



ENERGY AUDIT CONDITIONAL GRANT RMK-12 FOR INDUSTRIAL AND COMMERCIAL SECTOR (GENERAL INFORMATION)

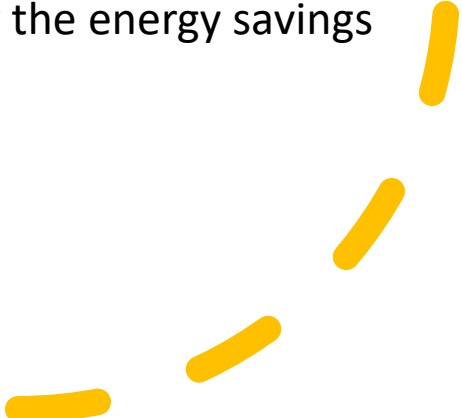


INTRODUCTION

RMK 12 Energy Audit Conditional Grant Project;

- ❖ Embarked under the RMK12 Energy Efficiency Projects (2021 – 2025).
- ❖ In general, the project component consists of ;
 - **Energy Auditing** (2 months)
 - **Implementation of the Energy Saving** Measures, including Monitoring & Reporting (3 years).
 - **Capacity building & trainings.**

Energy audit is a systematic process to understand how and where the energy being used, to explore on how to manage it and identify the energy savings potential.



INTRODUCTION

- **RMK 12 Energy Audit Conditional Grant Project;**
- ❖ Implementation of project;
 - Executing Ministry : Ministry of Energy and Natural Resources(KeTSA).
 - Secretariat : Energy Commission
 - Implementing agencies : SEDA Malaysia.

OBJECTIVES

- ❖ To provide awareness the importance of implementing energy audits as part of
 - energy efficiency and conservation exercise.
- ❖ To provide financing assistance to the eligible applicants through grant, as a catalyst for the implementation of energy audit, in order to identify the current energy consumption pattern, setting the Baseline and identify the energy savings potential.
- ❖ To provide a platform and facilitation for the implementation of energy saving measures based on the energy audit report outcome.
- ❖ To ensure electrical energy saving achieved through the implementation of the energy saving measures proposed in the energy auditor report.
- ❖ Development of capacity building in industry to meet the demand of energy audit activity in the commercial sector / industry.

WHO ARE ELIGIBLE TO APPLY

❖ Any existing installation (commercial & industrial sector).

- Any installation (industrial and commercial) which receives electrical energy from a licensee or supply authority with a total electrical energy consumption equal to or exceeding 3,000,000 kWh as measured at one metering point or more over any period not exceeding six consecutive months;
- Any installation which is used, worked or operated by a private installation licensee with a total net electrical energy generation equal to or exceeding 3,000,000 kWh over any period not exceeding six consecutive months;
- For Sarawak state, the applicants must submit the latest electricity bill (SESB) for 6 consecutive months whereby the total 6 months consumption shall be equal or higher than 3,000,000 kWh.
- Installation listed under the Efficient Management of Electrical Energy Regulation 2008 (EMEER) by Energy Commission, are eligible to apply (excluding Sarawak);
- Applicant shall appoint or designate a Registered Electrical Energy Manager (REEM) to carry out the functions and duties (excluding Sarawak);

