Growing global concerns for achieving sustainable and environment-friendly development has led to a sharp uptake in green projects. The likes of the World Bank, European Commission, United Nations Environment Programme and other international agencies have all championed the cause for achieving a cleaner, resilient and sustainable world economic ecosystem.

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Financing a greener world using ethical funding options - Malaysia embarks upon proactive initiatives

Growing global concerns for achieving sustainable and environment-friendly development has led to a sharp uptake in green projects. The likes of the World Bank, European Commission, United Nations Environment Programme and other international agencies have all championed the cause for achieving a cleaner, resilient and sustainable world economic ecosystem. Along with this, an increase in financing has also been required to fund such green projects. In 2008, the World Bank pioneered the concept of ‘green bonds’ which gives investors an innovative way of supporting clean energy, mass transit, and other low-carbon projects. Since then, financial instruments supporting green projects have rapidly been on an upward growth trajectory. Along these growth lines, Islamic finance has a tremendous opportunity to develop instruments that can support the global surge in green projects. The principles of Islamic finance share substantial synergies with the concept of environment-friendly and sustainable development. As a result, Malaysia being a major Islamic finance marketplace has embarked upon undertaking necessary initiatives to develop Islamic financial instruments, structured to fund green projects. Moving forward, Malaysia’s initiatives are likely to spearhead similar efforts by other jurisdictions leading to the creation of a new growth sector in the global Islamic finance industry.

Financing the Global Green Economy: Trends, Gaps and Opportunities

According to the Organisation for Economic Co-operation and Development (OECD)\(^1\), the global population is expected to number more than 9 billion people by the year 2050. Such a population growth trajectory will create an unprecedented rise in demand for energy, water, transport, urban development and agricultural infrastructure. Consequently, the ability to meet this bourgeoning demand while respecting global environmental and sustainability obligations will be challenging. As a result, a special report by the World Economic Forum (WEF)\(^2\) states that the only way to alleviate risks from future climate change and environmental degradation is to adopt a ‘green economic growth’ path which achieves growth and development while reducing greenhouse gas emissions and increasing natural resource productivity.

The world has made some progress towards achieving a sustainable ‘green growth’ modality. For instance, according to the United Nations Environment Programme (UNEP), global

\(^1\) OCED (2011): Social Cohesion: Making it happen

\(^2\) WEF (2013): Green Investment Report
investments in the renewable energy sector amounted to USD257 bln in 2011, a six-fold increase from 2004. The same report adds that the investments in 2012 were 93% higher than in 2007, the year before the global financial crisis. The tremendous investments growth was driven partly on account of favourable policy support by government agencies leading to rapid decreases in the costs of renewable energy.

Nonetheless, substantial amounts of investments are still required in the water, agriculture, telecoms, power, transport, buildings, industrial and forestry sectors to meet future population needs. According to the OECD, under current growth projections, approximately USD5 tln per year is required in investments over the next two decades. However, the McKinsey Global Growth Institute has estimated that the current rates of environmental degradation are unsustainable for the long-term functioning of the global economy and it is essential to move towards securing greener growth. As a result, in addition to the USD5 tln figure, the WEF report on green investments estimates at least an additional USD0.7 tln per year is required to meet the green development challenge. This additional cost is required for clean-energy infrastructure, sustainable and low-carbon transport, energy efficiency in buildings and industry, and for forestry to limit the global average temperature increase to 2°C above pre-industrial levels. In other sectors, incremental investment needs are unknown and more work is needed to understand these.

**Global Infrastructure and Additional Green Investment Requirements (2010-2030)**

<table>
<thead>
<tr>
<th>Sector</th>
<th>Total investment requirements (2010-2030)</th>
<th>Additional investment requirements in a green growth scenario (2010-2030)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agriculture</td>
<td>USD125 bln</td>
<td></td>
</tr>
<tr>
<td>Telecommunications</td>
<td>USD600 bln</td>
<td></td>
</tr>
<tr>
<td>Transport Infrastructure</td>
<td>USD805 bln</td>
<td></td>
</tr>
<tr>
<td>Water</td>
<td>USD1,320 bln</td>
<td></td>
</tr>
<tr>
<td>Transport vehicles</td>
<td>USD845 bln</td>
<td></td>
</tr>
<tr>
<td>Forestry</td>
<td>USD64 bln</td>
<td></td>
</tr>
<tr>
<td>Energy</td>
<td>USD619 bln</td>
<td></td>
</tr>
<tr>
<td>Building &amp; Industry</td>
<td>USD613 bln</td>
<td></td>
</tr>
<tr>
<td>Energy</td>
<td>USD619 bln</td>
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<tr>
<td>Energy</td>
<td>USD619 bln</td>
<td></td>
</tr>
</tbody>
</table>

