



# Victorian Energy Upgrades forum

Jeff Cefai, Director

Essential Services Commission

11 December 2019



# Victorian Energy Upgrades forum – 11 December 2019

Victorian Energy Upgrades forum agenda	
14:30	MC introductions (Jeff Cefai, Director) (5 mins)
14:35	VEU program update (Jeff Cefai, Director) (15 mins)
14:50	Registry presentation (15 mins) <ul style="list-style-type: none"><li>• Target days</li><li>• Evidentiary requirements</li><li>• Verifying duplicates</li></ul>
15:05	Audit & Compliance presentation (15 mins) <ul style="list-style-type: none"><li>• Compliance findings</li><li>• Audit &amp; compliance complaints</li></ul>
15:20	Technical Services Group presentation (15 mins) <ul style="list-style-type: none"><li>• Approved products vs product usage analysis</li><li>• Project-based activities – uptake and predictions</li></ul>
15:35	Planning & Development presentation (15 mins) <ul style="list-style-type: none"><li>• Our engagement activities</li><li>• Our data analytics activities</li></ul>
15:50	Q&A session (10 mins)
16:00	Afternoon tea and networking
16:00	CLOSE

# Sli.do

## How to:

1. Either open the web browser and go to [www.sli.do](http://www.sli.do) or download the sli.do app.
2. Enter the event code **#VEU19** to join the event '**Victorian Energy Upgrades forum 11 December 2019**'.
3. You will now be able to type in and submit your questions. To prioritise your own or other people's questions, click the 'like' button that appears next to each question. Questions are sorted by their popularity, so the most popular ones appear on top.

# 2019 Program Update



1. 2019 in review
  - The program by numbers
  - Emerging issues including complaints
2. What's in store for 2020
  - Prepare for the next phase of the program
  - Administer the program in light of the program being in transition
  - Continue to strengthen our risk-based and compliance-focused operational framework.



# Program performance since 2009

**4,478,013** total activities  
**4,312,605** residential  
**165,408** non-residential



**19,939**  
products  
approved

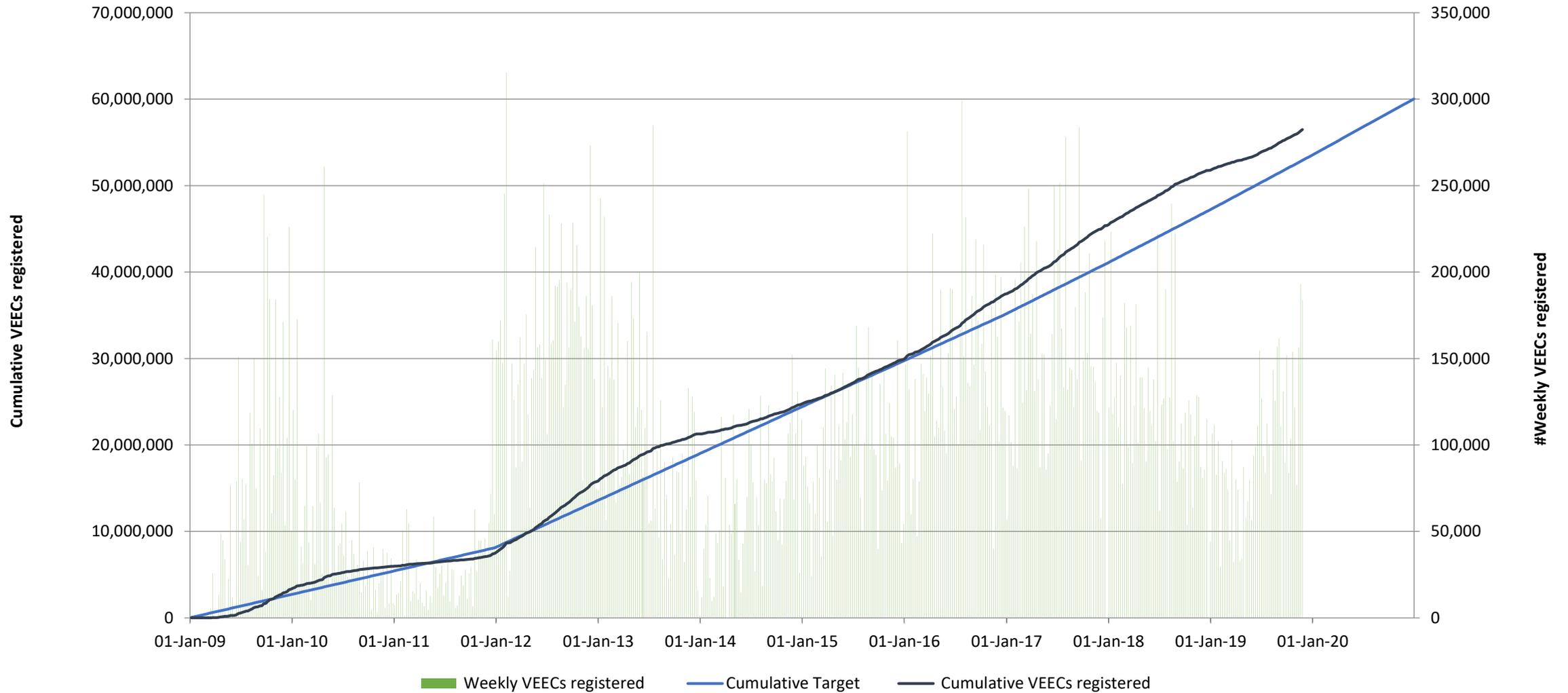
**4,027**  
approved  
installers



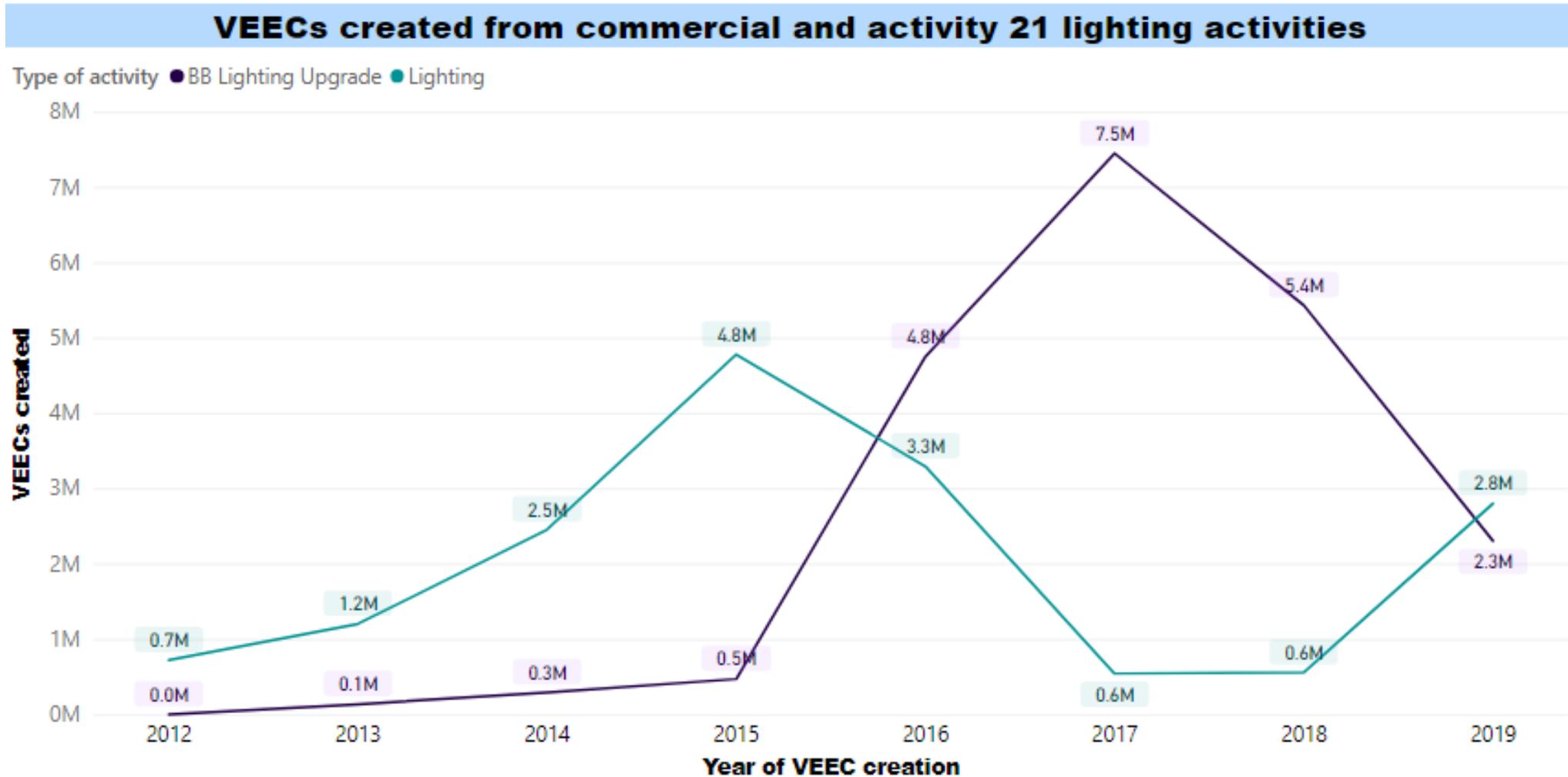
[VEU Data Dashboard](#)



