MALAYSIAN GREEN TECHNOLOGY
AND CLIMATE CHANGE CORPORATION

GREEN TECHNOLOGY FINANCING SCHEME (GTFS) 4.0

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MINISTRY OF NATURAL RESOURCES AND ENVIRONMENTAL SUSTAINABILITY

MINISTRY OF FINANCE MALAYSIA

POWERING MALAYSIAN SMEs

BANK NEGARA MALAYSIA
CENTRAL BANK OF MALAYSIA

INTRODUCTION

1 GTFS 1.0

- Financing scheme initially introduced as part of Budget 2010.
- Subsequently extended until 2017, total allocation was RM3.5billion.
- Maximum RM50 million per company (Producer) and RM10 million per company (User)
- Interest subsidy of 2.0% per annum and 60% government guarantee

2 GTFS 2.0

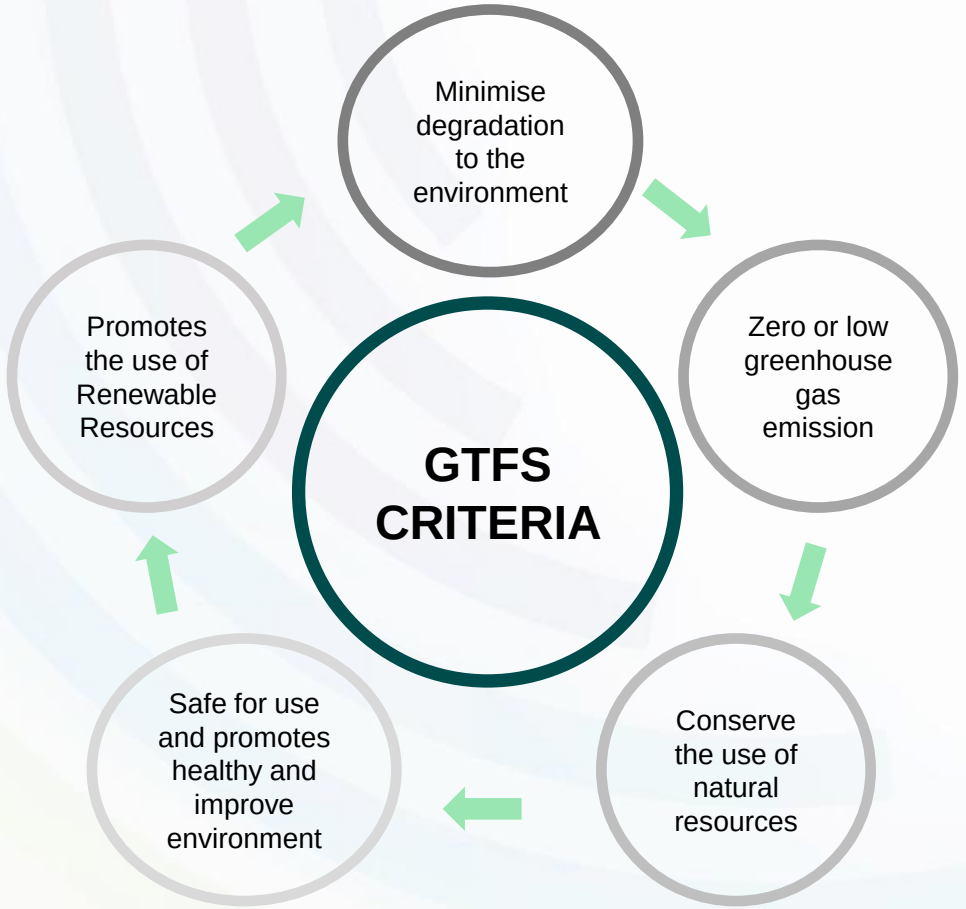
- Scheme available from 2019 until 31 Dec 2020.
- Total funding earmarked was RM2,0 billion.
- Introduced new category, Energy Services Companies (“ESCO”).

