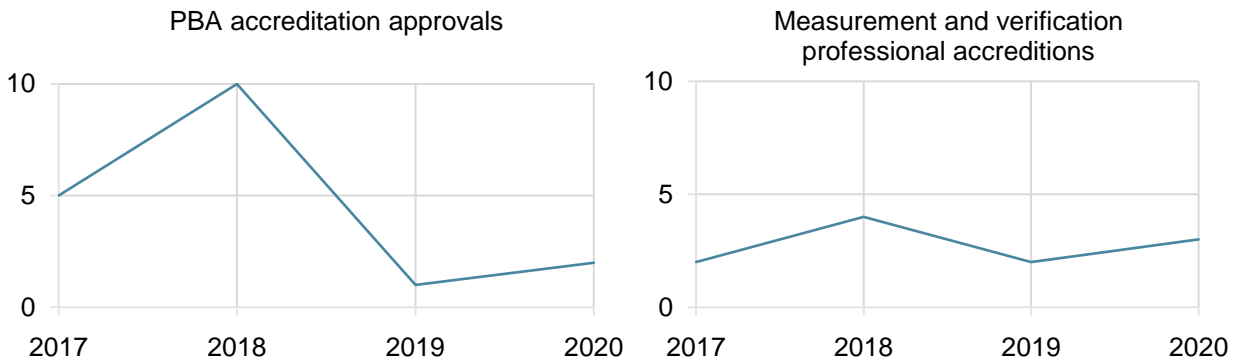


Figure 13 shows that we approved two new accredited persons and three new measurement and verification professionals to be involved in the delivery of project-based activities. This represents a small increase in both the number of PBA accreditation approvals and accredited measurement and verification professionals from 2019.

Figure 13 Project-based activities accreditations



As shown in Figure 12 above, there was a decrease in the number of projects which had their scoping plans approved from 166 in 2019 to 65 in 2020. Figure 14 shows that many of 2020's project-based activities projects were proposed to be carried out in the retail trade and commercial buildings sectors.

Figure 14 Number of PBA projects (projects with scoping plans approved in 2019 and 2020) by sector

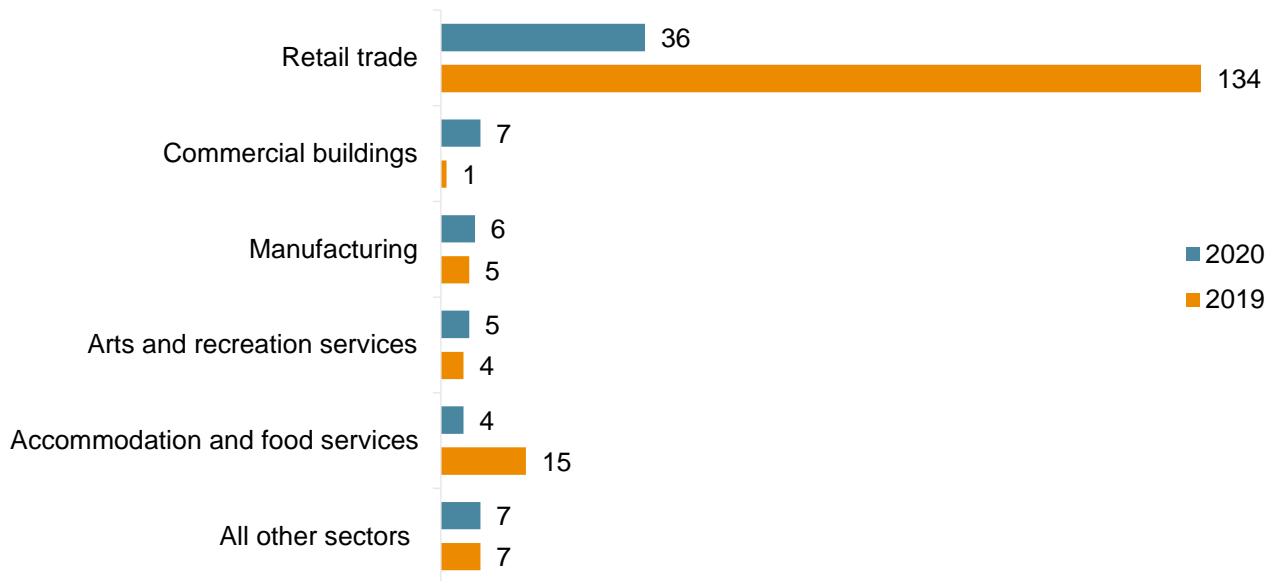
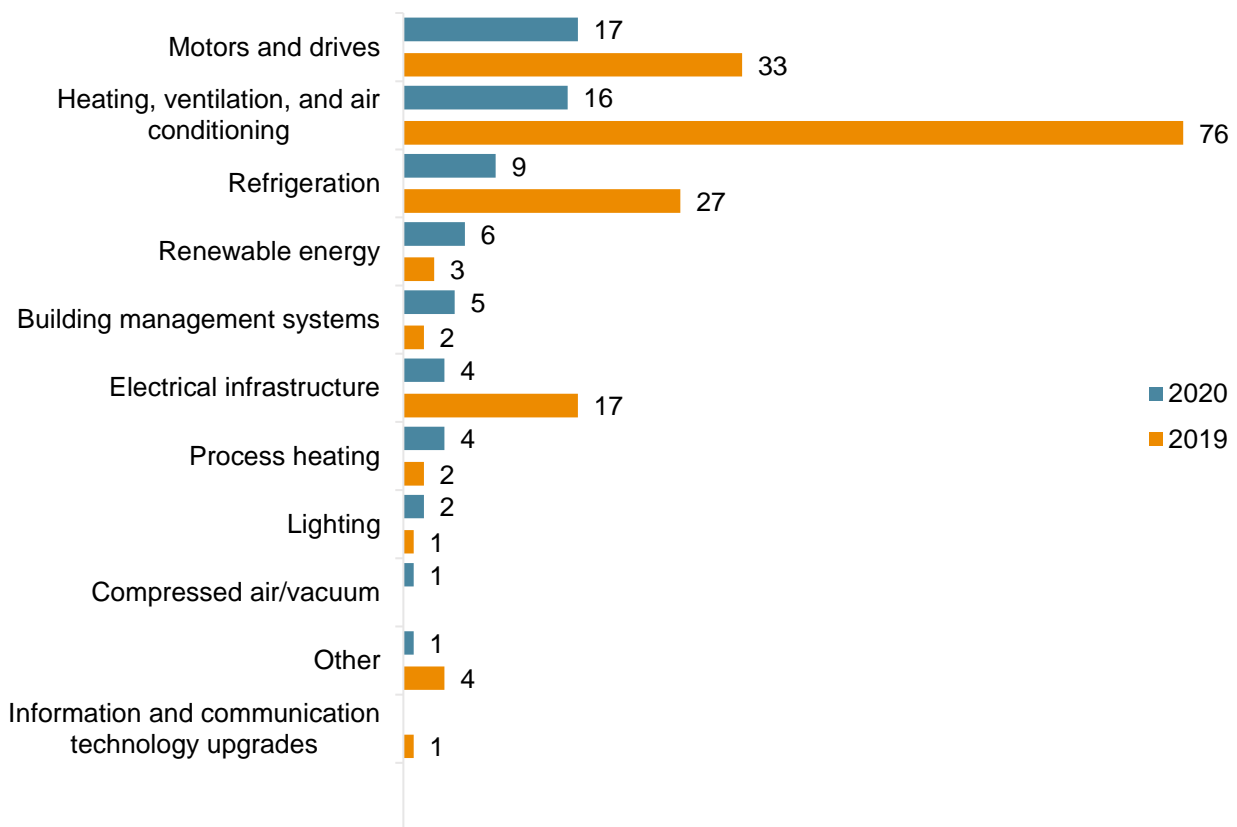