# Registered VEECs

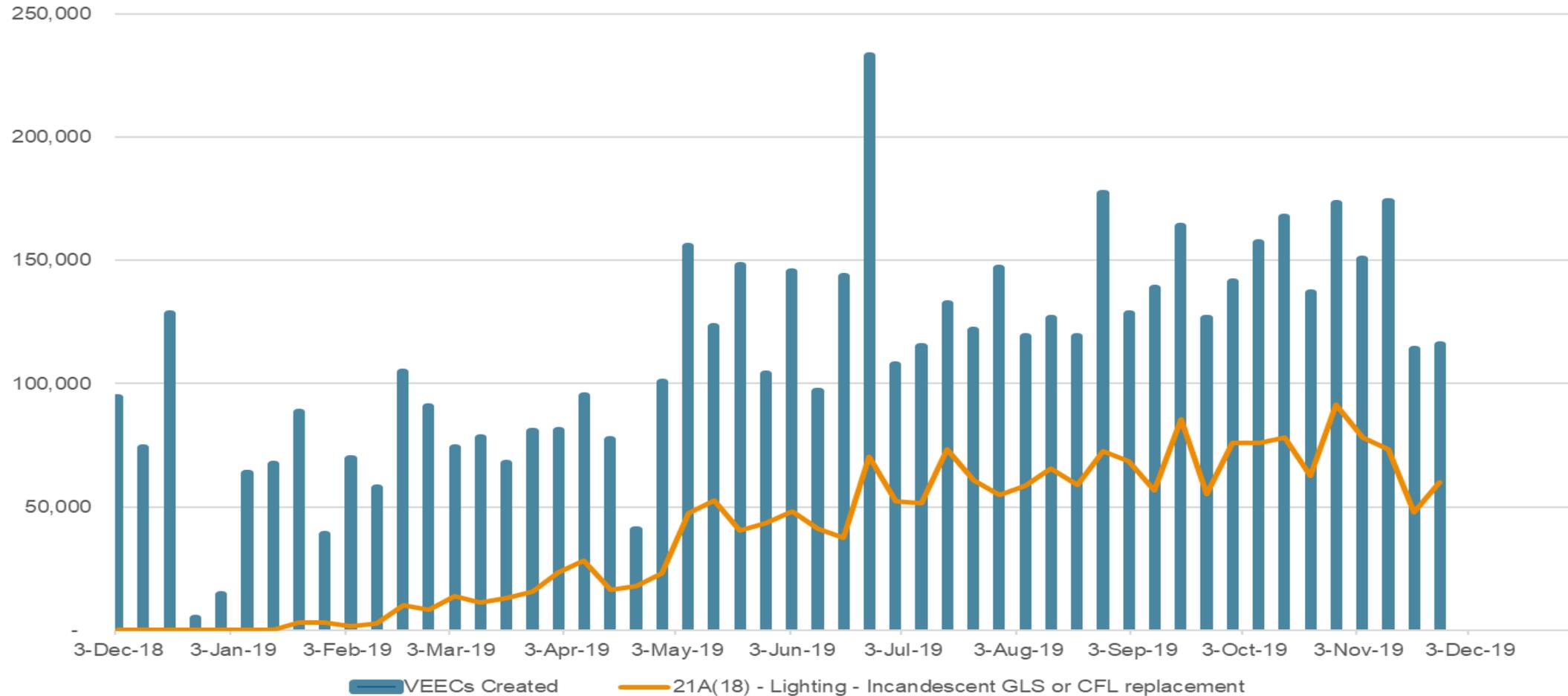


# Program performance – last 7 years



# Monthly VEECs created for activity 21A

Weekly VEEC creation – total VEECs and 21A creations



# VEU program update (Jan – Nov 2019)

Activity categories	No of installations	VEECs created
Lighting upgrade	357,153	2,807,637
BB lighting upgrade	9,010	2,315,284
Water heating	4,738	196,609
Refrigerator destruction	8,779	47,700
Shower rose	2,834	7,479
In-home display unit	1,234	2,922
Space heating	490	15,676
Weather sealing	198	752
HE refrigerated display cabinet	150	65,554
PBA activities	5	33,382
Public lighting	3	5,525
NBB lighting upgrade	2	970

# Audit and stakeholder contacts (Jan – Nov 2019)



**209**  
field audits



**3,287**  
queries (total)



**600**  
desktop audits



**1,327**  
AP queries



**53,657**  
VEECs  
surrendered  
from  
investigations  
and enforcement  
actions



**1,267**  
consumer queries



**311**  
complaints  
resolved

# 2019 Matters

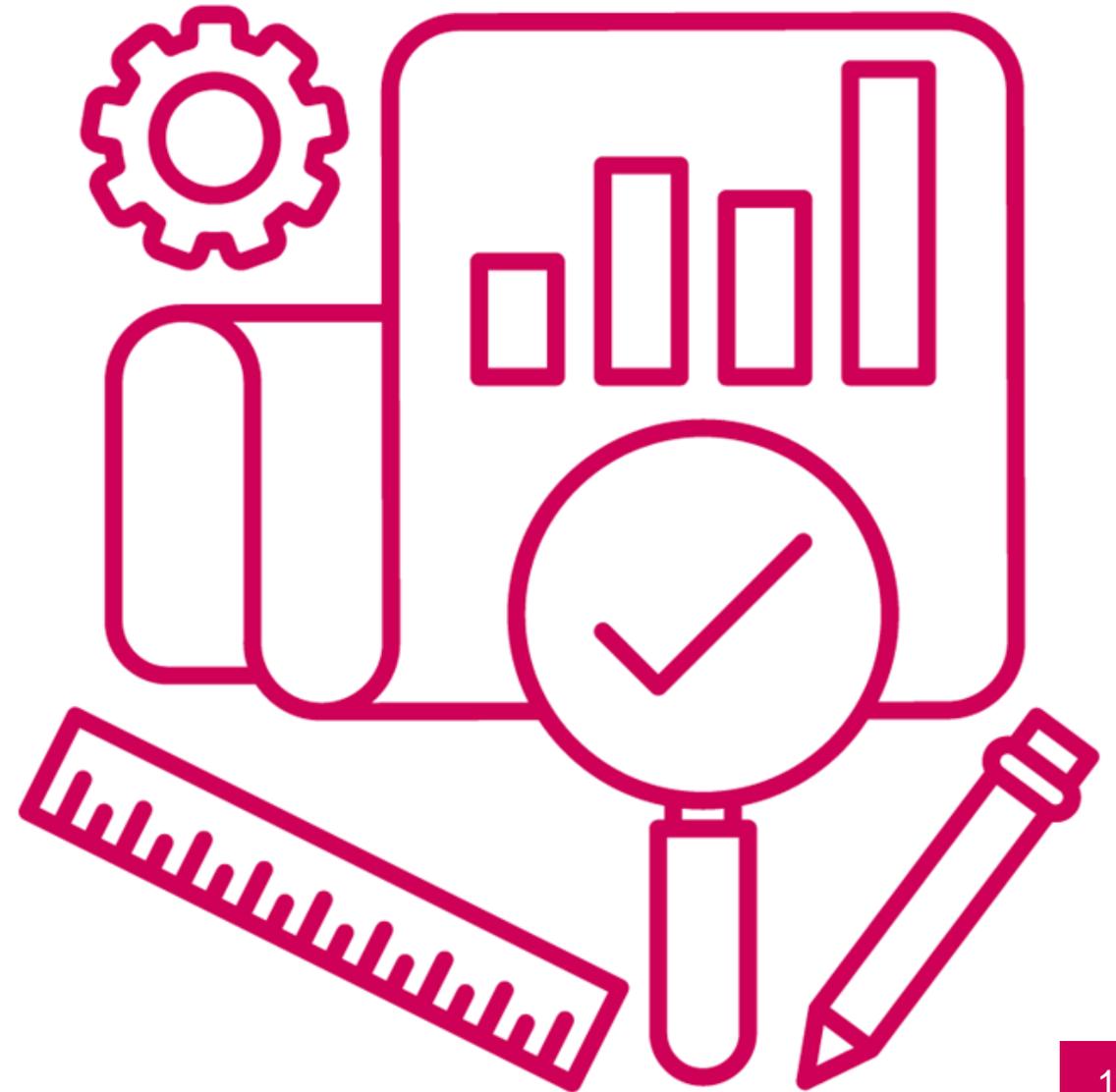
21A – use of omni-directional lighting and electricians