3 GTFS 3.0

- Introduced during the 2021 budget announcement.
- Total allocation RM2 billion
- Only focuses on green bond/sukuk issuance
- Guaranteed by Danajamin

4 GTFS 4.0

- Allocation RM1 billion up to December 2025
- One of the main enhancements of GTFS 4.0 is the inclusion of Housing Developer and Low Carbon Mobility Infrastructure
- Rebate 1.5% per annum, 60% - 80% government guarantee



PERFORMANCE OF GTFS

RM5.6 bil approved loans, 431 projects, 5400 green jobs created and 5.1 mil tCO2/year reduction

GTFS 1.0 (2010 -2017)

319
Num of Projects

28
Participating Financial Institutions (PFI)

4,909
Green Jobs creation

3.784
Mil tCO2/Year reduction

RM3.638 bil
Approved loans

GTFS 2.0 (2019 -2020)

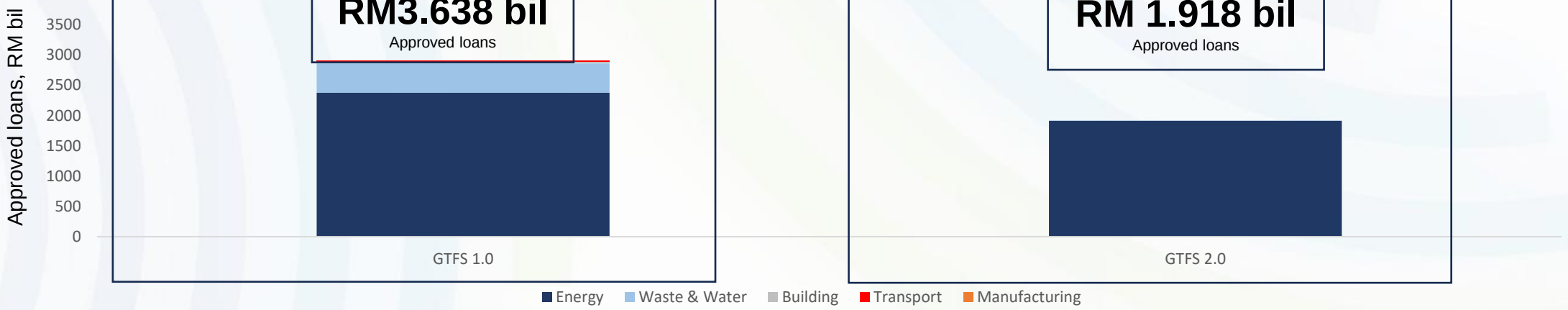
112
Num of Projects

29
Participating Financial Institutions (PFI)

491
Green Jobs creation

1.315
Mil tCO2/Year reduction

RM 1.918 bil
Approved loans



GTFS FEATURES

Producer

- Maximum RM100 million *
- To finance investment for the production of green products – *Excluding large scale solar projects*
- Financing Tenure – Up to 15 years
- Rebate 1.5%, period of rebate 7 years

User

- Maximum RM50 million*
- To finance investment for the utilization of green technology projects – *Excluding rooftop solar PV system*
- Financing Tenure – Up to 10 years
- Rebate 1.5%, period of rebate 7 years

ESCOs

- Maximum RM25 million*
- To finance investment or assets related to energy efficiency performance contracting
- Registered with Energy Commission as ESCO
- Financing Tenure – Up to 10 years
- Rebate 1.5%, period of rebate 7 years

Housing Developer

- Maximum RM100 million*
- To finance the construction of green building which focus on residential development with selling cost of maximum RM350,000
- Financing Tenure – Up to 5 years
- Rebate 1.5%, period of rebate 5 years

Low Carbon Mobility Infrastructure

- Maximum RM50 million*
- To finance electric vehicle charge point operator
- Financing Tenure – Up to 5 years
- Rebate 1.5%, period of rebate 5 years

* Per group of company

Note *: The maximum financing size/amount shall be aggregated and limited based on **Single Group Exposure Limit**.

