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# **Registration Record**

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### 1. OBJECTIVES

These Guides are developed by the Commission with the following objectives:

- (a) to specify the types of Registered Training Institution;
- (b) to give details on application to apply as Registered Training Institution;
- (c) to specify the requirements for Compliance Audit;
- (*d*) to give details on the renewal of application of Practising Certificate for Registered Training Institution; and
- (e) to give details on the cancellation of Registered Training Institution.

### 2. SCOPE

These Guides shall apply to any training institution who applies to become a Registered Training Institution under the Energy Efficiency and Conservation Act 2024 [*Act 861*].

## 3. INTERPRETATION

3.1. In these Guides, the following terms shall bear the following meanings:

"Act"	means the Energy Efficiency and Conservation Act 2024 [ <i>Act 861</i> ];
"Commission"	has the meaning assigned to it under the Energy Efficiency and Conservation Act 2024 [ <i>Act 861</i> ];
"CDP"	means Continuous Development Programs;
"REM"	means the registered energy manager;
"REM First Type"	means the first type registered energy manager;
"REM Second Type"	means the second type registered energy manager;
"RTI"	means the registered training institution.

3.2. Subject to paragraph 3.1 and unless expressly indicated to the contrary or unless the context otherwise requires, terms adopted and used in these Guides shall bear the same meaning as they are defined in the Act.

# 4. **REGISTRATION OF TRAINING INSTITUTION**

- 4.1 Pursuant to section 31 of the Act, a training institution shall register and holds a valid practising certificate issued under this Act for carrying or conducting any activity referred to in paragraphs 31(1)(*a*) and (*b*) of the Act.
- 4.2 RTI under the Act shall consists of two (2) types as follows:
  - (a) RTI to conduct training course for REM; and
  - (b) RTI to carry out CDP for REM.

#### 4.3 Registered training institution to conduct training course for registered energy manager

- 4.3.1 Requirement to become RTI to conduct a training course for REM are as follows:
  - (a) a company, limited liability partnership, firm, society, or other body of persons incorporated or established under any written law;
  - (b) fulfils other prerequisite requirements as may be determined by the Commission;
  - (c) has at least one (1) permanent/ contract staff to process training application including vetting the applicant qualification;
  - (*d*) has at least one (1) permanent/ contract staff for compliance audit by the Commission;
  - (e) own/ rent a registered office address;
  - *(f)* capability to own/ rent training place and equipment for the purposes of conducting training;
  - (g) own a complete syllabus/ training course as follows:

- (i) Appendix AA for the purpose of a registered training institution to conduct training course for REM First Type;
- (ii) Appendix BB for the purpose of registered training institution to conduct training course for REM Second Type;
- (h) has a pool of certified trainer where 80% must have valid REM certificate all time during each training session;
- (*i*) has established the management procedure as follows:
  - (i) procedure for organising training;
  - (ii) procedure for organising training;
  - (iii) procedure for result submission to the Commission;
  - (iv) procedure for fail and repeat training/asessment;
- (j) has established the examination committee;
- (k) has established the approval committee; and
- (*I*) has not been convicted of an offence involving fraud, dishonesty, or corruption.
- 4.3.2 Method to apply for RTI to Conduct Training Course for REM are as follows:

SUBMISSION	REVIEW	INTERVIEW	ISSUANCE
APPLICANT APPLICATION APPLICANT PAY PROCESSING FEE	NO SITE VISIT REVIEW BY COMMISSION REQUI		COMMISSION SENT APPROVA NOTICE APPLICANT PA ISSUANCE CERTIFICATE FE
	FAIL REVIEW	REVIEW BY COMMISSION FAIL SITE VISIT	CERTIFICATE

Figure 4-1 Application Process for RTI to Conduct Training Course for REM

PROCESS	DESCRIPTION
SUBMISSION	
Applicant submit application	<ol> <li>Applicant to submit to the Commission the following documents:         <ul> <li>(a) application form as per Appendix A; and</li> <li>(b) supporting document as follows:                 <ul> <li>(i) documents in relation to paragraph 4.3.1; and</li> <li>(ii) other additional supporting documents as may be required by the Commission.</li> </ul> </li> </ul> </li> </ol>
Applicant to pay the application fee	<ol> <li>Application fee for registration of training institution conducting a training course to be REM under subsection 33(2) of the Act amounting to RM200.00.</li> </ol>
REVIEW	
Review by Commission	3. Upon receiving the complete application together with the application fee, Commission shall start to review the application.
	4. During review, the Commission may decide that the submission is complete or incomplete.
	5. If the submission is incomplete, the Commission may request the applicant to furnish additional supporting documents within fourteen (14) days from the date of the notice. Failure to do so may result in the Commission declining the application without further notice and without affecting the right of the applicant to make a fresh application.