Building-based lighting activity guide

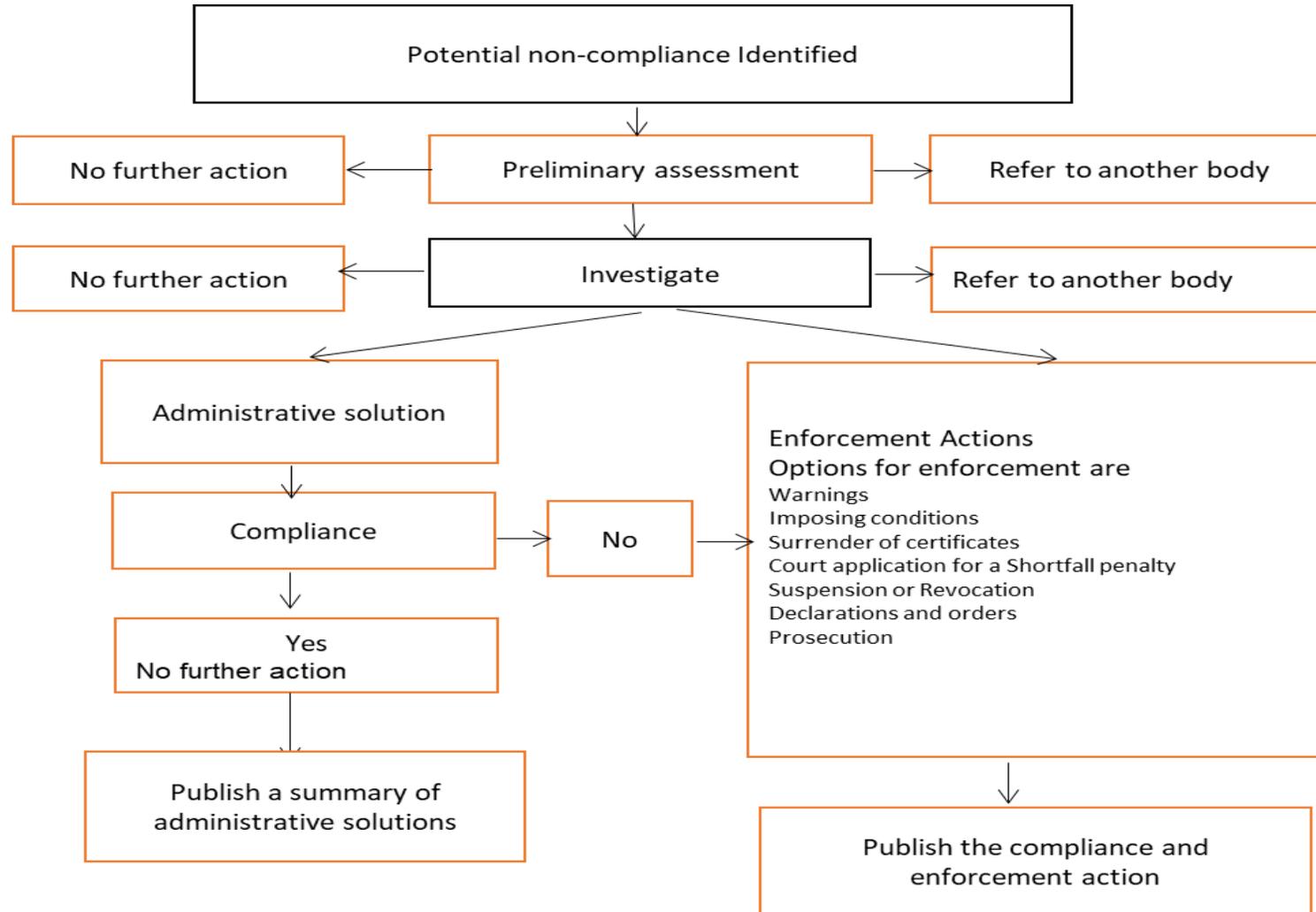
Compliance & enforcement

Recycling requirements; scheduled activity premises

Complaints



# Compliance and Enforcement Pathway



# 2019 Matters

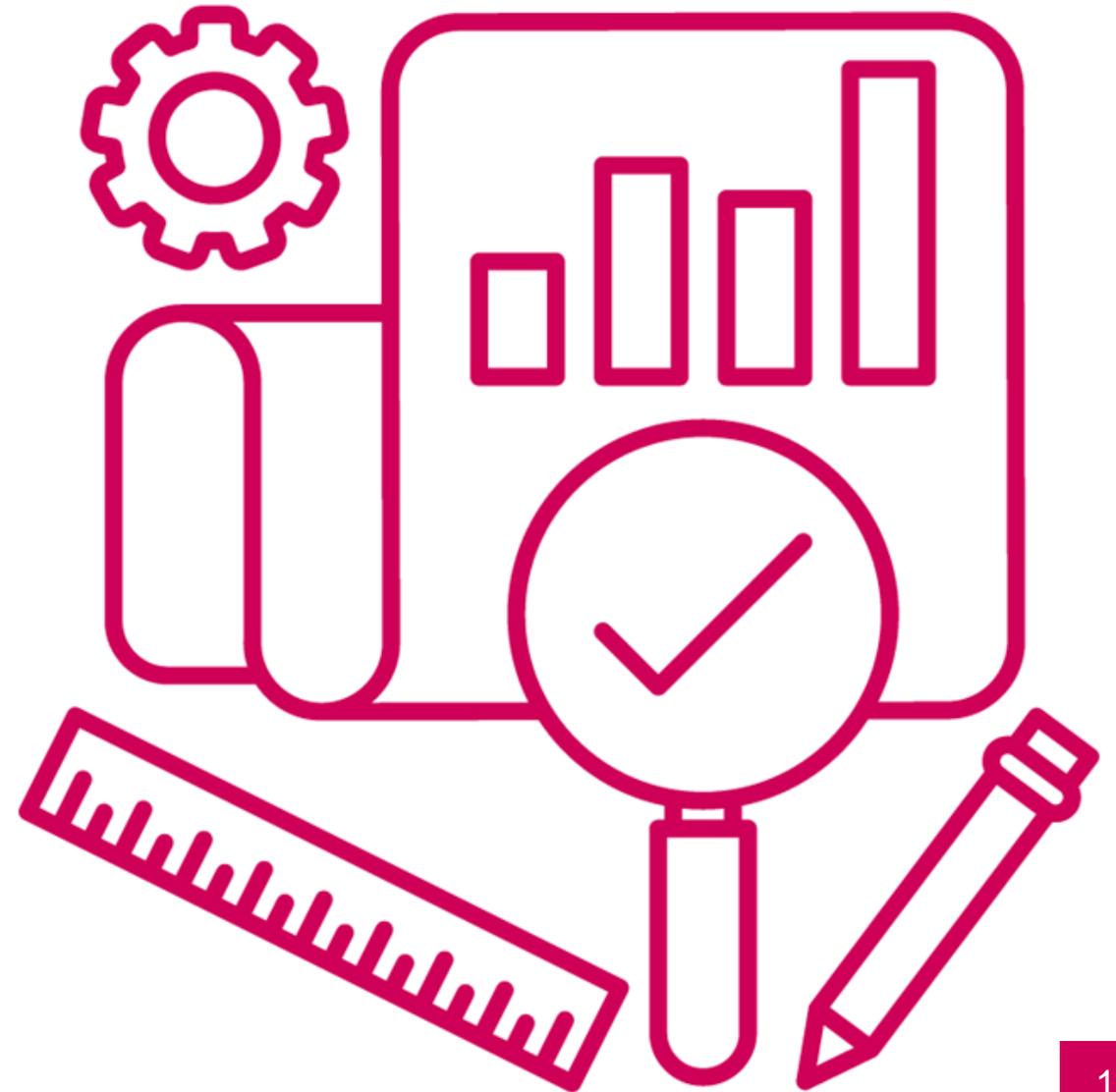
21A – use of omni-directional lighting and electricians

Building-based lighting activity guide

Compliance & enforcement

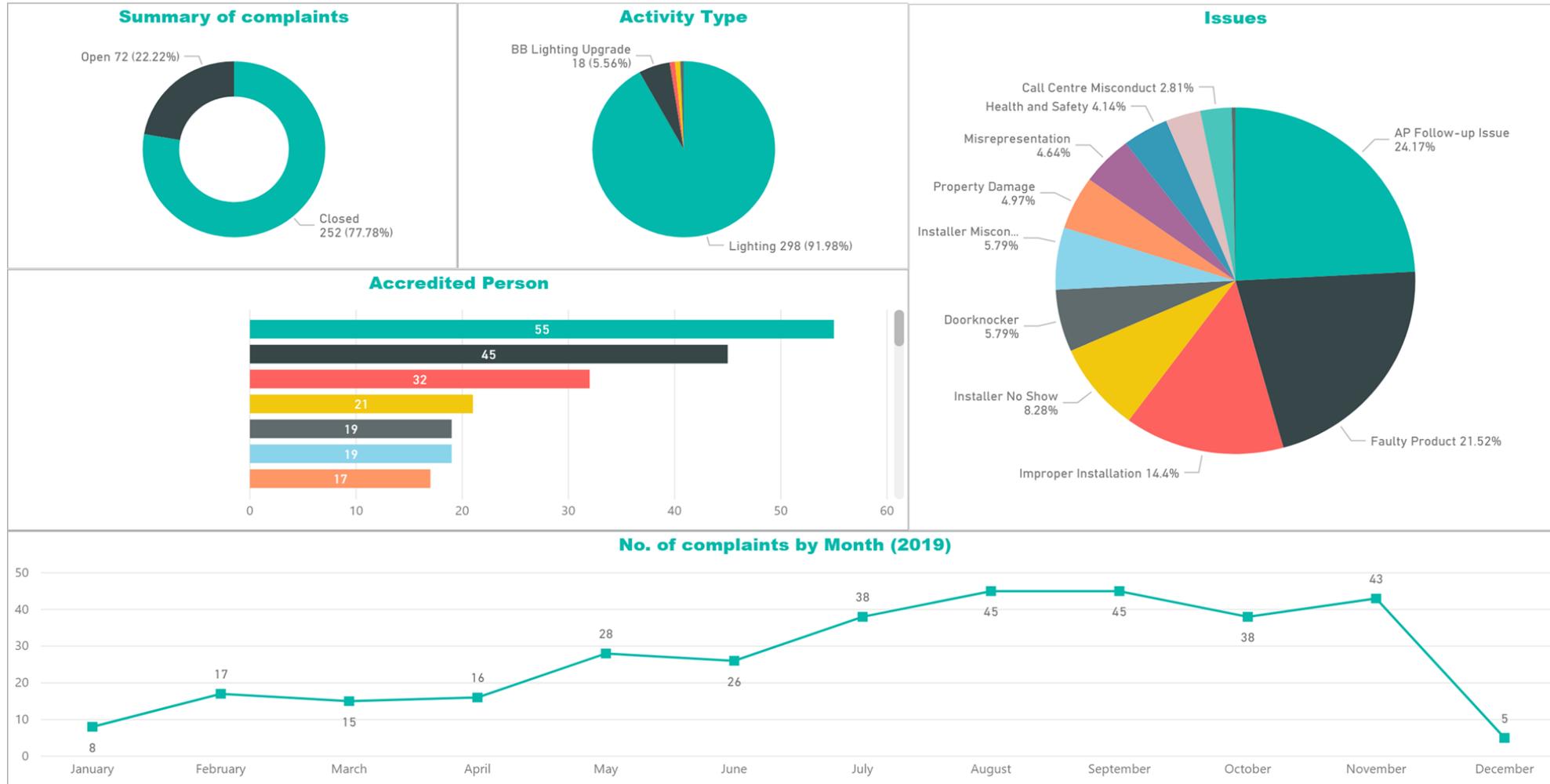
Recycling requirements; scheduled activity premises