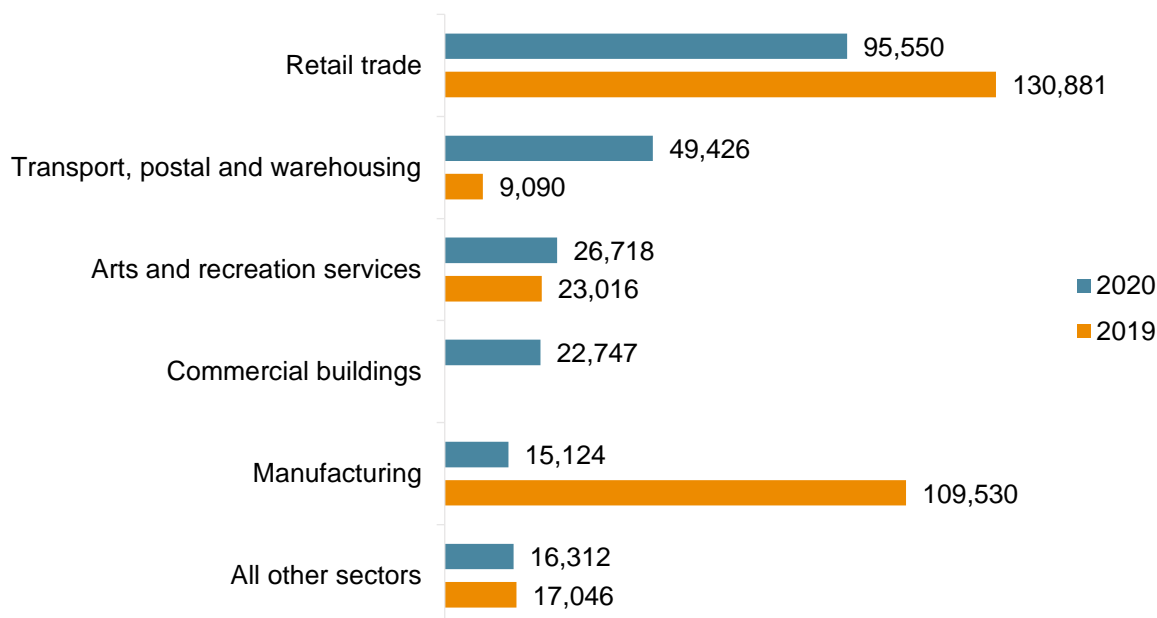
Figure 15 shows that the most popular type of technology proposed to be used in 2020's project-based activities projects continued to be motors and drives and heating ventilation and air-conditioning systems.

Figure 15 Number of PBA projects (projects with scoping plans approved in 2019 and 2020) by technology type



It is projected that approximately 225,877 certificates will be created from projects with scoping plans approved by us in 2020 in future years. This is a little lower than the 289,563 certificates expected to be created from projects with scoping plans approved last year.<sup>10</sup> We expect to see a large volume of these certificates to be delivered from projects undertaken in the retail trade and manufacturing sectors as shown in Figure 16.

Figure 16 Certificates expected to be created from PBA projects (with scoping plans approved in 2019 and 2020)



We continued to maintain required processing times in relation to project-based activities approvals. Table 3 shows significant improvements in our assessment times for impact reports and our assessment times for all three stages of project-based activities documentation are significantly below our legislated timeframes.

Table 3 Average assessment times and legislated times for project-based activities in 2020

Project documentation	Average time during 2019 (days elapsed)	Average time during 2020 (days elapsed)	Legislated time in PBA Regulations (days elapsed)
Scoping plan	0.88	0.8	60
Project plan	1.11	1.66	180
Impact report	55	8.11	120

<sup>10</sup> Certificate numbers provided in scoping plans are estimates only. Some scoping plans do not provide this estimate. Nevertheless, these numbers are useful to provide an indication of the number of certificates which are likely to be created from these projects in future years.

# Compliance and enforcement in 2020

A primary responsibility of the commission is to ensure that program participants – specifically, accredited persons and relevant entities – comply with the requirements of the Act, Regulations and Guidelines.

In 2020, the commission continued its compliance and enforcement efforts. In response to the coronavirus pandemic, we pivoted to phone and desktop auditing as remote working arrangements came into effect. A high level of pre-registration checks and audits were maintained during the year to ensure compliance with the program by accredited persons.

See appendix A for a summary of the risk-based compliance methods we use to manage the program's compliance environment.

## **Pre-registration validation activities**

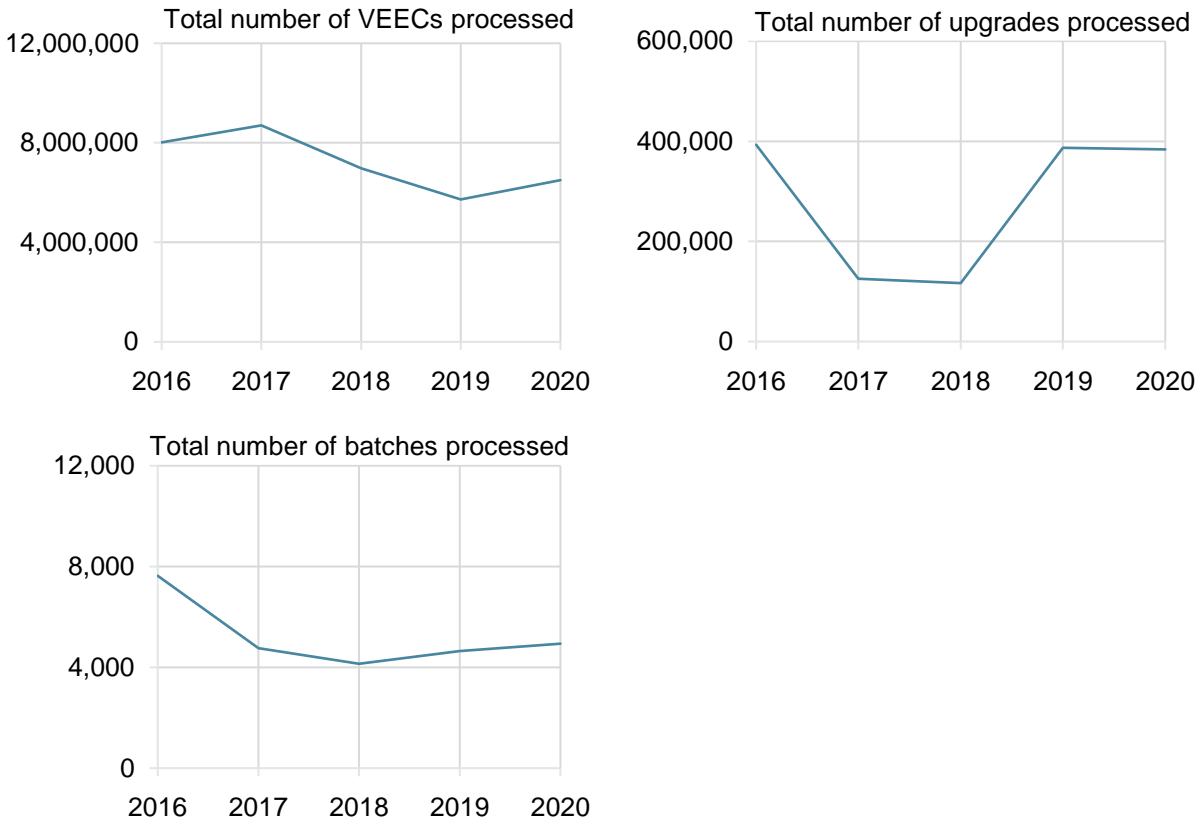
We validate certificates before they are registered, taking a risk-based approach that checks whether the installation, as undertaken, is likely to be eligible to create certificates.