PROCESS	DESCRIPTION
	6. If the Commission decides that the applicant does not fulfill the requirement of the Act, the application shall be declined.
SITE VISIT	
Site visit session	7. The Commission may require a site visit to ascertain qualification by giving two weeks' notice to the applicant.
	8. The applicant is required to prepare the original supporting document during the site visit session with the Commission.
	<ol> <li>The site visit may consist of face-to-face interview with the Commission and site visit of facility and equipment of the training institution.</li> </ol>
Review by Commission	10. During the site visit, the Commission may pass or fail the site visit.
	11. If the Commission decides that the applicant does not fulfill the requirement of the Act, the application shall be declined.
ISSUANCE	
Commission send the approval notice	12. The Commission shall inform the applicant on the approval of the application together with the detail of fees required to be paid by the applicant as follows:
	<ul> <li>(a) issuance of certificate of registration of training institution conducting a training course to be REM under paragraph 33(3)(a) of the Act – RM2,000.00;</li> </ul>
	<ul> <li>(b) application for practising certificate of RTI conducting a training course to be REM under subsection 34(2) of the Act – RM200.00; and</li> </ul>
	(c) issuance of practising certificate of RTI conducting a training course to be REM under paragraph 34(3)(a) of the Act - RM2,000.00.
	13. The applicant is given fourteen (14) days from the date of the notice to pay all the fees above. Failure to do so may result in the application being rejected. There shall be no refund on any payment made by the applicant.
Certificate issued	14. Upon receiving the payment of fees, the Commission shall register the applicant and issue—
	<i>(a)</i> the Certificate of Registration as Training Institution to Conduct Training Course for REM as per Appendix 1.

PROCESS	DESCRIPTION
	(b) the Practising Certificate of RTI to Conduct Training Course for REM as per Appendix 2.
	<ul> <li>(c) The certificate shall contain:</li> <li>(i) terms and conditions to comply; and</li> <li>(ii) limitations on types of training that can be performed under the Act.</li> </ul>
	15. The practising certificate shall be valid within the period specified in the certificate.

### 4.4 Registered training institution to carry out CDP for REM

- 4.4.1 Requirements to become RTI to carry out CDP for the REM are as follows:
  - (a) a company, limited liability partnership, firm, society or other body of persons incorporated or established under any written law;
  - (b) fulfils other prerequisite requirements as may be determined by the Commission;
  - (c) has at least one (1) permanent/ contract staff for compliance audit by the Commission;
  - (d) own/ rent a registered office address;
  - (e) capability to own/ rent place and equipment to conduct training;
  - (f) own a complete syllabus/ training course for training course as per
     Appendix CC for the purpose of becoming the registered training institution to carry out CDP for REM;
  - (m) has established the management procedure as follows:
    - (i) procedure for organising training;
    - (ii) procedure for result submission to the Commission;

- (g) has a pool of certified trainer and for training related to the Act, the trainer must have valid REM certificate;
- (h) special requirement for e-learning, online class and conference, the training institution are required to have the capability to track and monitor participant attendance; and
- *(i)* has not been convicted of an offence involving fraud, dishonesty, or corruption.
- 4.4.2 Method to apply for RTI to carry out CDP for REM are as follow:

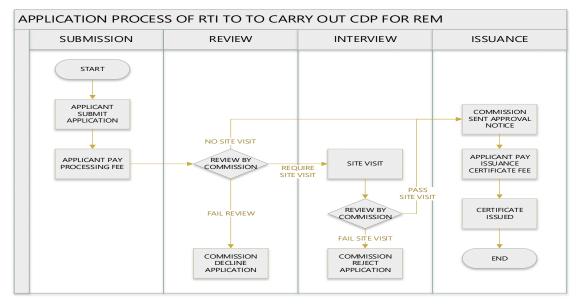


Figure 4-2 Application Process for RTI to Carry Out CDP for REM

PROCESS	DESCRIPTION
SUBMISSION	
Applicant submit application	<ol> <li>Applicant to submit to the Commission:         <ul> <li>(a) Application form as per Appendix B</li> <li>(b) Supporting document as follows:                 <ul> <li>(i) under paragraph 4.4.1</li> <li>(ii) other additional supporting documents as may be required by the Commission.</li> </ul> </li> </ul> </li> </ol>
Applicant pay application fee	2. Application fee for registration of training institution carrying out a CDP for a REM under subsection 33(2) of the Act amounting to RM100.00.

REVIEW	
Review by Commission	3. Upon receiving the complete application together with the application fee, the Commission shall review the application.
	4. During review, the Commission may decide whether the submission is complete or incomplete.
	5. If the submission is incomplete, the Commission may request the applicant to furnish additional supporting documents within fourteen (14) days from the date of the notice. Failure to do so may result in the Commission declining the application without further notice and without affecting the right of the applicant to make a fresh application.
	<ol> <li>If the Commission decides that the applicant does not fulfill the requirement of the Act, the application shall be declined.</li> </ol>
SITE VISIT	
Site Visit Session	<ol><li>The Commission may require a site visit to ascertain qualification by giving two weeks' notice to the applicant.</li></ol>
	8. The applicant is required to prepare the original supporting document during the site visit session with the Commission.
	9. The site visit may consist of face-to-face interview with the Commission or site visit of facility and equipment of the training institution.
Review by Commission	10. During site visit, the Commission may pass or fail the site visit.
	11. If the Commission decides that the applicant does not fulfill the requirement of the Act, the application shall be declined.
ISSUANCE	
Commission Sent Approval Notice	12. The Commission shall inform the applicant on the approval of the application together with the detail of fees required to be paid by the applicant as follows:
	<ul> <li>(a) Issuance of certificate of registration of training institution carrying out CDP for REM under paragraph 33(3)(a) of the Act – RM750.00</li> </ul>
	(b) Application for practising certificate of RTI carrying out a CDP for REM under subsection 34(2) of the Act – RM100.00
	<i>(c)</i> Issuance of practising certificate of RTI carrying out a CDP for REM under paragraph 34(3) <i>(a)</i> of the Act – RM750.00

