



Project-based activities

Measurement and Verification
Information session

August 2017

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Agenda

- What are project-based activities (PBA)?
- How are PBAs different from current activities?
- The Measurement and Verification end to end process
- Scheduled Activity Premises (former EREP sites)
- Administration release schedule

What are project-based activities (PBA)?

A broad range of bespoke energy efficiency projects in residential, commercial and industrial environments.

Project-based

Multiple energy efficiency measures contained within one project.

Technology neutral

Can be (almost) anything as long as eligible abatement can be achieved.

How are PBAs different?

PBAs differ from existing VEET activities in the following key ways:

Measurement



Actual before and after measurements are used to calculate certificates (VEECs)

Technology



Activities are not limited to specific technologies.

“Upgrade”



Projects don't need to be an “upgrade”. They can be process, set-point, or behaviour changes, or any other eligible abatement.

Product List



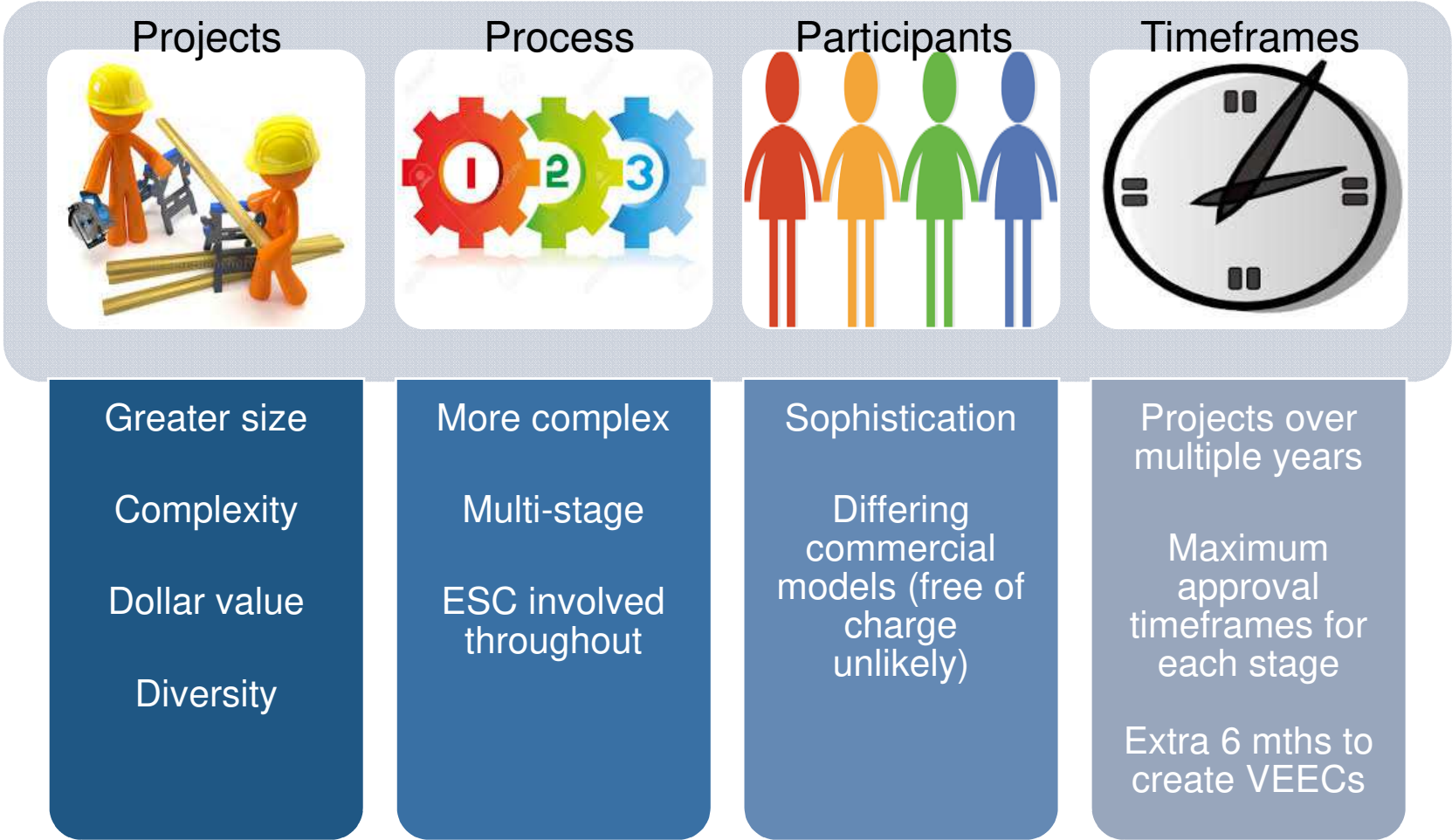
There is no requirement to use products from a list approved by the ESC, except for where lighting equipment has been installed.

