**Application - M&V Professional**

Method Details – PIAM&V

 Purpose of this form

This form is used to apply for approval as a Measurement & Verification (**M&V**) Professional under the **Project Impact Assessment with Measurement and Verification** (**PIAM&V**) **method**.

The application is assessed through a rigorous process. Please read the [*PIAM&V – Guide for M&V Professionals*](https://www.ess.nsw.gov.au/Auditors-Professionals/Measurement-and-Verification-Professionals/Apply-to-become-an-MV-Professional) for further information on the application process. Applicants must demonstrate their knowledge of the PIAM&V method. Responses should also include references to published standards and guides where relevant, for example the *International Performance Measurement and Verification Protocol* (**IPMVP**), *draft ISO 50015 standard*, and *2011 ASHRAE Handbook HVAC Applications Ch. 41 Building Energy Monitoring*.

 Meaning of key terms, icons and colours in this form

Words which are defined in the ESS Rule and which are used in this Application Form have the same meaning in this Application Form as in the ESS Rule, unless the context requires otherwise.

Key terms

**ACP** means **accredited certificate provider**.

**ESS Rule** means the **Energy Savings Scheme Rule of 2009**. The ESS Rule sets out the specific requirements of each calculation method under the ESS. Requirements specific to the PIAM&V method are set out in clause 7A of the ESS Rule. The ESS Rule is available on the ESS website.

**PIAM&V Method Requirements** means requirements that are published by the Scheme Administrator under the ESS Rule. ACPs must comply with the PIAM&V Method Requirements when using the PIAM&V method (see clause 7A.16 of the ESS Rule). The *PIAM&V Method Requirements* is available on the ESS website.

**M&V Professional** means **measurement & verification professional**. M&V Professionals confirm the validity of energy models and parameters used when calculating energy savings under the PIAM&V method.

**RESA** means **recognised energy saving activity**.

Icons

** Indicates an instruction for completing this form.**

 Indicates a document or supporting evidence to be provided with the application.

* Important information to assist you with completing the application.*

Shaded questions

Blue shaded questions must be completed by all applicants.

Amber shaded questions must only be completed if relevant to the application.

 How to complete and submit an application

If a previous application was refused (or a previous approval was withdrawn), you must wait three months from the date of the refusal (or the date of the withdrawal) before re‑applying. Refer to section 4.1 of the [*PIAM&V – Guide for M&V Professionals*](https://www.ess.nsw.gov.au/Auditors-Professionals/Measurement-and-Verification-Professionals/Apply-to-become-an-MV-Professional) for more information.[[1]](#footnote-1) Steps to apply are:

1. Complete this form.
2. Finalise supporting documentation.
3. Review the completed application form and supporting documentation to ensure that they are concise, complete, relevant and accurate.
4. Submit the application forms and supporting documentation to IPART via email to ESS\_applications@ipart.nsw.gov.au.

Applicant details

1. Who is applying to become an approved M&V Professional?

|  |  |
| --- | --- |
| Name | Click here to enter text |
| Job Title | Click here to enter text |
| Organisation | Click here to enter text |
| ABN *(not required if providing ACN)* | Click here to enter text |
| ACN *(not required if providing ABN)* | Click here to enter text |
| Postal address | Click here to enter text |
| Phone number | Click here to enter text |
| Email address | Click here to enter text |

1. Are you applying for general approval or approval for a specific RESA implementation?
* Applicants can apply for either general approval (may work in relation to any RESA) or RESA implementation specific approval (may only work in relation to a particular implementation or project). Contact details of M&V Professionals with general approval are published on the ESS website.

|  |  |  |
| --- | --- | --- |
| [ ]  | General approval | 🡪 Go to Question 4 |
| [ ]  | Implementation specific | 🡫 Provide a response to Question 3 |

1. Which ACP, RESA and implementation will you work with?

|  |  |
| --- | --- |
| ACP name (company) | Click here to enter text |
| RESA name | Click here to enter text |
| Implementation address (site) | Click here to enter text |

1. How will you ensure you are able to provide an independent opinion?
* M&V Professionals must provide an independent opinion over the validity of the energy models (ie, M&V Professionals cannot be responsible for validating their own work).
* If more space is required, attach your processes or procedures.

