

Tax incentives for green industry in Malaysia

Malaysian Investment Development Authority, Malaysia

<http://www.mida.gov.my>

To strengthen the development of green technology, the Government will continue to provide incentives in the form of investment tax allowance for the purchase of green technology assets and income tax exemption for the use of green technology services and system.

The incentives which were announced in Budget 2014 will cover broader scope of green technology activities in the areas of energy, transportation, building, waste management, and supporting services activities. It also facilitates the transition of the expired (by 31 December 2015) tax incentives relating to renewable energy (RE) and energy efficiency (EE) projects under the Promotion of Investment Act (PIA), 1986.

Tax incentive for green technology project

Investment Tax Allowance (ITA) of 100% of qualifying capital expenditure incurred on a green technology project from the year of assessment 2013 (date on which the first qualifying capital expenditure incurred is not earlier than 25 October 2013) until the year of assessment 2020. The allowance can be offset against 70% of statutory income in the year of assessment. Unutilised allowances can be carried forward until they are fully absorbed.

Green technology project related to renewable energy, energy efficiency, green building, green data centre, and waste management can qualify for this tax incentive.

Tax incentive for green technology services

Income tax exemption of 100% of statutory income from the year of assessment 2013 until the year of assessment 2020.

Green technology services related to renewable energy, energy efficiency, electric vehicle (EV), green building, green data centre, green certification and verification, and green township can qualify for this tax incentive.

Applications received by 31 December 2020 are eligible for this incentive. Applications should be submitted to MIDA.

Tax incentive for purchase of green technology assets

Investment Tax Allowance (ITA) of 100% of qualifying capital expenditure incurred on green technology asset from the year of assessment 2013 (date on which the first qualifying capital expenditure incurred is not earlier than 25 October 2013) until the year of assessment 2020. The allowance can be offset against 70% of statutory income in the year of assessment. Unutilized allowances can be carried forward until they are fully absorbed.

Incentives for establishment of Waste Eco Parks (WEPs)

Waste Eco Park (WEP) aims to promote waste recycling, recovery and treatment activities by the industries and provides a sustainable solution to waste management problem. This will encourage investments in facilities and infrastructure towards holistic waste management activities. In order to promote the activities, there are incentives available for WEP Developer, WEP Manager and WEP Operator (companies operating in the WEP).

WEP Developers

Applications received by MIDA from 1 January 2016 until 31 December 2020, are eligible to be considered for this incentive.

WEP Managers

Applications received by MIDA from 1 January 2016 until 31 December 2020, are eligible to be considered for this incentive.

WEP Operators (companies operating in WEP)

Applications received by MIDA from 1 January 2016 until 31 December 2020, are eligible to be considered for this incentive.

WIPO GREEN Database

WIPO GREEN, an interactive marketplace that connects technology and service providers with those seeking innovative solutions, was established by the World Intellectual Property Organization (WIPO) in 2013. WIPO GREEN consists of an online database and network that brings together a wide range of players in the green technology innovation value chain, and connects owners of new technologies with individuals or companies looking to commercialize, license or otherwise access or distribute a green technology. These technologies are available for license, collaboration, joint ventures and sale. The database helps not only to accelerate innovation and diffusion of green technologies, but also contributes to the efforts of developing countries in addressing climate change.

For more information, access:

<https://webaccess.wipo.int/green/>

Net-metering solutions for using renewable energy in Sri Lanka

Sri Lanka Sustainable Energy Authority (SLSEA), Sri Lanka

<http://www.energy.gov.lk>

Net-metering is a policy that allows an electricity customer to use renewable energy sources within his premises to generate electricity and utilise it within his premises, and to export it to the national grid if excess power is being generated, to be recovered when needed. Therefore, the grid acts like an energy bank for the customer. This policy originated in the USA, but has now spread to many countries. Both electricity distributors, that is, the Ceylon Electricity Board (CEB) and the Lanka Electricity Company Pvt. Ltd. (LECO), offer net-metering to their customers.

Both regulations are nearly the same, with the only difference in fees for net-metering. Net-metering involves a ten-year contract, a generation facility with a limit of 10 MW or the contract demand of the premises and any renewable resource for power generation. The surplus will be credited to the customer but no payment will be made for the surplus nor can the customer sell it to another customer.

Technically, any renewable resource like hydro, wind, solar and biomass can be used for net-metering. But at household level, solar PV systems are the preferred option, owing to resource availability, smaller space requirements and ease of operation and maintenance. Solar PV systems are available in the market in wide variety, quality and of course, price. The most advanced solar technologies require no special expertise to install. The basic requirements are a solar PV panel, a grid-tied inverter and careful integration of the system together. The inverter output requires to be connected to the household supply, accompanied with necessary protection and isolating equipment, while a two way meter is installed in the house by the electricity service provider. The net-metering scheme can become operational upon signing an agreement.