Decommissioning



There is no decommissioning requirement, except for where lighting equipment has been installed.

How PBAs differ to existing activities



Measurement and Verification



Likely to be large, mainly industrial projects

May involve upgrade of bespoke or custom equipment

1. Measure 'baseline' energy use
2. Undertake work
3. Measure 'impact' energy use
4. Verify and report the reduction in energy use

End to end process - on site

1. Measure baseline



Baseline measurement MUST be complete before site work commences



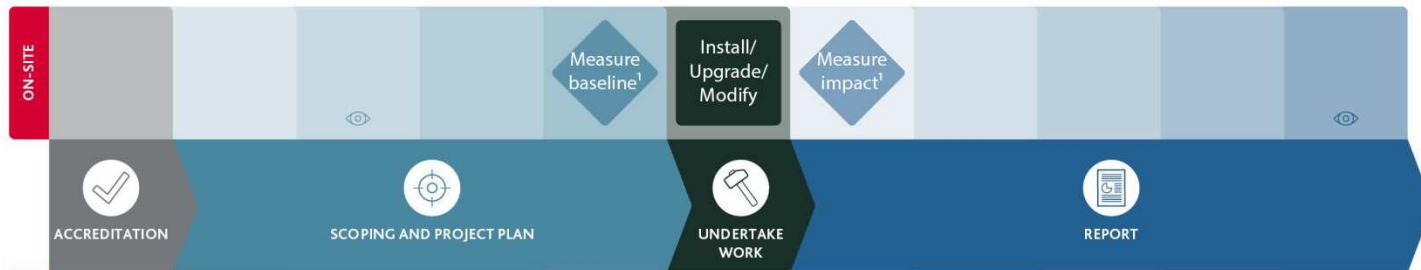
End to end process - on site

2. Undertake work



End to end process - on site

3. Measure impact



End to end process – accredited business

1. Accreditation



**Accreditation must be approved
before continuing**



End to end process – accredited business

2. Scoping and project plan



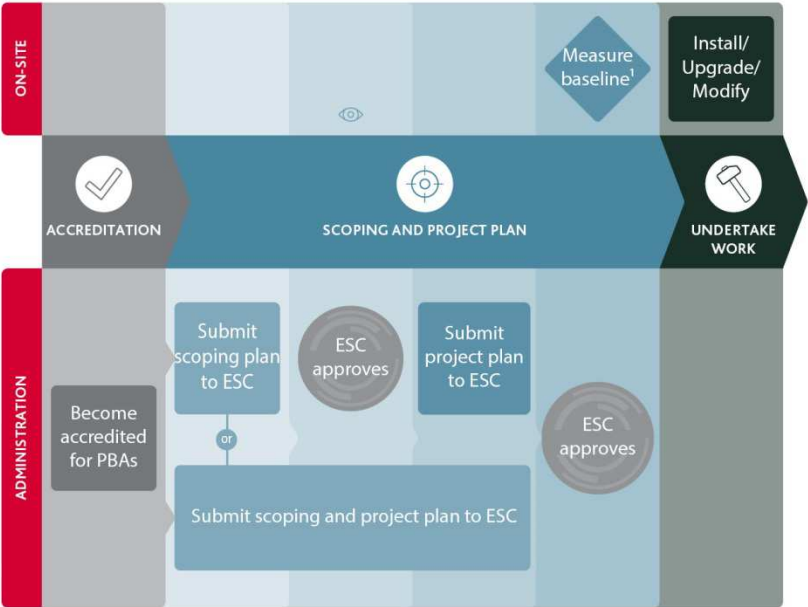
- Scoping plan: basic project outline
- Project plan: defines the activity in detail
- Combined applications are faster, but more certainty with separate applications
- Approved projects listed on 'PBA Projects' page on VEET website

