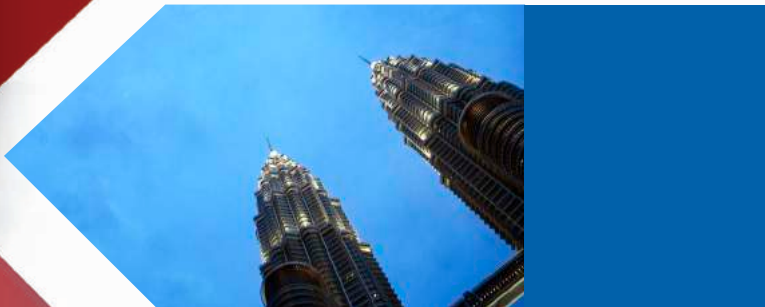


ENERGY EFFICIENCY FINANCING GUIDELINE IN MALAYSIA



A Step-by Step Approach on Financing
Energy Efficiency Projects in Malaysia



One Community
For Sustainable
Energy



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ISBN 978-979-8978-52-4



Editors:

- ASEAN Centre for Energy (ACE)
- Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH
- South Pole, Indonesia

Published by:

ASEAN Centre for Energy (ACE)
Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH

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August 2019

Acknowledgement

The guideline on Energy Efficiency Financing in Malaysia was prepared under the guidance of Christopher G. Zamora, Acting Executive Director of ACE, and Maria-José Poddey, Principal Advisor for AGEF, GIZ. The guideline development was managed by Septia Buntara Supendi (ACE), Yudiandra Yuwono (ACE), Melati Wulandari (GIZ) and Dr. Anant Shukla.

The guideline was developed in cooperation with South Pole, under the assistance of Dr. Martin Stadelmann, Johannes Spaleck and Umdatul Mujahidah.

Valuable feedback was provided by ACE and GIZ colleagues. The guideline has benefitted from input by Malaysian participants of the focus group discussion (FGD) on Energy Efficiency Financing in ASEAN held on 13-14 September 2018 in Bangkok, Thailand.

The guideline has gained valuable insights from the round table discussion with representatives from the Ministry of Energy, Science, Technology, Environment & Climate Change (MESTECC) and its relevant agencies including Sustainable Energy Development Authority Malaysia (SEDA), Suruhanjaya Tenaga (ST), Malaysian Green Technology Corporation (MGTC), Malaysia Debt Ventures Berhad (MDV). Their constructive inputs and suggestions have immensely helped to enhance the quality and add value to the document.

Special thanks and appreciation are extended to the Energy Efficiency and Conservation Sub-Sector Network (EE&C-SSN) Focal Point of Malaysia and the key person for ASEAN cooperation related matters from MESTECC for the continuous support throughout the development of this guideline.

» Disclaimer

The 'Energy Efficiency Financing Guideline in Malaysia' was prepared by the ASEAN Centre for Energy (ACE) and Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH with support of South Pole as consultant.

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Forewords

In line with the preparation of Malaysia's Energy Efficiency and Conservation Act (EECA) that is set to be tabled by the end of this year, we believe the development of this ***Energy Efficiency Financing Guideline in Malaysia: A Step-by-Step Approach on Financing Energy Efficiency Projects in Malaysia*** is timely and concurrently echoes the Government's vision of '*Energy sustainability and wealth creation through science and technology and environmental sustainability*'.

As one of the largest economies in ASEAN, Malaysia is in the pivotal role of meeting its primary energy demand to cope with their growing population and power consumption. They have been a forefront in promoting Energy Efficiency and Conservation (EE&C) since 1970s by establishing policies and multiple financing mechanisms.

To further support Malaysia's EE&C development, the ASEAN-German Energy Programme (AGEP) - a jointly implemented project by ASEAN Centre of Energy (ACE) and Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH on behalf of the German Federal Ministry for Economic Cooperation and Development (BMZ) - has developed this guideline to provide a comprehensive overview of the successful EE financing schemes currently in place, including its background, eligibility criteria and application process. In addition, it also present insights on how information and money flow in such mechanisms; procedures for individual proposal; guidance for EE-funding seekers to determine their right financing scheme; and how a self-sustaining, revolving EE financing cycle can be embedded in a government's organisational structure.

This guideline would have not been concluded without the immense support we received from The Ministry of Energy, Science, Technology, Environment and Climate Change (MESTECC), for their valuable insights and active engagement in the review and development of this guideline. We are hopeful that the guideline will not only benefit the EE development in Malaysia, but also serve as a resourceful reference to various stakeholders in other countries of the region in financing their EE initiatives, which ultimately support ASEAN's goal to achieve energy security, affordability and accessibility within the framework of sustainable development.

Maria-José Poddey
Principle Advisor for AGEP
GIZ

Christopher G. Zamora
Acting Executive Director
ASEAN Centre for Energy



► Diamond building, Malaysia, Suruhanjaya Tenaga

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► The Green Energy Office (GEO) building

» Acronyms and Abbreviations

A	ACE	ASEAN Centre for Energy
	ACMF	ASEAN Capitals Forum
	ACMV	Air Conditional Mechanical Ventilation
	AGEP	ASEAN-German Energy Programme
	AMEM	ASEAN Ministers on Energy Meeting
	AMS	ASEAN Member States
	APAEC	ASEAN Plan of Action for Energy Cooperation
	ASEAN	Association of Southeast Asian Nations
	ASEAN GBS	ASEAN Green Bond Standards
	ASEAN SBS	ASEAN Social Bonds Standards
	ASEAN SUS	ASEAN Sustainability Bond Standards
B	BAU	Business as Usual
	BCS	Building Control System
	BSEEP	JKR-Building Sector Energy Efficiency Project
C	CGC	Credit Guarantee Cover
	CGIF	Credit Guarantee and Investment Facility
	CLG	Companies limited by guarantee
	CMM	Capital Markets Malaysia
	CMSA	Capital Markets and Services Acts
	CO2	Carbon dioxide Equivalent
E	EACG	Energy Audit Conditional Grant (Malaysia)
	EC	Energy Commission (Malaysia)
	EE	Energy Efficiency
	EE&C	Energy Efficiency and Conservation
	EI	Energy Intensity
	EMEER	Efficient Management of Electrical Energy Regulations
	EPC	Energy Performance Contracting
	EPU	Economic Planning Unit
	ESCO	Energy Service Company
	EV	Electric Vehicle
F	FGD	Focus Group Discussion
	FI	Financial Institutions
G	GDP	Gross Domestic Product
	GHG	Greenhouse gas
	GIZ	The Deutsche Gesellschaft für Internationale Zusammenarbeit GmbH
	GLC	Government-linked companies
	GTC	GTFS Technical Committee (Malaysia)
	GTFS	Green Technology Financing Scheme (Malaysia)
	GWh	Gigawatt-hour
I	ICMA	International Capital Market Association
	ICMA GBP	ICMA Green Bond Principles
	IGA	Investment Grade Audits

K	ktCO ₂ e kWh	Kilotonne carbon dioxide equivalent Kilowatt-hour
L	LO LOG LOLA	Letter of Offer Letter of Guarantee Lodge and Launch
M	MDV MEA MESITA MGTC MESTECC MJ MOF Mtoe M&V	Malaysia Debt Ventures Ministry of Economic Affairs Malaysian Electricity Supply Industries Trust Account Malaysian Green Technology Corporation Ministry of Energy, Science, Technology, Environment and Climate Change Mega Joule Ministry of Finance (Malaysia) Million tonnes of oil equivalent Measurement and Verification
P	PPP	Purchasing Power Parity
R	RE REEM R&D RM	Renewable Energy Registered Electrical Energy Manager Research and Development Malaysian Ringgit
S	SAVE SC SEDA SIRIM SME SRI ST	Sustainability Achieved via Energy Efficiency Securities Commission Sustainable Energy Development Authority (Malaysia) Science and Industrial Research Institute of Malaysia Small to Medium-sized Enterprise Sustainable and Responsible Investment Suruhanjaya Tenaga
T	TFEC TPES	Total Final Energy Consumption Total Primary Energy Supply

» 1 Introduction

> 1.1 Background

The Association of Southeast Asia Nations (ASEAN) Member States have set a collective target to reduce energy intensity by 20% by 2020, and by 30% by 2025 compared to the 2005 levels. During the 36th ASEAN Ministers on Energy Meeting (AMEM) in Singapore, 2018, the ASEAN Member States (AMS) acknowledged that the 20% regional target has already been achieved. Additional outcome-based strategies were pointed out during the meeting, which aimed to further reduce the regional EI by 30% in 2025.

With a GDP of 314.5 billion in 2017, Malaysia is one of the largest economies within ASEAN. Malaysia's population and electricity consumption have increased steadily in recent years and as of 2017 stood at 31.62 million and 4,681 kilowatt-hour (kWh) per capita.

Malaysia has been promoting EE&C initiatives since 1970 and the Government has established a policy framework and financing mechanisms to bolster EE growth in the country. According to Malaysia's National Energy Efficiency Action Plan, Malaysia has set the target to reduce total final energy consumption (TFEC) by 8% in 2025, compared to the Business as usual (BAU) scenario.

One of the common challenges in implementing energy efficiency activities is the availability of financing schemes and mechanisms. Malaysia has developed several successful schemes and mechanisms to promote energy efficiency in various sectors through innovative financing schemes. In this document, six of the most successful EE financing schemes in Malaysia are elaborated.