Group Exposure is defined as:

- Companies having common directorship/management which include an individual who exercises control over a company or companies either directly or indirectly.
- Companies having common ownership/shareholding i.e. shareholding of over 50%.
- Subsidiary companies.

GTFS FEATURES

Items	Conditions
▪ Company Eligibility	▪ Legally registered Malaysian companies that have at least 60% Malaysian shareholding
▪ Participating Financial Institutions (PFIs)	▪ All Commercial Financial Institutions, Islamic Financial Institutions and Development Financial Institutions as per BNM
▪ Government Guarantee	▪ Up to maximum **60%** for the green cost of the finance amount for **energy, manufacturing, transport, building and water** while for **waste sector** is up to maximum **80%** for the green cost of the finance.
▪ Interest Rate	▪ Determine by Participating Financial Institutions (PFIs) for financing
▪ Project Eligibility	▪ Only **new**, **retrofitting** or **expansion** projects and **energy performance contracting** that incorporate Green Technology elements ▪ Applicable to fund the purchase of equipment and financing can be for both new and reconditioned equipment ▪ Reimbursement for advance payments included as part of the financing granted by PFI is allowed under the Scheme, subject to advances made on or after the Green Project Certificate date. Any advances made before the certification date are not eligible for reimbursement under this Scheme.

GTFS FEATURES

Items	Conditions
▪ Not Eligible	▪ 1) Refinancing / Restructuring of existing facilities; 2) Research and Development; and 3) Projects that has been completed and financed
▪ Working Capital	▪ Available for the financing of working capital for the purchase of raw materials. The maximum financing tenure allowed for working capital is 5 years and maximum financing amount is RM5 million
▪ Processing Fee	▪ 0.25% - Financing tenure of 10 years and less ▪ 0.50% - Financing tenure of more than 10 years ▪ The above processing fee is subject to green component cost apply or approved, subject to a minimum processing fee of RM8,000 (payable upfront upon submission of the application), payable to MGTC ▪ A processing fee of RM4,000 is payable for request to extend the validity of the project certificate. Each extension on the validity is only for a period of not more than 6 months. ▪ A processing fee of RM8,000 is payable for any request to vary the information on the certificate. Note: Processing fee paid shall be refunded should; 1. The application for a green project certificate rejected by the Technical Committee; 2. The applicant company failed to secure financing under the scheme after the 3rd extension of the certificate validity. The amount to be refunded shall be after deduction of minimum RM8,000 processing fee and plus any other expenses incurred during the technical assessment.

SUPPORTED SECTORS

Energy

- Application of Green Technology in power generation and in the energy supply side management, including co-generation by the industrial and commercial sectors
- Application of Green Technology in all energy utilisation sectors and in demand side management programmes

Water

- Adoption of Green Technology in the management and utilisation of water resources

Buildings

- Adoption of Green Technology in the construction, management, maintenance and demolition of buildings. Technology includes
  - Energy Efficiency and Renewable Energy
  - Indoor Environmental Quality
  - Materials & Resources
  - Water Efficiency

Transport

- Incorporation of Green Technology in the transportation infrastructure and vehicles, including public road transport
- Covers both infrastructure and vehicle

Waste

- Adoption of Green Technology in the management of waste water treatment, solid waste and sanitary landfill.
- Type of waste: Garden waste, industrial waste (i.e spent bleaching earth, waste edible oil, Palm Oil Mill Effluent; POME), municipal waste (Municipal Solid Waste; MSW), agricultural waste, organic waste and sewage

Manufacturing

- Transformation towards green manufacturing entails
  - Utilisation of green energy
  - Development and production of green products
  - Deployment of green processes in manufacturing activity

PROJECT ELIGIBILITY CRITERIA (ENERGY SECTOR)

