



THE NATIONAL GREEN TECHNOLOGY POLICY



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- THE NATIONAL GREEN TECHNOLOGY POLICY
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ESTABLISHMENT OF MINISTRY OF ENERGY, GREEN TECHNOLOGY AND WATER (KeTTHA)

APRIL 2009

Ministry of Energy, Green Technology and Water was established during the Cabinet reshuffle



Low Energy Office (LEO) Building, Putrajaya



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LAUNCHING OF THE NATIONAL GREEN TECHNOLOGY POLICY

24 JULY 2009

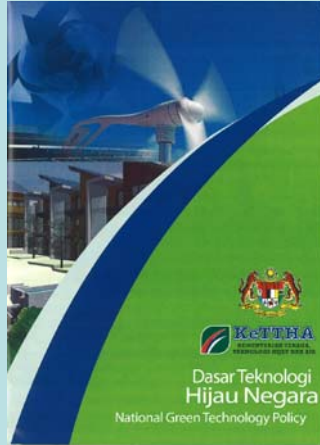
National Green Technology Policy was launched by the Prime Minister of Malaysia



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DEFINITION OF GREEN TECHNOLOGY



The development and application of **products, equipment and systems** used to conserve the natural environment and resources, which minimizes and reduces the negative impact of human activities.

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CRITERIA OF GREEN TECHNOLOGY

- Minimizes degradation to the environment;
- Has zero or low green house gas (GHG) emission;
- Safe for use and promotes healthy and improved environment for all forms of life;
- Conserves the use of energy and natural resources; and
- Promotes the use of renewable resources



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POLICY STATEMENT



Green Technology shall be a driver to accelerate the national economy and promote sustainable development



OBJECTIVES



- To **minimize growth of energy consumption** while enhancing economic development;
 - To **facilitate the growth** of GT industry & enhance its contribution to national economy;
 - To **increase national capability and capacity for innovation** in GT development & enhance Malaysia's competitiveness in global arena;
- (contd)



OBJECTIVES (contd)



- To ensure **sustainable development** & conserve environment for future generations;
- To enhance **public education & awareness** on GT and encourage its widespread use.



FOUR PILLARS



ENERGY

Seek to attain energy independence & promote efficient utilization

ECONOMY

Enhance national economic development through use of GT



ENVIRONMENT

Conserve & minimize impact on environment

SOCIAL

Improve the quality of life for all



SECTORS IN GREEN TECHNOLOGY

ENERGY SECTOR

- Energy Supply
- Energy Utilisation



BUILDING SECTOR



WATER & WASTE MANAGEMENT SECTOR



TRANSPORTATION SECTOR



ENERGY SECTOR

Application of Green Technology in power generation and in the energy **supply management** by the industrial and commercial sectors



Application of Green Technology in all energy utilisation sectors and in **demand side management** programmes



BUILDING SECTOR

Adoption of Green Technology in the construction, management, maintenance and demolition of buildings



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WATER & WASTE MANAGEMENT SECTORS

Adoption of Green Technology in the management and utilisation of water resources, waste water treatment, solid waste and sanitary landfill



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TRANSPORTATION SECTORS



Incorporation of Green Technology in the transportation infrastructure and vehicles, in particular, biofuels and public road transport



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Short-Term Goals

10th Malaysia Plan (2011-2015)

- Increased **public awareness and commitment** for the adoption and application of GT;
- Widespread **availability and recognition** of GT (products, appliances, equipment and systems) in local market;
- Increased **foreign and domestic direct investments** (FDIs and DDIs) in GT; and
- Expansion of **local research institutes and institutions of higher learning**



Mid-Term Goals

11th Malaysia Plan (2016 – 2020)



- GT - the **preferred choice** in procurement of products & services;
- Larger **local market share** in GT,
- Increased production of **local GT products**;
- Increased **Research Development & Innovation** of GT by local universities and research institutions
- Expansion of local SMEs and SMIs on GT into **global market**;
- Expansion of GT applications to **most economic sectors**.



Long-Term Goals

12th Malaysia Plan (2020 – 2024) and beyond



- Inculcation of GT in **Malaysian culture**;
- reduces **overall resource consumption** while sustaining national economic growth;
- Significant **reduction** in national energy consumption;
- Improvement of **Malaysia's ranking** in environmental ratings;
- Malaysia a **major producer** of GT in the global market;
- Expansion of **international collaborations** between local universities and research institutions with GT industries.