THE CONDITIONS OF THE ENERGY AUDIT GRANT

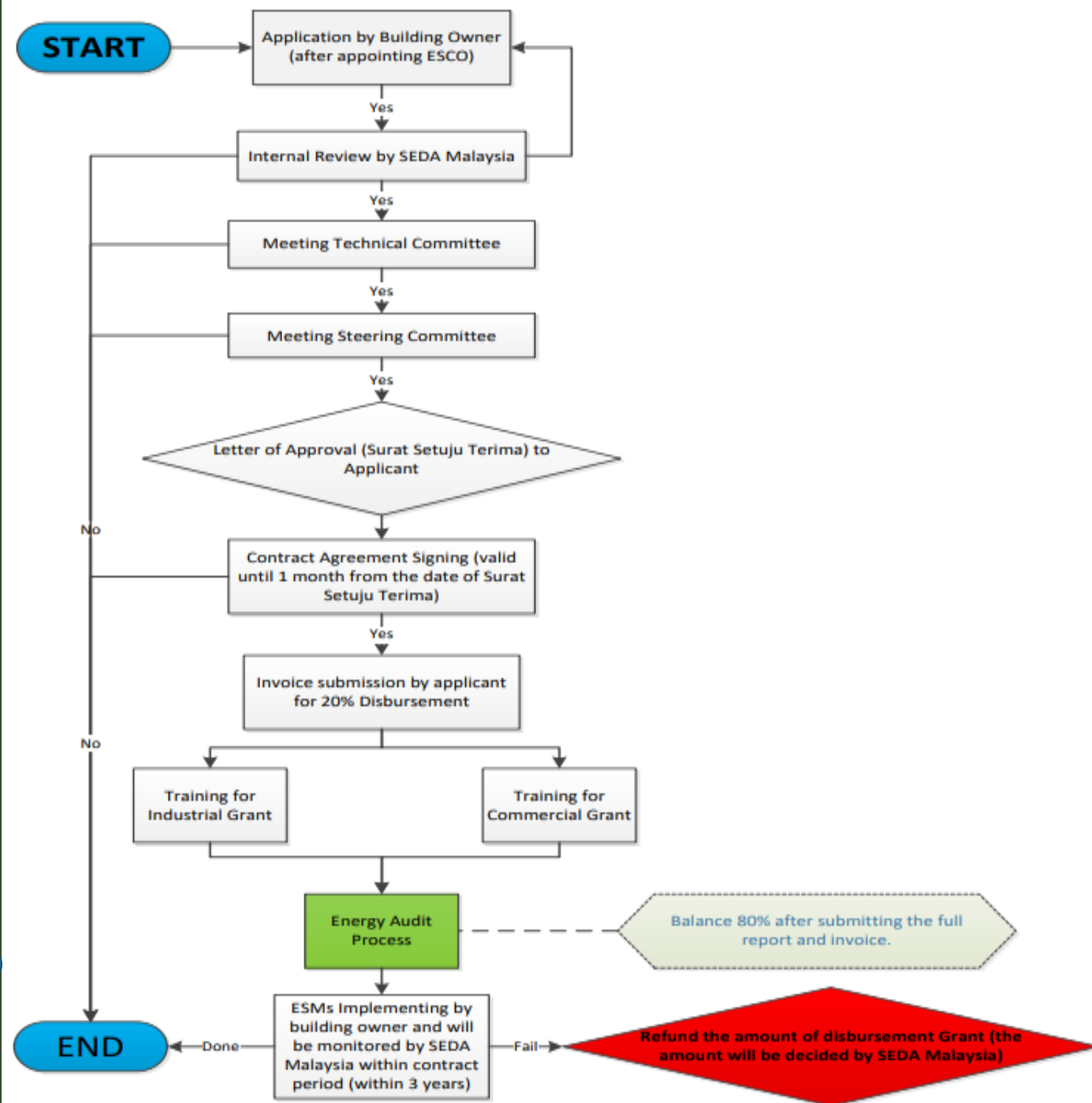
- 1) The energy audit shall be **conducted by the Energy Service Company (ESCO)** registered with Energy Commission / relevant authorities (for buildings in Sarawak).
- 2) The energy audit exercise must be **completed within 2 months** starting from the date of contract signing (date of stamping) with SEDAMalaysia.
- 3) **To implement energy saving measures.**
 - The cost of implementation is equal, or more than the amount of energy audit grant received.
- 4) The implementation of the energy saving measures are;
 - **according to energy audit report**, and
 - shall be **within 3 years** after the energy audit completed.

❖ However, for the benefit of the applicant, the No Cost Energy Saving Measures should be implemented immediately