Complaints



# Complaints Dashboard

## Complaints Raised (2019)



# 2020 Work Program



VEU FEE  
REVIEW



IT SYSTEMS  
PROJECT



PROPOSED  
LIGHTING  
PHASE-OUT



LARGE ENERGY  
USERS



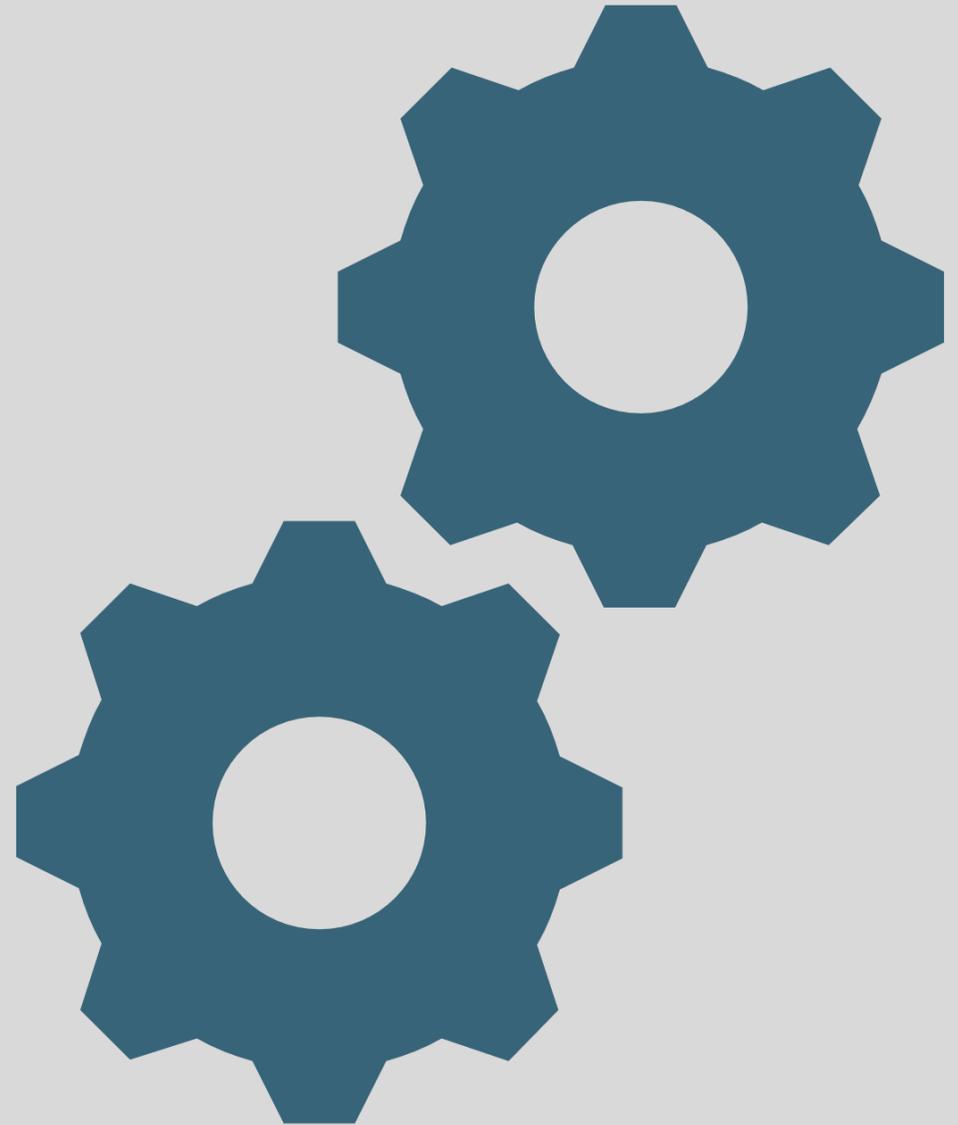
NEW ACTIVITIES



DEVELOPING  
OUR DATA  
ANALYTICS  
CAPABILITIES



IMPLEMENTING  
OUR PROGRAM  
ENGAGEMENT  
INITIATIVES





# Accreditation and VEEEC Assessments

Kate Keating, Manager

11 December 2019



# Key achievements



**Processed 90% batches within target timeframe**



**Completed > 100 first creation assessments**



**Consulted and introduced changes to flexible target days for Activity 34**



**Introduced automated RFI's**

# Supporting documentation



**Provide all the supporting evidence requested**



**Evidence needs to meet compliance requirements**



**Obligations and program guide for Accredited Persons**

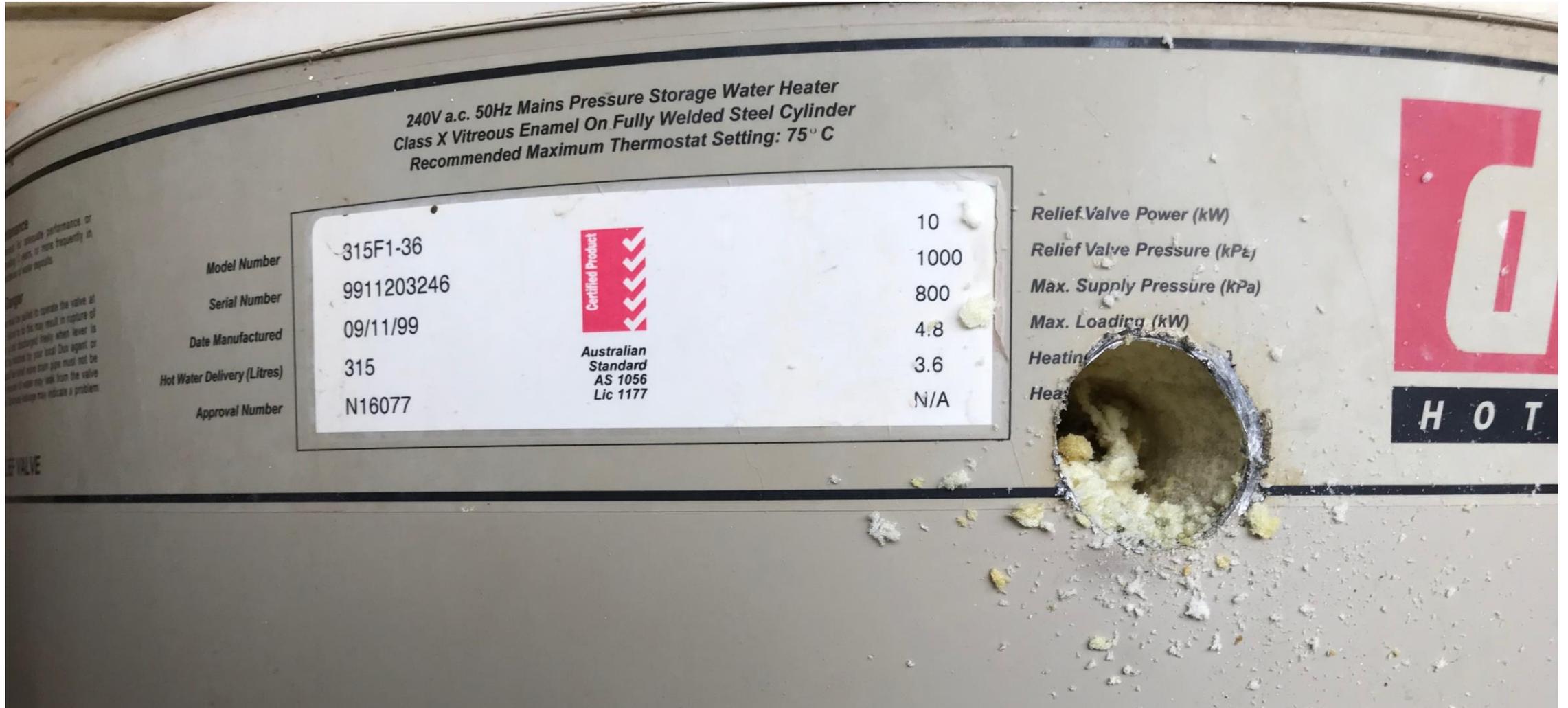


**Activity guides outline the requirements per activity**

# Supporting documentation – water heating



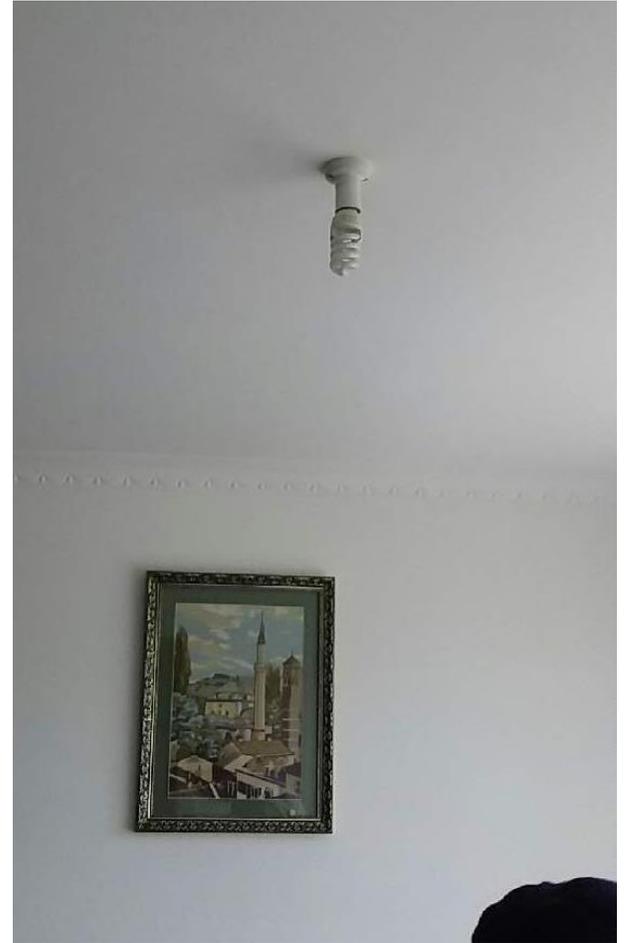
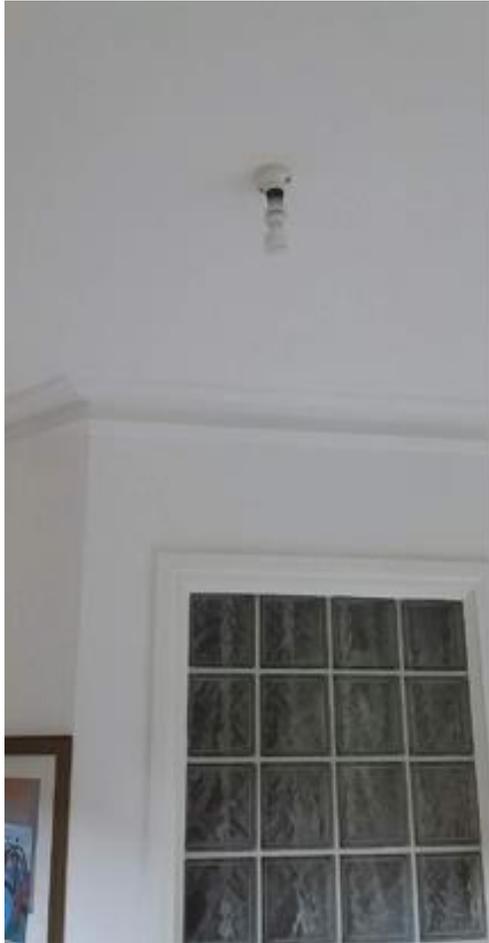
# Supporting documentation – water heating



# Supporting documentation – Photos



# Supporting documentation – Photos



# Verifying Duplicates



**Duplicates flagged for same activity**



**AP must investigate duplicate and confirm reason with consumer**



**AP must provide valid justification and evidence upon request**



**Lighting assignment form ‘total number of sockets in the premises’?**

# VEU Services

Date	
19 December 2019	Last day for invoicing for 2019
20 December 2019	Last day for VEEC registrations for 2019
24 December 2019 – 1 January 2020	VEU services not available*
2 January 2020 onwards	All VEU services resume

# Audit and Compliance

Luli Zyka, Manager

11 December 2019



**Victorian  
Energy  
Upgrades**



# Main audit findings

## Activity 21(A) – Incandescent lighting

-  Non compatible lamps installed onto dimmer circuits
-  Assignment form not provided to consumers
-  Spare lamps claimed as part of installation
-  Photo of removed lamps in a pile not representative of amount/type of lamps claimed
-  Poor marketing practices (e.g. not adhering to 'Do not knock' signs)
-  Poor complaints handling process

# Main audit findings

## Activity 1- Water heating

 Ineligible products being upgraded

 Geo-tagged photos not collected during installation

## Activity 34 – building based lighting

 Baseline manipulation

 Use of extension leads on high bay installations

# Enhanced baseline



## What is it?

The use of double adaptor, extension cords and quick connect plugs to create an inflated baseline.