4 OECD (2006): Infrastructure to 2030: Telecom, Land Transport, Water and Electricity,
5 McKinsey Global Institute (2011): Resource Revolution: Meeting the world’s energy, materials, food and water needs
The Global Green Bond Market

Consequently, there was a critical need to develop financing channels and instruments that can support the liquidity needs of the green infrastructure development projects. Earlier in a landmark development, the World Bank had launched the “Strategic Framework for Development and Climate Change” in 2008 to help stimulate and coordinate public and private sector activity to combat climate change. In the same year, the World Bank pioneered the issuance of the first ever Green Bond: an innovative fixed income instrument that supported eligible projects aimed at mitigating climate change and encouraging environmental sustainability. Since then, the World Bank has raised USD6.4bln in Green Bonds through 67 transactions and 17 currencies.

Green bonds are now increasingly being used to fund projects involving clean energy, mass transit, and other low-carbon projects that can help countries adapt to and mitigate climate change, while giving investors fixed-income investment opportunities that have a positive impact. Two entities of the World Bank Group – the International Bank for Reconstruction and Development (IBRD) and the International Finance Corporation (IFC) – have been instrumental in the development of the global green bond market. In the case of green bonds issued by the IBRD and IFC, investors benefit from the Aaa (Moody’s) / AAA (S&P) ratings of the issuers and also help rally the climate financing the world needs to confront the challenges of climate change.

Investors ranging from pension funds to global asset managers, leading companies and central banks are now refocusing their investment strategies to include climate considerations. For example, IFC’s USD1bln green bond issued in November last year attracted a new set of green bond investors, including the Ford Motor Company, Microsoft, and the central banks of Brazil and Germany. A floating rate green bond issued by the World Bank in January 2014 drew large institutional investors such as BlackRock, TIAA-Cref and Goldman Sachs Private Wealth Management in addition to other pension funds and sustainable investors.

Notwithstanding the above, there still remains vast potential in the global green financing market. Although rapidly expanding, the volume of the global green bond market is modest: the overall value of the corporate green bond market is estimated as USD10.4bln in end-2013. In 2014, there has been a sharp increase in issuances as a growing number of corporates in North America, Europe and Asia have tapped the green bond market. In four months ended April-2014, the volume of issuances had exceeded USD9bln. Meanwhile the World Bank Group President, Jim Yong Kim, has called for doubling the global green bond market to USD20bln by September this year, when the United Nations convenes a high-profile climate summit. In addition, President Kim has called for more than doubling the global green bond market to at least USD50bln by December 2015 when the UN climate negotiations begin in Paris. Overall, the potentials for the global green financing market are upbeat given the increasing awareness of investors and gradual transformation of economic systems towards a more sustainable and green growth path.

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7 World Bank (2014): Growing the Green Bond Market to Finance a Cleaner, Resilient World
8 Ibid
9 Standard and Poor’s / Financial Times
10 Ibid
11 World Bank (2014): Growing the Green Bond Market to Finance a Cleaner, Resilient World
12 Ibid
ISLAMIC FINANCE.
READY TO FINANCE A GREENER WORLD.

Top-five global green bonds in four months ended April 2014

<table>
<thead>
<tr>
<th>Date</th>
<th>Issuer</th>
<th>Country</th>
<th>Deal Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>March 11</td>
<td>Toyota Financial Services</td>
<td>Japan</td>
<td>$1.63 Billion</td>
</tr>
<tr>
<td>February 19</td>
<td>Unibail-Rodamco</td>
<td>France</td>
<td>$1.03 Billion</td>
</tr>
<tr>
<td>March 27</td>
<td>European Investment Bank</td>
<td>Luxembourg</td>
<td>$827 Million</td>
</tr>
<tr>
<td>March 13</td>
<td>International Bank for Reconstruction &amp; Development</td>
<td>United States</td>
<td>$763 Million</td>
</tr>
<tr>
<td>February 18</td>
<td>European Investment Bank</td>
<td>Luxembourg</td>
<td>$685 Million</td>
</tr>
</tbody>
</table>

Source: Dealogic, The Wall Street Journal

Islamic Finance and the Green Economy

As the world economy gradually moves towards adopting a green and more sustainable development model, the Islamic finance industry has tremendous opportunities to develop Shariah-compliant green financing facilities to meet the expanding liquidity requirements in this sector. The global Islamic finance industry has continued its sustained double-digit asset growth, expanding by 17.9% y-o-y to reach USD1.91tn as at 1H14.\(^{13}\)

Between 2009 and 2013, the industry’s assets have expanded at an impressive compounded annual growth rate (CAGR) of 16.94%. Based on current momentum, it is expected that the Islamic finance industry will cross the USD2tn asset mark during the third quarter of this year (3Q14).