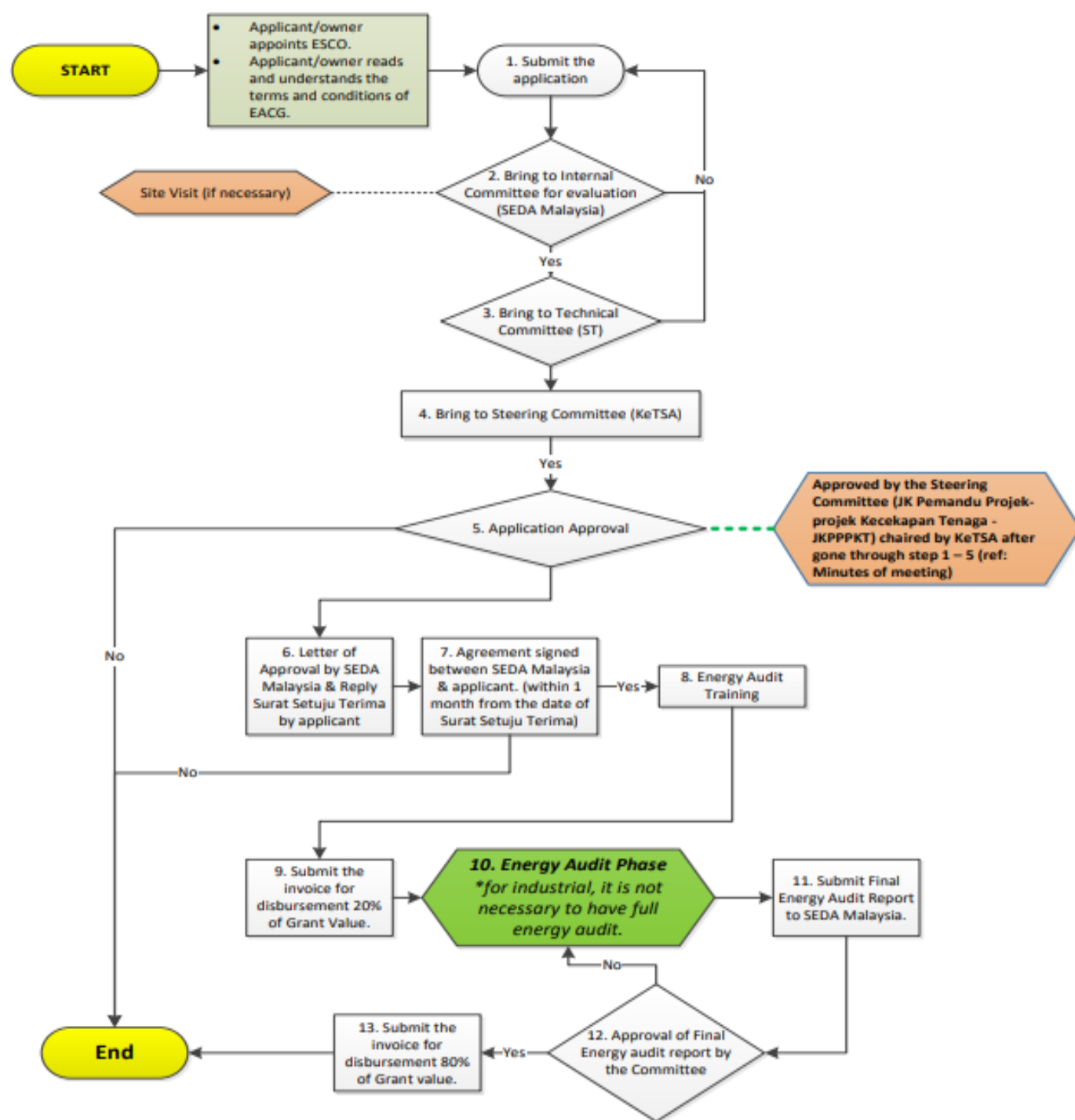
THE CONDITION OF THE ENERGY AUDIT GRANT

No	Recommended ESMs in the Energy Audit Report	Minimum energy saving to achieve in percentage		Period of implementation
		Commercial	Industrial	
1	No Cost Energy Saving Measures	5%	3%	1 st year
2	Low Cost Energy Saving Measures	7%	3%	2 nd Year
3	Medium/High Cost Energy Saving Measures	8%	4%	3 rd Year
TOTAL MINIMUM ENERGY SAVING		20%	10%	

