

## **Muhammad bin Ibrahim: Role and opportunities of the financial system in supporting green technology**

Welcoming remarks by Mr Muhammad bin Ibrahim, Deputy Governor of the Central Bank of Malaysia, at the Green Technology Financing Bankers' Conference, hosted by the Central Bank of Malaysia and the Institute of Bankers Malaysia (IBBM), Kuala Lumpur, 2 October 2012.

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Ladies and gentlemen, distinguished guests,

### **Introduction**

I am pleased to welcome you today to the Green Technology Financing Conference jointly hosted by Bank Negara Malaysia and the Institute of Bankers Malaysia (IBBM). This conference is timely and provides the industry with valuable opportunities to stay abreast with key developments in green technology financing and discuss transformative solutions to grow this new era of financing in a sustainable manner. My remarks today will hence focus on how the financial system can play a catalysing role in the development of a vibrant and dynamic green technology financing ecosystem, and to continuously support the needs of the economy in becoming a high value added high income economy by 2020.

The world's ecosystem is experiencing growing risks of climate change, resource depletion and environment degradation which have far reaching and irreversible ramifications for societies and economies. In the past 100 years, the global temperature has risen by 0.74°C as carbon dioxide intensity has increased largely due to increasing use of fossil fuels. More than 80% of our energy needs are currently derived from fossil fuels, exerting a huge burden on this non-renewable resource. The global forest acreage has reduced by 40% in the last 300 years. In many countries around the continents, hectares of forests are lost annually, resulting in severe deforestation issues that will leave adverse consequences to future generations. Sustainable development is hence paramount, necessitating financial support, strong political will and fundamental cultural changes to create the necessary enabling environment.

Increased awareness for sustainable development is beginning to profoundly change the behaviour of consumers, who are beginning to demand for more green solutions. This trend and awareness has begun to shape preferences for goods and services, as evident from a survey of young adults conducted by the Boston Consulting Group where 73% of respondents stated that green factors are amongst the key considerations in making purchasing decisions. More households and businesses are adopting green lifestyles – a trend that is already well-entrenched in many advanced countries and gaining rapid momentum in several developing economies, including in the ASEAN region. The environmental products and services market globally is estimated to be worth USD1.4 trillion. The growth potential of this market is tremendous. On the financing side, the United Nations Environment Programme Finance Initiative has made important strides, working closely with the financial sector to develop and promote linkages between sustainability and financial performance, and in developing models for best practices including risk management. Financial institutions themselves have taken the initiative to adopt the Equator Principles, where financial institutions commit to channel financing to projects which are both economically viable and environmentally sustainable. Such financing are also in line with ethical and responsible financing principles, that contribute towards the long-term sustainability of this business.

Governments around the world are also playing a critical role in catalysing sustainable development, through policies and regulations that encourage the adoption of green

solutions. South Korea, for example, has adopted a shared vision for green growth and established the Green Growth Institute to implement efforts to deal with climate change and resolve environmental and energy issues. The Philippines introduced new legislation on climate change and established a Climate Change Commission to coordinate, monitor and evaluate the government's actions to mitigate and adapt to the effects of climate change. In Malaysia, sustainability represents one of the key principles underpinning the New Economic Model and has been identified as a Key Strategic Reform Initiative which has led to the establishment of key agencies such as Malaysian Green Technology Corporation (MGTC) and Sustainable Energy Development Authority (SEDA). In the foreseeable future, green technology will be a driver to promote sustainable growth and development. It is in the financial industry's interest to be involved and engaged in its rapid development. The Government has put in place, the necessary support, incentives and infrastructure. Therefore the banking industry must reciprocate in kind, by allocating more resources and putting in place the required ecosystem to expand financing into this exciting new era of new financing.

### **Role of the financial system in supporting green technology**

The financial system has played an important role over the last few decades, in facilitating the economic transformation and growth of the real economy, by channelling investments into productive sectors. This role has been significantly fortified by a strong and well-capitalised financial system in Malaysia, that has been built through comprehensive reforms undertaken over the last decade. Our financial system today is characterised by solid financials, and strengthened risk management and governance practices. Combined with ample liquidity and improved credit infrastructures, the financial system is well-positioned to support new areas of growth that are viable and promising, including those in the green technology sector.

To meet the needs of the green technology sector, I would like to highlight two points that might reduce the information asymmetry between financial institutions and businesses, a pre-requisite for building a sustainable financing ecosystem for this sector. Firstly, financial institutions must have the capacity and capabilities, to assess the viability of projects despite the complex, diverse and rapidly-changing nature of green technology. Secondly, green businesses need continuing advisory support as they may be technically strong, but lack the capabilities to develop comprehensive business plans and cash flow projections, needed to demonstrate that a project is viable to financiers.

Taking into considerations the two points I earlier raised, Bank Negara Malaysia has worked closely with the Ministry of Finance and the Ministry of Energy, Green Technology and Water to establish the Green Technology Financing Scheme (GTFS), a framework designed to improve the preconditions for financial institutions to finance viable and innovative green technology companies. This is achieved through arrangements that help to bridge information gaps between financiers and businesses. These arrangements also involves credit enhancements and financial incentives, to address current market short comings in meeting a legitimate economic need. Also critically important are efforts being pursued to strengthen the capacity of financial institutions, to provide continuing advisory support to businesses that are mutually beneficial to both business ventures and financial institutions.

