SPEECH TEXT BY

BRIG. JEN DATO' PROF. DR. KAMARUDIN HUSSIN

VICE CHANSELLOR

Universiti Malaysia Perlis

Memorandum of Agreement (MoA) Signing Ceremony

Between

UniMAP, GETSOL DAN UniMAP HOLDINGS

The RE Project - Rooftop Solar Panel for FIT (Feed-in-tariff)

AT THE AUDITORIUM OF UniMAP LIBRARY, UniMAP MAIN CAMPUS PAUH PUTRA, PERLIS ON 18 JUNE 2013, 2.00 pm.

Bismillah Hirrahman Nirrahim

Royal Address

Mengadap Raja Muda Perlis, Duli Yang Teramat Mulia Tuanku Syed Faizuddin Putra Ibni Tuanku Syed Sirajuddin Jamalullail merangkap Tuanku Canselor UniMAP kerana kesudian bercemar duli berangkat ke majlis pada petang ini.

Sesungguhnya keberangkatan Duli Tuanku pada petang yang berbahagia ini bagi menyaksikan Majlis Menandatangani Persetujuan di antara UniMAP, GETSOL dan UniMAP Holdings amatlah patik sekalian hargai. Menjunjung kasih Tuanku.

Ampun Tuanku,

Patik mohon limpah perkenan Duli Tuanku bagi menyampaikan ucapan kepada tetamu yang hadir dalam bahasa Inggeris. Ampun Tuanku.

Salutation

- 1. Respected guests, Dr Gabriel Peter Salgo, President, Getsol Sdn Bhd
- 2. Yang Mulia Tengku Adyl Hazraque, Vice-President, Getsol Sdn Bhd
- 3. My respected colleagues, the Deputy Vice Chancellors
- 4. Ir. Shaharenam bin Mukhtar, General Manager TNB Perlis
- 5. Mr. Amir Shariffuddin Hamidi, Chief Operating Officer, Getsol Sdn Bhd
- Dr. Ing. Insan Boy, General Manager S.E.A., Canadian Solar Incorporated
- Mr. Eugene Teo, Regional Sales Manager S.E.A., Canadian Solar Incorporated
- 8. Mr. Siddiq Abdullah, Project Executive, Getsol Sdn Bhd
- 9. Senior Officers of UniMAP
- **10.** Deans and Heads of Departments, respected guests;
- **11.** Representatives from industry and university,
- **12.** UniMAP staffs and students;
- **13.** Ladies and Gentleman;

Assalamualaikum Warahmatullahi Wabarakatuh, Salam 1Malaysia and a very good morning,

Foreword

- 1. Alhamdulillah, I am most grateful to Allah, the Most Gracious and Most Merciful, for His blessings in giving us the opportunity to gather here at the Memorandum of Agreement (MoA) signing ceremony between UniMAP, GETSO and UniMAP Holdings for RE Project Rooftop Solar Panel for FIT (Feed in tariff). I would like to bid Selamat Datang to all respected guests for being here today. I do believe your presence here today has shown your support and trust to UniMAP's potential to undertake this joint project.
- **2.** It is indeed a remarkable effort where UniMAP will be collaborating with Getsol Sdn Bhd in implementing 3.2MW Grid-Connected Solar Photovoltaic Rooftop Power Generation for Feed-in Tariff. At this opportune moment, I would like to share with you information on energy scenario in Malaysia.

Energy Scenario in Malaysia

Ladies and gentlemen,

- **3.** Energy is required in almost our daily life including office work, agriculture, transportation, telecommunication, industrial activities and others that influence the nation economic growth. In 1981, the Government has adopted the Four-Fuel strategy which are oil, gas, coal and hydro, aimed at ensuring reliability and security of supply. However, the rise of market oil price, depletion of fossil fuels and environmental concerns of carbon dioxide (CO₂) emission has prompted Malaysia to look for alternative and clean energy such as the development of sustainable renewable energy.
- **4.** In 2001 under the 8th Malaysia Plan, Renewable Energy (RE) was introduced as the Fifth Fuel in the nation's energy supply mix.