## **Pre-registration processing volumes**

Certificate, upgrade, and batch processing volumes increased in volume from 2019 to 2020, as shown in Figure 17. When compared over five years, there was a peak in the total number of upgrades processed during 2020.

Although higher number of certificates were processed in 2016 and 2017, significantly fewer upgrades were processed in these years as a higher percentage of upgrades were undertaken in business premises (as shown in Figure 7 above). Business lighting upgrades were the dominant activity in these two years which provide a significantly higher average number of certificates per upgrade compared to residential lighting upgrades. Residential lighting upgrades were delivered in larger volumes in 2019 and 2020.

Figure 17 Pre-registration summary of upgrades, VEECs and batches processed – 2016 to 2020



### Pre-registration checks

In response to elevated certificate, upgrade, and batch processing annual volumes, we undertook more pre-registration checks on upgrades compared to 2017 to 2019 as shown in Figure 18. The total number of upgrades which flagged compliance issues increased from 2019 to 2020.

During 2020, a total of 2,975 upgrades flagged compliance issues. We assessed and issued requests for further information for 32,293 upgrades over the year.

Figure 18 Total number of upgrades subject to a request for further information and compliance issues – 2016 to 2020

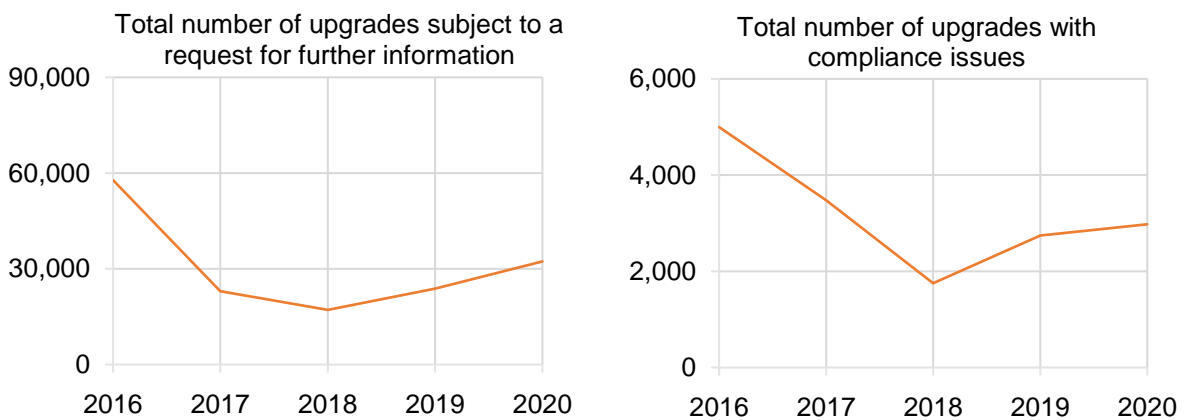




Table 4 shows that we increased the program's request for further information sampling rate and identified a higher volume of compliance issues per 100 upgrades in 2020 compared to 2019. The sampling rate and compliance issues rate is lower when compared to 2017 and 2018 when we had fewer upgrades to assess.

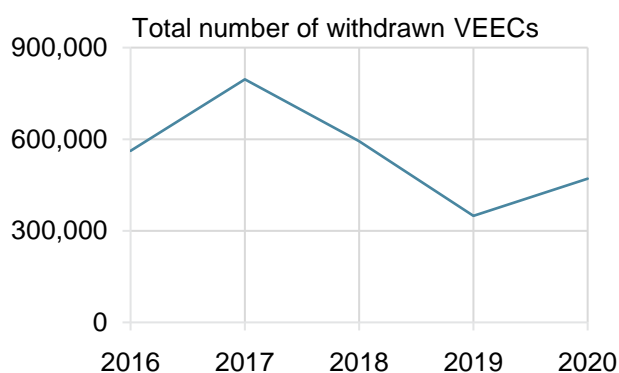
Table 4 RFI sampling and compliance issues identified as a proportion of upgrades undertaken

Sampling type	2016	2017	2018	2019	2020
Number of upgrades with compliance issues per 100 upgrades	1.3	2.8	1.5	0.7	0.8
Number of upgrades subjected to request(s) for further information per 10 upgrades	1.5	1.8	1.5	0.6	0.8

### Certificates withdrawn

Figure 19 shows there was an increase in certificates withdrawn by accredited persons, from 348,993 certificates in 2019 to 470,929 certificates in 2020. However, the total certificates withdrawn for 2020 remains significantly lower than those withdrawn from 2016 to 2018 which can be partially attributed to higher certificate creation volumes in those three years.

