Half-Day Seminar on MEPS- Part 2

by Dr Siow Chun Lim

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This is the continuation to the report on the Half Day Seminar on MEPS at Hotel Grand Paragon, Johor Bahru on 8th November 2018.

The second speaker, Dr. Gobbi, presented the outcome of his market research on opportunities for High Efficiency Motors (HEM) in Malaysia industries. HEM is characterised as having low power losses. Typical measures to minimise power losses include using larger diameter copper wires at the stator part, higher quality steel laminations to minimise core loss, good quality bearings to reduce windage and frictional losses, and optimisation of air gaps. As per IEC 600364-30-1:2008, IE1 is categorised as standard efficiency while IE4 is categorised as super premium efficiency. He then compared the savings if one is to use IE2 as opposed to IE1 motors. HEM may have higher initial cost but the savings shall override it over a longer lifespan. Based on the market study which was concluded in 2014 using data acquired through the survey of regulator, demand and supply side sectors, Dr. Gobbi concluded as below:

- Industries use 85% of the electric motors in Malaysia and import 100,000 units each year since 2010; most of which are IE1 motors.More than 70% of the installed motors are in operation for more than 15 years
- More than 80% of industries send their motors for rewinding upon stator winding failure for at least five times before buying a new motor. This is because; the cost of rewinding is much less than a new motor.
- The industries are not concerned about the drop in efficiency and life cycle cost of the motors.
- Technical personnel in Industries understand that the payback period for investment in HEMs is less than 2 years, but found it difficult to convince the decision makers.
- The most significant barrier for HEMs to penetrate Malaysian market is the low electricity tariff which made the industries think the payback period for investment on HEMs is too long rather than within 2 years especially for motor rating above 3 kW considering the ever increasing energy cost.
- The wrong understanding on the payback period is supported by the unregulated prices of HEMs in Malaysia as there is no MEPS in place and no enforcement to regulate type of motors to be imported into country.

The final speaker was Puan Ruhaizan from the Green Technology Division of the Malaysian Investment Development Authority (MIDA). She highlighted several investment opportunities in the green technology industry in Malaysia. MIDA is the principal government agency to promote investment and coordinate industrial development and selected services sectors in 1967 under Act of Parliament, 1965. It has presence in 20 countries around the world. Green and clean technology is one of many sectors identified as quality investment. Some of the business friendly policies in place include 100% foreign equity ownerships in selected services sectors, freedom of repatriation of incomes and employment of expatriate for key posts. As of March 2018, the following tables summarise the total energy efficient (EE) projects and renewable energy (RE) projects approved by MIDA:

Table 1: EE Projects Approved

Type of Services	Number of Projects	Total Investment (RM million)
Own Consumption	117	6506.53
ESCO	23	492.52
Total	140	6999.05

Table 2: RE Projects Approved

RE Projects based on Sources	Number of Projects	Total Investment (RM million)
Solar	386	5844.3
Biomass	127	4858
Biogas	81	1140.8
Mini hydro	25	1898.3
Geothermal	1	506.3
Total	620	14247.7

Tax incentives are also provisioned under Green Technology Incentive, Income Tax Act 1967 and Promotion of Investment Act (PIA), 1986. Investment Tax Allowance can be utilised to offset against 70% of statutory income and is eligible for companies which undertake investment in a specific project that promotes sustainability and green environment. Other than RE and EE, green building, green data centre and integrated waste management activity are also considered as promoted projects under MIDA. Eligible companies must minimise the degradation of the environment or reduce greenhouse emission and promote good health and improve the environment.

On the other hand, Income Tax Exemption of 100% of statutory income from the year of assessment where the date of application received by MIDA until the year of assessment 2020 is applicable for eligible companies. Eligible companies must employ at least five full time employees including at least one competent personnel in green technology, have a green policy related to sustainability or environmental and the income that qualifies for exemption must be derived from green technology services. She concluded her talk by explaining the application procedures for the aforementioned incentives.

More photos of the event are as below.

Prof. Afifi from IEM Southern Branch presenting token of appreciation to Puan Hafiza

Prof. Afifi from IEM Southern Branch presenting token of appreciation to Dr Gobbi

Prof. Afifi from IEM Southern Branch presenting token of appreciation to Puan Ruhaizan

Group photo of all participants