|  |  |
| --- | --- |
| Describe the processes or procedures you have in place to ensure you are able to provide an independent opinion over the validity of the energy models you will review | Click here to enter text |

* Attach processes or procedures that demonstrate you are able to provide an independent opinion over the validity of the energy models you will review.

|  |  |
| --- | --- |
| File name – managing independence  | Click here to enter text |

1. How will you ensure there are no conflicts of interest with ACPs?
* If more space is required, attach your processes or procedures.

|  |  |
| --- | --- |
| Describe any conflicts of interest, or potential conflicts of interest, that you have already identified (whether they be perceived or real) | Click here to enter text |
| Describe the processes or procedures you have in place to identify, manage and resolve conflicts of interest when working with ACPs | Click here to enter text |

* Attach processes or procedures to manage conflicts of interest with ACPs.

|  |  |
| --- | --- |
| File name – managing conflicts of interest | Click here to enter text |

End-user equipment

1. What end-user equipment categories are you applying for?
* Select all that apply.
* Refer to section 2.2 of the PIAM&V Method Guide for further details on each category.
* If this application is for general approval and is approved, the information in this question will be made publicly available.

|  |  |
| --- | --- |
| [ ]  | Building envelope |
| [ ]  | Commercial heating/cooling |
| [ ]  | Fluid transport and materials handling |
| [ ]  | Industrial heating/cooling |
| [ ]  | Information and communication technology |
| [ ]  | Lighting |
| [ ]  | Power generation systems |
| [ ]  | Power supply/distribution systems |
| [ ]  | Industrial processes (other) – please list below |
| If ‘Industrial processes (other)’, list the end-user equipment | Click here to enter text |

1. What skills, practical experience and qualifications do you have in relation to the end-user equipment categories selected above?
* You must answer these questions for each end-user equipment category selected in Question 6.

|  |  |
| --- | --- |
| Describe your skills, practical experience, qualifications and/or training that demonstrate your understanding of how end‑user equipment in each category converts energy into end-use services, and is affected by the independent variables | Click here to enter text |

* Attach a list of the projects you have worked on, together with a project summary demonstrating your practical experience in each end-user equipment category selected in Question 6.

|  |  |
| --- | --- |
| File name – list of projects | Click here to enter text |

* Attach copies of relevant qualifications and training certificates.

|  |  |
| --- | --- |
| File name – qualification certificates | Click here to enter text |

Understanding of M&V techniques

1. What skills, practical experience and qualifications do you have in relation to measurement and verification?
* You must provide details of any qualifications relevant to conducting measurement and verification such as evidence of being a Certified Measurement and Verification Professional (**CMVP**)[[2]](#footnote-2) and any relevant tertiary qualifications.

|  |  |
| --- | --- |
| Describe your skills, practical experience, qualifications and/or training that demonstrate your understanding of M&V techniques | Click here to enter text |

* Attach copies of relevant qualifications and certificates.

|  |  |
| --- | --- |
| File name – certificates | Click here to enter text |

Regression analysis

1. Are you applying in relation to regression analysis?
* Regression analysis is one of the acceptable energy model types under clause 7A of the ESS Rule.
* Check the appropriate box and respond accordingly.

|  |  |  |
| --- | --- | --- |
| [ ]  | No | 🡪 Go to Question 11 |
| [ ]  | Yes | 🡫 Provide a response to Question 10 |

1. What skills, practical experience and qualifications do you have to perform regression analysis?

|  |  |
| --- | --- |
| Describe your skills and practical experience performing regression analysis | Click here to enter text |
| Describe your qualifications relevant to the performance of regression analysis | Click here to enter text |

* Attach a list of the projects you have worked on together with a project summary demonstrating your practical experience in regression analysis.

|  |  |
| --- | --- |
| File name – list of projects | Click here to enter text |

* Attach copies of relevant qualifications and training certificates.

|  |  |
| --- | --- |
| File name – qualification certificates | Click here to enter text |

Estimate of the mean

1. Are you applying in relation to estimate of the mean?
* Estimate of the mean is one of the acceptable energy model types under clause 7A of the ESS Rule.
* Check the appropriate box and respond accordingly.