Figure 19 Total number of withdrawn VEECs by year – 2016 to 2020

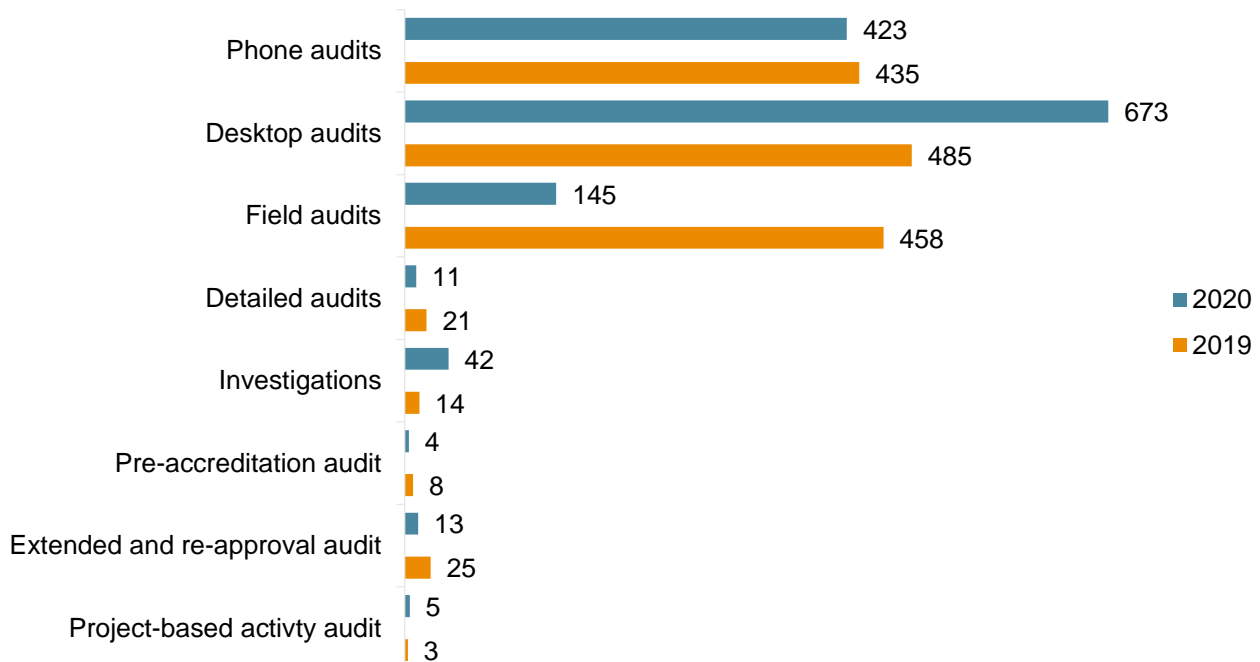


The reasons an accredited person may withdraw certificates are varied and may be linked to their own business processes or our validation processes. Some of these certificates may have been resubmitted and registered later when the accredited person is able to supply us with the evidence required to satisfy our pre-registration checks.

## Audits and investigations

Figure 20 shows the number of audits and investigations we conducted during 2020 to ensure certificates were created in compliance with the program requirements.

Figure 20 Number of audits and investigations conducted in 2019 and 2020



Between 2019 and 2020 we saw a small decrease in overall audits, from 1,482 in 2019 to 1,333 in 2020. This is largely due to a decrease in field audits during the year given the coronavirus restrictions on visiting sites during periods when 'stay at home' restrictions were in place.

In response, we increased our desktop audits by approximately 138 per cent, from 485 audits in 2019 to 673 in 2020. We also tripled the number of investigations undertaken, from 14 in 2019 to 42 in 2020. We undertook fewer detailed audits in 2020 (11 compared to 21 in 2019).

Our audit and investigation efforts resulted in the surrender of 65,555 certificates by accredited persons due to non-compliance in 2020. There have been 361,943 certificates surrendered by accredited persons since the start of the program in 2009 up to 31 December 2020.

## Enforcement actions arising from our investigations

### Cyanergy enforcement action

In June 2020, following a five-month investigation, we obtained evidence to suggest that Cyanergy Pty Ltd (Cyanergy), an accredited provider under the program, had unknowingly submitted certificates which did not meet compliance requirements. These alleged breaches included:

- misconduct by an installer
- doctored invoices by an offshore auditing company showing an overstatement of the number of lamps and baseline lamps, and incorrect baseline lamp technology used for certificate creation.

Actions taken against Cyanergy in response to the alleged breaches included:

- the commission issuing a warning to Cyanergy
- the commission requiring Cyanergy to engage an independent auditor to carry out an audit of its auditing processes and controls, and an audit of its certificate creation for the period 1 June 2020 to 30 June 2021
- the commission requiring Cyanergy to surrender 20,894 certificates for upgrades deemed to be non-compliant.

The commission also referred the allegation of fraud to Victoria Police.

### EcoCare Carbon Solutions and National Carbon Bank of Australia enforcement action

During 2020, we undertook a seven-month long investigation into alleged program fraud in upgrades across regional Victoria.

The investigation centred on installers allegedly falsifying evidence required to substantiate building-based lighting upgrades (activity 34) in regional areas. The investigation included commission staff:

- undertaking field audits of 74 regional sites over 6 months
- undertaking 368 desktop audits and phone audits
- investigating multiple accredited providers and sub-contractors.

As a result of this investigation, in March 2021 the commission considered that Eco Carbon Care Solutions Pty Ltd (Eco Carbon Care Solution Pty Ltd) and National Carbon Bank of Australia Pty Ltd (National Carbon Bank), accredited providers under the program, had breached the program's legislation.

These alleged contraventions included overstating the number of energy-efficient lamps installed and level of pre-upgrade energy use.

Both accredited providers had created certificates for activities undertaken by subcontractors, Evidence showed that they did not meet our compliance requirements. The commission required that:

- National Carbon Bank surrender 10,922 certificates
- Ecocare Carbon Solutions surrender 17,144 claimed certificates
- National Carbon Bank engage an independent auditor to determine the validity of 43 upgrades pending registration

Both organisations were required to engage an independent auditor to review their internal processes, procedures, and certificate creations.

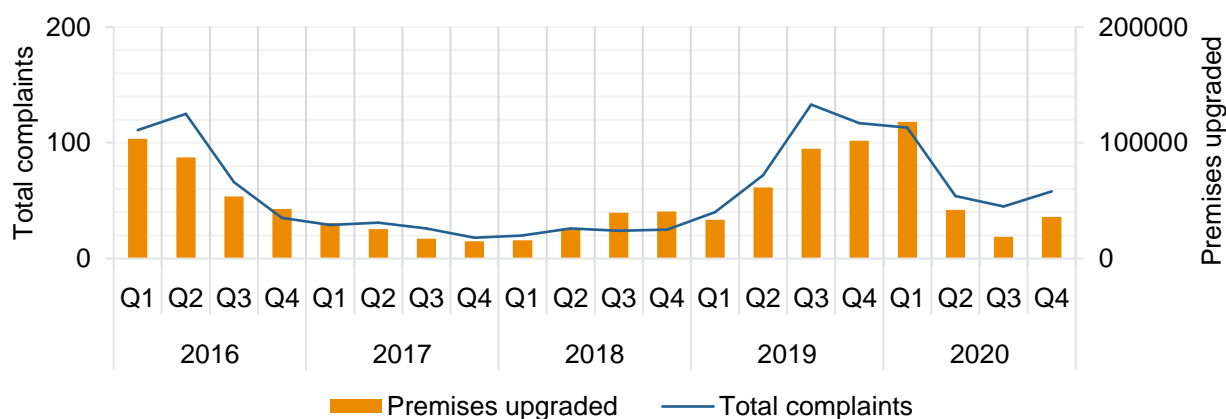
We also referred the allegations of fraud to Victoria Police and potential breaches of the Electrical Safety Act 1988 to Energy Safe Victoria in relation to the conduct of installers.