	13. The applicant is given fourteen (14) days from the date of the notice to pay all the fees above. Failure to do so may result in the application being rejected. There shall be no refund on any payment made.
Certificate Issued	<ul> <li>14. Upon receiving the payment of fees, the Commission shall register the applicant and issue— <ul> <li>(a) the Certificate of Registration as Training Institution to Carry Out Continuous Development Programme for Registered Energy Manager as per Appendix 3;</li> <li>(b) the Practising Certificate of Registration as Training Institution to Carry Out Continuous Development Programme for Registered Energy Manager as per Appendix 4;</li> <li>(c) The certificate shall contain: <ul> <li>(i) terms and conditions to comply; and</li> <li>(ii) limitations on types of training that can be performed under the Act.</li> </ul> </li> </ul> </li> <li>15. The practising certificate shall be valid within the period specified in the certificate.</li> </ul>

- 4.5 Terms and conditions for RTI to comply are as follows:
  - (a) conduct training courses that are approved by the Commission only (list can be referred to on the practising certificate issued). For other training that is not approved by the Commission, RTI are not allowed to promote and conduct in relation to the Act. Failure to comply with shall result in immediate cancellation of the certificate issued;
  - (b) no changes to the training course once approved except receiving written approval from the Commission before conducting the training such as:
    - (i) change of trainer;
    - (ii) change of duration of training;
    - (iii) change of training agend; and
    - (iv) change of training syllabus or training notes.

- (c) providing unrestricted access by the Commission during training sessions;
- (d) to submit post training report after each training within one (1) week after training is completed;
- *(e)* providing information access related to training course approved under the Act for the Commission to conduct compliance audit;
- (f) to adhere and do corrective action to the finding during compliance audit (if any);
- (g) training institution to issue certificates of attendance and certificate of completion for each participant with a unique identification code;
- (h) keeping of records and register of training up to five (5) years; or
- *(i)* other additional terms and conditions that may be inform from time to time through by ST.
- 4.4 Any non-compliance to the terms and conditions referred to in paragraph 4.3 could cause for the Commission to refuse any renewal of practising certificate of registered training institution under section 35 of the Act or immediate cancellation of the certificate under section 36.

# 5. ADDITION OF TRAINING COURSES

- 5.1 RTI that has received certificate of registration as Training Institution to Conduct Training Course for Registered Energy Manager or Training Institution to Carry Out Continuous Development Programme for Registered Energy Manager may apply with the Commission to add additional training course with the terms and conditions as follows:
  - (a) RTI has been issued a certificate of registration as Training Institution to Conduct Training Course for Registered Energy Manager or certificate of registration as a Training Institution to Carry Out Continuous Development Programme for Registered Energy Manager;

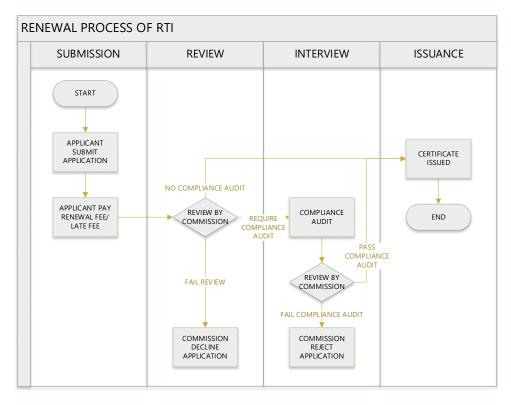
- (b) holds a valid practising certificate of Training Institution to Conduct Training Course for Registered Energy Manager or practising certificate of Training Institution to Carry Out Continuous Development Programme for Registered Energy Manager;
- (c) additional training course that shall be executed within the validity of RTI Practising Certificate.
- 5.2 Method to add for additional training course as follows:

PROCESS	DESCRIPTION
SUBMISSION	
Applicant submit application	<ol> <li>Applicant to submit to the Commission:</li> <li>(a) application form as per Appendix C</li> <li>(b) supporting documents as may be required.</li> </ol>
REVIEW	
Review by Commission	<ol> <li>The Commission shall review the application.</li> <li>During review, the Commission may decide that the submission is complete or incomplete.</li> <li>If the submission is incomplete, the Commission may request the applicant to furnish additional supporting documents within fourteen (14) days from the date of the notice. Failure to do so may result in the Commission declining the application without further notice and without affecting the right of the applicant to make a fresh application.</li> </ol>
SITE VISIT	<ol> <li>If the Commission decides that the applicant does not fulfill the requirement of the Act, the application shall be declined.</li> </ol>
Site visit session	6. The Commission may require a site visit to ascertain
	<ol> <li>The commission may require a site visit to ascertain qualification by giving two weeks' notice to the applicant.</li> <li>The applicant is required to prepare an original supporting document during the site visit session with the Commission.</li> <li>The site visit may consist of face-to-face interview with the Commission or site visit of facility and equipment of the training institution.</li> </ol>

Review by Commission	<ul><li>9. During site visit, the Commission may pass or fail the site visit.</li><li>10. If the Commission decides that the applicant does not fulfill the requirement of the Act, the application shall be declined.</li></ul>
ISSUANCE	
Certificate issue	<ul> <li>11. The Commission shall update the register and re-issue:</li> <li>(a) Practising Certificate of Registration as Training Institution as per Appendix 2 or 4.</li> <li>(b) the certificate may contain: <ul> <li>(i) update the terms and conditions to comply (if any); or</li> <li>(ii) update the limitations on types of training that can be performed under the Act.</li> </ul> </li> <li>12. There will be no changes to the validity of the practising certificate.</li> </ul>

# 6. RENEWAL OF PRACTISING CERTIFICATE

Method for renewal practising certificate is as follow:



#### Figure 0-1 Renewal Process of RTI Practising Certificate

PROCESS	DESCRIPTION
SUBMISSION	
Applicant Submit	1. Applicant to submit to the Commission:
Application	<ul><li>(a) Application form as per Appendix D; and</li><li>(b) supporting documents as may be required.</li></ul>
Applicant Pay Renewal	2. Renewal fee for RTI to conduct training course for REM
Fee/ Late Fee	(a) Application to renew the practising certificate of RTI conducting a training course to be REM under subsection 35(3) of the Act – RM200.00
	3. Renewal fee for RTI to carry out CDP for REM
	<ul> <li>(a) Application for registration of training institution carrying out a CDP for REM under subsection 33(2) of the Act – RM200.00</li> </ul>
REVIEW	
Review by Commission	4. The Commission shall review the application.
	5. During review, the Commission may decide that the submission is complete or incomplete.
	6. If the submission is incomplete, the Commission may request the applicant to furnish additional supporting documents within fourteen (14) days from the date of the notice. Failure to do so may result in the Commission declining the application without further notice and without affecting the right of the applicant to make a fresh application.
	7. If the Commission decides that the applicant does not fulfill the requirement of the Act, the application shall be declined.
COMPLIANCE AUDIT	
Compliance Audit	8. The Commission may require a compliance audit to be done to ascertain compliance to the terms and conditions set out by the Commission in paragraph 4.3 and for improvement of the training course.
	9. The applicant is required to prepare an original supporting document during compliance session with the Commission and provide access to the relevant document.
Review by Commission	10. During site visit, the Commission may:
	(a) pass the compliance audit;

PROCESS	DESCRIPTION
	<ul><li>(b) issue improvement notice of the training; or</li><li>(c) fail the compliance audit.</li></ul>
	11. If the RTI receives improvement notice from the Commission, the RTI is required to comply with the improvement notice set out by the Commission.
	12. While awaiting a response from training institution for the finding in compliance audit, the renewal process will be put on hold and no training can be done under the Act.
	13. Upon reviewing the action taken by the RTI, the Commission may pass or fail the compliance audit.
	14. If the Commission decides that the applicant does not fulfill the requirement of the Act, the renewal application of practising certificate shall be declined.
ISSUANCE	
Commission Sent Approval Notice	15. The Commission shall inform the applicant on the approval together with the detail of fees required to be paid by the applicant as follows:
	16. Renewal fee for RTI to Conduct Training Course for REM
	(a) Application made before expiry: Renewal of practising certificate of RTI conducting a training course to be REM under paragraph 35(4)(a) of the Act – RM2,000.00; and
	(b) Application made after expiry: To pay late fee for renewal of practising certificate of RTI conducting a training course to be REM under subsection 35(2) of the Act – RM2,000.00.
	17. Renewal fee for RTI to carry out CDP for REM
	<ul> <li>(a) Application made before expiry: Renewal of practising certificate of RTI carrying out CDP for REM under paragraph 35(4)(a) of the Act – RM750.00; and if</li> </ul>
	(b) Application made after expiry: To pay late fee for renewal of certificate of RTI carrying out CDP for REM under subsection 35(2) of the Act – RM750.00.
	18. The applicant is given fourteen (14) days from the date of the notice to pay all the fees above. Failure to do so may result in the application not being further proceeded with. There shall be no refund on any partial payment made.
Certificate Issued	<ol> <li>Upon approving the renewal application, the Commission shall update in the Register and re-issue:</li> </ol>

PROCESS	DESCRIPTION		
	(a) Practising Certificate of Registration as Train Institution as per Appendix 2 or 4 as per approv duration of minimum one (1) year and maximum of th (3) years.		
	(b) The certificate may contain:		
	<ul> <li>(i) updated the terms and conditions to comply (if any).</li> <li>(ii) updated the limitations on types of training that can be performed under the Act.</li> </ul>		

# 7. CANCELLATION OF CERTIFICATE OF REGISTRATION

- 7.1 Cancellation of the certificate of registration of RTI may be made by the Commission due to reasons as follows:
  - (a) has contravened any provision of this Act;
  - (b) has ceased to carry on the business in respect of which it is registered under this Act;
  - (c) has misused or cause to be misused the certificate of registration;
  - (d) has altered the certificate of registration;
  - (e) has obtained the certificate of registration by making or causing to be made, or by producing or causing to be produced, a false or fraudulent declaration, certificate, application, representation or information, either in writing or otherwise; or
  - (f) has been convicted of an offence involving fraud, dishonesty or corruption.

7.2 Method for the Commission to cancel the certificate of registration of RTI are as follows:

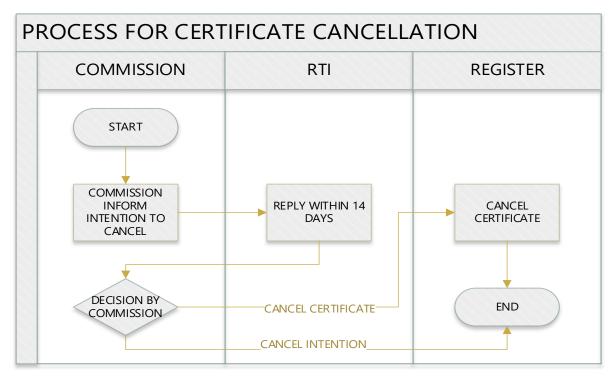


Figure 7-1 Process of Certificate Cancellation

PROCESS	DESCRIPTION		
Commission Inform Intention to Cancel Certificate	1. If there is a requirement under the Act that requires the Commission to cancel the certificate, the Commission shall inform the RTI the intention to cancel the certificate.		
RTI Reply Within 14 Days	RTI that receives the notice are given 14 days to respond and submit the appeal to the Commission. If no response is received, the Commission would consider the RTI has agreed with the Commission's intention.		
Decision by Commission	<ol> <li>The Commission shall review the reply letter and decide accordingly.</li> <li>If the Commission decides to continue with the intention, the Commission shall remove the name from the register and send a cancellation notice.</li> <li>If the Commission decides to cancel the intention, the Commission shall inform the decision to the RTI accordingly.</li> </ol>		