|  |  |  |
| --- | --- | --- |
| [ ]  | No | 🡪 Go to Question 13 |
| [ ]  | Yes | 🡫 Provide a response to Question 12 |

1. What skills, practical experience and qualifications do you have to perform estimate of the mean?

|  |  |
| --- | --- |
| Describe your skills and practical experience performing estimate of the mean | Click here to enter text |
| Describe your qualifications relevant to the performance of estimate of the mean | Click here to enter text |

* Attach a list of the projects you have worked on together with a project summary demonstrating your practical experience in estimate of the mean.

|  |  |
| --- | --- |
| File name – list of projects | Click here to enter text |

* Attach copies of relevant qualifications and training certificates.

|  |  |
| --- | --- |
| File name – qualification certificates | Click here to enter text |

Computer simulation

1. Are you applying in relation to computer simulation?
* Computer simulation is one of the acceptable energy model types under clause 7A of the ESS Rule.
* Check the appropriate box and respond accordingly.

|  |  |  |
| --- | --- | --- |
| [ ]  | No | 🡪 Go to Question 16 |
| [ ]  | Yes | 🡫 Provide a response to Question 14 |

1. Which computer simulation software are you seeking approval in relation to?

|  |  |
| --- | --- |
| Provide computer simulation software name(s) | Click here to enter text |
| Provide a short description of the computer simulation software, indicating which type of end-user equipment can be modelled | Click here to enter text |

1. What skills, practical experience and qualifications do you have using the computer simulation software listed above?

|  |  |
| --- | --- |
| Describe your skills and practical experience using the computer simulation software listed in Question 14 | Click here to enter text |
| Describe your qualifications relevant to the computer simulation software | Click here to enter text |

* Attach a list of the projects you have worked on together with a project summary demonstrating your practical experience in computer simulation.

|  |  |
| --- | --- |
| File name – list of projects | Click here to enter text |

* Attach copies of relevant qualifications and training certificates.

|  |  |
| --- | --- |
| File name – qualification certificates | Click here to enter text |

Sampling

1. Are you applying in relation to the sampling method?
* Under clause 7A.2(b) of the ESS Rule energy models may be developed for single sites or multiple sites using a sampling method in accordance with clause 7A.20 of the ESS Rule.
* Check the appropriate box and respond accordingly.

|  |  |  |
| --- | --- | --- |
| [ ]  | No | 🡪 Go to Question 18 |
| [ ]  | Yes | 🡫 Provide a response to Question 17 |

1. What skills, practical experience and qualifications do you have in relation to sampling?

|  |  |
| --- | --- |
| Describe your skills and practical experience in relation to sampling | Click here to enter text |
| Describe your qualifications relevant to sampling techniques | Click here to enter text |

* Attach a list of the projects you have worked on together with a project summary demonstrating your practical experience in using sampling.

|  |  |
| --- | --- |
| File name – list of projects | Click here to enter text |

* Attach copies of relevant qualifications and training certificates.

|  |  |
| --- | --- |
| File name – qualification certificates | Click here to enter text |

Understanding of the PIAM&V method

1. What is your level of understanding of the PIAM&V method in the ESS Rule?
* You must provide a sample M&V plan/report for a project related to one or more of the end-user equipment categories selected in Question 6 (as appropriate), and the corresponding M&V Professional Report completed by you. A template for the M&V Professional Report is available on the [ESS website](http://www.ess.nsw.gov.au/Methods_for_calculating_energy_savings/Project_Impact_Assessment_with_MV).
* The example M&V Professional Report(s) must demonstrate your ability to review a project against the requirements outlined in clause 7A of the ESS Rule and the PIAM&V Method Requirements, which are published on the [ESS website](https://www.ess.nsw.gov.au/Home/Document-Search/Notices/Notice-042020-Requirements-for-PIAMV-%E2%80%93-PIAMV-Method-Requirements-V1.0/ESS-Notice-042020-Requirements-for-PIAMV-PIAMV-Method-Requirements-V1.0).
* Attach an example M&V plan/report and the related M&V Professional Report for a project.

|  |  |
| --- | --- |
| File name – example M&V plan/report | Click here to enter text |
| File name – example M&V Professional Report | Click here to enter text |