## Ongoing issue

Enhanced baseline concerns were communicated at the prior forum  
Multiple APs and sub-contractors were investigated in 2019 resulting in substantial VEEC surrender.



## Cause

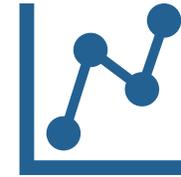
Limited oversight of electricians/subcontractors  
Lack of AP field audits  
Poor compliance checks prior to VEEC creation.



## How was it resolved?

Entire activity potentially deemed non-compliant resulting in VEEC surrender  
Electricians are reported to Energy Safe Victoria  
AP target dates are increased  
Potential enforcement action.

# Project based activities (PBA)



## Assessments so far

PBA projects are assessed by A&C once the VEECs are created

Three projects assessed and endorsed by A&C

## Observations

Project documentation failed to substantiate the savings calculated.

Use of renewable energy during baseline period not excluded in the energy savings

## What we look for

Identification of independent variables and constants

Behavioral change during the baseline and operating periods and its impact on energy savings

Evidence to substantiate baseline and operating period data

Assumptions made in the impact report and its validity

# Nominal Lamp Power (NLP) Issues



Audit & Compliance have identified anomalies in NLP claimed for fluorescent lamps



Accredited persons are reminded that all activities submitted to the portal are supported by geo-tagged photos of the:



Ballast markings



NLP of the approved upgrade product



The NLP column in the portal (column J) refers to the wattage of the lamp not the fixture



Moving forward, additional scrutiny for unusually high NLP claims.

# Audit & Compliance complaints



Significant increase in complaints in 2019



Re-emergence of consumer law issues



Products - failing, dimmers, sensor lights

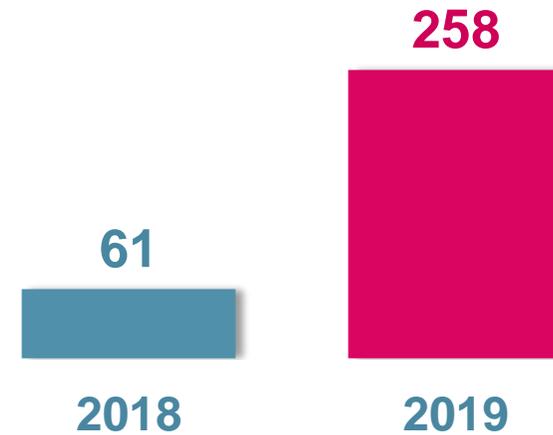


Non-compliance: assignment forms not provided, installer conduct



Customer service: warranty claims, no shows, incomplete upgrades

## Complaints received



# Activity 34 J6 program update



Program update sent to stakeholders 9 October 2019



Two criteria for eligibility:



Lighting upgrade is a part of a site refurbishment, and



work complies with Part J6 of the Building Code of Australia



VEU provided our position on meeting 'site refurbishment' criteria:



Renovation or improvement to existing site, and



site was previously tenanted or occupied

# Relevant entity (RE) compliance

 28 Relevant entities in the 2018 compliance year

 Relevant entities surrendered 6,314,700 certificates

 One shortfall penalty notice was issued

 For the 2019 compliance year, 21 Relevant entities have nominated their auditor

 Next due dates:

  Approve auditor nominations by 31 December 2019

  Relevant entities to provide signed tripartite deed by 31 January 2020

 GHG factor for electricity is 0.17255 for 2020

 GHG factor for gas is 0.00870 for 2020.