#### 8. APPENDIX

**Appendix A** – Application Form for Registered Training Institution to Conduct Training Course for Registered Energy Manager

**Appendix B** – Application Form for Registered Training Institution to Carry Out Continuous Development Programme for Registered Energy Manager

Appendix C – Application for Addition of Training Course

Appendix D – Renewal Application Form for Registered Training Institution

**Appendix AA** – List of Syllabus for Registered Training Institution to Conduct Training Course for Registered Energy Manager Type 1

**Appendix BB** – List of Syllabus for Registered Training Institution to Conduct Training Course for Registered Energy Manager Type 2

**Appendix CC** – List of Syllabus for Registered Training Institution to Carry Out Continuous Development Programme for Registered Energy Manager

**Appendix 1** – RTI to Conduct Training Course for Registered Energy Manager Certificate of Registration

**Appendix 2** – RTI to Conduct Training Course for Registered Energy Manager Practising Certificate

**Appendix 3** – RTI to Carry Out Continuous Development Programme for Registered Energy Manager Certificate of Registration

**Appendix 4** – RTI to Carry Out Continuous Development Programme for Registered Energy Manager Practising Certificate Appendix A – Application Form for Registered Training Institution to Conduct Training Course for Registered Energy Manager

Application to be Registered Training Institution to Conduct Training Course for Registered Energy Manager can be made through ST Integrated Regulatory Information System (iRIST) at <u>www.irist.st.gov.my</u>.

Appendix B – Application Form for Registered Training Institution to Carry Out Continuous Development Programme for Registered Energy Manager

Application to be Registered Training Institution to Carry Out Continuous Development Programme for Registered Energy Manager can be made through ST Integrated Regulatory Information System (iRIST) at <u>www.irist.st.gov.my</u> Appendix C – Application for Addition of Training Course

Application to add Additional Training Course can be made through ST Integrated Regulatory Information System (iRIST) at <u>www.irist.st.gov.my</u> Renewal application to be Registered Training Institution to Carry Out Continuous Development Programme for Registered Energy Manager can be made through ST Integrated Regulatory Information System (iRIST) at <u>www.irist.st.gov.my</u>

# Appendix AA – List of Syllabus for Registered Training Institution to Conduct Training Course for Registered Energy Manager Type 1

Any training institution seeking a registration to conduct training courses for Registered Energy Manager Type 1 must ensure full compliance which includes possessing a comprehensive syllabus, training course materials, and relevant documentation before submitting their application to the Commission.

The following list of topics is mandatory and must be included by all training institutions. Additionally, the Commission reserves the right to update the syllabus periodically. When such updates occur, both new applicants and currently registered training institutions must adhere to the revised requirements.

NO.	TOPICS	PROPOSED DURATION (HOUR)	
1.	Overview of Energy Scenario and The Governance		
	of Energy Sector in Malaysia		
	•World Energy Scenario	2	
	•Malaysia Energy Scenario		
	•Energy Policies in Malaysia		
	<ul> <li>Key Energy Efficiency Programs in Malaysia</li> </ul>		
2.	Legislation In Malaysia		
	•Energy Commission Act 2001		
	<ul> <li>Energy Efficiency and Conservation Act (EECA)</li> </ul>		
	-EEC Regulation	8	
	-Guide and Guideline under EECA		
	•Electricity Supply Act 1990 (ESA)		
	-Electricity Regulation 1994		
3.	Fundamentals As Energy Manager (Safety)		
	<ul> <li>Safety requirement under the Act</li> </ul>	2	
	<ul> <li>Types of competent person</li> </ul>	2	
	<ul> <li>Competent person vs energy manager</li> </ul>		
4.	Fundamentals As Energy Manager (Technical)		
	•Overview of energy		
	•Electricity Generation, Transmission, Distribution	2	
	and Classification	2	
	<ul> <li>Energy unit conversion factors</li> </ul>		

NO.	. TOPICS PROPOSED		
		DURATION (HOUR)	
5.	<ul> <li>Fundamentals As Energy Manager (Financial)</li> <li>Introduction on MESI (IBR, ICPT)</li> <li>Structure of Energy Pricing</li> <li>Calculation of energy saving</li> </ul>	2	
	•Common financial analysis for energy efficiency projects		
6.	<ul> <li>Energy Management System (EnMS)</li> <li>Type of Energy Management System (EnMS)</li> <li>Introduction to energy management and key definitions</li> <li>Best practices and standards related to energy management</li> <li>Overview of Energy Management System (EnMS) concept (PDCA cycle) and its key elements</li> <li>Establishment of suitable energy performance indicators and energy baselines for energy performance measurements</li> </ul>	6	
7.	Energy Audit (as per ST Guideline) •Definition and types of energy audit •Steps for energy audit •Energy audit measurement •Concept of Measurement & Verification	3	
8.	Common Energy Saving Measure I •ESM for Lighting System •ESM for Compressed Air System	4	
9.	Common Energy Saving Measure II •ESM for Air Conditioning System •ESM for Motors, Pumps and Fans	3	
10.	Assessment <ul> <li>Theoretical Test</li> <li>Individual Project Presentation</li> </ul>	8	
	TOTAL	40	

# Appendix BB – List of Syllabus for Registered Training Institution to Conduct Training Course for Registered Energy Manager Type 2

Any training institution seeking a registration to conduct training courses for Registered Energy Manager Type 2 must ensure full compliance which includes possessing a comprehensive syllabus, training course materials, and relevant documentation before submitting their application to the Commission.