No	Criteria	Sample Project
A	**Energy Supply Sector**: **Scope**: Application of Green Technology in power generation and in the energy supply side management, including co-generation by the industrial and commercial sectors	
	1.Efficient Fossil Fuel Power Plant	▪ Energy efficiency improvement aspects
	2.Renewable energy activities (off grid and on grid) Note: ▪ For on grid RE power plants, it is a pre-requisite that the Feed-in Tariff (FiT) has been approved by Sustainable Energy Development Authority (SEDA), or any other relevant schemes/initiatives ▪ **Eligibility for other RE sources except for Solar Project for Business or own consumption**	▪ Biomass power plant ▪ Biogas power plant ▪ Small hydro power plant ▪ Minihydro/microhydro ▪ Geothermal ▪ Waste to Energy ▪ Wind power plant
	3.Distributed power generation	▪ Heat and power plant (co-generation and tri generation plant)
	4.Improvement of power quality activities	▪ Power factor correction ▪ Harmonic filter

PROJECT ELIGIBILITY CRITERIA (ENERGY SECTOR)

No	Criteria	Sample Project
B	**1.Energy Utilisation Sector**: **Scope**: 1. Application of Green Technology in all energy utilisation sectors and in demand side management programmes.Application of Green Technology in industrial and commercial: ▪ Increase efficiency through; ▪ Rational use of energy ▪ Process improvement ▪ Replacement of equipment ▪ Energy recovery system ▪ Waste, reject reduction ▪ Use of green materials; or ▪ Improve working environment 2.New process to produce green products/ components	▪ Highly efficient equipment e.g., burner system, motor, chiller, pump, fan & blower, compressor, cooling tower, transformer, boiler and ballast ▪ Boiler economizer or air pre-heater ▪ Kiln recuperator or regenerator ▪ Proper insulation (e.g., mineral wool, refractory,etc.) ▪ Energy efficient lighting (e.g., T5 Fluorescent Light, Induction Light Compact Fluorescent; CFL and Light Emitting Diode; LED) ▪ Control (feedback with automatic actuator, Variable Speed Drive; VSD, temperature regulator etc.) ▪ Waste heat absorption chiller ▪ Producing energy efficient equipment or component

PROJECT ELIGIBILITY CRITERIA (MANUFACTURING SECTOR)

No	Criteria	Sample Project
A	**Scope**: Green Manufacturing **Type:** Transformation towards green manufacturing entails the executions of the following initiatives/type: 1. Utilisation of green energy; 2. Developing and production of green products; and 3. Deployment of green processes in manufacturing activity	Green Energy ▪ Utilisation of green energy and cleaner energy by the company. Green energy includes both deploying of renewable energy sources and achieving higher energy efficiency in operations. Green Product ▪ Developing greener products with lower carbon footprint. By developing Green products with eco-labels that are sought by consumers, companies can derive additional volumes and price premiums. Green Processes in Business Operations ▪ Implementing green processes in operations with efficient use of key resource, reduce waste generation, reducing carbon and water footprint. Green processes therefore improve operational efficiency and lower costs.

PROJECT ELIGIBILITY CRITERIA (TRANSPORT SECTOR)

No	Criteria	Sample Project
A	**Scope**: Incorporation of Green Technology in the transportation infrastructure and vehicles, in particular, bio-fuels and public road transport. ***Type***: Infrastructure and Vehicle **Infrastructure** Green infrastructure **Green Fuel** Green fuel production **Vehicle** Alternative Fuel, Energy Efficient Vehicle, including Electric Vehicle and Hybrid (i.e. taxi, bus, prime movers, lorry, motocycle, bicycle, etc) **Marine transportation**	▪ Biofuel refueling station ▪ Hydrogen refueling station ▪ Electric charging station ▪ Charge Point operator ▪ Biofuel from crops (i.e. jatropha, soybean, corn, etc) ▪ Production of environmentally friendly engine ▪ Fuel efficient vehicle ▪ Advanced fuel cells ▪ Advanced materials for transportation ▪ Advanced motor fuels ▪ Hybrid and Electric Vehicles ▪ Efficient electric train ▪ Leasing/Rental of EEV (services) ▪ Manufacturing/fabrication/assembly