Islamic finance has substantial synergies with the Green economic concept and fits in well with the ethical requirements of green projects.

The Islamic law of Shariah which governs the Islamic financial system has ample injunctions which emphasise the need to care for the environment and forms of life on earth while ensuring the proper usage of natural resources.

Islamic finance endeavours to promote an ethical financing and economic concept that extends beyond being a component of a financial system, but as part of a total value-based social system that is driven by the principle of public interest.

\(^{13}\) KFH Research Database

\(^{14}\) Ibid
As such environmental protection and sustainability fits in nicely with the Islamic finance agenda that seeks to enhance the general welfare of society.

At present, Islamic finance has largely remained absent from the Green financing sector in the global markets. In an effort to facilitate the Green Bond concept, a Green Sukuk Working Group had been established in 2012 by the Climate Bonds Initiative, the Clean Energy Business Council (CEBC) of the Middle East and North Africa, and the Gulf Bond and Sukuk Association. This working group had been mandated to identify green energy projects that fall under Shariah-compliant categories for potential investors. A ‘Green sukuk’ is the Shariah-compliant version of a green bond and represents Shariah-compliant investments in renewable energy and other environmental assets. Green sukuk notably address the Shariah concerns for protecting the environment.

Most recently, efforts for developing the green sukuk sector are being spearheaded by authorities in Malaysia and Dubai in the United Arab Emirates. The Dubai Supreme Council of Energy (DSCE) and the World Bank have joined together to design a funding strategy for Dubai’s green investment programme using green bonds and sukuk. The DSCE has a green investment programme in place since 2010 as part of the Dubai Integrated Energy Strategy (DIES) 2030 that aims to secure a sustainable supply of energy for the Emirate. Dubai has a target of drawing 1% of its energy needs through solar means by 2020 and green bonds and sukuk would play a crucial role in arranging the necessary financing required to implement the various green projects.

In Malaysia however, the involvement of the Islamic financial sector in the Green economy had already begun a few years back. Green technology has been identified as a major growth area by the Malaysian government under the National Green Technology Policy in 2009. Following this, a number of government-led initiatives have been implemented with a view to position the country as a hub for green technology by 2020. Alongside, the potential for Islamic finance stakeholders to facilitate the financing and investments in Malaysia’s green economic sector have also been upbeat. Given Malaysia’s progressive strides in its Islamic financial sector, the Shariah-compliant green financing sector has tremendous opportunities to innovate and expand itself both within and beyond the Malaysian financial markets.

Malaysia’s National Green Technology Policy – Launched in July 2009

Source: GreenTech Malaysia
Malaysia: Leading Ethical Green Financing Initiatives

Green financing initiatives in Malaysia are already in place. The Malaysian Government has implemented various initiatives promoting green financing through the major financing channels including banking, equity market and the fixed-income market. More importantly, Malaysia has proactively included formal guidelines on the use of Islamic financing facilities to support the green technology sector. The three major Green financing initiatives currently in place by the Malaysian Government are as follows:

Green Technology Financing Scheme (GTFS)

The Malaysian Government first announced the Green Technology Financing Scheme (GTFS) in October 2009 when the Malaysian Prime Minister cum Finance Minister presented the National Budget 2010. The scheme commenced with a budget of MYR1.5bln (USD0.45bln) soft loan to companies and users of Green Technology. The Malaysian Government announced to subsidise funding costs of Green Technology financing by 2% while also guaranteeing 60% of the financing amount via Credit Guarantee Corporation Malaysia (CGC). The remaining 40% financing risk is to be borne by participating financial institutions.

“Malaysia’s Islamic financial institutions have been important catalysts in driving the growth of the nation’s green economy. Over the past four years, Islamic financing has grown to account for over 40% of all funds granted under the Green Technology Financing Scheme, facilitated by Malaysian Green Technology Corporation. Drawing on their pioneering role and accumulative knowledge and experience, Malaysia’s Islamic financial marketplace stand poised to capitalise on the rapid growth of the global green technology sector.”