Strategic Thrust 1



STRENGTHEN THE INSTITUTIONAL FRAMEWORKS

- Formation of a **GT Council**
- Establishment of the **Malaysia GT Agency**
- Review and establish **legal mechanisms**
- Enhancement of **institutional clarity**



Strategic Thrust 2



PROVIDE CONDUCIVE ENVIRONMENT FOR GT DEVELOPMENT

- innovative **economic instruments**, including monetary and fiscal measures
- strengthening **the understanding** of local players in GT industries
- promotion of **FDIs and DDIs**
- establishment of **strategic GT hubs**
- establishment of **GT funding mechanism**



STRATEGIC THRUST 3



INTENSIFY HUMAN CAPITAL DEVELOPMENT IN GT

- **training & education programs** to improve human resource capacity
- **financial & fiscal incentives** for students to pursue GT disciplines
- **retraining programme & scheme** to enhance competency of semi-skilled labour
- **grading & certification mechanisms** for competent personnel
- **brain gain** programs



STRATEGIC THRUST 4



INTENSIFY GT RESEARCH AND INNOVATIONS

- **financial grants** in RDIC
- Establishment of **a coordinating agency** for RDI and **centre of excellence** or new research institute for GT development
- **smart partnerships** between the Government, industries, and research institutions
- strong **linkages** between local research institutions and regional and international centres of excellence in GT RDI



STRATEGIC THRUST 5



PROMOTION AND PUBLIC AWARENESS

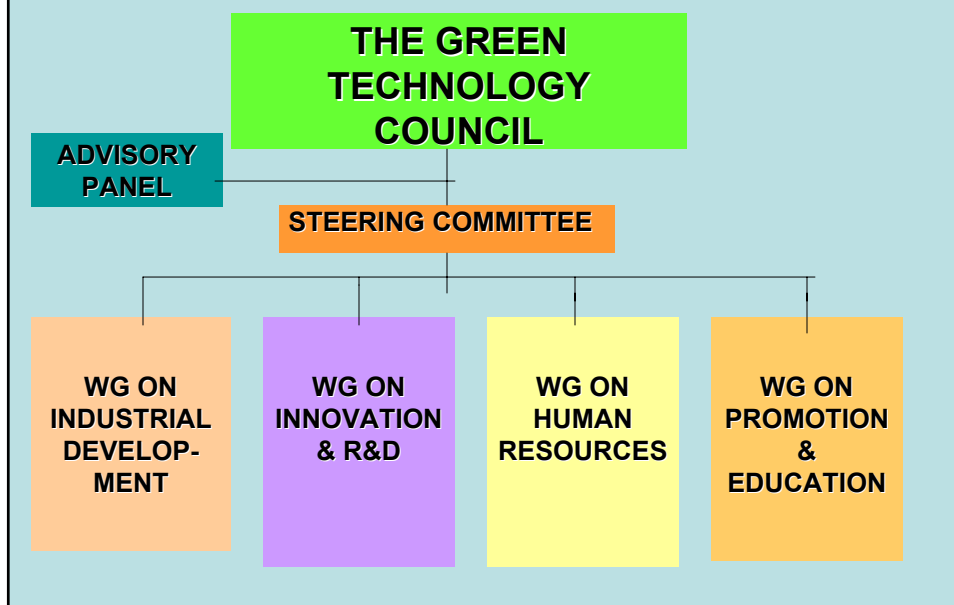
- information **dissemination**
- involvement of **media**, NGOs and individual stakeholders
- development of **syllabus** in education system
- **demonstration programs** of effective GT applications
- Adoption of GT in **all Government facilities**





THE GREEN TECHNOLOGY COUNCIL

- High level **coordination forum** for government ministries, agencies, private sectors and key stakeholders
- Chaired by **the PM**
- Supported by a **steering committee** and 4 **working groups**
- The first GT Council was held on **26 January 2010**





PROGRAMME

RESTRUCTURING OF MALAYSIA ENERGY CENTRE (PTM) AS THE NATIONAL GREEN TECHNOLOGY CENTRE (PTHN)

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BUDGET SPEECH 2010

MEMBANGUNKAN TEKNOLOGI HIJAU

54. Teknologi hijau, yang menjangkau pelbagai bidang, berpotensi menjadi sektor penting dalam pembangunan ekonomi. Ke arah ini, Kerajaan telah melancarkan Dasar Teknologi Hijau Negara pada bulan Ogos yang lalu. Dasar ini bertujuan menyediakan hala tuju pengurusan alam sekitar yang mampan. Untuk menggalakkan lagi pembangunan aktiviti teknologi hijau, Kerajaan akan:

Pertama: Merestruktur semula Pusat Tenaga Malaysia sebagai Pusat Teknologi Hijau Negara dengan tapak web untuk mempercepatkan pelan tindakan pembangunan teknologi hijau. Pusat ini berkerjasama dengan **fokus point** untuk mempromosikan dan memperluas teknologi hijau. Untuk mempromosikan aktiviti keedaran mengenai betapa perlunya mengijau persekitaran dan mengamalkan budaya hidup yang mesra alam, peruntukan sebanyak 20 juta ringgit akan disediakan;

Kedua: Mengadakan pameran antarabangsa tentang teknologi hijau pada April 2010. Pameran ini dijangka dapat menarik syarikat terkemuka dunia dan pakar dalam bidang teknologi hijau;

Ketiga: Menjadikan Putrajaya dan Cyberjaya sebagai Bandar Teknologi Hijau yang akan menjadi pelopor kepada pembangunan bandar lain; dan

Keempat: Memberi keutamaan kepada barangan dan perkhidmatan yang mesra alam sekitar dan memenuhi standard produk teknologi hijau dalam perolehan Kerajaan.

**'FOCAL POINT'
GREEN
TECHNOLOGY
DEVELOPMENT**

**RESTRUCTURING OF THE
MALAYSIA ENERGY CENTRE
AS
THE NATIONAL GREEN TECHNOLOGY
CENTRE**

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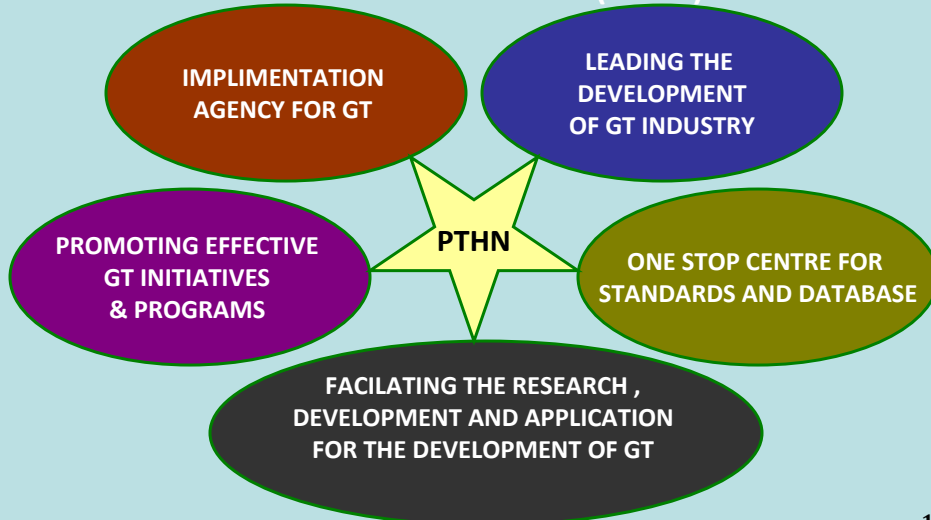
Malaysian Energy Centre



Established on 12th May 1998 as a research and development centre for the energy sector.



MAIN FUNCTIONS OF THE NATIONAL GREEN TECHNOLOGY CENTRE (PTHN)





PROGRAMME

**GREEN TECHNOLOGY
FINANCING SCHEME
(GTFS)**



BUDGET SPEECH 2010 ON 23-OCT-2009

FUND:
RM 1.5 BIL

GT PRODUCER:
MAXIMUM
RM 50 M

GT USER:
MAXIMUM
RM 10 M

56. Seterusnya, bagi memalukan pembekalan dan penggunaan teknologi hijau, Kerajaan akan mewujudkan satu dana berjumlah 1.5 bilion ringgit. Dana ini membolehkan syarikat pengeluar dan syarikat pengguna teknologi hijau membuat pinjaman mudah untuk membiayai aktiviti mereka. Bagi syarikat pengeluar, pinjaman maksimum yang boleh dibuat adalah 50 juta ringgit. Dan syarikat pengguna 10 juta ringgit. Sebagai tanda komitmen, Kerajaan akan menanggung 2 peratus daripada jumlah kadar faedah dengan nisbah jaminan Kerajaan 60 peratus dan institusi perbankan 40 peratus. Permohonan pinjaman boleh dibuat melalui Pusat Teknologi Hijau Negara. Skim ini dijangka akan memberi faedah kepada lebih 140 buah syarikat dan dimulakan pada 1 Januari 2010.