PROJECT ELIGIBILITY CRITERIA (BUILDING SECTOR)

No	Criteria	Sample Project
A	**Scope**: Adoption of Green Technology in the construction, management, maintenance and demolition of buildings. **Element**: 1. Building: Office, Shopping complex, Hospital & clinic, Hotel and resort, University/ college and research institution, factoring building, exhibition hall and School, telecommunication tower, transmission tower and other type of building or structure as may be advised from time to time. **Eligibility:** ▪ The developer of Green Building must obtain Design Assessment/Provisional Certificate from locally developed rating tools/certification body recognized by MGTC ▪ Company is allowed to submit application after receiving Design Assessment/Provisional Certificate and not later than being awarded by Final Green Building Certificate	**Building owner:** self-occupy **Developer:** Green building, housing projects (link house, condominium, apartment, bungalow, etc), commercial buildings.
B	**Energy Efficiency and Renewable Energy** 1. Minimum EE Performance – Compliance to minimum requirement of MS1525:2007 (Code of Practice on Energy Efficiency and Use of Renewable Energy for Non-residential Buildings)	▪ Building envelope (Overall Thermal Transfer Value; OTTV or Roof Thermal Transfer Value; RTTV) ▪ High efficient equipment (e.g motor, chiller, pump, fan & blower, cooling tower, transformer, boiler and ballast ▪ Boiler economizer or air pre-heater ▪ Control (Building Energy Management System; BEMS, Variable Speed Drive; VSD. etc.) ▪ Enhanced post occupancy commissioning and verification, and sustainable maintenance ▪ Energy management

PROJECT ELIGIBILITY CRITERIA (BUILDING SECTOR)

No	Criteria	Sample Project
C	**Indoor Environmental Quality** Minimum Indoor Air Quality (IAQ) Performance- Minimum IAQ performance to enhance indoor air quality in building, thus contributing to the comfort and well-being of the occupants. Low indoor air pollutants, mould prevention	▪ Carbon Dioxide Monitoring and Control, ▪ Good thermal comfort control system, ▪ Effective air change ▪ Acceptable lighting levels ▪ Daylight glare control ▪ Low internal noise levels. ▪ Low Volatile Organic Compound (VOC) level
D	**Materials and Resources** 1. Reuse materials, recycle content materials and construction waste management. 2. Use of environmentally-friendly Refrigerants and Clean Agents.	▪ Record of reuse and recycle content materials. ▪ R-134a, Hydrocarbon refrigerant
E	**Water Efficiency** 1. Rainwater harvesting to reduce potable water consumption 2. Water recycling to reduce potable water consumption 3. Water efficient (irrigation/landscaping)-encourage the design of system that does not require the use of potable water supply from the local water 4. Water efficient fittings-encourage reduction in potable water consumption through use of efficient devices 5. Metering and leak detection system-encourage the design of systems that monitors and manages water consumption	▪ Rainwater Harvesting system ▪ Dual piping to allow the use of grey water ▪ Water efficient fittings ▪ Metering & Leak Detection System

PROJECT ELIGIBILITY CRITERIA (WASTE SECTOR)

No	Criteria	▪ Sample Project
A	***Scope:*** Adoption of Green Technology in the management of waste water treatment, solid waste and sanitary landfill. ***Type of Waste;*** Garden waste, industrial waste (i.e spent bleaching earth, waste edible oil, Palm Oil Mill Effluent; POME), municipal waste (Municipal Solid Waste; MSW), agricultural waste, organic waste and sewage 1. Waste recycling 2. Waste to fertilizer 3. Waste reduction 4. Waste water treatment 5. Circular Economy activities	▪ Waste cooking oil to biofuel ▪ Construction waste ▪ Batteries ▪ Clothing/Furniture ▪ Electronic Waste (e-Waste) ▪ Tires ▪ Composting (green microbe) ▪ Biodegradable materials (i.e bio resin) ▪ Hazardous waste ▪ Plastic Bags ▪ Styrofoam ▪ Contribute to improve effluent Biochemical Oxygen Demand (BOD) and Chemical Oxygen Demand (COD) level