## Consumer complaints

In 2020, we received 270 compliance-related complaints from consumers, all of which were resolved. This represents a fall in complaint numbers from 2019 (with 362 complaints) and approximately 13 complaints for every 10,000 premises upgraded during the year.

Figure 21 shows that complaint volumes are correlated with the number of premises upgraded. We saw an overall decline in consumer complaints as the volume of premises upgraded under the program fell from Q2 2020. This contrasts with historical peaks in complaint numbers in 2016 and 2019.

Figure 21 Total number of complaints by premises upgraded – 2016 to 2020



## Types of consumer complaints received

Each complaint that we receive is recorded, categorised and responded to within set timeframes. A complaint may be recorded against more than one complaint category.

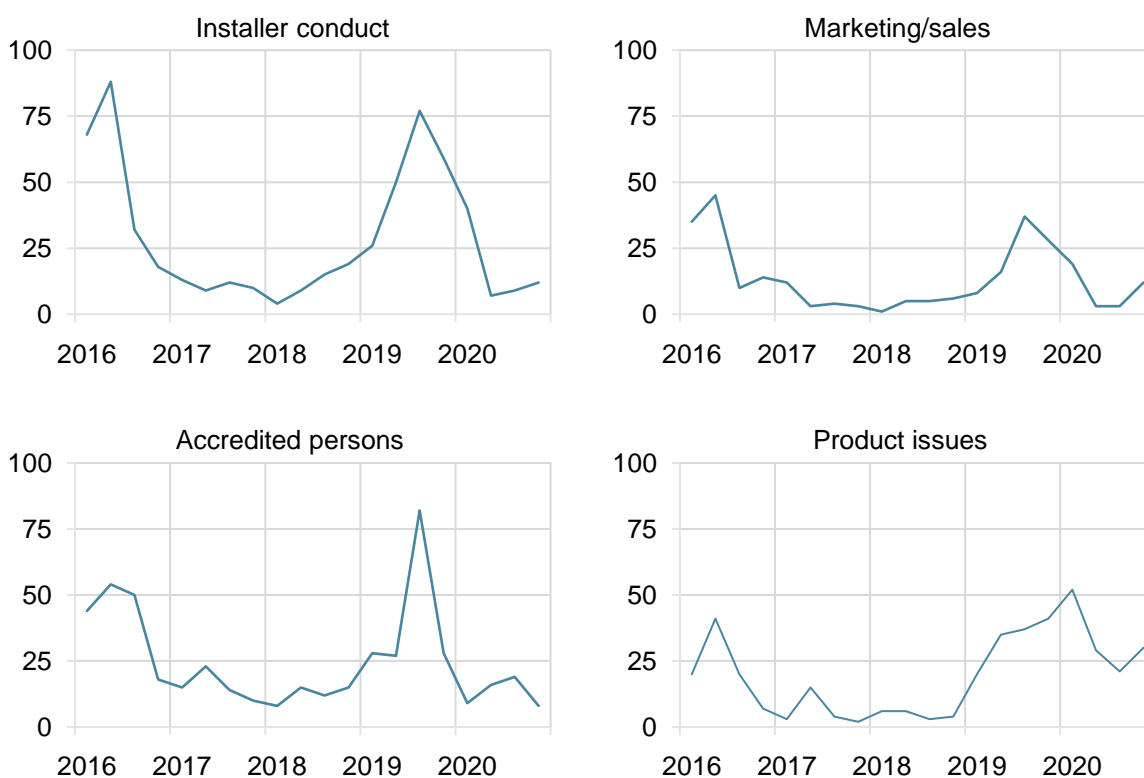
Complaints received are recorded against the following categories:

- **Installer conduct** – complaints relating to ineligible or incomplete upgrades, occupational health and safety issues, general installer behaviour and conduct, property damage and unattended bookings.
- **Marketing/sales** – complaints relating to communications such as telemarketing, flyers, websites, doorknocking activities, shopping centre booths, questionable use of government and/or program logos and branding.
- **Product issues** – complaints relating to issues including product failing or breaking, warranty issues or products not fit-for-purpose.
- **Accredited persons** – complaints relating to failure to provide assignment forms or other paperwork, or the accredited provider being unresponsive to consumer calls or emails.

As shown in Figure 22, most complaints in 2020 were related to installer conduct and product issues, with a marked increase in product related complaints from 2019.

Unlike the previous five years, 2020 did not see any elevated category of complaint, although installer conduct, marketing and sales experienced a small increase towards the end of 2020.

Figure 22 Quarterly trends of complaints by category – 2016 to 2020



## Compliance by relevant entities

The Act requires energy retailers (relevant entities) to surrender certificates if they are:

- energy (electricity and gas) retailers with at least 5,000 residential customers

- retailers with program acquisitions of at least 30,000 MWh of electricity or at least 350,000 GJ of gas in one compliance year.

Energy retailers must send the commission an annual energy acquisition statement and an independent audit report detailing the amount of electricity and/or gas sold to eligible premises for the year. In most years, energy retailers are required to submit their statement and to surrender the required number of certificates by 30 April as required by the Act.

However, the Act allows the commission to nominate a later day for submission of the annual energy acquisition statement and surrendered certificates. Given the challenges faced by program participants in 2020 due to the coronavirus pandemic, we decided to provide a three-month extension to energy retailers to submit their 2020 statements and surrender certificates from 30 April to 31 July 2021. Ten energy retailers accepted the extension.

Over six and half million certificates were surrendered by 29 Victorian energy retailers in 2020. Two energy retailers failed to surrender certificates to meet their legislated liability by 31 July. The result of our audit of their submissions and certificate surrenders is summarised in Table 5.

Table 5 Audit outcomes of our review of energy retailers' annual energy acquisition statements and certificates surrendered

Details	Total
Energy retailers identified as relevant entities	29
Relevant entities that submitted their annual energy acquisition statement and independent audit report by 30 April	19
Relevant entities that submitted their annual energy acquisition statement and independent audit report by 31 July (extended deadline)	10
Relevant entities that surrendered sufficient certificates to meet their annual liability	27
Relevant entities that had an energy efficiency certificate shortfall	2
Number of certificates surrendered by relevant entities for 2020	6,538,562
Amount of relevant entities' energy efficiency certificate shortfalls:	
Blue NRG Pty Ltd	31,184
People Energy Pty Ltd	4,624

In November 2020, People Energy Pty Ltd paid a shortfall penalty of \$335,550 for their 2019 surrender shortfall of 6,711 certificates.

## Program administration and development

In our role as regulator of the program, we understand the importance of regularly reviewing and updating our administrative framework settings in response to new opportunities and emerging issues to optimise the program's operations for both us and program participants. During 2020, it was critical for us to be adaptive and respond flexibly to the emerging challenges faced by program participants from the coronavirus pandemic, whilst safeguarding the integrity of the program.