GOV INCENTIVE:
2% INTEREST SUBSIDY
GOV GUARANTEE- 60%

TARGET:
≥ 140 COMPANIES

EFF. DATE:
1-JAN-2010



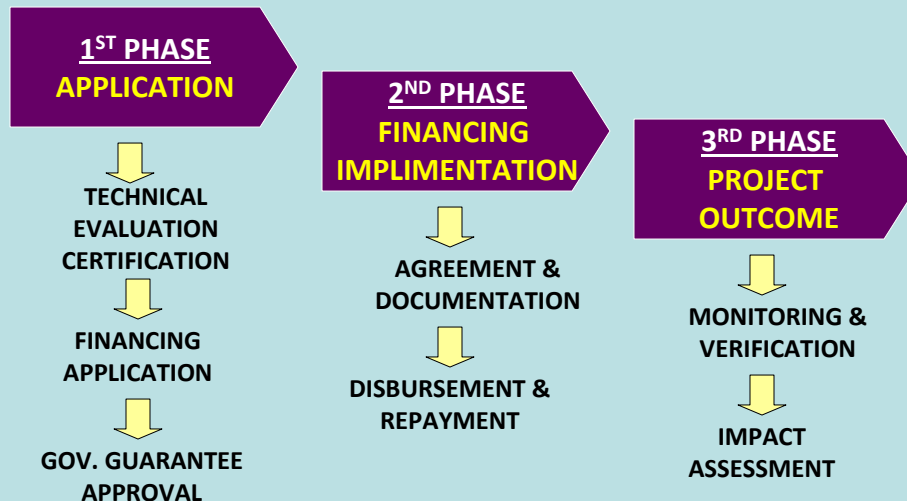
GREEN TECHNOLOGY FINANCING SCHEME

	(1) PRODUCER	(2) USER
SIZE	MAXIMUM RM 50 M PER COMPANY	MAXIMUM RM 10 M PER COMPANY
TENURE	UNTIL 15 YR	UNTIL 10 YR
CRITERIA FOR ELIGIBILITY	MALAYSIAN OWNED COMPANY (≥ 51% MALAYSIAN SHAREHOLDER)	MALAYSIAN OWNED COMPANY (≥ 70% MALAYSIAN SHAREHOLDER)
FINANCIAL INSTITUTION	COMMERCIAL BANKS; ISLAMIC BANKS; DEVELOPMENT FINANCIAL INSTITUTIONS	
GOVERNMENT INCENTIVE	INTEREST SUBSIDY OF 2%; GOV GUARANTEE OF 60% OF AMOUNT BORROWED	

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GTFS PROCESS FLOW



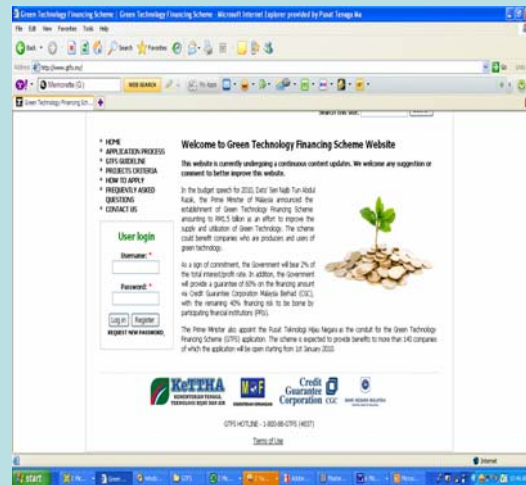
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GTFS HOTLINE & WEBPAGE (www.gtfs.my)

HOTLINE
1-800-88-4837

EMAIL
gtfs@ptm.org.my



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Credit Guarantee Corporation WEBPAGE (www.iguarantee.com.my)



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PROGRAMME

ROADMAP ON GREEN TECHNOLOGY

- A Roadmap on Green Technology will be prepared this year
- PTHN is tasked to come up with the road map



PROGRAMME

GREEN PROCUREMENT AND LABELING FOR GT

- KeTTHA is working with Ministry of Finance on mechanism for Green Procurement to be implemented for government agencies
- KETTHA is working with SIRIM to develop standards, certification and labeling mechanism to support this



PROGRAMME

PROMOTION & PUBLIC AWARENESS ON GT

- KeTTHA will undertake a promotion and public awareness programme
- To increase awareness of GT among the stakeholders and general public
- To involved media and NGOs



PROGRAMME

INTERNATIONAL CONFERENCE AND EXHIBITION ON GREEN TECHNOLOGY 2010



IGEM 2010



DATE:
14 – 17 OCTOBER 2010

VENUE:
KUALA LUMPUR CONVENTION
CENTRE

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PROGRAMME & ACTIVITIES



- Exhibition
- Conference/Seminar
- Cooperation between local and foreign universities
- Workshops
- Documentaries / Videos
- *Business Matching Sessions*
- *Business Networking*