However, despite successful EE financing scheme and mechanisms, Malaysia still faces several challenges in reaching this target and upscaling EE developments. The key challenges include the absence of comprehensive regulations, limited awareness on EE initiatives, and in particular, limited information on existing, dedicated EE financing mechanisms available in the region and within the individual AMS.

> 1.2 Objectives

The objectives of this EE financing guideline in Malaysia are to:

- 1) Present an overview on successful EE financing schemes currently in place in Malaysia
- 2) Provide detailed, step-by-step guidance on the set-up and processes within EE financing schemes

This guideline provides not only a comprehensive overview of the EE financing schemes, including background, eligibility criteria and application procedures, but also insights on the flow of information and money in such mechanisms, the time needed for individual processes, and the right financing schemes needed for stakeholders looking for EE project funding.

> 1.3 Methodology

The information presented in this guideline has been obtained and validated through the following means:

- **Desk review:** A thorough desk review and mapping of existing EE financing mechanism available in Malaysia was conducted. The mapping was based on the information available on the official government websites, documents and presentations, various case studies and reports, among others. The desk review was further enhanced through inputs from the Malaysia Focal Points of Energy Efficiency and Conservation Sub-Sector Network (EE&C-SSN) and through Focus Group Discussion (FGD) involving additional stakeholders.
- **Collection of information by relevant stakeholders:** The chapter on EE financing in Malaysia from the mapping study was complemented through discussions with relevant contact persons of each mechanism, and resource persons in the field of EE financing in Malaysia.
- **Validation and Enhancement:** Information were then validated and enhanced through a dedicated EE financing Round Table Discussion with relevant stakeholders in Malaysia¹.

> 1.4 Report Outline

This report is divided into four main chapters:

- > Chapter 1 sets the context and objective of this guideline.
- > Chapter 2 presents a snapshot of the current energy landscape in the country and introduces the existing energy efficiency support framework and the organisational set-up.
- > Chapter 3 elaborates specific information on the available financing schemes in Malaysia.
- > Chapter 4 provides the decision-making matrix (decision tree) for stakeholders in Malaysia seeking the right EE financing scheme for their funding needs.



► Diamond building, Malaysia, Suruhanjaya Tenaga

¹The Round Table meeting took place on 29 November 2018 in Putrajaya, Malaysia.

» 2 Current Energy Efficiency Situation in Malaysia

According to the 5th ASEAN Energy Outlook, the total final energy consumption (TFEC) in the region will increase from 427 million tonnes of oil equivalent (Mtoe) in 2015 to 1,046 Mtoe in Business as Usual (BAU) scenario in 2040 (ASEAN Centre for Energy, 2017). The increase in energy demand is driven by industry, transport and residential sectors. These sectors, however, provide opportunities for potential energy savings and efficiency gains in the region. In the absence of enhanced energy efficiency (EE) saving measures and renewable energy (RE), between 2015 and 2040, the total primary energy supply (TPES) will increase by about 60%. The 5th ASEAN Energy Outlook highlights that EE policies in place or under consideration today will lead to savings in TFEC of 10% by 2040, as compared to BAU (ACE, 2017).

AMS are committed to achieve the ASEAN Plan of Action for Energy Cooperation (APAEC) target on EI by harmonising EE standards and labelling requirements, aligning building codes more strongly with EE and Conservation (EE&C) criteria, enhancing private sector participation including Energy Service Companies (ESCOs) for EE&C promotion as well as financial institutions in EE&C development (ACE, 2015).

Malaysia has established several key policy frameworks to help achieve its EE&C targets. After EE&C elements were introduced in the Malaysian legislations in 1970s, further EE&C elements were included as part of the National Energy Policy (1979), the National Renewable Energy (RE) Policy Action Plan (2010), and the National EE Action Plan (2015). In the National EE Action Plan published in 2015, the Government of Malaysia has set a target to reduce electricity consumption by 8% in 2025 compared to BAU. The Government also released the 11th Malaysia Plan 2016-2020 in 2015 which highlights its intention to promote the adoption of EE technologies across the transport, buildings, products and services sectors.

The Government of Malaysia is currently drafting the Energy Efficiency and Conservation Act to provide a framework on the promotion and development of EE&C in the country. This Act is expected to be tabled to the Parliament by the end of 2019.

In 2010, the Government introduced the Green Technology Financing Scheme (GTFS), which has been one of the main financing instruments for green investments in the country. The Government has also launched several financing mechanisms to promote energy efficiency measures in the commercial and industry sectors in Malaysia, such as the Energy Audit Conditional Grant (EACG), the Energy Performance Contracting (EPC) Fund, the Malaysian Electricity Supply Industries Trust Account (MESITA) and the Sustainability Achieved via Energy Efficiency (SAVE) programme. These financing schemes offer various financing support such as government guarantee and grants, soft loans and rebates. The Government also offers financial incentives in form of tax waiver, import duty, and sales exemption.

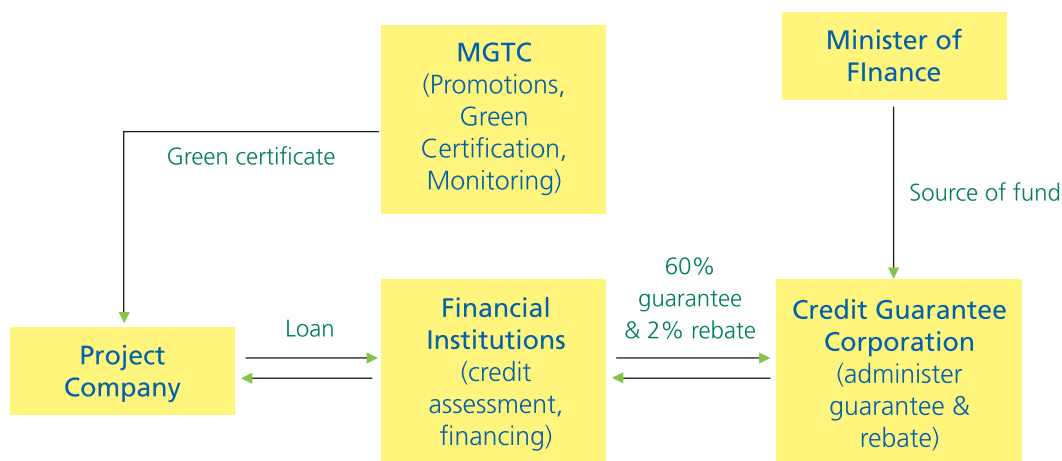
The Government's role, through its ministries and agencies, are crucial in the development of EE in Malaysia. Some of the key players for EE&C in Malaysia are the Ministry of Energy, Science, Technology, Environment and Climate Change (MESTECC), responsible for formulating and implementing EE policy, the Energy Commission, which regulates the electricity and gas supply industry at the reticulation stage, and the Malaysian Green Technology Corporation (MGTC), in charge of catalysing the deployment of green technology in line with national green policies, as well as the Ministry of Finance among others.

» 3 Energy Efficiency Financing Mechanism in Malaysia

> 3.1 Green Technology Financing Scheme

3.1.1 Overview

The Green Technology Financing Scheme (GTFS) was launched in 2010. It provides attractive financial instruments to promote green investments and stimulate green technology industries in Malaysia. It operates through a loan guarantee scheme that offers an annual rebate of 2% on interest or profit rates charged by financial institutions, as well as a guarantee of 60% on green technology cost provided by financial institutions. The Government through the Ministry of Finance earmarked Malaysian Ringgit (RM) 3.5 billion during its implementation period which ended in 2017. GTFS is implemented by the Malaysian Green Technology Corporation (MGTC) in cooperation with the Credit Guarantee Corporation (CGC), Danajamin Berhad², all commercial and Islamic banks, and Development Finance Institutions (e.g. Bank Pembangunan, SME Bank, Agrobank, Bank Rakyat, EXIM Bank and BSN) in Malaysia (See Figure 1).



>> Figure 1: GTFS Structure

Source: South Pole elaboration, based on MGTC (2018)

As of 2017, GTFS has contributed up to RM 7.05 billion in green investments in the country. EE projects made up about 5% of all the loans approved by GTFS, with a total investment of RM 141.9 million. These investments have supported 16 EE projects with the majority of funds channelled to EE projects in the energy and building sectors. In addition, GTFS has created over 4,909 new green jobs and reduced emission of up to 3.78 million tonnes CO₂e per year (MGTC, 2018).

3.1.2 Eligibility Criteria

Funding is available for projects that meet the green technology criteria under the GTFS Programme. Green Technology is defined as products, equipment and systems used to conserve the natural environment and resources to minimise and reduce the negative impacts of human activities.

²Danajamin Berhad was not involved in the RM 3.5 billion scheme.

In order to be eligible for GTFS, all products, equipment and systems must satisfy the following general criteria:

- Minimise degradation of environment
- Zero or low greenhouse gas emission
- Safe for use and promotes healthy and improved environment for inhabitants
- Conserve the use of energy and natural resources, and
- Promote the use of renewable energy resources

GTFS is only available to new, retrofit and expansion projects in Malaysia. Project refinancing or projects in restructuring existing facilities do not qualify for GTFS. Ongoing and finished projects, as well as research and development (R&D) costs are also not eligible for funding.

GTFS has two different categories for funding recipients: Green Technology Producers and Green Technology Users. Each category has different eligibility criteria and financing terms which are summarised in Table 1.