# Technical Services Group

Andy Sharp, Manager

11 December 2019



# Product applications

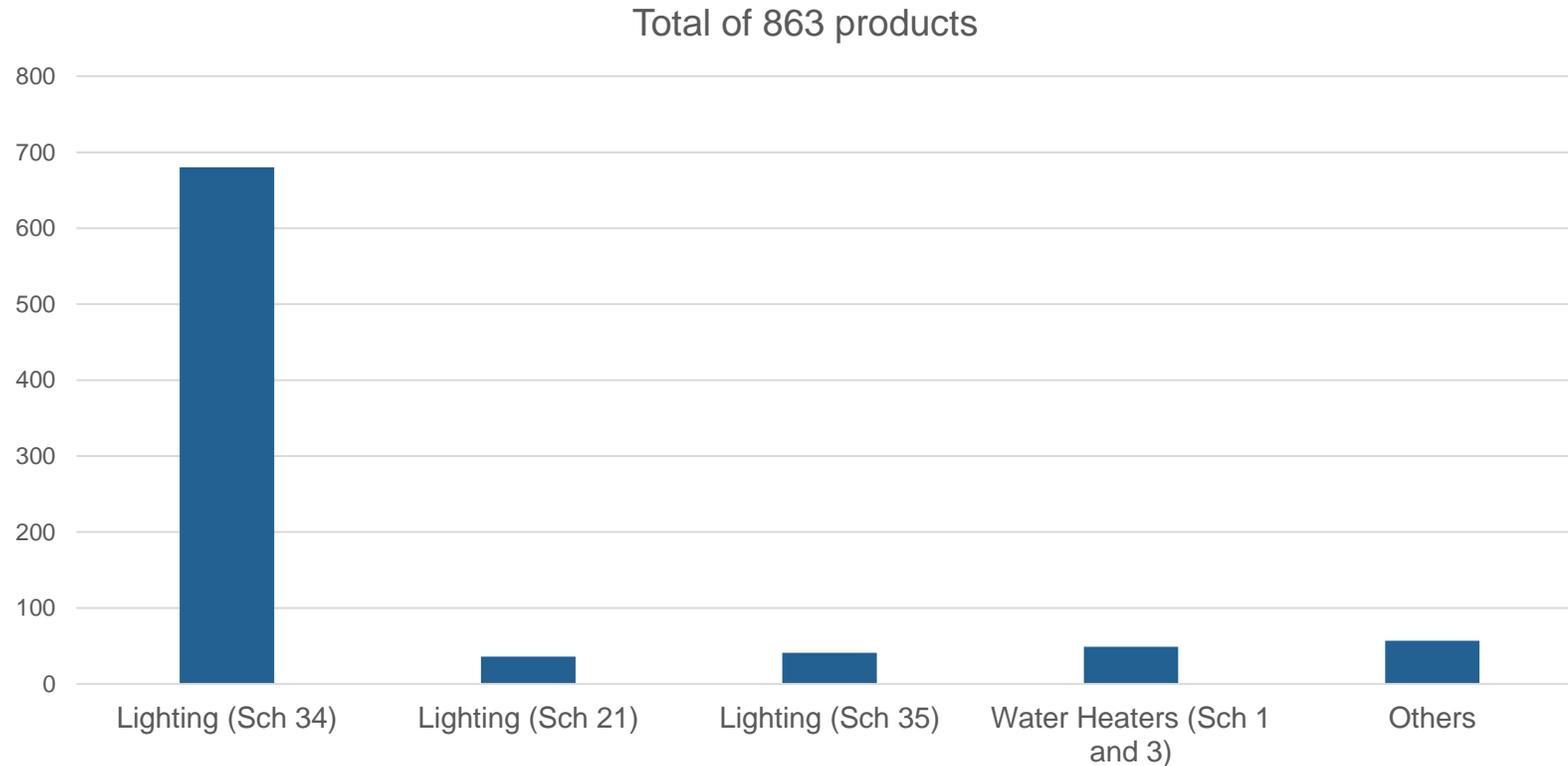
## Approved products analysis

1. Product approvals breakdown
2. How we're managing the application queue
3. Product testing program



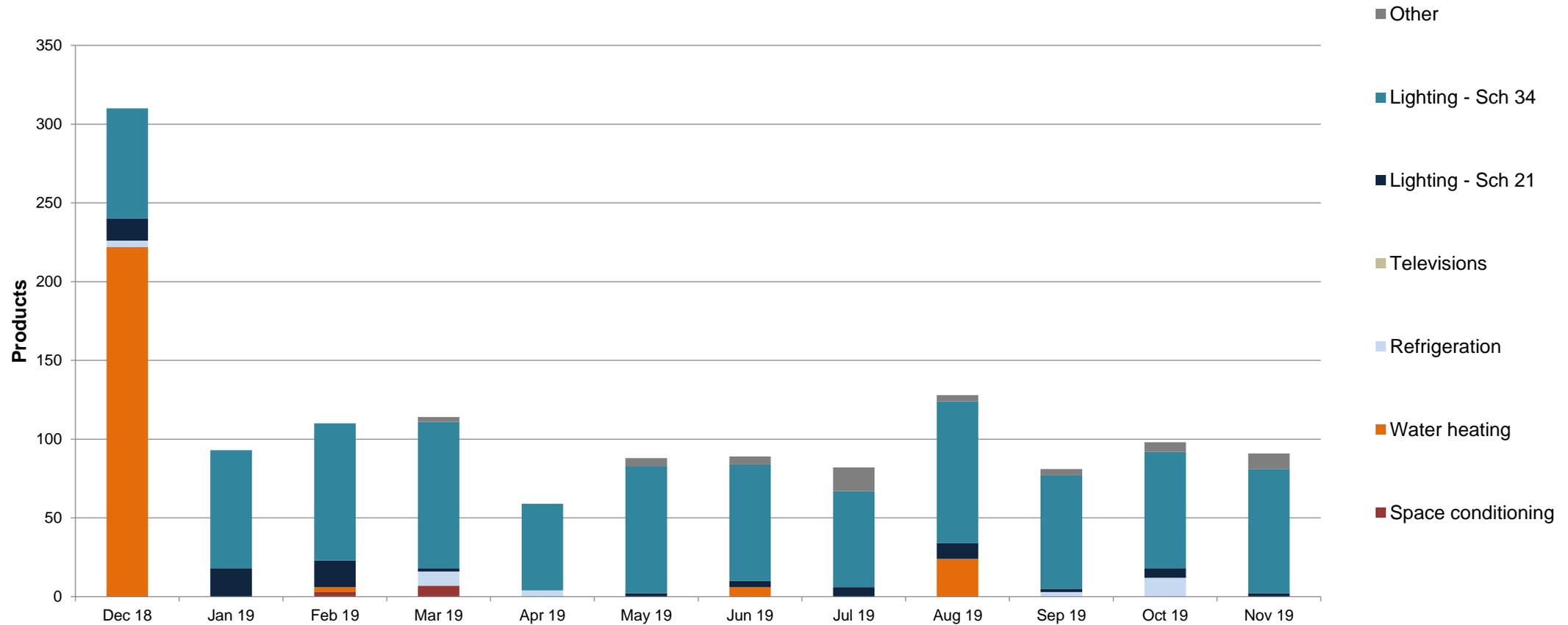
# 1. Product approvals

## Products approved - 1 January 2019 to 6 December 2019



# 1. Product approvals

Products approved



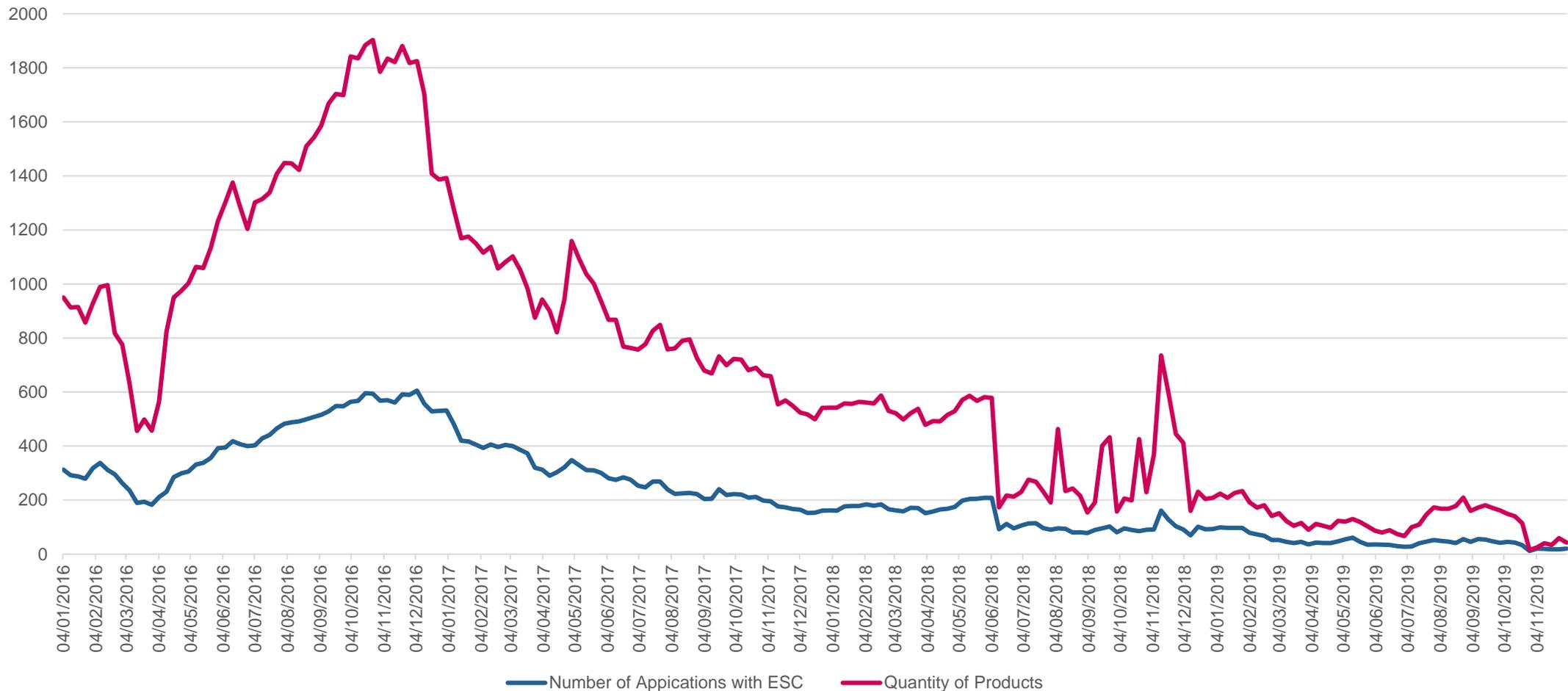
## 2. How we're managing the application queue

### Reminders:

1. Limit applications to two RFIs
2. Application will be withdrawn by us if no response to RFI within 40+ days
3. We only process (lighting) applications with nominations
4. We will RFI applications with no nominations within 40+ days

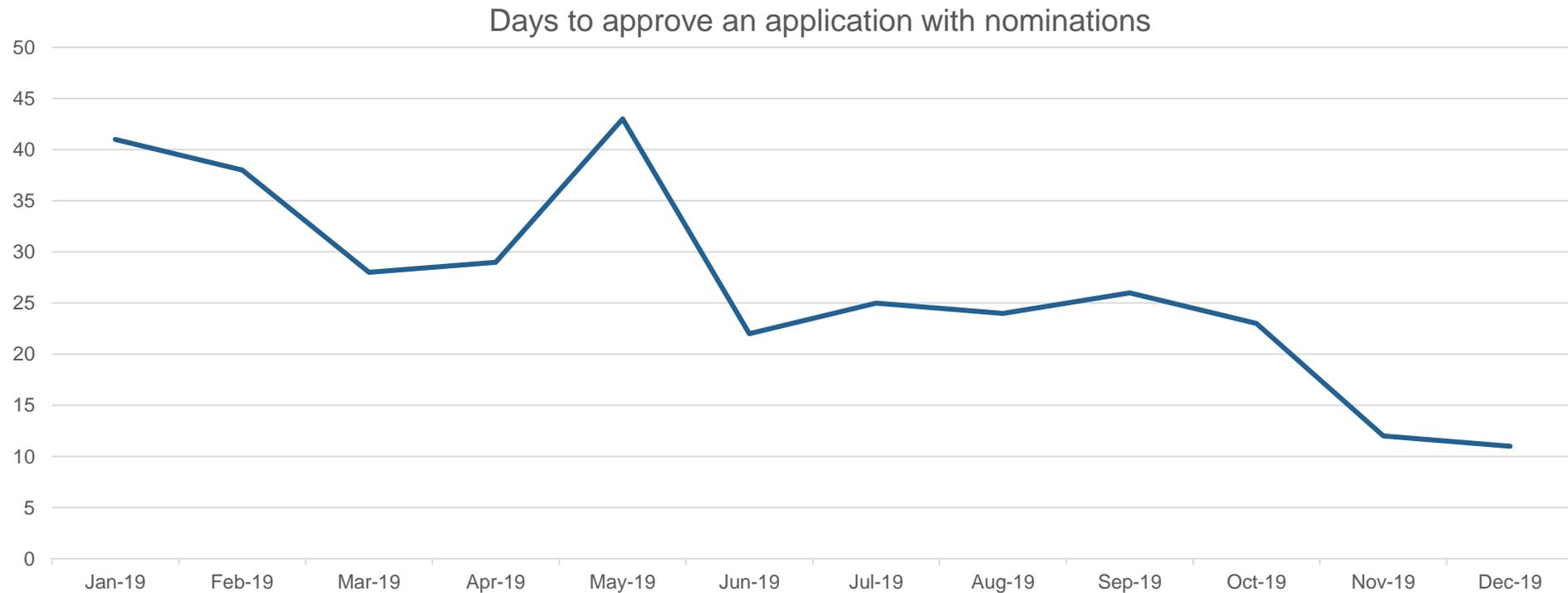
# 2. How we're managing the application queue

Applications Queue (with nominations) - since 2016



# 2. How we're managing the application queue

## Approval times – average queue age





# Project-based activities: uptake and predictions

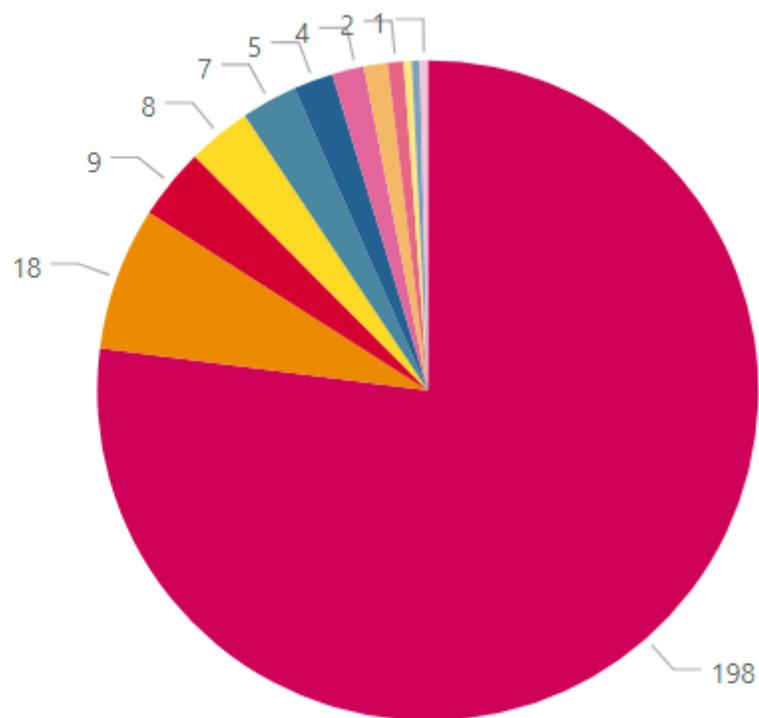
- **Which sectors are participating?**
- **What technology types have been used for PBA?**
- **Where are projects being undertaken?**
- **What is the level of participation and impact?**



# Current projects by sector

## Sector

- Retail Trade
- Accommodation and Food Services
- Arts and Recreation Services
- Manufacturing
- Health Care and Social Assistance
- Information Media and Telecommuni...
- Transport, Postal and Warehousing
- Electricity, Gas, Water and Waste Servi...
- Commercial buildings
- Agriculture, Forestry and Fishing
- Education and Training
- Professional, Scientific and Technical ...