### **Adapting to the coronavirus pandemic**

We met the challenge of 2020, supporting participants in registering over 6.1 million certificates while changing the way we worked. We delivered the program by:

- working online and onboarding new staff remotely while responding to new work activities due to the coronavirus pandemic
- engaging online and hosting our VEU public forums for the year via Zoom
- implementing a labour exchange across teams, enabling team staffing to surge by up to 140 per cent to meet priorities of improving certificate and project base activity registration times
- enhancing our resilience by continuing to develop our multi-skilled workforce, enabling us to meet differing skills needs across the program.

We assisted and supported program participants during the year by:

- working together with other Victorian government agencies to provide timely clarification on the impact of the coronavirus restrictions on the program and guidance on how to operate in compliance with COVIDSafe practices
- having one-on-one conversations with participants seeking clarification about the impact of coronavirus restrictions on proposed upgrades.
- making changes to streamline the pre-registration checks and registration of certificates to assist participants' cash flow position across the year.
- providing flexibility in audit requirements to be implemented by accredited providers in respect of upgrades undertaken and in meeting their certificate surrender obligations
- extending the deadline for surrender of certificates for the 2019 compliance year to four relevant entities to 31 July 2020
- extending the deadline for submission of audited energy acquisition statements for the 2019 compliance year to two relevant entities.
- extending the payment period from 28 to 60 days for shortfall penalties issued to relevant entities for the 2019 compliance year.

## **Project-based activities legislative update**

In response to the coronavirus pandemic, we worked with the Department of Environment, Land, Water and Planning and stakeholders during 2020 to revise the Measurement and Verification method specifications. These changes were developed for the program's projects that are materially affected by the pandemic.

The new provisions provide impacted projects greater flexibility by extending timeframes, shortening measurement periods, and adjusting for site access constraints.

This specifications change will deliver benefits beyond the immediate impacts of the coronavirus pandemic as they can be utilised during a future state of emergency or state of disaster, such as bushfires, floods, or pandemics.

## **Program reform**

In 2020, the Department of Environment, Land, Water and Planning commenced a project looking at possible reforms to the Act that would strengthen the legislative structure of the VEU program. The scope of the reform work includes:

- strengthening the program's compliance and enforcement framework
- improving consumer protections
- reviewing the role of the program post-2029 and its role in the energy transition
- supporting investment and improving access to incentives

We recognised that the Act review project was critical in determining the future of the program and our role in regulating the program. During the year, we undertook a range of research and preparatory pieces to provide informed, balanced and considered input to the Department as part of this project including:

- building our understanding of the legislative and compliance and enforcement frameworks for other efficiency schemes through research and discussions with other regulators and policy makers.
- undertaking research on potential energy demand management frameworks.
- undertaking research on market monitoring and regulation frameworks, and how they may be utilised under the Victorian Energy Upgrades program.



## Updates to our program requirements

In 2020, we published and updated a range of documents providing clarification and guidance for participants on the requirements and processes for participating in the program.

Key updates made to our administrative requirements and communicated during the year<sup>11</sup> include:

- 20 February - updates to requirements for lighting activities and in-home display activities
- 11 March - updates to requirements for water heating and space heating/cooling product applications
- 21 April - updates on recycling invoice requirements and other matters for lighting activities-
- 26 May - updated guidance and evidentiary requirements for building based lighting upgrades-
- 31 July - updates to requirements for lighting product approvals under product category 21, -
- 24 September - changes to product type and certificate creation for building based lighting upgrades and public lighting upgrades.

During the year, we also released fifteen emails communicating updates to program participants on the impact of coronavirus restrictions on the program.

## Enhancements to our IT systems

We continued to maintain and improve our Victorian Energy Upgrades Registry system throughout 2020, releasing five system updates containing 22 system changes. These updates were made to:

- reflect changes in the administrative settings of the Victorian Energy Upgrades program
- reflect updates to backend-supporting software development and user interfaces
- streamline our administrative systems and processes.

We continued to engage in the development of a new IT system to replace the VEU Registry (our current web-based portal) during the year. The new system is being developed on the Microsoft Dynamics 365 platform and is expected to be deployed in 2022. The aim is to deliver a fast, secure, intuitive, and versatile IT system which will enable more efficient administrative outcomes for program participants and commission staff.

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<sup>11</sup> All updates are available from the [commission website](#)

## Engaging with program participants and consumers

A key principle of our regulatory approach is to engage with businesses participating actively and regularly in the program. We dedicate considerable effort to supporting their understanding of the program's legislative framework, evidentiary requirements, and administrative processes.

We also have a dedicated stakeholder contact channel that addresses telephone or email queries from members of the public, consumers, accredited persons, relevant entities and product manufacturers. In 2020 we received 3,152 queries from stakeholders and consumers, of which 95 per cent was responded to within 10 days.

In 2020, we held two public forums:

- 25 June and 15 July 2020 - We held this forum in two parts. The first part included presentations from the commission, the Department of Land, Environment, Water and Planning and Sustainability Victoria. The presentations outlined the performance of the program to date, provided updates on proposed legislative changes to the program and provided information on Sustainability Victoria's energy upgrades tool. In the second part, we held workshops with program participants seeking feedback on coronavirus pandemic impacts, the challenges they faced, and what the commission could do to provide support. Approximately 201 stakeholders attended the forum.
- 17 December 2020 – We hosted the second program forum, with the Department of Land, Environment, Water and Planning presenting. The forum outlined the performance of the program to date, provided updates on new prescribed activities, and featured a question-and-answer session. Approximately 190 stakeholders attended the forum.

We undertook consultation on the following matters in 2020:

- 15 September 2020 – Proposed changes to product type and certificate creation for building-based lighting upgrades (activity 34). We sought feedback to recategorise the 'LED other (240V)' lamp type to new lamp types for building-based lighting upgrades to align them better with 2018 VEU specifications.
- 13 November 2020 – Proposed evidence requirements and clarification on decommissioning requirements for building based lighting upgrades (activity 34). We sought feedback on proposed changes to evidence requirements for high-bay LED upgrades claimed under this activity.
- 9 October and 17 December 2020 – Switchable wattage lighting products (product category 34). We undertook consultation to consider how to best administer lighting products with switchable wattage settings.

Forum presentations and consultation documents are available on the [commission website](#).

## **Working with other government agencies**

During the year, we continued to work with regulators from other state and federal energy efficiency programs to address common compliance or administrative issues, and to work towards alignment of the operation of the VEU program with other energy efficiency schemes.

We worked with multiple other Victorian government departments and agencies to develop a timely and consistent response for program participants on the implications of coronavirus restrictions for the program.

We also worked closely with the following organisations during the year:

- Department of Environment, Land, Water and Planning (DELWP) to prepare for program reform and to coordinate program events and communications.
- DELWP and Sustainability Victoria to promote linkages between the VEU program and other Victorian government energy efficiency initiatives.
- The Victorian Building Authority and Energy Safe Victoria to effectively manage compliance issues and to enhance regulatory alignment with the Building Act 1993 and Electricity Safety Act 1998, respectively.
- Consumer Affairs Victoria to address marketing and other consumer related complaints. We referred 38 cases of potential breaches of Australian Consumer Law to Consumer Affairs Victoria in 2020.