Tips on installing a net-metered system

- It's appropriate to study the past electricity bills, of about three years, to ascertain variations in the electricity waste pattern. The average electricity bill should be considered for the selection of an appropriate system.
- Scan the surrounding environment of the house and select an exposed, sunny, south sloping roof area to locate the panel and an enclosed area to install the inverter.
- In Colombo, solar panels need to be oriented at an angle of 7 degrees to the horizontal sloping in the southern direction, for maximum yield. However a more angle of 15° is recommended to facilitate.
- The solar panels should be purchased accompanied with a suitable inverter and other appropriate items, known in the PV industry as Balance of System (BoS), and installed conforming to wiring regulations governing such installations.
- Solar tracking systems are capable of tracking the motion of the sun throughout the day to get maximum power generated from the solar panels. Such tracking systems can be installed for better results, but are significantly expensive.
- The customer is required to enter into an Agreement, with the utility (CEB or LECO), namely, the "Agreement and Grid Interconnection Standards for Net-metering of an On-grid Renewable Energy based Generating Facility."
- The electricity distributor would take necessary steps to install the net-metering setup, after which the facility could start generating. The surplus could be banked to the grid legally as per the contract.

Configurators

The SEA developed user-friendly configurators (tools) to help users identify the 'right size' for a solar net-metering solution which would enable making the best choice for a net-metered solar system based on the level of investment. The tariff effective since September 16, 2014 is applicable for this configurator.

1st Configurator

This configurator helps you make choices based on:

- Your level of investment.
 - Need of replacing or adding electrical equipment.
- You can make choices based on the two options given above. The configurator will select a suitable system for you, assuming the following:
- 17% plant factor
 - Utility cost of LKR 65,000
 - System cost of LKR 350,000 per kW
 - Your energy bill will be reduced to the lowest possible value (close to zero). The tool has been optimised, therefore it is practically impossible to get zero units, but the tool would give you the best deal between the highest saving and the lowest investment.

2nd Configurator

This configurator is based on data of list prices of panels and inverters provided by solar companies. You can make choices based on:

- Prices of systems.
- Payback periods.

You can make choices based on the two options given above. The configurator will select a suitable system for you, assuming the following.

Results would be displayed at your convenience. For example, if you wish to seek a system that fits your budget, you could select systems sorted according to their prices or simple payback periods. Alternatively, if you wish to seek reputed brands, you could select companies sorted in the alphabetical order. We also give contact details of companies, so that you could get more information about the products from them.

3rd Configurator

This configurator is built for micro inverters. Micro inverters are compact units that convert direct current (DC) to alternating current (AC) immediately at the solar module. As compared to solar PV installations that use string or central inverters, micro inverters deliver 5% to 10% greater energy harvest over the system lifetime by applying Maximum Power Point Tracking (MPPT) to each solar module to optimise energy harvest. Micro inverter technology delivers more kilowatt-hours daily, monthly and yearly, even though the partial shade of clouds, trees, or structural obstructions are present. As a result, there is

no dramatic reduction in system output when a solar module, or part of a module, has its output reduced by shading or build-up of surface debris. Micro inverters are designed for high reliability operations and they generally have a longer lifespan than that of string or central inverters.

This configurator is based on data of list prices of panels and micro inverters provided by solar companies. You can make choices based on:

- Prices of systems.
- Payback periods

Results would be displayed at your convenience, and are listed according to their payback periods.

4th Configurator

Sometimes, you may need to replace a few household items, for example, an old refrigerator, incandescent lamps, or even you might need to purchase new items, such as an air conditioner, a double door refrigerator etc. You will lower your electricity bill when you remove items in use, and you would increase your bill when you add new items. This configurator will calculate your new electricity bill, based on the items you choose to add or remove.

This tool uses the average wattages of common household electrical equipment. The tool will help you make choices based on:

- Items you wish to replace, add or remove.
- The tentative duration which these equipment will be operated.

Publications on SMEs competitiveness

Innovation and SME Financing in Selected Asian Economies

This publication highlights the different policy measures taken by the governments of seven Asian economies to stimulate innovation among SMEs. It contributes to the current discourse on the importance of financing innovations to create a conducive environment for long-term SME growth.

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Exchanging Value - Negotiating Technology Licensing Agreements: A Training Manual

The manual provides an introduction to some of the basic issues that arise in technology licensing negotiations and offers useful insights into how they may best be handled. In a highly competitive and dynamic marketplace, technology licensing is a useful option for companies seeking to maintain their competitive advantage and a healthy balance sheet. It covers a wide range of basic issues that arise during technology licensing negotiations and offers useful insights into how they may best be handled in practice.

Contact: Media Relations and Public Affairs Section, WIPO. Tel: + 41 22 338 8161 or 338 95 47, E-mail: publicinf@wipo.int, Web: <http://www.wipo.int>

Globalization and Performance of Small and Large Firms

The report examines whether and how globalization has differential effects on small and (or versus) large firms and aims at identifying policy issues to be addressed to achieve stronger and more resilient economic growth in East Asian countries. Globalization in this research is broadly defined to include trade and foreign direct investment (FDI) liberalization, trade (exports and imports), international capital flows, outsourcing and traded intermediate goods. The research conducted 10 country studies for 8 countries in the Asia-Pacific region, namely, China, Indonesia, Japan, Korea, Malaysia, Philippines, Thailand, and Viet Nam.

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