>> Table 1 GTFS Eligibility Criteria

Type of entity	Green Technology Producers	Green Technology Users
Eligibility	Legally registered Malaysian companies that have at least 51% Malaysian shareholding.	Legally registered Malaysian companies that have at least 70% Malaysian shareholding.
Maximum financing size	RM 100 million	RM 10 million
Financing tenure	Up to 15 years	Up to 10 years

Source: South Pole elaboration, based on MGTC, 2018.

Furthermore, eligible projects are classified into four different sectors: energy, building, water and waste, as well as transport sectors. Each sector will be elaborated further in this section.

3.1.2.1 Energy Sector

Projects eligible for GTFS funding in the energy sector include green technology projects in power generation and energy supply-side management, specifically projects in fossil fuel plants, on-grid and off-grid renewable energy activities, distributed power generation and improvement of power quality. Examples of projects under these criteria are renewable energy plants, biomass and biogas power plants, all projects/activities to improve EE, co-generation power plants and power factor correction.

Similarly, projects in energy utilisation and in demand-side management are also eligible for a GTFS funding. The scope for projects in this sector includes activities increasing energy efficiency, green materials usage, improvement in working environment, as well as innovation in green product production. Examples of qualified projects are replacement of old equipment with new and energy efficient ones (e.g. energy efficient lighting and boilers, proper insulation and controls such as temperature regulator).

3.1.2.2 Building Sector

Any green technology utilisation in the construction, management, maintenance and demolition of public buildings (i.e. shopping complex, hospital and clinic, hotel and resort, university and research institution, and exhibition hall and school), infrastructures, and parks is categorised under this sector. It is then further classified into six different scopes including EE projects in buildings striving to attain minimum EE performance as specified in the Malaysian Standard.

MS1525:2007 (Code of Practice on Energy Efficiency and Use of Renewable Energy for Non-residential Buildings), projects in achieving minimum indoor environmental quality, sustainable site planning and management, materials and resources reuse and recycle and water efficiency, as well as innovation in designs. Sample projects include pollution control in construction activities, water-efficient irrigation, and construction waste management.

3.1.2.3 Transport Sector

Projects using green technology for transportation infrastructure, vehicles, and mass public transport systems are eligible for funding under this sector. Sample projects include biofuel production, biofuel/hydrogen refuelling stations, and production of environmentally-friendly engines.

3.1.2.4 Water and Waste Management Sector

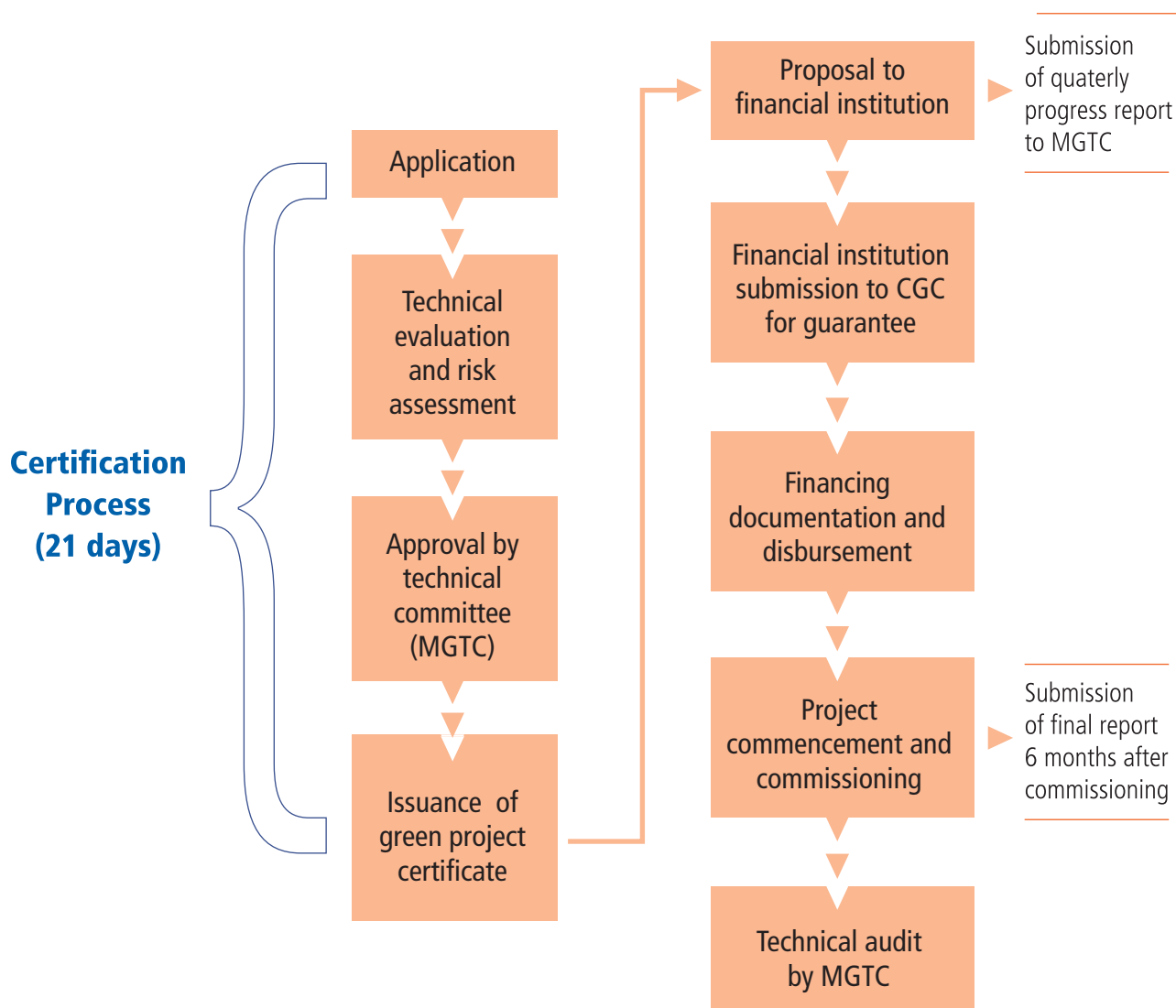
Projects using green technology in the management and utilisation of water resource, waste water treatment, solid waste and sanitary landfill are allowed for GTFS funding in this sector. The criteria of eligible projects include recycling and reuse, reduction of chemicals, utilisation of green materials and/or equipment, waste recycling, waste reduction and waste water treatment. Sample projects include recycling and reuse of water, highly efficient treatment plant, and composting.



Menara Kerja Raya, Malaysia ◀

3.1.3 Application Process

Applicants must register online on the GTFS official website³ and complete the application form. Afterwards, the technical team will evaluate the project eligibility according to the GTFS guidelines for each category. Once the application is successful, MGTC will issue a Green Project Certificate for the applicants. They can use this certificate to apply for funding at a financing institution i.e. one of the participating banks. Upon approval by the financial institution, CGC will issue the Letter of Undertaking, provide a guarantee of 60% of the total loans in case of payment failure, and issue a 2% rebate on loan interest. The application process is illustrated in Figure 2 below.



>> Figure 2: GTFS Application Process

³<https://gtfs.my>.

1) GTFS Application to MGTC:

All applicants must register online on the GTFS website and complete the application forms – **to reduce the application time, the applicant can also concurrently apply for loans to financing institutions of their choice (see section 3).** The applicant is also required to submit a signed copy of the undertaking letter, which can be obtained from the website. The required documents must be mailed or hand-delivered to the MGTC's office. Any additional supporting documents requested by MGTC must be submitted within three working days.

Some of the required documents

- Memorandum and articles of association of applicant.
- Collaboration /joint venture agreement with other project partner(s), authorisation letter from technology providers.
- Approved layout drawing indicating the project boundary.
- Project management team structure.
- CVs of team members, employment contracts or latest EPF receipts as evidence of employment.
- Full technology specification, track record, relevant approved engineering drawings, etc.
- Project implementation schedule and key milestones (if indicated in separate sheet).
- Environmental Impact Assessment.
- Sales and Purchase Agreements.
- Tenancy agreement and development order.
- Safety and Fuel Supply Agreement.
- Calculation of project outcome.
- Softcopy of the spreadsheet to calculate the cash flow and internal rate of return (with relevant supporting document).
- Relevant approved drawings to support explanation.

2) Technical Evaluation:

The MGTC's Technical Evaluation team will review the technical and financial aspects of the project and evaluate the application according to the GTFS standards for each category. Every month, this technical evaluation team and the GTFS Technical Committee (GTC), comprised of representatives from MGTC, Energy Commission (EC), JKR (Malaysian Public Works Department), JPSPN (Malaysian Solid Waste Management Department), Science and Industrial Research Institute of Malaysia (SIRIM), Department of Environment and MESTECC, as overseeing body, will hold a meeting to review all received applications. Thus, the application process takes approximately 21 working days from the submission date of the complete documents. MGTC will inform the applicant about the result. Once it is successful, MGTC will issue a **Green Project Certificate**. The certificate is valid for six months starting from the date of issuance and can be used to apply for loans at financial institutions. In cases where the project company cannot obtain funding within these six months, the certificate can be renewed up to three times because the certificate has a two-year maximum validity. Beyond this period, the project company must submit a new application to MGTC.

3) Financing Application:

Successful applicants subsequently can apply for financing at the participating financial Institutions (FI) of their choice. Applicant must submit the certificate along with required documents according to the respective FI's standards and procedures. The FI will then issue a Letter of Offer (LO) to successful applicants. The Government, through CGC, will bear 2% of interest rate or profit charged by the FI, and CGC will issue a guarantee (see Section 4).