Central to this effort is the certification process to verify that businesses which qualify for the GTFS are not only able to demonstrate the required technical capabilities, but are also commercially viable. Other complementary efforts include education and awareness programmes, organised around the country to inform and update, financial professionals as well as businesses on the latest developments in the green technology sector. Likewise, courses offered by IBBM are designed to equip finance professionals to effectively assess the viability and risk of green technology projects. In 2010, a Joint Action Committee comprising of government agencies and financial institutions was formed to provide an efficient and coordinated platform to tackle implementation issues, such as, on the compliance and monitoring processes of green projects financed under the GTFS.

As a result of these holistic efforts, green technology financing is beginning to gain traction amongst financial institutions. To date, the GTFS has supported RM805.5 million in financing to 65 companies, operating in a broad range of green technology sub-sectors which encompasses energy, buildings, transportation and water and waste management, reflecting a year-on-year growth rate of 130% in terms of total financing and 171% in terms of companies assisted. While still small in aggregate terms, the value accumulated by participating financial institutions in terms of greater familiarity with green technology applications, and their potential and success factors for commercialisation is an important ingredient in positioning financial institutions to further expand financing into this new and increasingly important area of growth. Therefore, the financial industry needs to do more.

### **Opportunities moving forward**

Moving forward, the finance industry's ability to leverage on the opportunities in green technology financing will determine the pace of growth in the green technology sector in Malaysia. The SME Masterplan 2012–2020 has identified potential areas such as solar power and energy efficiency products as well as other related services such as design and consulting of green solutions that could facilitate SMEs to move up the value chain. This is expected to contribute towards achieving the targets set under the SME Masterplan, where SMEs contribute 41% of GDP, 62% of total employment and 25% of total exports by 2020.

Another important trend is that with higher commodity prices and advances in green technology solutions, price differentials between traditional solutions and green solutions are likely to narrow substantially over time. Under these conditions, the green technology sector is expected to attract significant investments across many sectors which will produce high value added outputs and create high-income employment opportunities. A United Nations study estimated that about USD76 trillion worth of investment is needed in green technology over the next 40 years to “avert a climate change catastrophe” such as global warming, resource depletion and loss of biodiversity. Already, economies that have invested strategically in the green technology sector are reaping the benefits. Germany, for example, which produces 17% of the world's green technology outputs has seen an increase in employment in the green technology sector from 166,000 jobs in 2004 to an estimated 280,000 in 2011.

Recognising the immense potential of the green sector, 77 financial institutions from 32 countries have adopted the Equator Principles to enhance their capability to provide financing to ventures which are both economically viable and environmentally friendly. Adoption of the Equator Principles allows financial institutions to play a leading role to promote responsible environmental stewardship and socially responsible development. Furthermore, training and access to the tools and research necessary to develop the necessary expertise to adopt green financing is available through global initiatives such as the United Nations Environment Programme Finance Initiative.

To achieve more significant progress in green financing, some key priorities in Malaysia could include the following:

- i. Financial institutions to constantly develop expertise in support of this sector. Green financing teams should have in-depth knowledge and capacity across the entire financing process flow including product development, promotions, sourcing of viable projects, effective credit assessment, holistic risk management and robust monitoring. The larger regional reach by Malaysian banks will also enhance the potential to access a wider talent pool from the region, catalyzing efforts to build a specialised human capital team needed to drive the green technology financing agenda.
- ii. Government policies that are further enhanced to spur the growth of the industry and create larger consumer awareness. On the supply side, more efforts should be taken to build a highly skilled workforce and increase collaboration between

research institutions and businesses to commercialise and scale up innovative green technology research. On the demand side, to create incentives to encourage consumers to use green products and government procurement policies which prioritise green solutions could be explored.

- iii. A holistic governance structure and performance measurement system would be put in place to drive the implementation of policies and ensure that green and sustainability outcomes are achieved. This could potentially bring us to a more transparent reporting of green initiatives by various players including the Government, business and the financing community.
- iv. As Asia becomes increasingly more integrated, economically and financially, Malaysian financial institutions have the opportunity to leverage on regional networks to scale up their business and serve a sustainably growing green technology market in a cost-efficient manner. This regional network is further strengthened through the collaboration among Asian countries to further the green agenda and sustainable development conferences such as the Asia Low Emission Development Strategies (LED) Forum, and the ASEAN Initiative on Environmentally Sustainable Cities.
- v. To create a more diverse and robust financing ecosystem for green ventures, the sukuk market and venture capital industry can play a more active role in supporting this sector. To promote long-term financing, the sukuk market presents an additional avenue to meet market demands. Sukuk which uses a principles-based approach on having real productive underlying assets is an ideal financing solution for green technology projects which have large capital outlays and long gestation periods. Another is the promotion of a vibrant venture capital industry in Malaysia to complement the banking system, as it has the potential to facilitate the development of small and innovative businesses and the commercialisation of intellectual property.

I am pleased to inform you that the recommendations made from this conference will be forwarded to the Government in designing a conducive ecosystem that will accelerate Malaysia to the frontier of green technology. It is therefore imperative that recommendations devised are practical, effective and holistic.

## **Conclusion**

There remain large untapped opportunities in the green technology sector in Malaysia. Swift action is necessary not only to address the growing demand for green technology, but also to address the increasing risks to the environment. The growth potential of green technology is boundless with prospects and expectations to contribute significantly to the country's transformation into a high value-added economy. The financial system plays a pivotal role in this transformation and today's conference offers an important platform to encourage new paradigms and to develop concrete, transformative solutions moving forward. On that note, I wish you a productive and engaging conference.