Scoping plan must be approved and project plan submitted before continuing



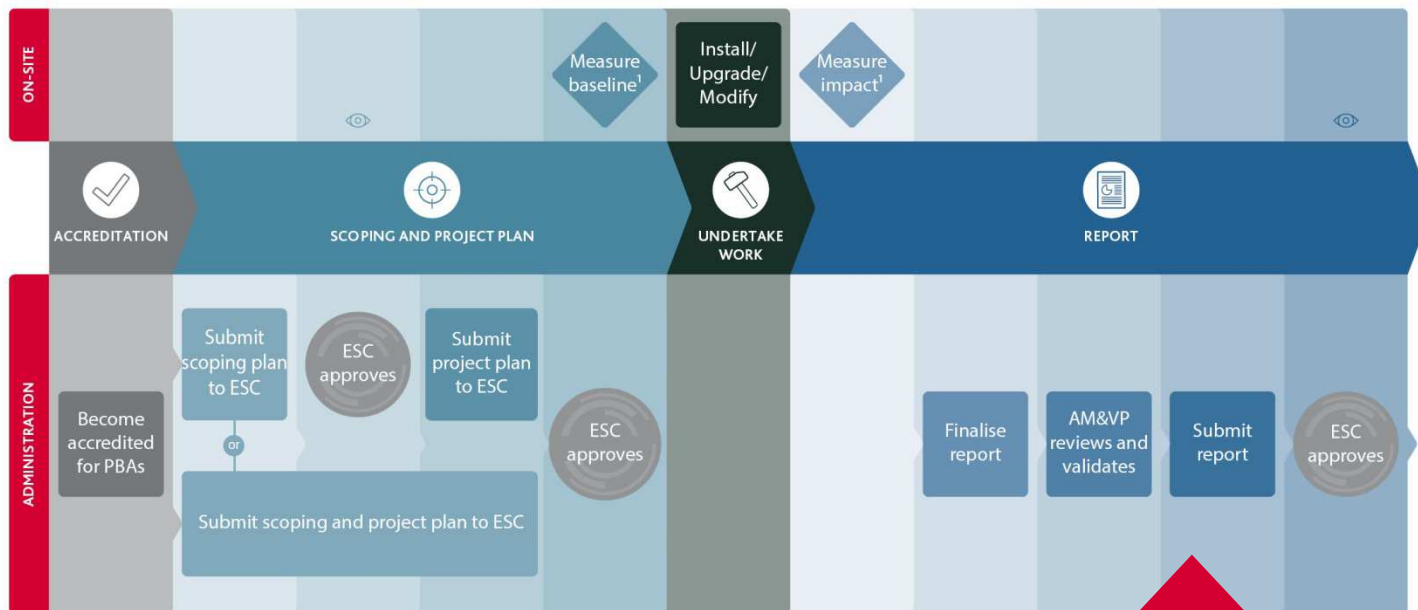
End to end process – accredited business

3. Undertake work



End to end process – accredited business

4. Measure impact and report



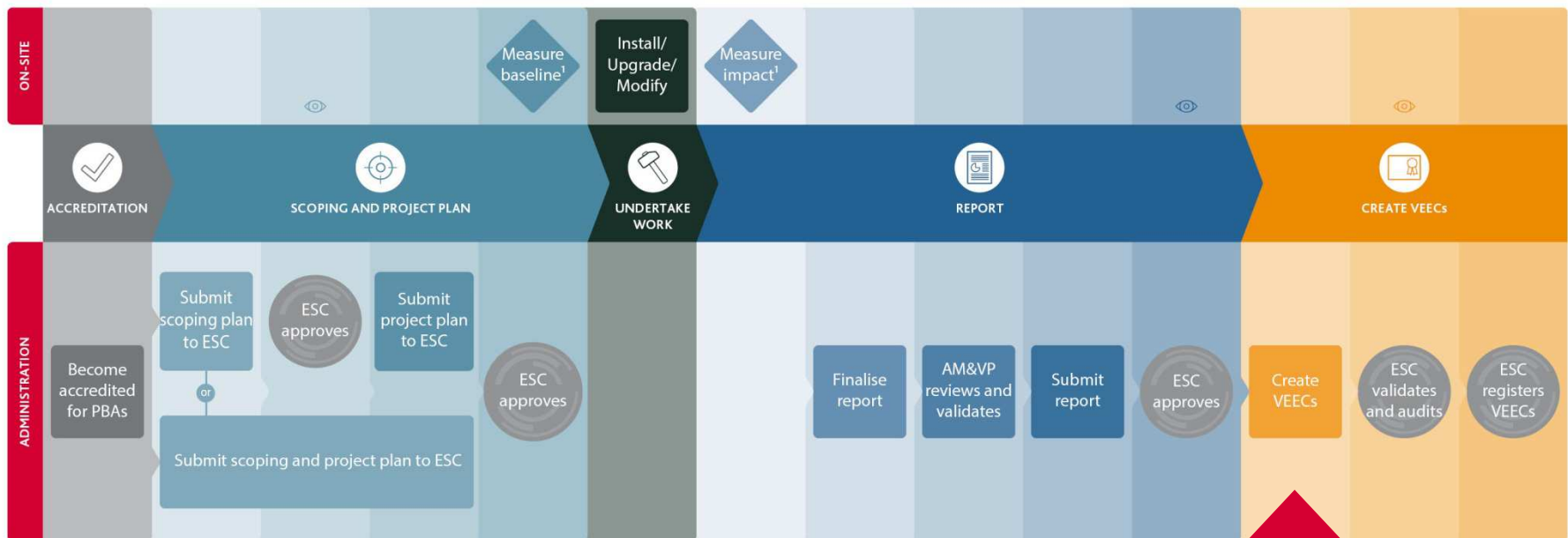
Approved Measurement and Verification Professional (AM&VP) validates that the impact report:

- is compliant with IPMVP
- follows project plan
- has all required components

AM&VPs listed on 'PBA M&V Professionals' page of VEET website

End to end process – accredited business

5. Create VEECs



VEEC creation types:

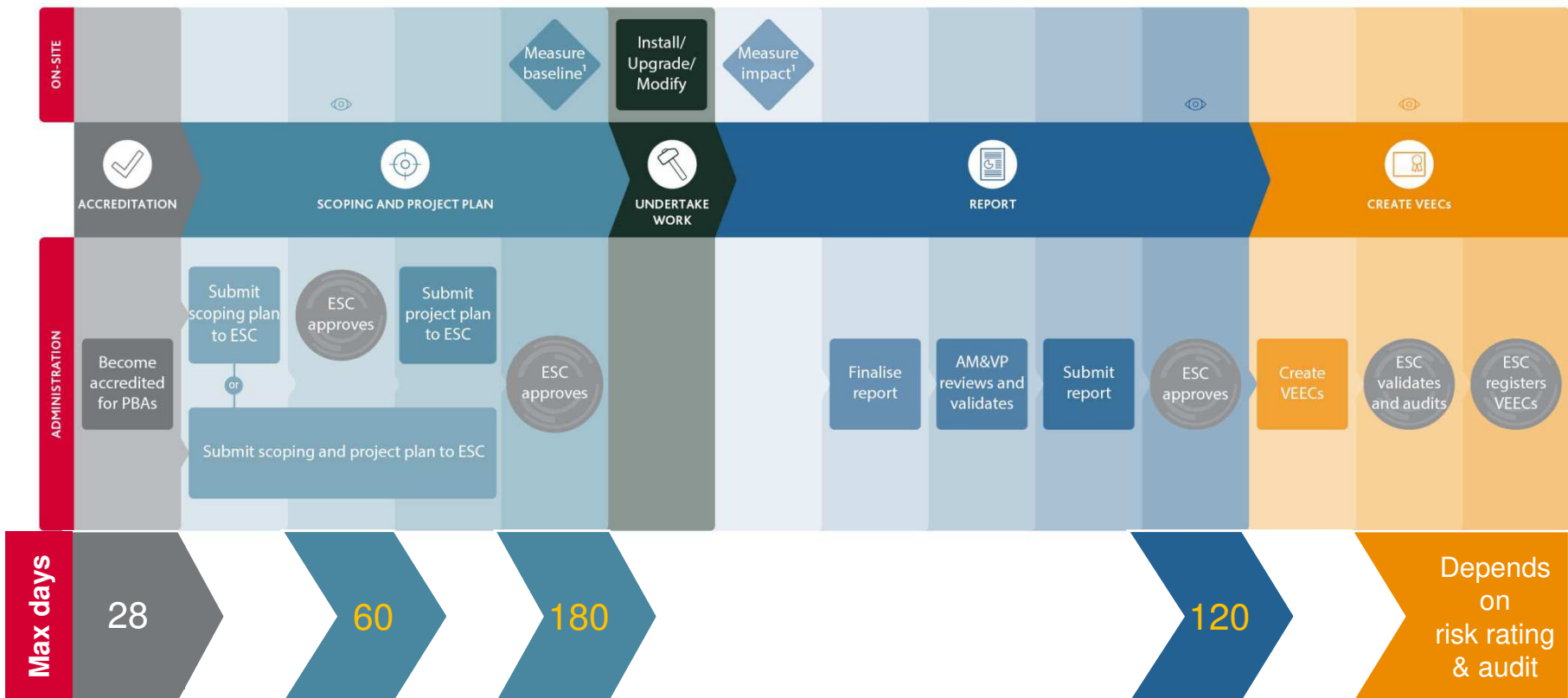
- Forward creation*
- Forward creation* with top-up
- Annual creation

*only for eligible activities

End to end process – accredited business

Timeframes

These are maximum timeframes



Persistence model

What are they?