References

1. Who are your referees?
* Provide details for Referee 1

|  |  |
| --- | --- |
| Referee 1 – Name  | Click here to enter text |
| Referee 1 – Organisation  | Click here to enter text |
| Referee 1 – Phone number | Click here to enter text |
| Referee 1 – Email address | Click here to enter text |

* Provide details for Referee 2

|  |  |
| --- | --- |
| Referee 2 – Name  | Click here to enter text |
| Referee 2 – Organisation  | Click here to enter text |
| Referee 2 – Phone number | Click here to enter text |
| Referee 2 – Email address | Click here to enter text |

* Attach two written references

|  |  |
| --- | --- |
| File name – reference 1 | Click here to enter text |
| File name – reference 2 | Click here to enter text |

Declaration

1. Sign the declaration for this application
* Section 158 of the Electricity Supply Act 1995 imposes a maximum penalty of $11,000 and/or six (6) months imprisonment for knowingly providing false or misleading information to the Scheme Administrator.
* This application must be signed by the applicant. The person signing the form must provide proof of their authority to sign.

I hereby declare that:

* I have completed this form.
* I have read and understood the information and requirements set out in the [*PIAM&V – Guide for M&V Professionals*](https://www.ess.nsw.gov.au/Auditors-Professionals/Measurement-and-Verification-Professionals/Apply-to-become-an-MV-Professional)*.*
* The information in this application, including any attachments, is complete, true and correct and not misleading by inclusion or omission.
* The example M&V Professional Report submitted by me is my own work.
* I am aware that there are penalties for providing false or misleading information to IPART as Scheme Administrator of the Energy Savings Scheme in this application and when operating as an M&V Professional.

**I hereby authorise IPART to:**

* Copy, record, use or disclose any of the information provided in this application for the purpose of assessing and making a decision on the application, auditing, compliance, and enforcement of laws, regulations and legislative rules, the performance of IPART’s statutory functions and for related purposes, subject to requirements of relevant laws.

Signed by the applicant:

|  |  |
| --- | --- |
| Signature of applicant: |  |
| Full name of signatory: |  |
| Position/title of signatory: |  |

In the presence of:

|  |  |
| --- | --- |
| Signature of witness: |  |
| Full name of witness: |  |
| Relationship to signatory: |  |

Date and place of signature:

|  |  |
| --- | --- |
| Date signed and witnessed: |  |
| Address of where this form was signed and witnessed: |  |

Application checklist

1. Have you completed the application form and supporting documentation?
* Check the box when you have completed the task beside it.

|  |  |
| --- | --- |
| [ ]  | Application - M&V Professional has been completed. |
| [ ]  | The attachments are complete and relevant to the application. |
| [ ]  | Quality assurance of the application forms and attachments has been completed.  |
| [ ]  | Declaration has been signed by an authorised signatory in the presence of a witness. |

* Check the box for the supporting documentation that is attached to the application.

|  |  |
| --- | --- |
| [ ]  | Processes or procedures to demonstrate independent opinion is provided (Question 4). |
| [ ]  | Processes or procedures to manage conflicts of interest (Question 5). |
| [ ]  | Supporting documentation for end-user equipment skills and experience (Question 7). |
| [ ]  | Supporting documentation for M&V skills and experience (Question 8). |
| [ ]  | Supporting documentation for regression analysis (Question 10). |
| [ ]  | Supporting documentation for estimate of the mean (Question 12). |
| [ ]  | Supporting documentation for computer simulation (Question 15). |
| [ ]  | Supporting documentation for sampling (Question 17). |
| [ ]  | Sample M&V plan/report plus M&V Professional Report (Question 18). |
| [ ]  | Written reference from referee 1 (Question 19). |
| [ ]  | Written reference from referee 2 (Question 19). |

1. *ESS Rule*, cl 7A.15(b): An application for approval as a Measurement and Verification Professional must be in the manner and form (if any) as determined and Published by the Scheme Administrator. [↑](#footnote-ref-1)
2. The CMVP program is run by the Association of Energy Engineers. Refer [www.aeecenter.org](https://www.aeecenter.org/) [↑](#footnote-ref-2)