4) Guarantee Approval:

CGC will then issue a letter of undertaking, providing a guarantee for maximum 60% of the approved loan amount. A guarantee fee of 0.5% per annum of the total guarantee amount will be charged to the borrower. The financing and guarantee processes typically take approximately 30-60 working days.

5) Fund Disbursement:

CGC will send a copy of the Letter of Undertaking to the respective FI. Upon receiving the letter, the said FI will disburse the loan according to its standards and procedures.

6) Project Monitoring and Verification:

During the project implementation, the applicant must submit quarterly project progress reports to MGTC until the commission date. The applicant must submit a final report (project outcome report) six months upon completion of the commission date. Monitoring and verification audit will be conducted throughout the project's financing tenure.

3.1.4 Contact Point

MGTC provides a general line for all enquiry at 603-8921 0800. The mailing address is:

Malaysian Green Technology Corporation

No. 2, Jalan 9/10,
Persiaran Usahawan, Seksyen 9,
43650 Bandar Baru Bangi,
Selangor Darul Ehsan
Attention: GTFS Secretariat

3.1.5 Challenges in GTFS Implementation

Despite its success, GTFS encountered challenges throughout its implementation period. These challenges are elaborated in the following:

- During its early implementation period, financing institutions were reluctant to provide loans to project developers because of limited capacity within financing institutions in assessing EE projects. To overcome this challenge, MGTC conducted trainings and workshop to increase awareness and build capacity in financing institutions
- Difficulty in quantifying savings from EE projects.
- Some project developers/owners could not obtain funds due to various reasons. As a solution, MGTC provided assistance and pitched the projects directly to financial institutions.

3.1.6 Outlook of GTFS

Following the success of GTFS, the Government launched GTFS 2.0 in April 2018 which allows new criteria for ESCOs company to finance investment or assets related to energy efficient project and/or energy performance contracting. The scheme earmarked RM 5 billion for a 5-year implementation period. However, in May 2018, the implementation of the GTFS 2.0 had been discontinued by the new Government administration. In March 2019, the Ministry of Finance (MOF) announced the continuation of the scheme with the allocation of RM 2 billion for the period of January 2019 until the end of 2020. The scheme will be offering an annual 2% interest or profit rebate for the first 7 years with 60% government guarantee for green technology cost.

> 3.2 Energy Audit Conditional Grant Project

3.2.1 Overview

The Energy Audit Conditional Grant Project (EACG) is a scheme initiated under the RMK11 Energy Efficiency Projects (2016-2020). **The EACG provides grants to commercial and industrial sectors of up to RM 55,000 and RM 95,000 respectively.** The EACG aims to help Malaysia reach its carbon emission target and provide financial assistance through grants and building capacity in the energy service industry. The support for energy audit has been implemented from 2016 to April 2018, while the implementation of energy saving measures, monitoring and reporting, as well as capacity building and training will continuously be conducted until 2020. Since the quota has been filled, application for the EACG is closed and there is no further plan to extend the Programme. However, to enable such extension, the Economic Planning Unit (EPU), as the custodian of the Fund, needs to apply for budget allocation under the next Malaysia Plan while highlighting the positive impacts of EACG on the development of EE in Malaysia. The decision to have a Programme extension will depend on the review by the Ministry of Economic Affairs (MEA) for the next Malaysia Plan in 2021.

This scheme is available for commercial and industrial facilities. MESTECC has appointed the Sustainable Energy Development Authority (SEDA) and MGTC as implementing agencies for the EACG for commercial and industrial sectors respectively.

The EACG aims to reduce energy consumption in the industrial sector by 1957 gigawatt-hour (GWh), leading to cost savings of up to RM 947 million throughout its 5-year implementation period. The Fund is also expected to reduce GHG emission by 1,942 ktCO₂e. Furthermore, the EACG also helps stimulate growth in EPC and ESCOs industries in the country. As of July 2018, 190 ESCO have been registered with the Energy Commission (EC), 13 energy audit trainings with 242 participants were conducted and the EC has received 104 applications for registered electrical energy manager (REEM) under the EACG.

3.2.2 Eligibility Criteria

All commercial and industrial facilities that consume electricity equal to or more than 100,000 kWh per month are eligible for the EACG. Commercial building is defined as any existing building categorised in Commercial Electricity tariff (B, C1 and C2) such as private offices, private hospitals, education institutions, shopping complex, hotel & resorts, banks, warehouses, convention and exhibition centre and statutory bodies/local authority-owned buildings. They facility owner must appoint an ESCO to perform the energy audit. The ESCO must be registered with the Energy Commission of Malaysia or the relevant authorities in the state of Sarawak.

An additional requirement is applied to any commercial or industrial building with electricity consumption equal to or larger than 3,000,000 kWh for six consecutive months. Such buildings are required to appoint a Registered Electrical Energy Manager (REEM) as required by Efficient Management of Electrical Energy Regulations (EMEER) 2008.

3.2.3 Application Process

Applicants from the commercial sector can download the online application form from SEDA's website⁴, while applicants from the industrial sector can obtain application forms from the MGTC's website⁵. After filling in all forms including questionnaires, the applicant must submit the application to the respective implementing agency⁶ i.e. to SEDA for commercial and MGTC for industrial sector. The relevant agency will process the application and, if deemed necessary conduct a site visit to the applicant's project site. A technical committee chaired by EC, which comprise of representatives from SEDA, MESTECC and EPU, will convene every three months to conduct technical evaluations of the applications.

The MESTECC, as the steering committee, has the decision-making power to choose whether a project is eligible for EACG funding or not during their quarterly meeting, which is approximately two weeks after the decision from the technical committee. Once an application is successful, the implementing agency will issue a Letter of Approval. When an agreement is signed between the implementing agency and the applicant, the ESCO shall start the energy audit process. The EACG does not cover project costs such as GST and other taxes.

The implementing agency will start to disburse a grant equal to 20% of the investment upon invoice submission from applicant for upfront payment. After the energy audit is completed, the ESCO must submit an energy audit report to the respective implementing agency. The disbursement of the remaining grant starts after the energy audit report has been verified, after which the applicant submits the invoice for the final payment. The application process can take up to three months starting from the time of the application submission to contract signing and fund disbursement, subject to approval from the Steering Committee.

Below is the list of required documents to be submitted by the applicant and ESCO:

- Company information
- Building information
- Electricity bills for a year
- Information on energy audit scope. EACG requires the applicant to include compulsory scope of work and

>> Table 2: Scope of Work of EACG

Compulsory scope of work	Additional scope of work
<ul style="list-style-type: none">• Energy management practices• Electricity supply and consumption	<ul style="list-style-type: none">• Compressed air system• Electric motors as drives of machines• Fans and blowers• Ventilation• Pumps• Air conditioning system• Lighting• Furnace• Steam generation and distribution

⁴For more information, visit www.seda.gov.my/eagrant

⁵For more information <https://www.greentechmalaysia.my/services/energy-audit-conditional-grant/>

⁶Application for commercial sector is submitted to rohaiza@seda.gov.my

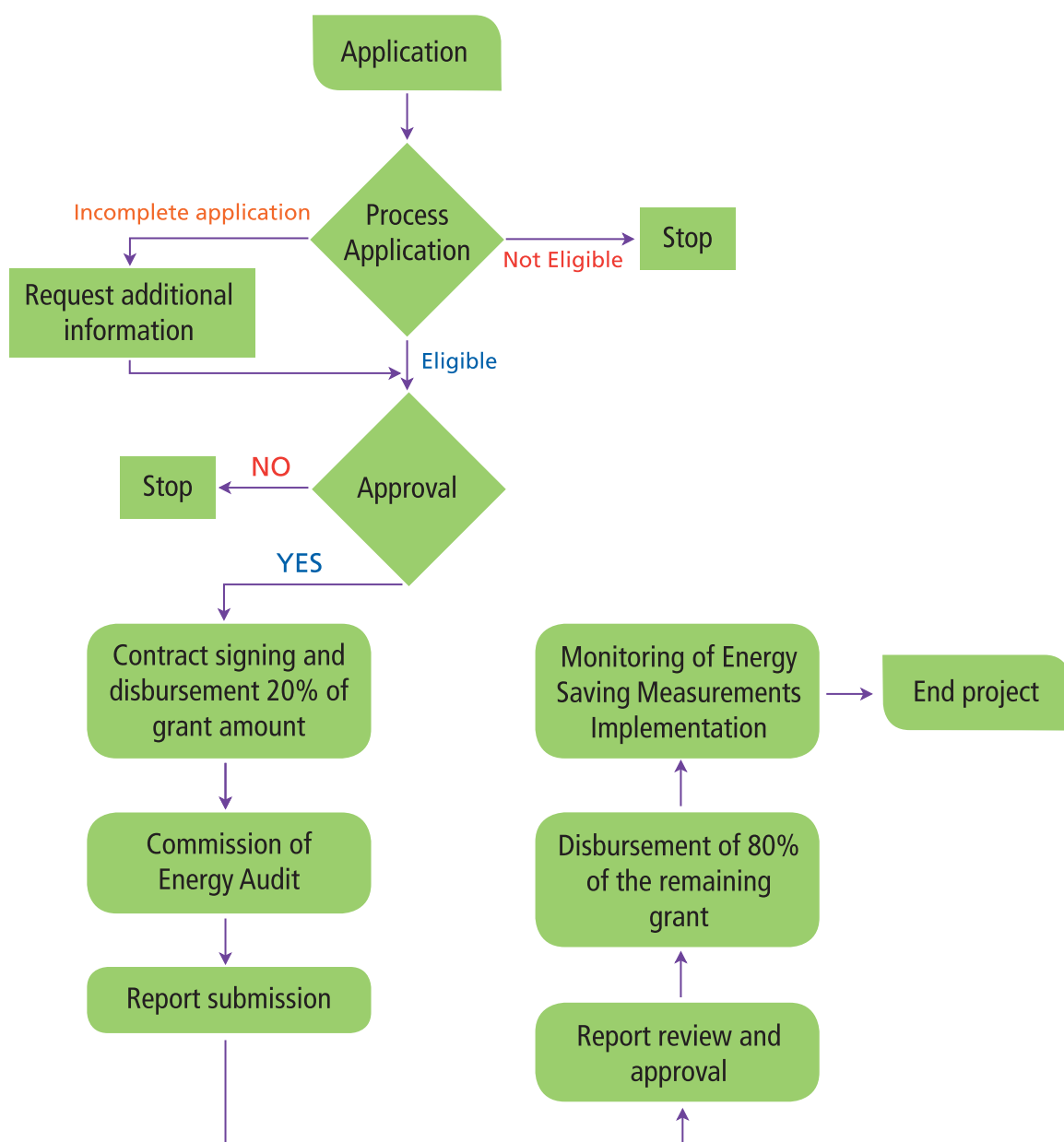
Additional required documents for buildings consuming 3,000,000 kWh or more for six consecutive months:

- Appointment certificate of REEM or Energy Manager
- Technical staff related to the Energy Manager

Required documents to be submitted by the ESCO:

- Company information
- Services offered
- Experiences in energy management and audit
- Budget – to ensure that the costs quoted by the ESCO matches with the proposed scope of work
- Technical staff and competency
- Methodology and project schedule

The detailed EACG application process is illustrated in Figure 3 below:



>> Figure 3: EACG Application Process

South Pole elaboration, based on GreenTech Malaysia and SEDA Malaysia, 2017

3.2.4 Terms and Conditions

EACG has determined a set of conditions for applicants as follows.

- The energy audit shall be conducted by an ESCO registered by the Energy Commission or relevant authorities in Sarawak. The ESCO shall renew the registration with the EC every year.
- The energy audit must be completed within two months after the date of contract signing with the implementing agency.
- The cost of implementation is equal, or more than the amount of audit grant received.
- Energy saving measures are to be implemented as foreseen in the energy audit report, within three years after the energy audit is completed.
- The energy saving target is 5% per year for three years or 15% in total compared to the baseline. The implementation of energy saving measures is distributed within the years as follows.

>> Table 3 Energy-saving Measures Target

Energy saving measures recommended in the energy audit report	Minimum energy savings to be achieved with these measures (compared to baseline)	Period of implementation
No cost energy saving measures (behavioural changes e.g. reduction of usage time, scheduling of air-conditioners)	5%	1 st year
Low cost and medium/high cost energy saving measures	5% per year	2 nd and 3 rd year
Total energy saving measures implemented	Total minimum 15%	

Source: GreenTech Malaysia & SEDA Malaysia (n.d).

There is no penalty imposed on facilities which cannot manage to reach their energy saving measures target provided that reasonable justifications are given for the failure. Furthermore, the implementing agencies have also set terms of references for applicants:

- applicants must implement recommendation of energy saving measures as stated in the energy audit report submitted by ESCO.
- applicants must deliver implementation and energy saving reports to the implementing agency.
- applicants must attend mandatory energy management trainings organised by the implementing agency.
- applicants must liaise with the implementing agency to ensure proper implementation of energy saving measures.

3.2.5 Challenges in EACG Implementation

There are several challenges commonly encountered during the implementation of EACG as listed:

- unregistered ESCO try to participate in the EACG.
- changes in management disrupts the energy audit process and energy saving implementation.
- changes in building/facilities ownership. When this occurs, the grant must be returned to SEDA or MGTC.
- building/facilities owners withdraw from the contract/agreement after the signing (18 cases up to now). This is often caused by top management disagreeing with certain clauses of the contract. The implementing agency need to find a replacement for the withdrawn applications.

3.2.6 Contact Point

Any commercial sector application shall be submitted to rohaiza@seda.gov.my, fax to 03-8870 5900 or post/hand delivered to SEDA Malaysia's office. SEDA also provides an additional contact point for the commercial sector through Mr. Steve Anthony Lojuntin, the Head of Energy Demand Management Unit, SEDA Malaysia at steve@seda.gov.my. For the industrial sector, the contact point is Ms. Masilah Bandi from MGTC at masilah@greentechmalaysia.my.

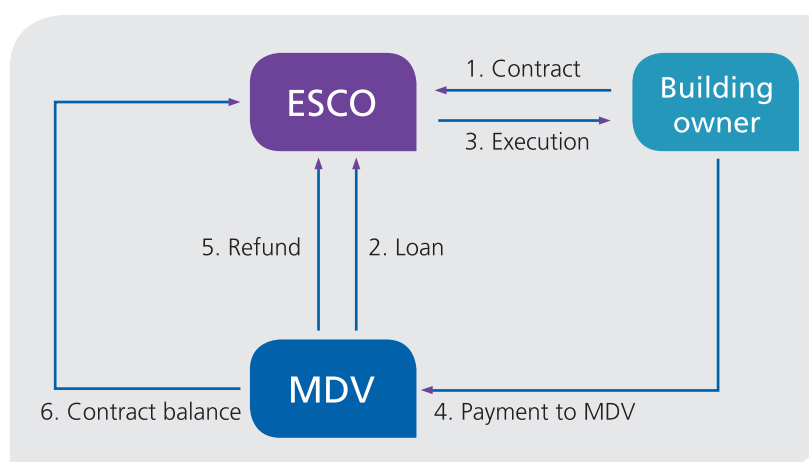
> 3.3 Energy Performance Contracting Fund

3.3.1 Overview

The Energy Performance Contracting (EPC) Fund was launched in 2017 to accelerate the growth of energy efficiency in the industry sector. The Malaysian Government, through the Malaysia Debt Venture (MDV), provided RM200 million funding under this scheme. Furthermore, MESTECC and JKR-Building Sector Energy Efficiency Project (BSEEP) also provide additional RM15.8 million and RM2 million respectively as guarantee funds to support the EPC Fund. MESTECC also provides interest rebates of 1% per year for successful applicants, reducing EPC financing rates to around 7%. As of August 2018, the EPC Fund has provided support amounting to RM 44.8 million to EE projects. ESCOs participation is predicted to increase in the coming years. The EPC Fund is expected to achieve electricity savings of 1,050 GWh or equivalent to 729.7 ktCO₂ by the 5th implementation year (MESTECC, 2017).

MDV provides term, revolving and trade financing facilities with a financing rate ranging from 7% to 9% per annum. The loan covers up to 85% of total project costs with a maximum financing size of RM 10 million. The financing tenure is set to a maximum of 10 years, but less than the project tenure. MDV assigns savings payments as loan security.

A credit guarantee cover is also available to ESCOs, covering 50% of the unsecured portion up to the maturity date of the loan with a maximum cover of RM3 million. A guarantee fee of 5% per annum is applicable to the borrower.



>> Figure 4 EPC Funding Mechanism

Source: BEESP, 2017

Figure 4 illustrates the EPC funding mechanism with the following detail of each process:

1. Building owner awards the project to ESCO. The contract proceeds are assigned to MDV.
2. MDV provides loans to ESCO with a financial assistance of up to 85% of the total project cost.
3. ESCO completes and delivers the project to the building owner.
4. The building owner remits the contract payment (generated from savings) to MDV as financing repayment.
5. MDV gives partial contract payment to ESCO.
6. MDV gives the remaining balance of the contract payment to ESCO when the total loan is repaid. The application process can take up to 21 to 30 working days once the application is submitted up to the approval stage.

3.3.2 Eligibility Criteria

The EPC Fund targets small or medium-sized enterprises (SMEs) and ESCOs for building retrofits located in Malaysia. The preferred energy efficiency retrofit measures include: chiller retrofits, Lighting System Efficiency, Air Conditioning Mechanical Ventilation (ACMV), Building Control System (BCS) and passive building features upgrade such as window tinting.

MDV as the implementing agency has set several requirements for ESCOs, as well as for projects eligible for funding. These requirements are as follows:

- a viable project needs both Investment Grade Audits (IGA) by EC-registered Electrical Energy Manager and an effective measurement and verification (M&V) plan with M&V process.
- said ESCO must be registered with the EC.
- said ESCO must have at least 5 full time staff.
- said ESCO must have at least RM 100,000 of capital.
- said ESCO must satisfy MDV's minimum credit requirements and credit checks.

3.3.3 Application Process

To obtain funding from the EPC Funds, once an ESCO as fulfilled the requirements as stipulated in the previous section, it needs to contact MDV through the general call line at +603 2697 9068 or by email at mdvinfo@mdv.com.my. The MDV will schedule a meeting with the ESCO to discuss the project and ensure that the proposed energy saving measures are reasonable. MDV also provides guidance on the application process which is done manually i.e. all forms and required documents are obtained from and sent to MDV's office at level 5, Menara Bank Pembangunan, 1016 Jalan Sultan Ismail, 50250 Kuala Lumpur.

