HKAEE 香港能源工程師學會 Hong Kong Association of Energy Engineers

EVO Efficiency Valuation Organization

Introductory Course - Energy Efficiency Performance Measurement and Verification Analyst (PMVA)

Flyer for Introductory Webinar

IPMVP® INTERNATIONAL PERFORMANCE MEASUREMENT & VERIFICATION PROTOCOL

PMVA™ PERFORMANCE MEASUREMENT AND VERIFICATION ANALYST

Supporting Organizations:

HK IE THE HONG KONG INSTITUTION OF ENGINEERS 香港工程師學會 Building Services Division 屋宇設備分部

澳門工程師學會 ASSOCIAÇÃO DOS ENGENHEIROS DE MACAU THE MACAU INSTITUTION OF ENGINEERS

ASHRAE Hong Kong Chapter

HKGBC 香港綠色建築議會

BSOMES Building Services Operation and Maintenance Executives Society 屋宇設備運行及維修行政人員學會

機電工程署 EMSD

AEEMM 澳門機電工程師學會 Associação dos Engenheiros Electrotécnicos e Mecânicos de Macau The Macau Institution of Electrical and Mechanical Engineers

Introductory Webinar - Energy Efficiency Performance Measurement and Verification Analyst (PMVA)

Details of the Course	
Date	15th July, 2022; Friday
Time	6:00pm
Duration	1 hour
Format	Zoom Meeting
Language	English

Survey for PMVA Course 2022:
Please help to conduct the survey as linked by the below QR code: https://forms.gle/LtVSoXQmdsUcfu617

For Registration to this Introductory Webinar:
https://forms.gle/oaNTdJwALxAkyfkS6

Efficiency Valuation Organization (EVO)

A non-profit organization whose products and services assist people in engineering and investing in energy efficiency projects. EVO owns and manages the International Performance Measurement and Verification Protocol (IPMVP®), the globally recognized reference for reliably measuring and verifying savings of energy efficiency projects.

What is Measurement and Verification (M&V)?

The process of planning, measuring, collecting and analyzing data for the purpose of verifying and reporting energy savings within an individual facility resulting from the implementation of energy conservation measures (ECMs).

What is PMVA?

Performance Measurement and Verification Analyst (PMVA) professional certification establishes the primary standard for individuals applying performance, measurement, and verification concepts to energy efficiency projects.

Who needs PMVA?

PMVAs typically work in an Analyst role for ESCOs, public administration, utilities, financial institutions and are involved in the design and implementation of energy efficiency programs and the financing of energy efficiency projects. They have demonstrated M&V capabilities including good understanding of how to apply the IPMVP to determine savings. PMVAs could be building technologists, HVAC specialists, engineers, architects, economists, financial analysts, etc.

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TRAINING PROGRAMME OVERVIEW

CURRICULUM

- M&V (Measurement & Verification) Fundamentals and IPMVP (International Performance Measurement & Verification Protocol)

LEARNING OBJECTIVES

- Understand the fundamental principles of M&V for individual energy efficiency and water projects
- Understand relevant statistical concepts and how they apply to M&V
- Understand the IPMVP four Options and the essential elements/content of an M&V Plan
- Be able to provide professional advice to energy efficiency program developers, utilities, governments, financial institutions, and other parties interested in M&V.

CERTIFICATION

- All participants will receive a certificate of attendance
- Participants interested in receiving the *Performance Measurement and Verification Analyst (PMVA)* certification must take the certification examination

TARGET AUDIENCE

- Candidates who are seeking qualifications in M&V and Energy Management.

DURATION AND FEE

- 2.5 days + Examination; HKDxxxx

PMVA APPROVAL CRITERIA

- Take the M&V fundamentals and IPMVP course and pass the exam with a mark 70% or higher.

CERTIFICATION EXAM

- The exam consists of multiple-choice questions.
- Before taking exam, candidates have access to a series of knowledge-based questions on various M&V topics

FOR MORE INFORMATION

- Website of EVO
https://evo-world.org/en/
- PMVA Website & Leaflet
https://evo-world.org/en/products-services-mainmenu-en/ipmvp-certifications/performance-measurement-verification-analyst/pmva-2

COURSE OUTLINE

1. Introduction to M&V
2. Key Concepts
3. Short Examples
4. M&V Planning
5. Critical Issues
6. Statistics for M&V
7. Retrofit Isolation Details (Option A+B)
8. Option C Details
9. Option D Details
10. Other M&V Applications
11. Summary and Review of an M&V Plan

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