- 5. Since then Malaysia has given special attention toward clean energy in 9th Malaysia Plan. The formation of the Ministry of Energy, Green Technology and Water (KeTTHA) in April 2009 presents another milestone in the commitment of the Government towards Green Energy while in July 2009, National Green Technology Policy was introduced to ensure sustainable development and the conservation of the environment for future generation.
- **6.** Under 10th Malaysia Plan in 2011, the Government has launched Renewable Energy Act 2011 together with Sustainable Energy Development Authority of Malaysia (SEDA Malaysia) which is a statutory body formed under the Sustainable Energy Development Authority Act 2011. The keyrole of SEDA is to administer and manage the implementation of the feed-in tariff mechanism which is mandated under the Renewable Energy Act 2011.

The Feed-in Tariff (FiT) in Malaysia

Ladies and gentlemen,

- **7.** The Feed-in Tariff (FiT) is Malaysia's new mechanism under the Renewable Energy Policy and Action Plan to catalyze generation of RE, up to 30 MW in size.
- 8. This mechanism allows electricity produced from indigenous renewable energy resources to be sold to power utilities at a fixed premium price for a specific duration. This allows owners to sell their clean energy to the distribution licensee for a fixed number of years; the duration is dictated by the type of renewable energy used for power generation. The incentive provides a fixed payment from the electricity supplier for every kilowatt hour (kWh) of electricity generated and a guaranteed minimum payment for every kilowatt hour exported to the grid. Up to now, only 4 types of

RE are eligible for FiT which are biogas, biomass, small hydro and solar photovoltaic (PV).

The Benefits of the Feed-in Tariff (FiT)

- **9.** Among the benefits of FiT are as follows:
- Reduce carbon dioxide (CO₂₎ emissions by replacing fossil fuel-based power production with clean, renewable sources of energy.
- Enable new businesses to emerge, new jobs to be created and new growth areas to be developed, which will pave the path for us to become the leading country in this region for green technologies and low carbon economic growth. For example, in 2006 the German renewable industry employs around 234,000 (two hundred and thirty four thousand) people. Almost 60% of which were employed as a direct result of the German FiT Law.
- Help secure domestic energy supply, enabling countries to reduce their reliance on imported fossil fuels.
- Guarantee investment security for renewable energy investors.
- Enhance new technological innovations.

Solar PV is the greatest potential for any RE source.

Ladies and gentlemen,

10. Solar PV is the most promising source of clean, renewable energy and it has the greatest potential of any RE source in Malaysia. The climatic conditions are favorable for the development of solar PV facilities due to the abundant sunshine throughout the year, around 12 hours per day. The northern regions of Malaysia such as Perlis have been identified to have the highest potential for solar energy application due to its high solar radiation throughout the year.

11. The annual average daily solar irradiations for Malaysia are from 4.21 kilowatt hour per meter square to 5.56 kilowatt hour per meter square while the highest solar radiation was estimated at 6.8 kilowatt hour per meter square. A PV system normally consists of PV modules that convert light energy into electricity, inverters and other accessories known as Balance of System (BOS). The production of electricity from PV is silent, no pollution, minimum maintenance and no depletion of resources.

Closing

Ladies and gentlemen,

12. Last but not least, I do hope that this collaboration could benefit both parties UniMAP and Getsol Sdn Bhd. In addition, the developed facilities for PV system should be used also for education and research purposes for students and researchers while the technical experience and technical advancement of Getsol Sdn Bhd could be shared for both parties in developing and training our staffs toward technical and expert human capital.

Ampun Tuanku,

Sekian sahaja sembah ucapan patik pada petang ini. Patik mewakili seluruh warga UniMAP merafak sembah, menjunjung setinggi-tinggi kasih di atas perkenan Duli Tuanku berdua bercemar duli berangkat ke majlis ini. Ampun Tuanku

Patik sudahi ucapan patik dengan Wabillahi Taufik Walhidayah Wassalamualaikum Warahmatullahi Wabarakatuh.