The required documents to be submitted during application are as follows:

General requirements

- Completed application form which can be obtained directly from MDV's office
- Cross cheque payable to MDV as a deposit on the financing amount is applied as follows:
 - o Up to RM10 million: RM10,000
 - o More than RM10 million: RM20,000
- Signed and attached statutory (as per template format provided) declaration on
 - o Bankruptcy, litigation and authenticity of document
 - o Non-conflict of interest with MDV
 - o Non-payment of 3rd party intermediary fees
 - o Copy of National Registration Identity Card of the Directors/Managing Director/Chief Executive Officer/Chief Financial Officer

- Corporate/management information – including:
 - o Corporate profile
 - o Detailed listing of shareholders and shareholding percentage
 - o Organisation chart/reporting structure
 - o Business plan (for open-ended project)
- Profile of key technical staff/ project team of the company
- List of past major projects (3-5 years) and present projects –shown in table format. The information should include:
 - o Description of project
 - o Awarder of project
 - o Project start and end dates
 - o Value of the project
- Bank Negara Malaysia Credit Bureau Credit Report for applicant/company's proposed guarantors, directors and shareholders (for non-publicly listed companies) as well as the applicant/company and its subsidiary(ies)

Statutory documents

- Statutory documents include:
 - o Form 8/9 (Certificate of Incorporation of Public/Private Company)
 - o Form 13 (if there is a change after incorporation)
 - o Latest one year of Form 24 (Return of Allotment of Shares)
 - o Latest Form 49 (Return Giving Particulars in Register of Directors, Managers and Secretaries and Changes of Particulars)
 - o Latest Form of Annual Return
 - o Latest Form 44 (Notice of Situation of Registered Office and of Office Hours)
 - o Latest one year of Form 32A (Form of Transfer of Securities)
 - o Memorandum and Articles of Association

Project/contract information

- Certified true copies of main contract document(s), or Letter of Award(s) for the project(s) in relation to the financing application
- Details of the project which is subject to the financing, including:
 - o Technology application
 - o Scope of work
 - o Project timeline/Gantt chart
 - o Project team chart
 - o Soft and hard copies of project cashflow forecast and projection including details based and assumptions
 - o Company cashflow (for open-ended project only)
- Certified true copy of relevant sub-contracting/supplier document(s)/agreement(s) (where sub-contracting or third party(ies) are involved)
- Certified true copy of operating licences and permit (if applicable)

Financial information

- Certified true copy of the past three years of audited accounts of the applicant
- Latest management account of the applicant
- Certified true copy of the latest audited account of the Holding Company and Corporate Guarantor
- Latest management account of the Holding Company and Corporate Guarantor
- Latest Debtor/Creditor Ageing
- 6 months' bank statements of operating account

- List of existing borrowing/financing – in table format, including:
 - o Name of financial institutions
 - o Type of facility offered
 - o Facility limit
 - o Interest/profit rate
 - o Security/collateral imposed
 - o Latest outstanding balance
- Certified true copy of Letter of Offer from the existing financial institutions (if the applicant has existing borrowing/financing)

Declarations

- Signed declaration on net personal net-worth of personal guarantor(s) giving guarantee for the financing (format provided by MDV)

After MDV approves the project, they will forward the application to CGC and perform due diligence of the project. If approved, CGC will issue a letter of guarantee to MDV for the project.

3.3.4 Terms and Conditions

There are no specific terms and conditions applied to the EPC Fund. Furthermore, the EPC Fund does not have any restrictions on foreign ownership of the EE project i.e. it can provide funding to foreign-owned ESCOs and/or facilities

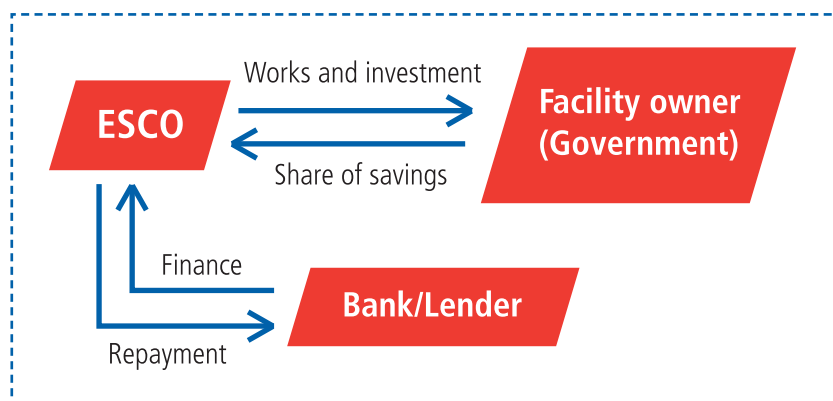
3.3.5 Contact Point

Queries can be directed to MDV's Credit Marketing Consultant Ms. Audi Jasman at audi@mdv.com.my or at 6016 266 1478.

> 3.4 Energy Performance Contracting in Government Buildings

3.4.1 Concept and Status in Malaysia

Implementation of the Energy Performance Contracting (EPC) concept in the government sector was approved by the government in January 2013. The concept of EPC is based on a profit-sharing agreement between the building owner and the Energy Service Company (ESCO) whereby the initial capital cost for the EE improvement projects is borne by ESCO (see Figure 5). To fund the EPC project, ESCO can use their own fund or take a loan from a bank for which a guarantee is often required. The Malaysian government through MDV also provides the EPC Fund dedicated for ESCOs engaging in EPC projects (see section 3.3).



>> Figure 5: Concept of EPC under Shared-savings Mechanism

Source: BSEEP (2017)

In addition to having the responsibility of providing initial capital cost, ESCO is also accountable for the implementation of energy saving measures, including:

- supply of energy efficient devices and equipment
- project financing
- consultancy services
- management of EPC contract
- contract works
- commissioning and services
- energy audit
- the operation and maintenance of equipment/energy-efficient installation
- design engineering
- inspections of energy efficiency improvement projects

The reduced energy costs from the energy saving measures are used as payment to ESCO. The actual payment amount is based the agreed sharing value between ESCO and the facility owner. Once the agreement has ended, the ownership of all equipment and system installed at the facility will be transferred to the facility's owner (Government). The implementation of the EPC mechanism in Government's buildings in Malaysia has been limited and only a few EPC contracts have been awarded. To date, EPC projects have been implemented in seven state-owned polytechnic institutions, for instance, in Politeknik Merimau, Politeknik Ibrahim Sultan Johor, and Politeknik Seberang Perai Penang, in which energy savings of 15-24% was achieved.

Currently, MESTECC, EC and the Public Works Department are developing a standard guideline with procurement procedures, as well as a sample contract on the implementation of EPC in the government sector. These documents will be used as a reference by the facility's owner implementing EPC especially in the public sector.

3.4.2 Criteria for Registration of ESCO

- The applicant has registered his business with either the Registrar of Business or the Registrar of Companies
- The applicant has employed, on a full-time basis, a Registered Electrical Energy Manager as prescribed under the Efficient Management of Electrical Energy Regulations 2008
- The applicant has access to suitable monitoring and testing equipment, and instruments required (i.e. electrical power and energy data logger, thermal energy data logger, flow data logger) for energy efficiency management works
- The applicant has satisfactorily furnished all the information as stipulated in the Application Form

3.4.3 Conditions of Registration

- The Letter of Registration issued is valid for a period of one year from the date of issuance of the said Letter of Registration
- The renewal of the Letter of Registration as an ESCO must be made not less than 1 month before the expiry date of the registration
- EC may cancel a Certificate of Registration of an ESCO if,
 - The holder of the letter ceases to conduct his business according to the purposed registered
 - The holder of the letter has been adjudicated a bankrupt
 - The company goes into liquidation
- The Letter of Registration as an ESCO may not be transferred unless there is a written approval from EC
- Any changes to the name, address, and other details of the business or company stated in the Letter of Registration must be informed in writing to EC within 14 days of such change
- All electrical works related to the energy services provided by the registered ESCO must be performed by competent persons in accordance with the Electrical Supply Act 1990 and the Electricity Supply Regulations 1994

3.4.4 Terms and Conditions

For government agencies whose electricity bills are paid by federal government, a set of following conditions are applied:

- The ESCO must be registered with the Ministry of Finance under the code 222801: Green Technology Services. The registered ESCO under this code must also be registered with the EC
- The government agency must ensure that the EPC provides savings to the government

For government agencies under the State authority or which have financial autonomy as a statutory body, and some public higher education institutions, the implementation of EPC depends on the respective procedures and regulations the agencies are subjected to.

> 3.5 Malaysia Electrical Supply Industries Trust Account

3.5.1 Overview

The Malaysia Electricity Supply Industries Trust Account (MESITA) was launched in 1997, with power producers, as its main funders, voluntarily contributing 1% of their total annual audited turnover from electricity sales to the Peninsular Grid or the transmission network (minus the fuel cost) to the Trust Account. The Electricity Supply Industries Trust Account Committee manages the Trust. The committee comprises representatives from EPU, MESTECC, EC, Tenaga Nasional Berhad and the representative from the contributing Independent Power Producer. The Committee is chaired by the Secretary General, Ministry of Energy, Science, Technology and Climate Change.

As MESITA depends on voluntary contributions, the amount of funds varies each year, and a certain percentage is earmarked off the total sitting fund, aligned with Ministry's current relevant policy.