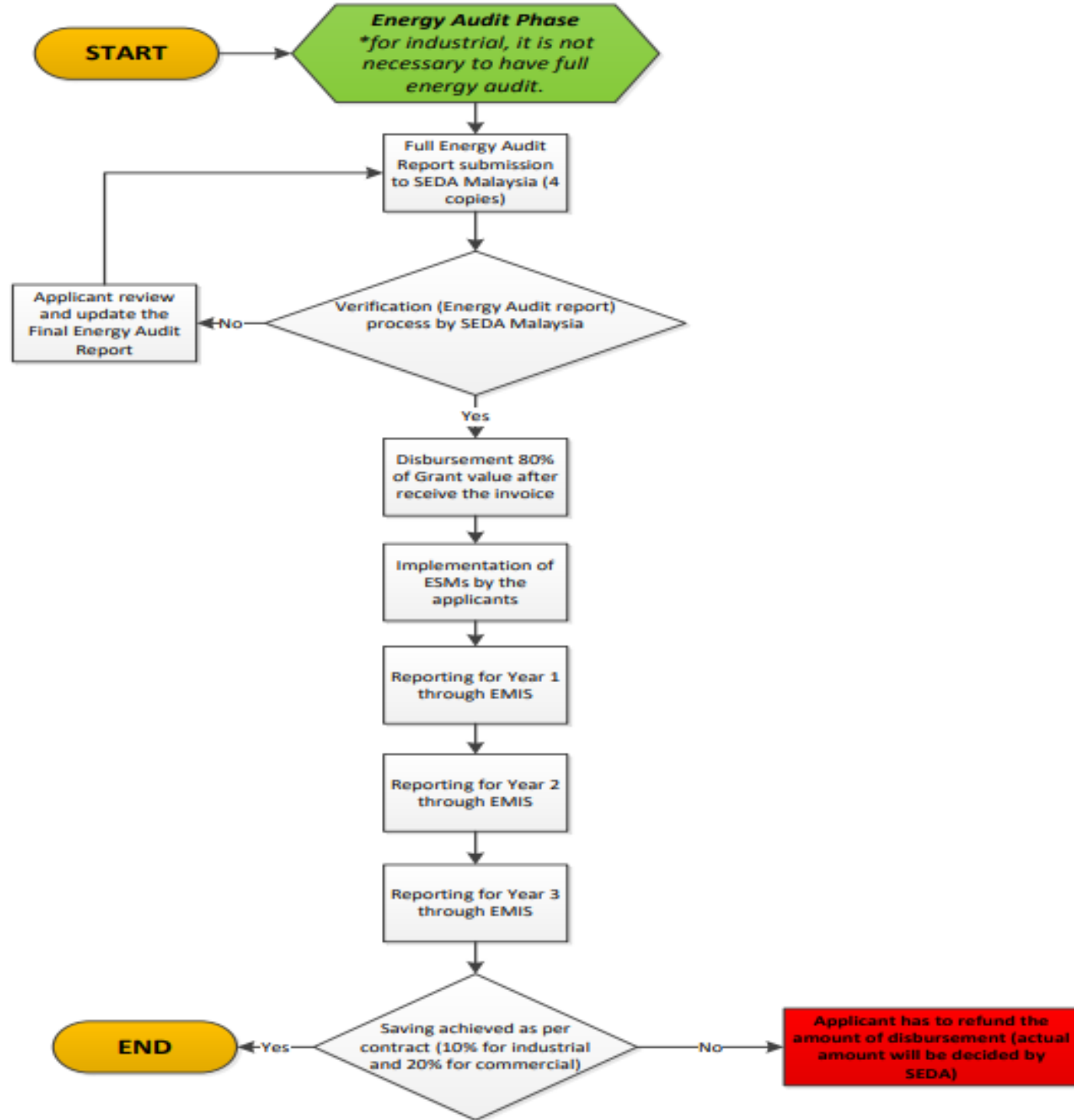
OVERALL PROCESS FLOW CHART



APPLICATION PROCESS FLOW CHART



REPORTING AND MONITORING FLOW CHART

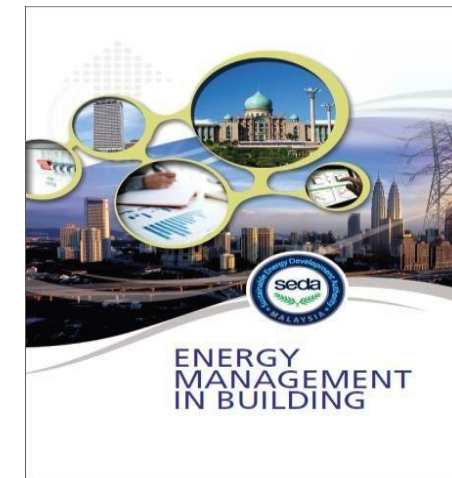
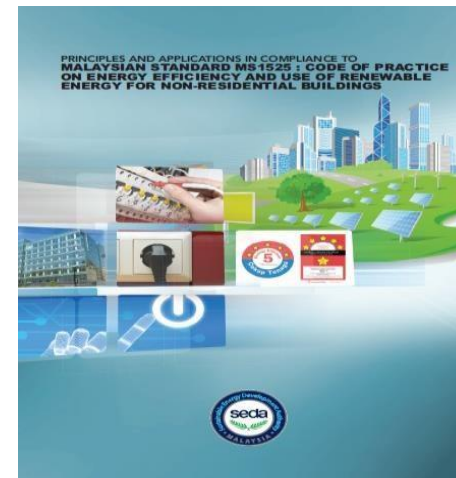
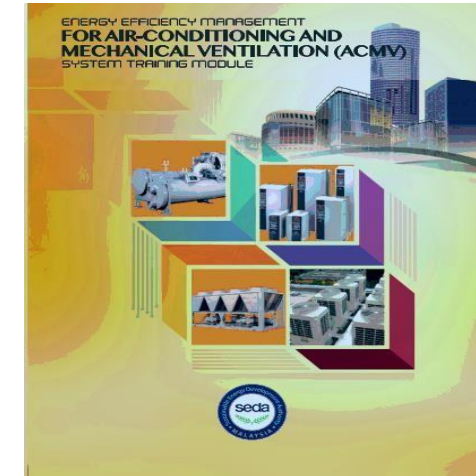
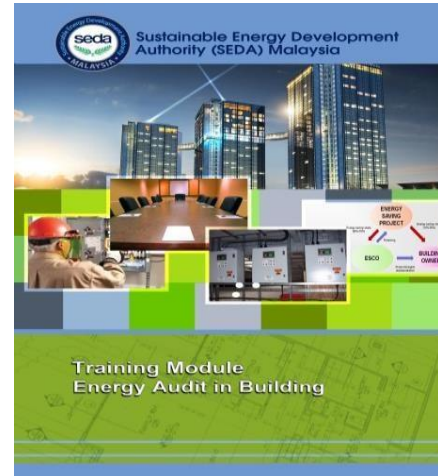


TERMS OF REFERENCE (Implementation of ESMs)

- **Within 3 years** after energy audit exercise completed, applicants are responsible to;
 - ❖ **Implement the energy saving measures** recommended in the energy audit report submitted by the ESCO in this project.
 - ❖ Submit implementation progress report to SEDA Malaysia and EMIS system provided by ST.
 - ❖ **Attend the energy audit & energy management training** organized by SEDA Malaysia under the project to ensure continuous development of capacity building within the organization. (**may be organized earlier –during phase 1*)
 - ❖ **Communicate / liaise with SEDA Malaysia** to ensure proper implementation of energy saving measures

Increase Local Expertise In Energy Management Through Capacity Building

- Attend energy management-related training by SEDA Malaysia.
- Continuous capacity building.
 - Energy Management in Buildings
 - Energy Efficient Management in ACMV System
 - Principal & Application in Compliance to MS1525
 - Energy Audit in Buildings