# Glossary

Term	Definition
activity or prescribed activity	An activity which is prescribed under the Act and regulations which provides for certificates to be created under the program for reduction in greenhouse gas emissions that would not have occurred if the activity was not undertaken.
accredited person (AP)	Person accredited under the Victoria Energy Upgrades program. Once accredited, a person is eligible to create certificates in the VEU program in respect of prescribed activities.
certificate created	Victorian energy efficiency certificate created as part of the program, representing one tonne of carbon dioxide equivalent of greenhouse gases to be reduced by the prescribed activity.
certificate registered	Victorian energy efficiency certificate created as part of the program and registered by the commission. Only registered certificates are available for trading or surrender under the program.
certificate surrendered	Victorian energy efficiency certificate surrendered to the commission by either a relevant entity to acquit their legislative obligations, or by an accredited person as a result of compliance and enforcement actions initiated by the commission.
certificate withdrawn	Victorian energy efficiency certificates created but then withdrawn by the accredited person. These certificates may be re-submitted for registration at a later date by the accredited provider
commission	Essential Services Commission, established under the Essential Services Commission Act 2001.
compliance year	Period over which each annual target must be achieved, which is a full calendar year.
DELWP	Department of Environment, Land, Water and Planning. The program was previously part of the former Department of Economic Development, Jobs, Transport and Resources.
energy acquisition statement	Annual statement by a relevant entity about the amounts of electricity and gas acquired under program acquisitions during the year.
energy efficiency certificate shortfall	Number of certificates for which a relevant entity has failed to acquit its share of the program target.
energy efficiency shortfall penalty	Civil pecuniary penalty for which a relevant entity is liable in the event of an energy efficiency certificate shortfall.
greenhouse gas	Carbon dioxide, methane, nitrous oxide, sulphur hexafluoride, hydrofluorocarbons, perfluorocarbons and any other gas prescribed to be a greenhouse gas.
liability	The liability of relevant entities to surrender certificates under the program.

Term	Definition
MWh	Megawatt hour
regulations	the Victorian Energy Efficiency Target Regulations 2008 (the VEET Regulations) and the Victorian Energy Efficiency Target (Project-Based Activities) Regulations 2018 (PBA Regulations)
the Act	Victorian Energy Efficiency Target Act 2007
upgrade	An upgrade occurs where energy efficient products are installed at a consumer's premises in accordance with the requirements of a prescribed activity under the Act and regulations
VEEC	Victorian energy efficiency certificate representing one tonne of carbon dioxide equivalent of greenhouse gases to be reduced by the prescribed activity.
Victorian Energy Upgrade program	The public facing name of the VEET scheme established under the Act
VEU accounts	Accounts used by participants to carry out transactions in the Victoria Energy Upgrades program.

# Appendix A: VEU program framework

## **Our role**

We administer the program in accordance with the program's Act and regulations. Our responsibilities include to:

- accredit persons who can create Victorian energy efficiency certificates (VEECs) under the program
- validate the creation of certificates for registration
- administer the registration, transfer, and surrender of VEECs
- approve energy efficient products that can be installed under the program
- set performance standards for certain products to be installed under the program
- monitor compliance with the Act, regulations, and guidelines
- issue shortfall statements and enforce energy efficiency shortfall penalties
- maintain electronic registers.

Our regulatory responsibilities are set in the Act, the regulations, the specifications, and the guidelines.

## **The Act**

The Act came into operation on 1 January 2009. It is the primary legislation establishing the program and enables the authority of regulations and guidelines to be made. We administer the Act and discharge our regulatory responsibilities as set in regulations and guidelines.

## **The Regulations**

The Act is supported by the Victorian Energy Efficiency Target Regulations 2008 (the VEET Regulations) and the Victorian Energy Efficiency Target (Project-Based Activities) Regulations 2018 (PBA Regulations).

The VEET Regulations specify what activities can create certificates. This includes what products can be installed and the greenhouse gas abatement for each activity. The PBA Regulations set out the requirements for project-based activities via two methods – measurement and verification and benchmark rating.

## **The Specifications**

The VEU Specifications contain the technical requirements for activities prescribed in the VEET Regulations and the methods and variables for determining the amount of greenhouse gas equivalent emissions reduced by each activity prescribed in the VEET Regulations.

Under the PBA Regulations, there are two separate specification documents:

- The Measurement and Verification in the Victorian Energy Upgrades Program – Specifications sets out the rules for defining the methods and variables to be used when calculating the abatement of a prescribed activity using the Measurement and Verification method
- The Benchmark Rating in Victorian Energy Upgrades - Specifications' sets out the rules for defining the methods and variables to be used when calculating the abatement of a prescribed activity using the Benchmark Rating method

## **The VEET guidelines**

We issue guidelines which outline general administrative processes under the program. This includes:

- how program participants can become accredited
- how certificates can be created, registered, transferred, withdrawn, or surrendered
- details on how to undertake some prescribed activities
- how participants are to operate in the scheme, including occupational health and safety and record keeping requirements
- how the commission undertakes its assessment, compliance and enforcement activities, and what information we collect for our registers of accredited persons and certificates.

## **Our compliance and enforcement framework**

The Act provides the commission with auditing and enforcement powers to ensure that accredited persons properly create certificates, and that relevant entities surrender enough certificates to acquit their liability for the reporting year. The commission uses these statements to determine whether relevant entities have correctly calculated their VEET liabilities and surrendered the required number of certificates for the reporting year.

Our key goal is to safeguard the integrity of the program by maintaining confidence in the energy efficiency benefits delivered to consumers, and delivering a balanced, transparent and efficient program for participants. We do this by implementing an integrated risk-based framework to all our regulatory activities and regularly engaging with stakeholders to discuss improvements.

The compliance-driven functions we undertake include:

- accreditation of persons seeking to participate in the program or to extend their accreditation to be able to deliver new activities
- risk-based pre-registration checks of certificates created by accredited persons
- audits and investigations of accredited persons
- audits on relevant entity statements to ensure they surrender enough certificates to match their liabilities under the program
- registration of products to ensure they meet the required performance and installation standards.

### **Pre-registration checks**

Pre-registration checks form an important screening process for the program. We undertake a large volume of checks for every certificate that is created in the program.

We evaluate in batches of up to 10,000 certificates and our checking protocols are based on the risk factor of the activity and the risk rating of the accredited person. Each batch will consist of multiple upgrades and the number of certificates associated with each upgrade will vary depending on the nature of the upgrade.

We use both manual and automatic systems to maintain a constant sampling rate. Accredited persons may be required to provide additional evidence in response to a request for further information (RFI) to demonstrate the created certificates meet the relevant requirements.

Our pre-registration checks may raise compliance issues on certificate claims. When potential systemic compliance issues are identified, auditing plays a key role in undertaking further investigative work to determine certificates were created in compliance with legislative requirements.

### **Audit and investigations of accredited persons**

We use phone, desktop, and field audits to check that upgrades are undertaken correctly. We review specific evidence during a desktop audit and inspect upgraded premises during a field audit. These audits inform our detailed audits and investigations of accredited persons. Where audits and investigations identify significant and systemic non-compliance, we may pursue enforcement action or seek an administrative solution with the accredited person.