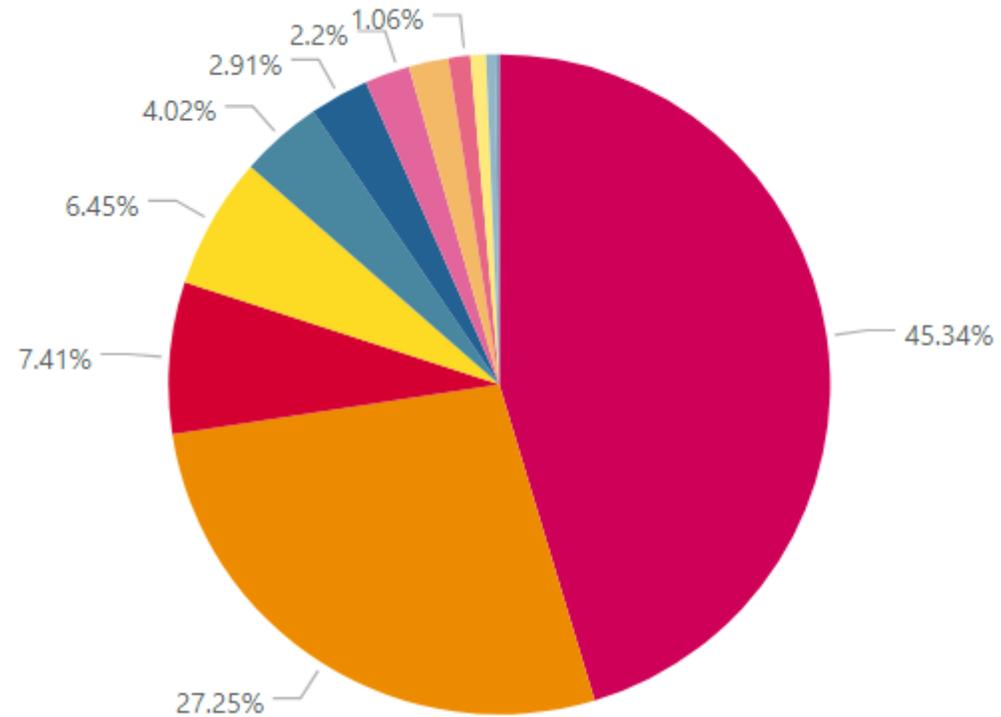


All information as at 4/12/2019 @ 05:00am

# Current expected VEECs by sector

## Sector

- Retail Trade
- Manufacturing
- Health Care and Social Assistance
- Transport, Postal and Warehousing
- Agriculture, Forestry and Fishing
- Arts and Recreation Services
- Information Media and Telecommuni...
- Accommodation and Food Services
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- Professional, Scientific and Technical ...
- Commercial buildings
- Education and Training

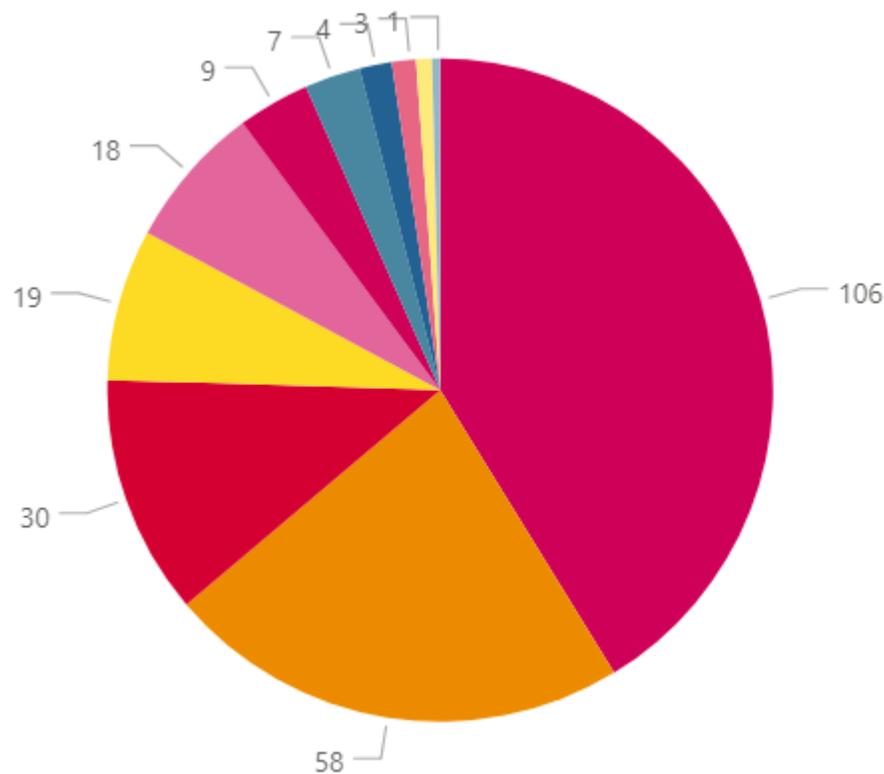


All information as at 4/12/2019 @ 05:00am

# Current projects by equipment type

## Equipment type

- HVAC
- Motors and drives
- Refrigeration
- BMS/BEMS
- Electrical infrastructure
- Process heating
- Lighting
- Renewable energy
- Other
- Other building equipment upgrades
- Compressed air/vacuum

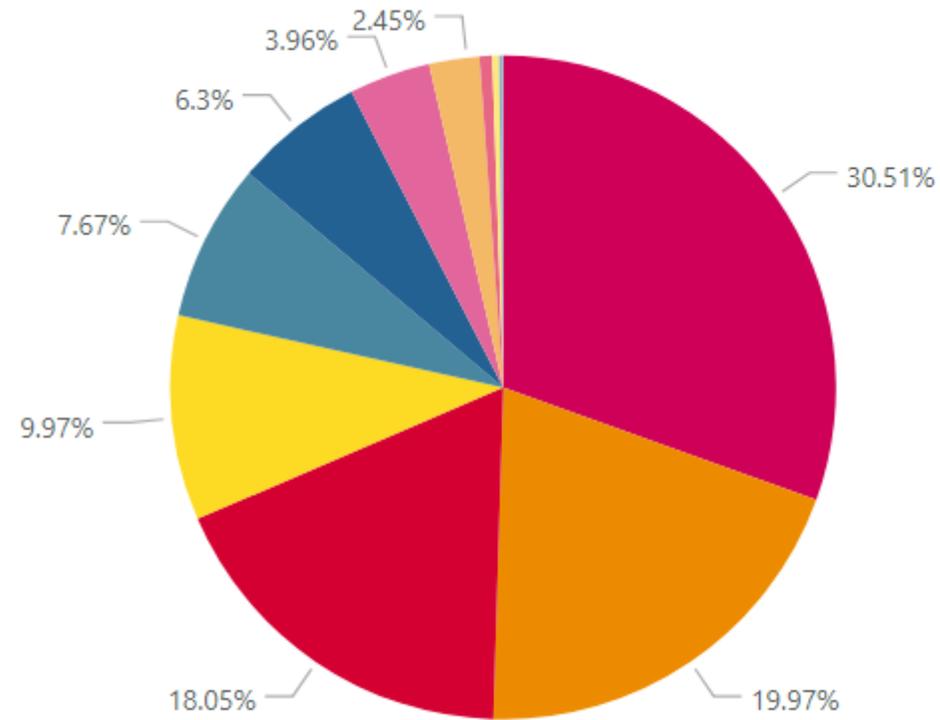


All information as at 4/12/2019 @ 05:00am

# Current expected VEECs by equipment type

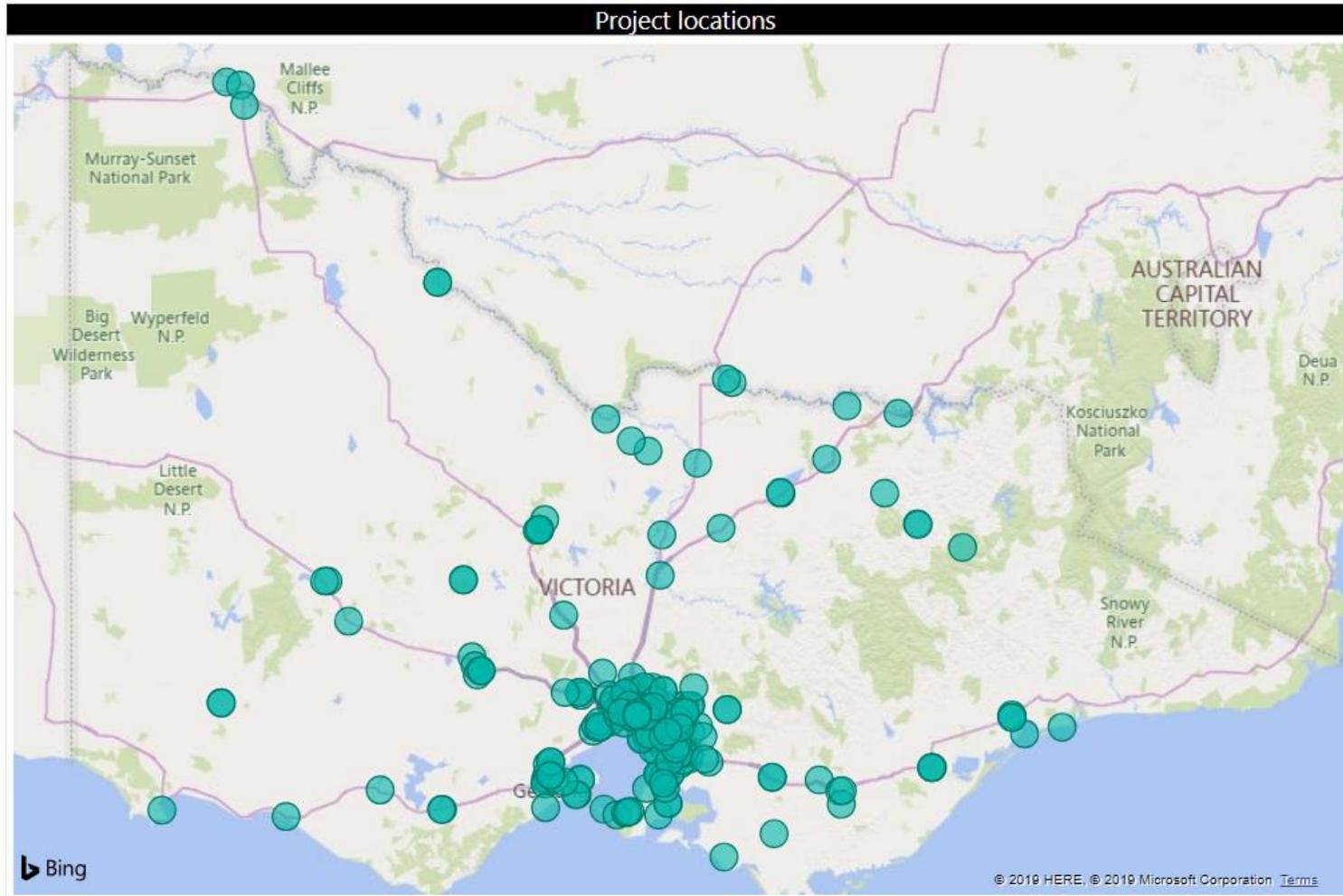
## Equipment type

- Process heating
- Refrigeration
- HVAC
- Motors and drives
- Lighting
- Renewable energy
- Electrical infrastructure
- BMS/BEMS
- Other
- Other building equipment upgrades
- Compressed air/vacuum