The following list of topics is mandatory and must be included by all training institutions. Additionally, the Commission reserves the right to update the syllabus periodically. When such updates occur, both new applicants and currently registered training institutions must adhere to the revised requirements.

NO.	TOPICS	PROPOSED DURATION (HOUR)
1.	<ul> <li>Revision on Overview of Energy Scenario and The</li> <li>Governance of Energy Sector in Malaysia</li> <li>World Energy Scenario</li> <li>Malaysia Energy Scenario</li> <li>Energy Policies in Malaysia</li> <li>Key Energy Efficiency Programs in Malaysia</li> </ul>	1
2.	Revision on Legislation In Malaysia •Energy Commission Act 2001 •Energy Efficiency and Conservation Act (EECA) -EEC Regulation -Guide and Guideline under EECA •Electricity Supply Act 1990 (ESA) -Electricity Regulation 1994	4
3.	<ul> <li>Revision on Fundamentals As Energy Manager (Safety)</li> <li>Safety requirement under the Act</li> <li>Types of competent person</li> <li>Competent person vs energy manager</li> </ul>	1
4.	<ul> <li>Revision on Fundamentals As Energy Manager (Technical)</li> <li>Overview of energy</li> <li>Electricity Generation, Transmission, Distribution and Classification</li> </ul>	1

NO.	TOPICS	PROPOSED
NO.		DURATION (HOUR)
	•Energy unit conversion factors	
5.	Revision on Fundamentals As Energy Manager	
	(Financial)	
	<ul> <li>Introduction on MESI (IBR, ICPT)</li> </ul>	
	Structure of Energy Pricing	1
	<ul> <li>Calculation of energy saving</li> </ul>	
	•Common financial analysis for energy efficiency	
	projects	
6.	Overview Of Thermal Energy Systems	1
7.	Key Principles And Concepts In Thermal Energy	
	System Applications	3
	•Concept of Heat & Energy	0
	•Energy Conversion	
8.	Common Energy Saving Measure III	
	•Fuel And Combustion (Furnace)	
	<ul> <li>Boilers and Steam Distribution Systems</li> </ul>	
	•Thermal Oil Heaters	16
	Insulation	
	•Waste Heat Recovery	
	•Co-Generation	
9.	Thermal Energy Audit	
	<ul> <li>Energy Performance Indicator And Reporting</li> </ul>	4
	Measurement & Verification	
10.	Assessment	
	•Theoretical Test	8
	<ul> <li>Individual Project Presentation</li> </ul>	
	TOTAL	40

# Appendix CC – List of Syllabus for Registered Training Institution to Carry Out Continuous Development Programme for Registered Energy Manager

Any training institution seeking a registration to conduct Continuous Development Programmes for Registered Energy Managers must ensure full compliance which includes possessing a comprehensive syllabus, training course materials, and relevant documentation before submitting their application to the Commission.

Training institution wishing to apply for the topic must ensure that they own the syllabus. Additionally, the Commission reserves the right to update the syllabus periodically. When such updates occur, both new applicants and currently registered training institutions must adhere to the revised requirements.

NO.	TOPICS	MANDATORY TOPIC FOR REM FIRST TYPE	MANDATORY TOPIC FOR REM SECOND TYPE	OPTIONAL CDP TOPIC*	
1.0 G	1.0 GENERAL				
1.1	Energy Efficiency Activities in Malaysia			$\checkmark$	
1.2	Energy Efficiency Standards and Labelling			$\checkmark$	
1.2	Energy Policy and Legislation			$\checkmark$	
1.3	Energy Pricing and Electricity Bills			$\checkmark$	
1.4	Energy Scenario			$\checkmark$	
1.5	Guides and Guideline under Energy Efficiency and Conservation Act. ( <i>Select one guideline and elaborate</i> )	✓ Minimum 8 hours	✓ Minimum 8 hours	√*	
1.6	Incentives for Energy Management/ Energy Efficiency			$\checkmark$	
1.7	Registration of REM, REA and Training Institution			$\checkmark$	

NO.	TOPICS	MANDATORY TOPIC FOR	MANDATORY TOPIC FOR	OPTIONAL CDP
NO.		REM FIRST TYPE	REM SECOND TYPE	TOPIC*
2.0 N	IANAGEMENT			
2.1	Effective Energy Efficiency Project Proposal and Presentation		✓ Minimum 8 hours	√*
2.2	Thermal Energy Reporting and Analysis		✓ Minimum 4 hours	√*
2.3	Energy Performance Contracting (EPC)			$\checkmark$
2.4	Financial Analysis for Energy Efficiency Projects	✓ Minimum 8 hours		√*
2.5	Internal rate of return			$\checkmark$
2.6	Safe Work Procedure			$\checkmark$
2.7	Setting up Energy Management Gold Standard (EMGS); OR	√**		<b>√</b> *
2.8	Setting up ISO 50001:2018	Minimum 16 hours		
2.9	Stop Work Order			$\checkmark$
2.10	GHG Reporting			$\checkmark$
2.11	Monitoring part			$\checkmark$