- Estimated expected lifetime of energy consuming products
- Applies a decay factor for annual performance decline due to product type, how it's used and environment it's used in

What models are available?

- Default model in regulations
- Use of CEFC model is planned
Can use PIAM&V model in meantime:
 - <http://www.environment.nsw.gov.au/resources/business/PIAMV-template.xlsm>
- Can apply to ESC for other models

Variations

What can be varied:

- Site ownership
- Project timing
- Project measurement boundaries (in some cases)
- Scope (if purpose hasn't changed)
- Modeling approach
- Key role responsibilities or personnel
- Withdraw project

What cannot be varied:

- The accredited business (except in exceptional cases)
- Physical location
- Project purpose
- Scope (in some cases)
- Changes that introduce unacceptable risk
- Changes that make genuine abatement unlikely.

Hypothetical case study 1

Activity	CAPEX	Energy savings	Simple Payback	VEECs	Payback with VEECs*
Waste heat utilisation	\$1,167,000	\$177,000	6.6	9,820	5.8
Compressed air optimisation	\$24,750	\$10,700	2.3	1,176	0.8
Cold stores air ingress	\$779,898	\$151,090	5.2	13,177	4.0
Lighting upgrade	\$518,648	\$200,391	2.6	19,922	1.2
VSD on cooling towers	\$38,600	\$14,700	2.6	1,623	1.1
VSD on combustion air fan	\$18,600	\$8,600	2.2	863	0.8

*Current spot price of \$14 per VEEC used. M&V costs of \$20k included.

Hypothetical case study 2

Activity	CAPEX	Energy savings	Simple Payback	VEECs	Payback with VEECs*
Cogeneration plant installation	\$6,000,000	\$1,328,803	4.5	165,351	2.8

*Current spot price of \$14 per VEEC used. M&V costs of \$20k included.

No VEECs can be created if even 1 kWh of electricity is exported



Scheduled Activity Premises (former EREP sites)

- Scheduled Activity Premises (SAP) (as at 1 August 2017) are excluded from scheme, but can opt-in
- Once opt-in, premises can create VEECs, also creates liability for retailer
- Prior to opting in
 - Discuss implications with energy retailer, and/or
 - Seek legal advice re impact on energy contract
- Opt-in by providing written notice to ESC
 - Must be made by person with authority (CFO or equivalent)
 - Must occur prior to activity
 - Notification template on VEET website

Register of Scheduled Activity Premises

- ESC to publish Register of Scheduled Activity Premises by September
 - Source of addresses are Schedule 37 of VEET Regulations, EPA EREP list, RE's EREP exemption claims (2015/2016)
 - Currently validating address details with occupiers of SAPs
 - Responsibility of accredited business to check with occupier if premises is a SAP

Issues with SAPs

- Ownership changes
 - SAP status unchanged
- Multiple occupiers of a premises
 - Discuss individual circumstances with ESC. Metering is key.
- Multiple address for a SAP
 - A SAP may occupy multiple sites, multiple addresses (e.g. University campus)
 - Written notice to be provided for each discrete, individual address
- Inaccurate addresses
 - EREP legacy program – imperfect records
 - ESC has used best endeavours to complete register accurately

Administration Release Schedule

Date	Document	Rules	Guidance	Forms
19 Jun	<ul style="list-style-type: none"> • PBA Regulations • M&V methods & variables • M&V process overview • M&V process map • PBA web page • Accreditation 	<ul style="list-style-type: none"> ✓ ✓ 	<ul style="list-style-type: none"> ✓ ✓ ✓ ✓ 	<ul style="list-style-type: none"> ✓
1 Aug	<ul style="list-style-type: none"> • Activity guidance • Compliance requirements • Scoping plan • Project plan • Approved M&V professional • SAPs 		<ul style="list-style-type: none"> ✓ ✓ ✓ ✓ ✓ ✓ 	<ul style="list-style-type: none"> ✓ ✓ ✓ ✓
Sep	<ul style="list-style-type: none"> • Impact report • VEEC assignment form 		<ul style="list-style-type: none"> ✓ ✓ 	<ul style="list-style-type: none"> ✓ ✓
TBC	<ul style="list-style-type: none"> • VEET Guidelines 		<ul style="list-style-type: none"> ✓ 	

Where can I get help?

- VEET website (www.veet.vic.gov.au) has:
 - **Project-based Activities** page
information, links, downloads
 - **Publications** page
guidance documents, forms, SAP Information Bulletin
 - **Legislation** page
PBA Regulations and M&V Methods and Variables
- Still have questions? Email veet@esc.vic.gov.au
- Feedback welcome on how you are finding implementing the PBA administration in practice

Questions?