MESITA provides funds for projects in various areas, including development and promotion of electricity supply industry, program to increase usage of EE, R&D programme in renewable energy and new sources of energy, as well as capacity building to develop human capital and expertise in electricity and energy sector. MESITA encourages the implementation of EE related courses, seminars, workshops and other capacity building activities, as well as the installation of highly efficient appliances and equipment. The fund also supports projects aiming to encourage EE by setting targets on reducing energy consumption. The latest figures of MESITA obtained from MESTECC revealed that from 1998 - 2018, MESITA provided funds for 156 projects with a total amount of RM 1,054,434,899.73 (See Table 4).

>> Table 4: Projects Funded by MESITA

Core trust	MESITA		MESITA Sabah	
	No of Projects	Project Value (RM)	No of Projects	Project Value (RM)
Rural area electrification	27	500,103,106.22	2	5,630,000.00
Promotion of electricity supply industry	36	206,385,772.51	1	3,200,000.00
EE programmes	20	95,490,629.97	6	2,437,016.36
R&D for electricity supply industry	45	149,412,721.80	3	6,520,710.81
Skills and training programmes	28	103,042,669.23	2	1,100,000.00
Total	156	1,054,434,899.73	14	18,887,727.17

MESITA determines the grant amount based on project cost budget and other related costs, including contracted staff's salary, project's scope and its viability and sustainability. In cases where the grant does not cover overall project cost, the applicant is responsible to cover the additional funding.

The application for MESITA is available online for twice a year through the website: <https://mesita.mestecc.gov.my>. For 2019 period, the first round of application was closed in May 2019.

3.5.2 Eligibility Criteria

Projects in the following areas are eligible for funding from MESITA:

- Rural electrification (for AAIBE Sabah only)
- R&D programme in renewable energy and new sources of energy
- Training/education to develop human capital and expertise in electricity and energy sector
- Programme to increase usage of energy efficiency
- Development/promotion of electricity supply industry

Entities eligibility for MESITA funding is also subject to the following things:

- Project's technical assessment that meet the terms in the trust deed of MESITA
- Contribution to the electricity supply industry and the well-being of community
- Alignment with national priorities.

3.5.3 Application Process

The applicants need to register and fill a form online on MESITA's website at <https://mesita.mestec.gov.my>. A complete guideline is provided on the website. Some of the information to be provided by the applicant include:

- Project identification and cost
- Objectives and scope of the project
- Benefits of the project and its target area/recipients.

Some of the required application documents include:

- Entity information
- Project information including scope, objectives, benefits and structure/component.
- Project team information/collaboration
- Methodology including project activities and proposed timeline
- Detail costing

Upon submission, the application is reviewed by various committees including a screening committee, technical committee and accounts committee. This process typically takes 2-3 months after the online application closed. Figure 6 shows MESITA application process



>> Figure 6: MESITA Application Process

3.5.4 Contact Point

Any enquiry can be directed to aaibedg@mestec.gov.my or direct line 03-88858042/8821/8752/8726.

> 3.6 Green Bonds and Sukuk

3.6.1 Overview

In addition to the aforementioned financing schemes, another innovative financing scheme is also available through the Malaysian capital market, where corporations may raise financing through the issuance of green bonds or sukuk. To provide guidance for the issuance of sukuk for green, social and sustainability projects, the Securities Commission Malaysia (SC) has introduced Sustainable and Responsible Investment (SRI) Sukuk Framework in 2014. Under this Framework, SRI sukuk can be issued to finance eligible projects including renewable energy, energy efficiency, natural resources, community and economic development as well as waqf⁷.

As an Islamic financing instrument, green SRI sukuk can only finance eligible green projects that are Shariah-compliant. While there are generally no Shariah issues regarding green technologies, green projects should not be related or incidental to non-Shariah compliant businesses or activities, for example construction of a green building for a casino or brewery. In 2017, the world's first green sukuk was issued under the SC's SRI Sukuk Framework to finance a solar project. Up to the end of 2018, there are five green SRI sukuk issued with a total amount of MYR 2.4 billion. The proceeds were used to finance four RE projects and the construction of a green building.

To support the growth of green sukuk in the country, several incentives are provided, including tax deduction on the issuance costs of SRI sukuk from year of assessment 2016 to year of assessment 2020. In addition, the SC also established MYR6.0 million **Green SRI Sukuk Grant Scheme**, administered by the Capital Markets Malaysia (CMM), the promotional arm of SC, to support external review costs incurred by green SRI sukuk issuers. The grant scheme is also tax exempted for applications received from 1 January 2018 to 31 December 2020. The grant covers the costs for independent expert reviews, up to 90% of the total cost, with a maximum financing size of RM 300,000 per issuance.

This development in the green sukuk market provides another source of project financing for green infrastructure.



⁷Property dedicated to charitable purposes

ASEAN Green Bond Standards

At the regional level, the ASEAN Capital Markets Forum (ACMF) introduced the ASEAN Green Bond Standards (GBS) in November 2017. This initiative, which is co-led by the SC and Philippines Securities and Exchange Commission, aims at developing green asset class in the region. The ASEAN GBS are aligned with the International Capital Market Association (ICMA)'s Green Bond Principles (GBP).

In line with the objective to develop green asset class in the region, the issuers of ASEAN Green Bonds must have a geographical or economic connection to the ASEAN region. In addition, fossil fuel power generation projects are excluded from ASEAN GBS to mitigate green washing of projects and protect the ASEAN Green Bond label.

Up to the end of 2018, six ASEAN Green Bonds/Sukuk⁸ with total issuances amounting to US\$543.70 million have been released in Malaysia, Singapore and Thailand. In February 2018, Indonesia issued the world's first sovereign green sukuk with an issuance size of US\$1.25 billion which is also aligned with the ASEAN GBS.

Recently, the ACMF also introduced ASEAN Social Bond Standards (SBS) and ASEAN Sustainability Bond Standards (SUS), which are aligned to ICMA's principles and guidelines, to support sustainable development and create sustainable asset class in ASEAN.

While ICMA has provided broad principles on green, social and sustainability bonds, the ASEAN standards aim to provide more specific guidance on how the ICMA's principles are to be applied across ASEAN in order for these bonds to be labelled as ASEAN Green, Social and Sustainability Bonds. Although ACMF has approved the ASEAN GBS, SBS and SUS, the implementation of each standards is subject to the respective regulations in each ACMF member countries.

3.6.2 Eligibility Criteria for SRI Sukuk

Eligible SRI projects refer to projects which aim to:

- Preserve and protect the environment and natural resources,
- Conserve the use of energy,
- Promote the use of renewable energy,
- Reduce greenhouse gas emission; or,
- Improve the quality of life for the society

The proceeds from the issuance must be utilised for eligible SRI projects under four different sectors:

- Natural resources
- Renewable energy and energy efficiency
- Community and economic development
- Waqf properties/assets

In addition, the following conditions are applied to the issuer:

- Issuer is required to appoint an independent expert to assess the SRI project
- Issuer is required to appoint a Shariah adviser to advise on Shariah-related matters
- Issuer is required to publish annual reporting to sukuk holders through a variety of medium such as websites, annual report and newsletter – containing information on the original amount earmarked for eligible SRI project, amount utilised for the SRI project, unutilised amount and if applicable, impact objectives of the eligible SRI project

⁸More information on the ASEAN Green/Social/Sustainability Bonds/Sukuk can be found on <http://www.theacmf.org/ACMF/upload/ASEANGreenBondsListing.pdf>

3.6.3 Application Process

The SRI Sukuk Framework only sets out additional requirements for an issuance of SRI sukuk. Therefore, similar to the issuance of non-SRI sukuk, issuers of SRI sukuk must comply with the requirements under the Capital Markets and Services Act 2007 (CMSA) and the relevant guidelines set by SC. The SC guidelines governing the issuance of SRI sukuk are the Guidelines on Unlisted Capital Markets Products under the Lodge and Launch (LOLA) Framework⁹ for issuances to sophisticated investors¹⁰ and the Guidelines on Issuance of Corporate Bonds and Sukuk to Retail Investors¹¹ for issuances to retail investors.

Application for issuances to retail investors¹²

All submission to SC must be made by an issuer through a principal adviser in an electronic version as well as two hard copies.

Some of the required application documents are listed in the following:

- Application letter
- Principal terms and conditions of the proposal
- Parties to the transaction
- Rating letter
- Latest audited financial statements
- Copies of approval from other relevant regulatory authorities, if any
- Declaration by issuer
- Shariah pronouncement
- Diagram illustrating the flow of monies in the designated account(s)
- Any other documents

Application for Green SRI Sukuk Grant Scheme

To receive the Green SRI Sukuk Grant Scheme, the sukuk issuer needs to submit an application to CMM. The application form is available at www.capitalmarketsmalaysia.com.

The required application documents are as follows:

- A copy of the independent expert review
- A copy of the invoice issued by the independent expert
- Proof of payment to the independent expert

The grant will be paid to the issuer within 60 days upon complete submission to CMM.