PROJECT ELIGIBILITY CRITERIA (WATER SECTOR)

No	Criteria	Sample Project
A	***Scope:*** Adoption of Green Technology in the management and utilisation of water resources ***Type of Water:*** Fresh water (tap or portable), water for industrial processes, agriculture and grey water. 1.Management and utilization of water resource: •Better quality of water supply to users •Efficient use of water resource •Rainwater harvesting •Recycling & reuse •Reduction use of chemicals •Use of green materials and/or equipment	▪ Better water treatment technology ▪ Leakage monitoring and minimization ▪ Lower grade water for industrial process ▪ Recycling and reuse of water ▪ High efficient treatment plant

GTFS STRUCTURE

- Evaluate and verify projects meet the Scheme criteria
- Monitor and audit the success of the projects

Green Project Certificate

Government

MINISTRY OF FINANCE MALAYSIA

MINISTRY OF NATURAL RESOURCES AND ENVIRONMENTAL SUSTAINABILITY

- Credit evaluation and assess viability of the project
- Provide financing

Participating Financial Institutions (PFI)

Financing

Project Company

Category	Max Financing	Max Tenure	Rebate Period
Producer	RM100 mil	15 years	Up to 7 years
Users	RM 50mil	10 years	
ESCOs	RM 25 mil		
Housing Developer	RM100 mil	5 years	Up to 5 years
Low Carbon Mobility Infrastructure	RM 50mil		

- Administer the Guarantee and 1.5% Rebate

CGC POWERING MALAYSIAN SMEs

60% - 80% Government Guarantee

1.5% P.A Rebate

APPLICATION PROCESS

Certification Process (21 Working Days)

Processing fee
- Min RM8000 OR
- 0.25% : ≤ 10year Financing Tenure OR
- 0.50% : >10year Financing Tenure

APPLICATION (PROJECT PROPOSAL) via www.gtfs.my

→ **TECHNICAL EVALUATION AND RISK ASSESSMENT**

→ **APPROVAL BY GTFS TECHNICAL COMMITTEE (GTC)**

→ **ISSUANCE OF THE GREEN PROJECT CERTIFICATE (Cert Validity : 6 Month)**

Financing Process

SUBMISSION TO FINANCIAL INSTITUTIONS FOR FINANCING / LOAN

← **FINANCIAL INSTITUTION SUBMISSION TO CGC FOR GUARANTEE APPROVAL**

← **FINANCING DOCUMENTATION AND DISBURSEMENT BY PFIs**

← **PROJECT COMMENCEMENT AND COMMISSIONING. YEARLY M&V AUDIT CONDUCTED BY MGTC**

GTFS recipients are to submit GTFS M&V Audit Report 6 months upon commissioning.

Green Project Certificate holders are required to submit **GTFS Quarterly Report** until project commissioning

APPLICATION FORM

Green Technology Financing Scheme
(GTFS 4.0)

Application Form

1. Project Name Please state the name of the proposed project	
2. Category	**3. Project Sector**
☐ Producer ☐ User ☐ ESCO ☐ Housing Developer ☐ Low Carbon Mobility Infrastructure	☐ Energy ☐ Manufacturing ☐ Transportation ☐ Building ☐ Waste ☐ Water

- Applications for GTFS 4.0 are to be submitted online via email
- There are 6 sections in the Application Form that must be completed before submitting.
  1. Section A: Company Information
  2. Section B: Project Description
  3. Section C: Project Financing
  4. Section D: Project Monitoring & Verification
  5. Section E: Checklist (supporting documents)
  6. Section F: Declaration

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