NO.	TOPICS	MANDATORY TOPIC FOR REM FIRST TYPE	MANDATORY TOPIC FOR REM SECOND TYPE	OPTIONAL CDP TOPIC*		
3.0 T	3.0 TECHNICAL ENGINEERING					
3.1	Detailed Energy Audit for Electrical and Mechanical System	✓ Minimum 16 hours		√*		
3.2	Detailed Energy Audit for Thermal System		✓ Minimum 16 hours	√*		
3.3	Electrical Loads and Maximum Demand			$\checkmark$		
3.4	Electrical, mechanical formula/calculation			$\checkmark$		
3.5	Energy audit reporting under the Act	✓ Minimum 8 hours		√*		
3.6	Energy Performance Monitoring and Targeting		✓ Minimum 4 hours	√*		
3.7	Fundamentals of Architecture			$\checkmark$		
3.8	Fundamentals of Electrical System			$\checkmark$		
3.9	Fundamentals of Mechanical System			$\checkmark$		
3.10	Green Technology			$\checkmark$		
3.11	Measurement and Verification		✓ Minimum 8 hours	√*		
3.12	Heat Recovery Optimization		✓ Minimum 8 hours	√*		

NO.	TOPICS	MANDATORY TOPIC FOR REM FIRST TYPE	MANDATORY TOPIC FOR REM SECOND TYPE	OPTIONAL CDP TOPIC*
3.13	Establishing Baseline Energy and Regression analysis	✓ Minimum 8 hours		√*
4.0 F	UNDAMENTALS, APPLICATION AND ENERGY SAV	/ING MEASURE OF A SYSTEI	M	
4.1	Air Conditioning System			
4.2	Power Distribution System	$\checkmark$		
4.3	Fans and Blowers	Minimum 16 hours		
4.4	Motor and Drives	*choose 1		
4.5	Pumps And Cooling Tower			√*
4.6	Steam Systems		$\checkmark$	
4.7	Chiller		·	
4.8	Heat Transfer		Minimum 8 hours	
4.9	Energy Storage (REM Second Type)		*choose 3	
	TOTAL	80 hours of training/ 10 days for CDP exemption	80 hours of training/ 10 days for CDP exemption	Unlimited for REM Renewal

\*Notes:

a) Registered Energy Managers (REM) may be exempted from submitting Continuous Development Programme (CDP) documentation for renewal of their practising certificate if they have completed the mandatory CDP syllabus as indicated above.

b) If the training course provided by a Registered Training Institution (RTI) falls below the required minimum hours specified, it will automatically be classified as an optional CDP. While REMs can use this for practising certificate renewal, it will not count towards the completion of mandatory topics.

c) The symbol  $\checkmark^*$  denotes that the topic will be classified as optional CDP if the training duration is below the specified hours.

d) The symbol  $\checkmark^{**}$  indicates that one of the listed topics must be selected.

Appendix 1 – RTI to Conduct Training Course for Registered Energy Manager Certificate of Registration

AKTA KECEKAPAN DAN KONSERVASI TENAGA 2024 [PERENGGAN 33.(3)*(a)*]



# PERAKUAN PENDAFTARAN SEBAGAI INSTITUSI LATIHAN BERDAFTAR UNTUK MENGENDALIKAN KURSUS LATIHAN UNTUK MENJADI PENGURUS TENAGA BERDAFTAR

INI ADALAH UNTUK MEMPERAKUI BAHAWA

NAMA : ALAMAT : NO. PENDAFTARAN :

Telah memenuhi kehendak dan keperluan dibawah Seksyen 32 Akta Kecekapan dan Konservasi Tenaga 2024 untuk didaftarkan sebagai Institusi Latihan Berdaftar tertakluk kepada syarat-syarat yang telah dinyatakan dibawah:

- (a) tarikh mula pendaftaran
- (b) mempunyai Perakuan Amalan Sebagai Institusi Latihan Berdaftar Untuk Mengendalikan Kursus Latihan Untuk Menjadi Pengurus Tenaga Berdaftar yang sah dibawah Akta Kecekapan dan Konservasi Tenaga 2024;



SURUHANJAYA TENAGA

Appendix 2 – RTI to Conduct Training Course for Registered Energy Manager Practicing Certificate

AKTA KECEKAPAN DAN KONSERVASI TENAGA 2024 [PERENGGAN 34.(3)(a), 35.(4)(a)]



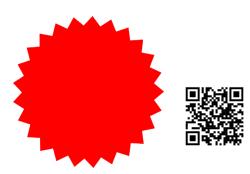
# PERAKUAN AMALAN SEBAGAI INSTITUSI LATIHAN BERDAFTAR UNTUK MENGENDALIKAN KURSUS LATIHAN UNTUK MENJADI PENGURUS TENAGA BERDAFTAR

INI ADALAH UNTUK MEMPERAKUI BAHAWA

NAMA	:
ALAMAT	:
NO. PENDAFTARAN	:

Telah memenuhi kehendak dan keperluan dibawah Seksyen 34 atau Seksyen 35 Akta Kecekapan dan Konservasi Tenaga 2024 untuk diluluskan pengeluaran Perakuan Amalan Institusi Latihan Berdaftar Untuk Mengendalikan Kursus Latihan Untuk Menjadi Pengurus Tenaga Berdaftar tertakluk kepada syarat-syarat yang telah dinyatakan di bawah:

- (a) tarikh mula perakuan :
- (b) tarikh tamat perakuan:
- (c) mempunyai Perakuan Pendaftaran Sebagai Institusi Latihan Berdaftar Untuk Mengendalikan Kursus Latihan Untuk Menjadi Pengurus Tenaga Berdaftar yang sah dibawah Akta Kecekapan dan Konservasi Tenaga 2024;
- (d) Bagi tujuan Pembaharuan Perakuan Amalan, mematuhi terma dan syarat dan had jenis latihan yang dibenarkan untuk dijalankan dibawah Akta Kecekapan dan Konservasi Tenaga 2024.