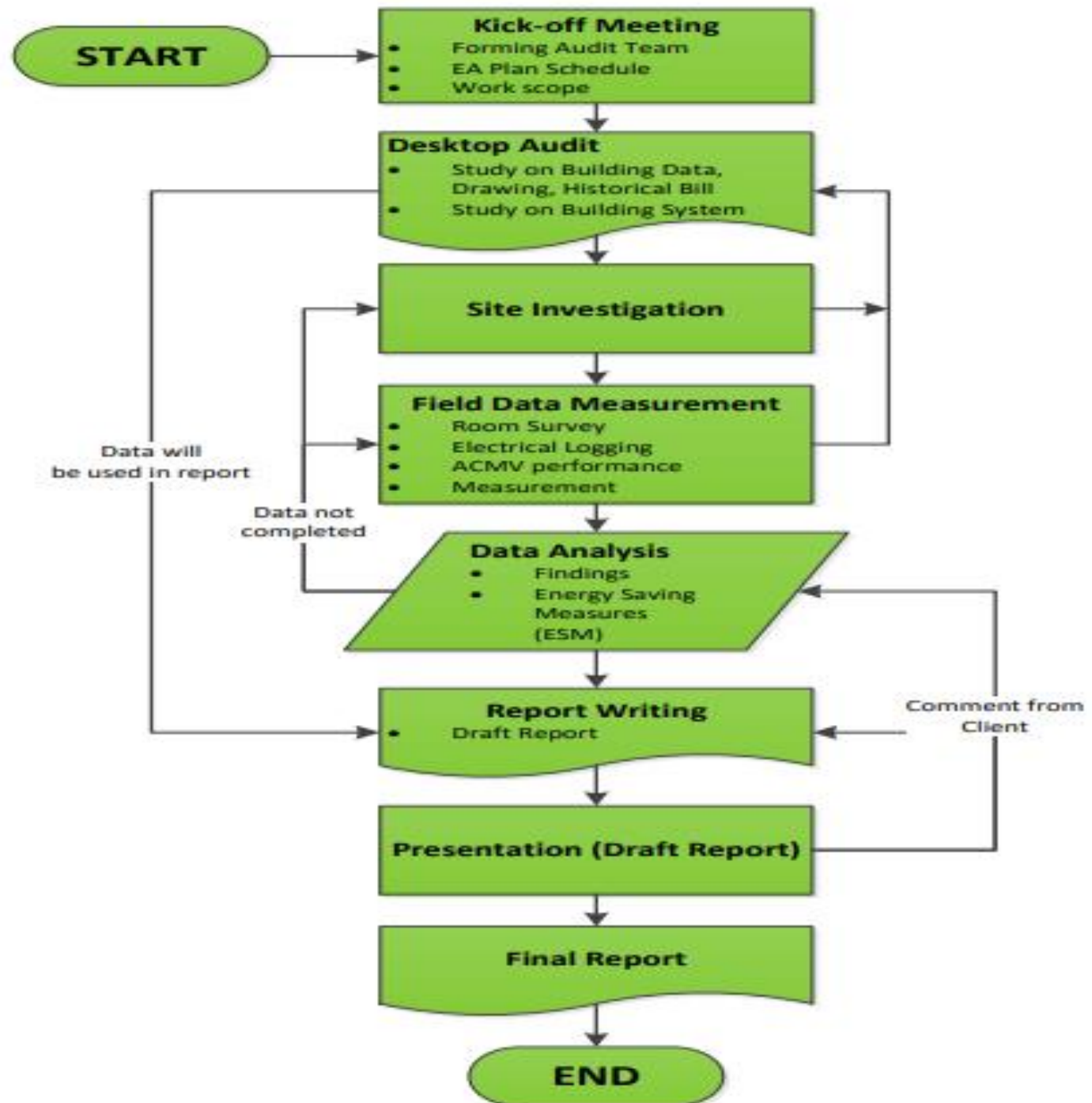
ROLES AND RESPONSIBILITIES – (SEDA)

- i. Prepare the contract and ensure that the applicant is understand and act in accordance with the contract agreement;
- ii. To provide the application form, application requirement and criteria, process workflow, conditional agreement, scope of work and grant disbursement to the applicant;
- iii. Manage conditional energy audit grant;
- iv. Assist KeTSA and ST in promotional activities and technical training;
- v. Review, process and approve the conditional energy audit grant application;
- vi. Monitor energy audit works at applicant's premise;
- vii. Review and verify energy audit report submitted by applicant;
- viii. Process and disburse grant according to progress works;
- ix. Provide facilitation and advice to applicants on the overall project exercise, to ensure the project direction is according to the objective. This includes advisory activities related to energy management;
- x. Organise energy management trainings;
- xi. Coordinate and monitor the implementation of the project from time to time; and
- xii. Monitor and verify the implementations of the energy saving measures recommended in the energy audit final report.