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WEBPAGE



www.kettha.gov.my atau www.igem.com.my

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PROGRAMME

**TO MAKE
PUTRAJAYA & CYBERJAYA AS
GREEN TECHNOLOGY CITIES
(Green Township)**

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GREENING OF PUTRAJAYA AND CYBERJAYA

- During the Budget Speech in October 2009 the Prime Minister informed that the government will :
 - “ Develop Putrajaya and Cyberjaya as pioneer townships in Green Technology, as a showcase for the development of other townships. “



KEY GOALS FOR 2010

*GREEN TOWNSHIP
GUIDELINE*

GREEN RATING SYSTEM

**SAVING 10% OF ENERGY AND WATER USAGE
IN GOVERNMENT BUILDINGS IN PUTRAJAYA**

***CARBON FOOTPRINT BASELINE FOR
PUTRAJAYA & CYBERJAYA***

1. GREEN TOWNSHIP GUIDELINE

TO DEVELOP
AND
PROMOTE
A GUIDELINE
FOR
GREEN
TOWNSHIP



Well connected neighbourhood



Reduced carbon footprint



Thriving and vibrant economy



Green building



Environmentally friendly



Efficient use of resources



Well managed



Inclusiveness and equity



Sense of community and belonging

2. GREEN RATING SYSTEM



TO DEVELOP AND APPLY A GREEN RATING SYSTEM FOR TOWNSHIP AND COMMUNITY



SYSTEM TO BE BASED ON '**CARBON FOOTPRINT**' USING '**COMMON CARBON METRIC (CCM)**' PROTOCOL DEVELOPED BY UNEP- SUSTAINABLE BUILDING AND CONSTRUCTION INITIATIVES (UNEP-SBCI)



SYSTEM TO BE USED FOR CALCULATING '**CARBON EMISSION**' OR '**GREEN HOUSE GASES**' PRODUCED BY THE DEVELOPMENT AND OPERATION OF A TOWNSHIP OR COMMUNITY



3. SAVING 10% OF ENERGY AND WATER USAGE IN GOVERNMENT BUILDINGS IN PUTRAJAYA



TO IMPLEMENT THE FOLLOWING ACTIVITIES:-

1. SEMINARS AND AWARENESS CAMPAIGNS
2. BASIC TRAINING ON ENERGY AND WATER MANAGEMENT TO USERS'S BUILDING MANAGERS
3. TECHNICAL ADVISORY SERVICES
4. A COMMITTEE OF ALL STAKEHOLDERS AND USERS TO OVERSEE AND COORDINATE ACTIVITIES

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OTHER ACTIVITIES

- CONFERENCES AND WORKSHOPS
- COLLECTION OF DATA FOR THE GREEN RATING SYSTEM
- DEMONSTRATION PROJECTS ON GREEN TECHNOLOGY
- RETROFITTING OF THE PRIME MINISTER'S OFFICE BUILDING BY KeTTHA & PWD
- RECYCLING AND COMPOSTING PROJECT PUTRAJAYA CORPORATION (PJC)
- ROADMAPS AND DEVELOPMENT PLAN BY PUTRAJAYA CORPORATION, PUTRAJAYA HOLDINGS, CYBERVIEW SDN. BHD AND SEPANG MUNICIPAL COUNCIL IN DEVELOPING THE GREEN TOWNSHIP CONCEPT IN PUTRAJAYA & CYBERJAYA

AGENCIES INVOLVED

LOCAL GOV.	Putrajaya Corporation (PJC)	Sepang Municipal Council
Township Developer	Putrajaya Holdings	Cyberview Sdn Bhd
Operator / Owner / Managers	PWD Putrajaya, Bahagian Perumahan & Hartanah (BPH-JPM) & PJC	Cyberview Sdn Bhd & Multimedia Development Corp. (MDEC)
Project Implementor	KeTTHA, PTHN	
Others	<p style="text-align: center;"> Kementerian Wilayah Persekutuan & Kesejahteraan Bandar Ministry of Natural resources and Environment(NRE) Ministry of Housing and Local Government (KPKT) Dept. Of Town and Country Planning Institut Sultan Iskandar Institute (ISI-UTM) Malaysia Green Building Confederation (MGBC) Malaysia Institute of Planners (MIP) National Hydraulic Research Inst. </p>	



THANK YOU