All information as at 4/12/2019 @ 05:00am

# Where are projects being undertaken?



All information as at 4/12/2019 @ 05:00am

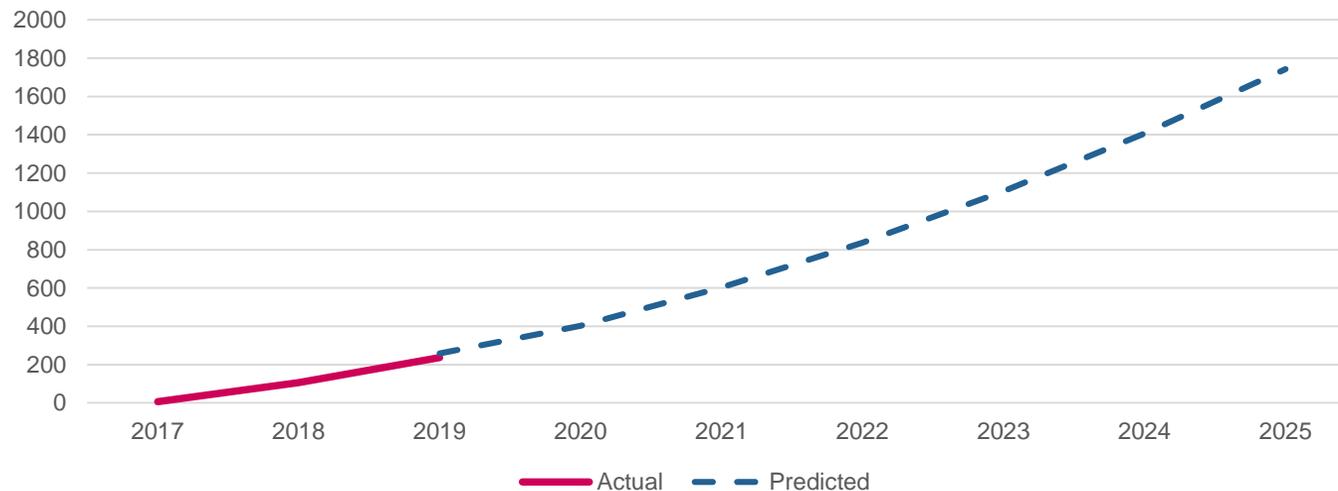
# What is the level of participation and impact?

- 222 project submissions so far since release (June 2017)
- Project numbers have increased year on year
- Currently have rates of 170 projects submitted per year
- Currently 16 APs approved for PBA of whom 11 have participated
- 8 multi-site projects since release (September 2019)
- 30,856 VEECs created\*

Current active projects	
ProjectStatus	No. projects
Approved-In-Principle	71
Conditionally Approved-In-Principle	134
Incomplete	6
<b>Total</b>	<b>211</b>

Scoping plans		
Year	Submitted	Approved
2017	3	2
2018	49	48
2019	170	161
<b>Total</b>	<b>222</b>	<b>211</b>

Extrapolated PBA Project volumes



\*Created VEECs are subject to potential audit prior to registration

# Planning and Development

Maureen Goey, Manager

German Ferrando-Miguel, Policy Lead

11 December 2019



Victorian  
Energy  
Upgrades



# Our engagement activities



**Developed and released stakeholder engagement plan**



**Aim: Building relationships with stakeholders to:**

Improve our reputation as regulator

Improve VEU compliance

Promote uptake of VEU activities

Leverage our information and experience to deliver better energy efficiency outcomes

# Our engagement activities – Key priority initiatives

 Bi-annual forums

 Issue based workshops for existing/new stakeholders

 Workshop for energy retailers

 Engagement as part of IT system upgrade

 Stakeholder survey

 Log of decisions on website

 Increased knowledge sharing on VEEC assessment rules

 Decision making training for staff

# Our engagement activities – Other planned initiatives



Regular newsletters



Articles in publications targeting new stakeholders



Building social media profile to highlight program



Booths/presentations at conferences



Collaboration initiatives with DELWP



Data sharing initiatives with Vic Govt

# Our data analytics activities



## Building new dashboards

VEU data dashboard published

Inter-agency dashboard

Team based dashboards

Risk based dashboards (e.g. activity 21A)



## Building intelligence

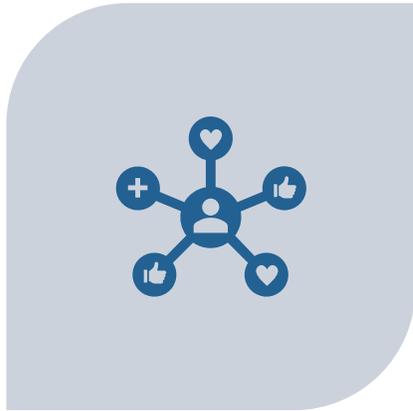
Detailed risk profile of activities

Effectiveness of our validation activities

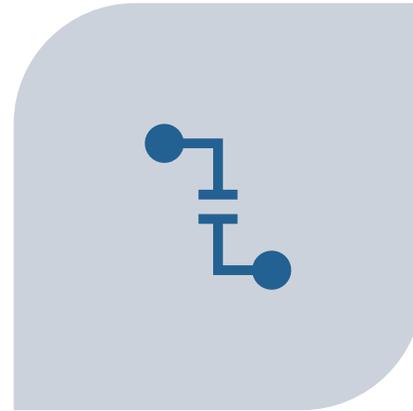
Linkages between products and non-compliance

Potential impact of lighting phase out

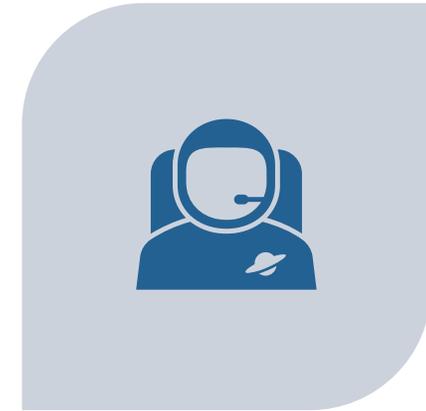
# Our regulatory change activities



COLLABORATING WITH DELWP TO  
DELIVER LARGE ENERGY USER  
AMENDMENT CHANGES



WORKING WITH COMMONWEALTH CER  
TO UNDERSTAND AND LEVERAGE THE  
NGERS AND EITE DATASET



PREPARING FOR NEXT PHASE OF  
PROGRAM (2021 TO 2025)

# Feedback



How can we engage better? Initiatives suggestions? Newsletter content suggestions?



Involvement in our IT systems upgrade?

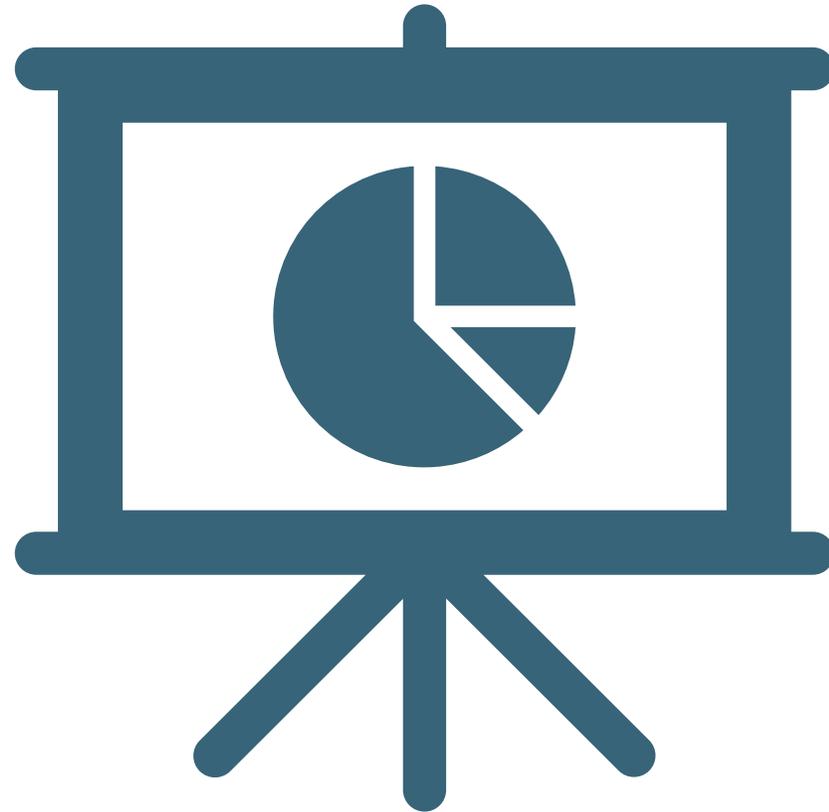


VEU data dashboard



Email: [veu@esc.vic.gov.au](mailto:veu@esc.vic.gov.au)

# Case Study – Activity 21A Risk Dashboard



# Q&A



# Contact us

	<a href="http://www.esc.vic.gov.au">www.esc.vic.gov.au</a>
	<a href="https://www.linkedin.com/company/essential-services-commission">/company/essential-services-commission</a>
	<a href="https://twitter.com/EssentialVic">@EssentialVic</a>