ROLES AND RESPONSIBILITIES – (APPLICANT)

- i. Understand and agree all the terms and conditions in the contract agreement. Failure to follow and act in accordance with the contract agreement will cause SEDA MALAYSIA to issue a written notice to the Applicant requesting the Applicant to refund the grant;
- ii. Fill-up the relevant forms and submit the official application to SEDA Malaysia. The Application Form (Industrial and Commercial);
- iii. To nominate the focal person/person in charge for the project;10
- iv. To appoint their own Energy Services Companies (ESCO) that is registered with Energy Commission to conduct the energy auditing exercise. SEDA Malaysia and government are not responsible to the selection and appointment of the ESCO. The appointment and service charges payment to the ESCO is under the responsibility of the applicant;
- v. To provide SEDA Malaysia with project timeline once the application was approved;
- vi. To ensure that the ESCO executes the energy audit exercise according to the methodology, quality and reporting format outlined in the Energy Audit requirements. SEDA Malaysia has the right to reject any energy audit exercise and reports that is not according to the requirements. SEDA Malaysia will not be held responsible to any additional cost arise due to the delay in complying the requirements.
- vii. To provide the progress, draft and final reports to SEDA Malaysia according to the agreed timeline, SEDA Malaysia will make comments and revert for improvement;
- viii. To provide four (4) final reports hard copy and a soft copy (MS Office) to SEDA Malaysia;
- ix. To submit two (2) invoices (upfront and final payment) to SEDA Malaysia for payment purposes. Applicant is responsible to pay the additional charges such as GST and/or other taxes;
- x. To submit the ESMs implementation progress report to SEDA Malaysia and Energy Management Information System (EMIS) provided by Energy Commission;
- xi. To attend the energy management training conducted by SEDA Malaysia under the project to ensure continuous development of capacity building within the organization; and
- xii. Communicate with SEDA Malaysia in ensuring the energy audit exercise is complete and according to the objective and requirement of the project.

Energy Audit Flow Process



Implementation of the Energy Saving Measure phase


Within 3 years after energy audit exercise completed, applicants are responsible to;

- i. Comply with EMEER requirements issued by Energy Commission;
- ii. Achieve energy saving in 3 years as per Table 1 above;
- iii. Implement the energy saving measures as recommended in the energy audit report submitted by the ESCO for this project. However, the applicant may select the most appropriate ESMs and it is not compulsory to implement all the recommended ESMs in the energy audit report if the total minimum energy saving is achieved and the investment is similar or higher than total amount of grant;
- iv. The implementation cost could be borne by applicant or using energy performance contracting (EPC). The expenditure of investment cost equivalent to, or greater than the Grant amount for the purpose of implementing the energy saving measures; and
- v. Communicate with SEDA Malaysia to ensure the implementation of energy saving measures was successfully held.

$$\begin{array}{l} \textit{Year of Investment Cost (RM X)} \\ + \textit{Year 2 Investment Cost (RM Y)} \\ + \textit{Year 3 of Investment Cost (RM Z)} \end{array} \geq \textit{Grant Amount}$$

Failure to implement the recommended the ESMs (as stated in ii iii and iv) without any concrete justification and agreement from SEDA Malaysia will cause the applicant to refund the amount of disbursement (actual amount will be decided by SEDA Malaysia).

Why Infolliance

- ✓ An ISO 9001, ST registered Company, serving Malaysian Industries to Conserve Energy since 2005, one of the veteran ESCO.
 - ✓ Cumulative Audit experience of over 70 years.
 - ✓ Audited Multidisciplinary Manufacturing Industries like Food, Auto, Plastics, Paper, Oil & Gas, Ports, Building Materials, Electronics, etc..
 - ✓ Key Industry clients are Nestle, Dutch Lady, Mondelez, Carotino.
 - ✓ Total 153 ECMs (Energy Conservation Measures) were Proposed to save RM 15.3 million with average ROI (Return on Investment)
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Clientele

The Way Forward For Industries:



Please provide the following details, rest will be taken care by us:

1. Industry name
2. Address
3. Is it registered under EMEER 2005
4. REEM Name
5. REEM Registration No
6. Electricity Bill No.
7. Name & Position of Contact Person
8. Telephone/Fax/Email

The Way Forward For Commercial Buildings:



Please provide the following details, rest will be taken care by us:

1. Building name
2. Building Address
3. Is it registered under EMEER 2005
4. REEM Name
5. REEM Registration No
6. Does the building have its own incoming electricity sub-meter?
7. Electricity Bill No.
8. Building Owner/Operator Name:
9. Owner/Operator Address:
10. Name & Position of Contact Person
11. Telephone/Fax/Email

THANK YOU

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