We use a range of sources, including intelligence from complaints, tip offs and our internally generated risk profiles of an accredited provider to undertake audits and investigations. Table 6 lists the various methods we use to safeguard compliance of certificates.



Table 6 Compliance-focused engagement methods with accredited persons

Compliance method	What we do
<b>Audit meetings</b>	We conduct pre-accreditation audits of anyone applying to become a new accredited person or expand their existing accreditation to include a new upgrade activity. These include meetings with business.
<b>Detailed audits</b>	We undertake detailed audits to assess the accredited person’s systems, processes, and controls. We undertake these audits based on the risk profile of the accredited person, certificate creation rates, and other risk criteria. As part of these audits, we interview key personnel and installers to gain assurance that they are participating in accordance with the program requirements.
<b>Audit investigations</b>	We undertake significant audits arising out of intelligence indicating the possibility of significant non-compliance within the program.
<b>Upgrade audits</b>	We use phone, desktop, and field audits to check that upgrades are undertaken correctly. We use specific contacts with consumers to obtain intelligence and data, or to support our audits and investigations. This work helps us to confirm the eligibility of an upgrade.
<b>Project audits (for project-based activities)</b>	We undertake a review of the project’s impact reports and verification of supporting documentation and energy savings data. The audit may also include meeting with the energy consumer to discuss and validate the quantity of VEECs claimed.

## Enforcement actions

Our approach to enforcement is to resolve any performance issues using administrative tools, where possible and appropriate.<sup>12</sup> This means the largest outcome of our compliance activities is the voluntary withdrawal or surrender of certificates by accredited persons. If we believe that non-compliance has occurred and that an administrative solution is not appropriate or an administrative solution has not been complied with, we may commence enforcement action.

Enforcement action may include:

- warning or imposing conditions on an accredited person’s accreditation
- requiring an accredited person to surrender certificates found to be improperly created
- suspending or revocation of an accredited person’s accreditation to create certificates
- seeking declarations and orders from a court for a failure to pay a shortfall penalty or a failure to
- comply with a certificate surrender notice

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<sup>12</sup> Review our [compliance and enforcement policy](#) to learn more about our approach to promoting and enforcing compliance under the program,

## Shortfall statements and enforced energy efficiency shortfall penalties

Relevant entities determine the number of certificates they are required to surrender each year by calculating their annual greenhouse gas emissions liability. This liability is calculated by multiplying each of that year's electricity and gas acquisitions with the relevant greenhouse gas reduction rate.

For 2020, the greenhouse gas reduction rates were fixed at 0.17255 electricity and 0.00870 for gas. We may issue a shortfall statement imposing an energy efficiency shortfall penalty on a relevant entity if it fails to surrender sufficient certificates to acquit its liability in a given year. This civil penalty is determined by multiplying the relevant entity's certificate shortfall for the year by the prescribed shortfall penalty. The shortfall penalty rate for 2020 was fixed at \$50.83 per tonne of carbon dioxide equivalent of greenhouse gases.

## Appendix B: Table of VEECs created and registered by prescribed activity

Activity type	Upgrades	VEECs created	VEECs registered
<b>Water heating activities</b>	<b>1 Jan 2020 – 31 Dec 2020</b>		
1A - Water heating - Gas/LPG storage replacing electric resistance	65	2,230	2,124
1B - Water heating - Gas/LPG instantaneous replacing electric resistance	868	30,700	30,395
1C(18) - Water heating - Electric boosted solar replacing electric resistance	117	4,482	4,349
1D(18) - Water heating - Gas/LPG boosted solar replacing electric resistance	9,056	287,858	272,264
1E(08) - Water heating - Electric boosted solar replacing electric resistance (revoked)	-	-	953
1F - Water Heating - Gas/LPG boosted solar replacing electric resistance	17	866	808
3B - Water heating - Gas/LPG boosted solar replacing gas/LPG	20	186	178
<b>Space heating &amp; cooling activities</b>	<b>1 Jan 2020 – 31 Dec 2020</b>		
5(18) - Space heating - Ducted gas heater	882	21,937	21,966
7(18) - Space heating - Ducted air heat pump replacing ducted air heat pump (revoked)	2	208	208
9(18) - Space heating - Gas/LPG space heater	1	1	1
10(08) - Space heating - Space air to air heat pump (revoked)	-	-	128
10(18) - Space heating - Space air to air heat pump (revoked)	94	2,140	143
<b>Space conditioning activities</b>	<b>1 Jan 2020 – 31 Dec 2020</b>		
15 - Weather sealing	752	3,022	2,065
<b>Lighting activities</b>	<b>1 Jan 2020 – 31 Dec 2020</b>		
21A(08) - Lighting - Incandescent GLS lamp replacement (revoked)	1	8	28
21A(18) - Lighting - Incandescent GLS or CFL replacement	145,309	1,451,170	1,874,773

Activity type	Upgrades	VEECs created	VEECs registered
21B - Lighting - Incandescent reflector lamp replacement	74,924	243,575	294,820
21C - Lighting - 12V halogen lamp replacement	23,796	234,024	272,856
21D - Lighting - 12V downlight and transformer replacement	345	7,273	6,354
21E - Lighting - Mains voltage GU10 halogen lamp replaced with GU10 lamp	17,104	112,170	129,953
21F – Installing a low energy lamp in place of an existing mains voltage halogen fitting	2	60	24
34 Non J6(08) - Building based lighting upgrade (revoked)	2	525	10,640
34 Non J6(18) - Building based lighting upgrade	14,684	3,352,376	2,817,290
34 J6(18) - Building based lighting upgrade	13	11,858	17,016
27(18) - Public lighting	8	36,356	19,581
35(18) - Non-building based lighting	32	24,023	24,597
<b>Refrigerator/freezer activities</b>	<b>1 Jan 2020 – 31 Dec 2020</b>		
19 - Destruction of pre-1996 refrigerator or freezer	11,071	61,074	55,008
32 - Refrigerated display cabinet	174	109,389	115,813
<b>Water efficiency activities</b>	<b>1 Jan 2020 – 31 Dec 2020</b>		
17 - Low flow shower rose	17,002	42,813	17,740
<b>Appliances</b>	<b>1 Jan 2020 – 31 Dec 2020</b>		
30 - In-home display unit	12,183	24,852	17,621
<b>Project-based activities (PBA)</b>	<b>1 Jan 2020 – 31 Dec 2020</b>		
PBA measurement and verification	6	33,239	43,967
<b>Total</b>	<b>328,530</b>	<b>6,098,415</b>	<b>6,053,663</b>

Note: After a certificate is created by an accredited person, certificates are assessed against criteria in the program legislation by commission staff before being validated and registered. This is the reason for the variance in the numbers for created and registered certificates. The status of all certificates (updated daily) is listed on the VEU website at [www.veu-registry.vic.gov.au](http://www.veu-registry.vic.gov.au).