⁹More information on the LOLA framework can be found on <https://www.sc.com.my/api/documentms/download.ashx?id=50633bce-a4b6-4d51-a6a4-e7007a049dc8>

¹⁰Sophisticated investors include i) companies with total net assets exceeding RM10 million or its foreign currency equivalent and ii) individuals with a net worth exceeding RM3 million or its foreign currency equivalent

¹¹More information on the Guidelines on Issuance of Corporate Bonds and Sukuk to Retail Investors can be found on <https://www.sc.com.my/api/documentms/download.ashx?id=7be24ad9-1846-4de9-8897-d5ed58ec0011>

¹²For the application process details for Sophisticated Investors please see <https://www.sc.com.my/api/documentms/download.ashx?id=50633bce-a4b6-4d51-a6a4-e7007a049dc8>

3.6.4 Eligibility Criteria for Issuance of Green Corporate Bonds and Sukuk to Retail Investors

The following issuers, among others, are eligible to issue green corporate bonds/sukuk to retail investors:

- A public company whose shares are listed and quoted at a stock exchange;
- A licensed bank, licensed investment bank or licensed Islamic bank;
- Cagamas Berhad;
- Danajamin Nasional Berhad;
- Khazanah Nasional Berhad; and
- A public company whose shares are not listed and quoted at a stock exchange can also be eligible to issue a corporate bond/sukuk. In this case, the corporate bonds/sukuk should be irrevocably, unconditionally and fully guaranteed by the aforementioned entities or Credit Guarantee and Investment Facility (CGIF).

Green corporate bonds/sukuk issued to retail investors must have the following characteristics, among others:

- Green bonds/sukuk must be denominated in Malaysian Ringgit
- Green bonds/sukuk must be rated by a credit rating agency
- Green bonds/sukuk must have a tenure of at least one year



► Solar panel in the solar farm used to collect solar energy and converted it to electrical energy, Johor, Malaysia

» 4 Decision-making Matrix for the Selection of EE Financing Support Schemes for Private Investors

As elaborated in the previous chapters, there are several energy efficiency financing support schemes available to stakeholders looking for EE financing in Malaysia. Each scheme has its own set-up, requirements, eligibility criteria, funding application process and a particular target group. This chapter contains a decision tree to help stakeholders in Malaysia identify and determine the suitable EE financing scheme for their investment needs.

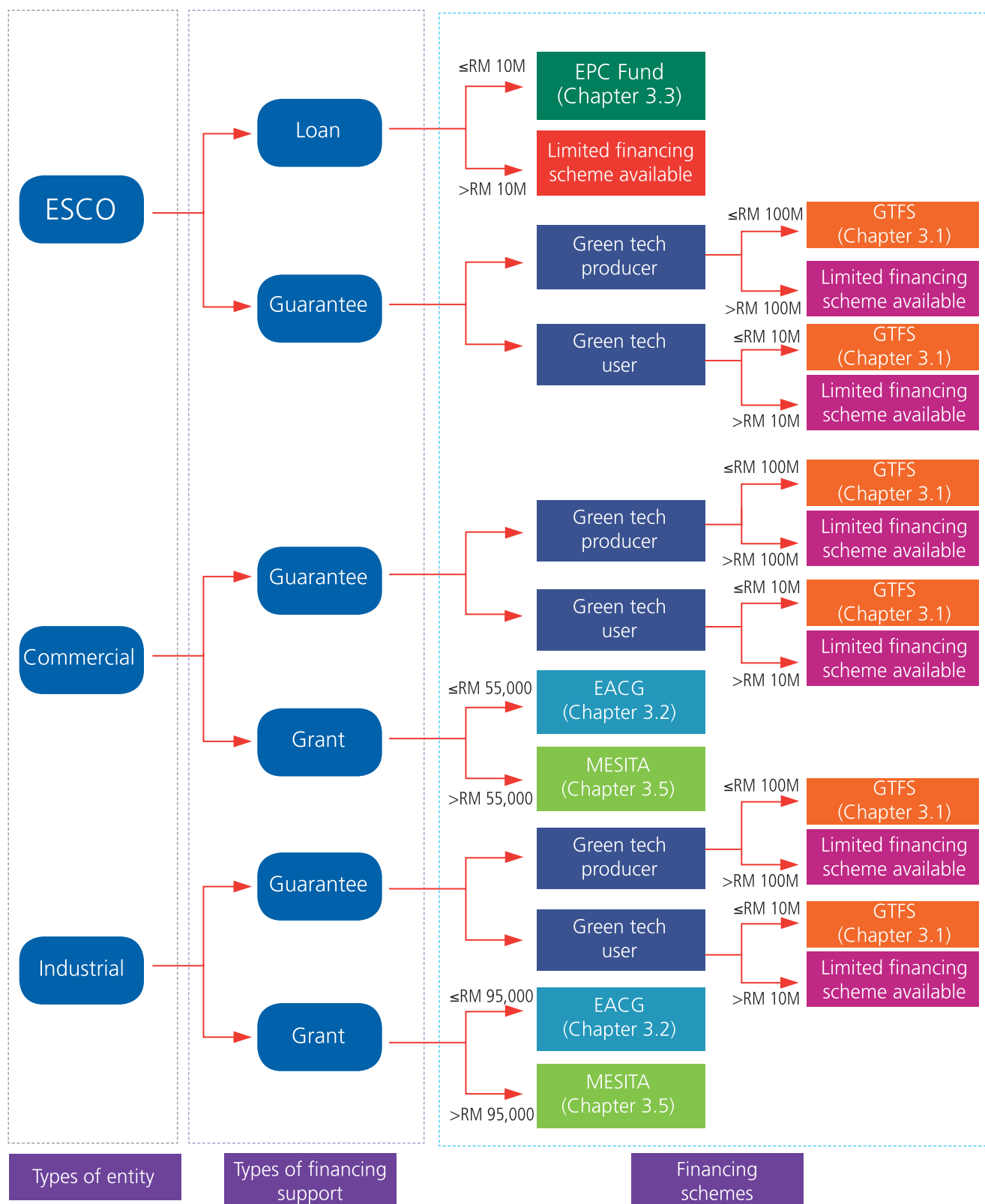
The following key variables in selecting a financing scheme for an EE project have to be considered:

- 1) Type of entity: institutions that want to access the financing scheme (i.e. commercial building owners, industrial corporations seeking funding to implement EE measures in their facilities, as well as Energy Service Companies (ESCOs) who require capital for their investment in Energy Performance Contracting (EPC) projects).
- 2) Type of financing support: each EE project has specific characteristics, which result in the need for different types of financing support, i.e. market or concessional loans, guarantees or grants.
- 3) Financing size: A financing scheme with larger endowment will be able to support a wider range of project types and sizes. In contrast, a smaller financing scheme will usually focus on a more specific EE project type.

In order to use the decision tree, the user needs to correctly determine all key variables applicable for their individual situation. Some of these variables may not be applicable in all cases, or certain projects may have two available funding options or, in some cases, none at all.

After identifying the suitable EE financing scheme, the user can refer to the section of the respective financing scheme (see Chapter 3) which provides detailed information about the available financing mechanisms for the project.

Figure 7 shows the decision tree for EE financing support schemes in Malaysia.



>> Figure 7: Decision Tree for EE Financing Support in Malaysia

Note: the EPC in Government Buildings and Green Bonds/Sukuk are not included in the decision tree since they have different features/mechanisms compared to other financing schemes listed above. In addition, public sector/ government buildings implementing EPC projects can get support through the EPC Fund provided they are engaged in eligible ESCOs.



▶ Off Grid PV Power Plant in Tanjung Labian Malaysia

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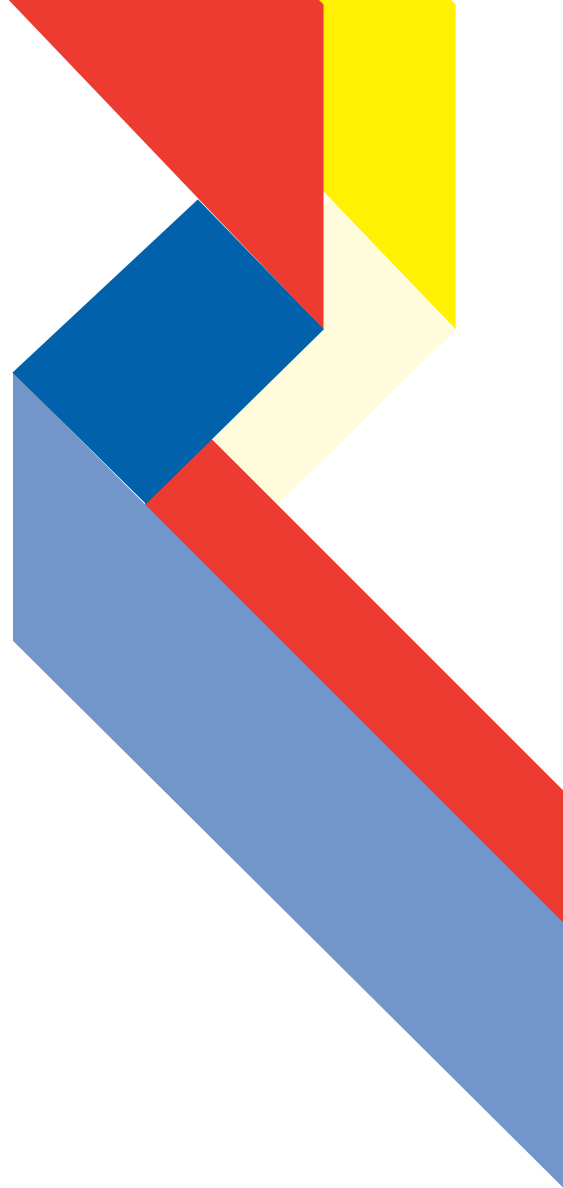
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ISBN 978-979-8978-52-4



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This publication is supported by:



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