SURUHANJAYA TENAGA

### 1. TERMA DAN SYARAT SEMASA MENJADI INSTITUSI LATIHAN BERDAFTAR UNTUK MENGENDALIKAN KURSUS LATIHAN UNTUK MENJADI PENGURUS TENAGA BERDAFTAR

(a) Terma dan syarat bergantung kepada kelulusan yang diberikan oleh Suruhanjaya.

#### 2. SENARAI KURSUS LATIHAN YANG DILULUSKAN UNTUK INSTITUSI LATIHAN BERDAFTAR MENGENDALIKAN KURSUS LATIHAN UNTUK MENJADI PENGURUS TENAGA BERDAFTAR

BIL.	KOD	TAJUK	TARIKH MULA
1.		Kursus Latihan Untuk Menjadi Pengurus	
		Tenaga Berdaftar Jenis Pertama	
2.		Kursus Latihan Untuk Menjadi Pengurus	
2.		Tenaga Berdaftar Jenis Kedua	

Appendix 3 – RTI to Carry Out Continuous Development Programme for Registered Energy Manager Certificate of Registration

> AKTA KECEKAPAN DAN KONSERVASI TENAGA 2024 [SEKSYEN 33.(3)(a)]



# PERAKUAN PENDAFTARAN SEBAGAI INSTITUSI LATIHAN BERDAFTAR UNTUK MENJALANKAN PROGRAM PEMBANGUNAN BERTERUSAN BAGI PENGURUS TENAGA BERDAFTAR

INI ADALAH UNTUK MEMPERAKUI BAHAWA

NAMA	:
ALAMAT	:
NO. PENDAFTARAN	:

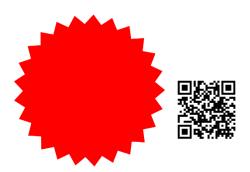
Telah memenuhi kehendak dan keperluan dibawah Seksyen 32 Akta Kecekapan dan Konservasi Tenaga 2024 untuk didaftarkan sebagai Institusi Latihan Berdaftar tertakluk kepada syarat-syarat yang telah dinyatakan dibawah:

I. Tarikh mula pendaftaran :

:

II. Mempunyai Perakuan Amalan Sebagai Institusi Latihan Berdaftar Untuk Menjalankan Program Pembangunan Berterusan Bagi Pengurus Tenaga Berdaftar yang sah dibawah Akta Kecekapan dan Konservasi Tenaga 2024;

Tarikh dikeluarkan



SURUHANJAYA TENAGA

Appendix 4 – RTI to Carry Out Continuous Development Programme for Registered Energy Manager Practicing Certificate

> AKTA KECEKAPAN DAN KONSERVASI TENAGA 2024 [SEKSYEN 34.(3)(a), 35.(4)(a)]



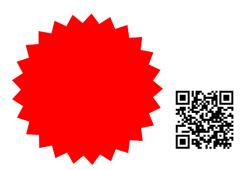
# PERAKUAN AMALAN SEBAGAI INSTITUSI LATIHAN BERDAFTAR UNTUK MENJALANKAN PROGRAM PEMBANGUNAN BERTERUSAN BAGI PENGURUS TENAGA BERDAFTAR

INI ADALAH UNTUK MEMPERAKUI BAHAWA

NAMA : ALAMAT : NO. PENDAFTARAN :

Telah memenuhi kehendak dan keperluan dibawah Seksyen 34 atau Seksyen 35 Akta Kecekapan dan Konservasi Tenaga 2024 untuk diluluskan pengeluaran Perakuan Amalan Sebagai Institusi Latihan Berdaftar Untuk Menjalankan Program Pembangunan Berterusan Bagi Pengurus Tenaga Berdaftar tertakluk kepada syarat-syarat yang telah dinyatakan dibawah:

- I. Tarikh Mula Perakuan:
- II. Tarikh Tamat Perakuan
- III. Mempunyai Perakuan Pendaftaran Sebagai Institusi Latihan Berdaftar Untuk Menjalankan Program Pembangunan Berterusan Bagi Pengurus Tenaga Berdaftar yang sah dibawah Akta Kecekapan dan Konservasi Tenaga 2024;
- IV. Bagi tujuan Pembaharuan Perakuan Amalan, mematuhi terma dan syarat dan had jenis latihan yang dibenarkan untuk dijalankan dibawah Akta Kecekapan dan Konservasi Tenaga 2023.



SURUHANJAYA TENAGA

### 1. TERMA DAN SYARAT SEMASA MENJADI INSTITUSI LATIHAN BERDAFTAR UNTUK MENJALANKAN PROGRAM PEMBANGUNAN BERTERUSAN BAGI PENGURUS TENAGA BERDAFTAR

(a) Terma dan syarat bergantung kepada kelulusan yang diberikan oleh Suruhanjaya.

## 2. SENARAI KURSUS LATIHAN YANG DILULUSKAN UNTUK INSTITUSI LATIHAN BERDAFTAR MENJALANKAN PROGRAM PEMBANGUNAN BERTERUSAN BAGI PENGURUS TENAGA BERDAFTAR

BIL.	KOD	KATEGORI	SUB- KATEGORI	JAM	TAJUK	TARIKH MULA
1.	XXXXXX	WAJIB	Pengurusan	16		
2.	уууууу	PILIHAN	ESM	4		