Ir. Ahmad Hadri Haris,
Chief Executive Officer,
Malaysian Green Technology Corporation

Socially Responsible Investment (SRI) Sukuk

Environmental, Social and Governance (ESG) Index

Commercial banks in Malaysia are eligible to participate in the GTFS and have been actively supporting the scheme in view of the potential market for environmental business. Along with the conventional banks, Islamic banks in Malaysia are also eligible to participate in the scheme known as Green Technology Financing Scheme Islamic (GTFS - i). Effective 11th October 2013, following a restructuring exercise, the scheme now offers users either a rebate of 2% on the interest or profit rate, or a government guarantee of 30% on the financed amount. As of 22nd August 2014, a total of MYR1.65bln worth of financing has been approved under this scheme through both conventional and Islamic facilities."
Key Highlights of the GTFS / GTFS - i

| Facilities | Green Technology Financing Scheme (GTFS)  
|            | Green Technology Financing Scheme Islamic (GTFS-i) |
| Purpose    | To finance investments in the utilisation of green technologies that meets the scheme objective.  
| Investment Criteria | Investment in Green Technology refers to products, equipment, or systems which satisfy the following:  
|                | • Minimises the degradation of the environment  
|                | • Has zero or low greenhouse 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;  
|                | Promotes the use of renewable resources.  
| Financing Limit | Upto MYR10mln  
| Financing Tenure | Upto 10 years  
| Eligible Financing Facilities | All types of financing facilities under Islamic and Conventional financing  
| Total GTFS funds allocated to the Scheme | MYR3.5bln  
| Total Financing Approved* | MYR1.65bln  
| Balance of GTFS Fund* | MYR1.85bln  
| Total No. of Projects Financed* | 129  

* as at 22nd August 2014  
Source: Credit Guarantee Corporation (Malaysia)

Socially Responsible Investment (SRI) Sukuk  
Malaysia’s initiative in developing Shariah-compliant green fixed-income instruments received a significant boost when the Malaysian Prime Minister announced in the Budget 2014 to set formal guidelines for developing and issuing SRI sukuk. The SRI sukuk would be raised to fund sustainable and responsible investment projects. Accordingly, the Malaysian capital markets regulator, Securities Commission Malaysia (SC) is in the process of finalising a framework for socially responsible sukuk, expected to be launched in the third quarter of 2014.

“The SRI Sukuk is the Islamic capital market’s response to the rising trend of green bonds and social impact bonds that have been introduced globally to finance a wide range of sustainable activities such as those addressing the needs of the country like infrastructure and small businesses,”  

Dato Dr Nik Ramlah Mahmood,  
the Deputy Chief Executive,  
Securities Commission Malaysia
The SRI Sukuk guidelines would be instrumental in attracting Malaysian issuers to raise funds through green sukuk while attracting investors from the Western countries who are familiar with the concept of socially responsible investing but have yet to venture into the sukuk market. This, in turn, would raise the profile of sukuk in the global fixed income markets, thus enabling the sector to expand on its offerings.

Environmental, Social and Governance (ESG) Index

In addition to the SRI Sukuk, the Malaysian Prime Minister also announced the formation of an Environmental, Social and Governance (ESG) Index in Budget 2014 which will list companies that demonstrate high accountability, transparency and sustainability, including inclusiveness in diversity encompassing gender, age and ethnicity. This Index will enable investors to divert their capital into companies that instill high levels of environmental, social and governance standards. Effectively, the ESG Index will enable green investors to channel their funds into eligible companies that comply with the green economic growth and developmental requirements along with upholding social and governance responsibilities. To lead the momentum in this asset class, the government also announced that its related entity, Valuecap Sdn Bhd will allocate MYR1bln to invest in companies that score high on the ESG Index. The proposed index will also feature Shariah-compliant companies.

The Malaysian bourse, Bursa Malaysia, has implemented efforts to launch the ESG index, expected by the end of 2014. In this regard, Bursa Malaysia has formed a partnership with United Kingdom’s FTSE, under which Bursa Malaysia will roll out a FTSE4Good Index series covering 14 sectors and based on Bursa-listed companies designed to promote transparency and openness. It will be the first in Asia to be part of the globally benchmarked ESG Index series.

“The introduction of a Bursa Malaysia-focused ESG Index Series will provide the marketplace an enhanced advantage in Asean, especially in attracting the US$3.4 trillion (RM10.9 trillion) socially responsible investments from around the world,”

Datuk Tajuddin Atan,
CEO, Bursa Malaysia

The introduction of the ESG Index is a monumental development that will give due recognition to companies that already have high socially responsible practises and set an encouragement for others to follow suit. Meanwhile, the combined SRI Sukuk and the ESG Index initiatives are likely to create a new asset class for investments in the funds sector in Malaysia. Fund managers are expected to offer new green investment funds that would invest in eligible SRI Sukuk and ESG Index instruments, thus creating a new market in the green financing and investments segment. The offering would have tremendous potentials to attract business from overseas investors, particularly from the West, where this is a gradual but expanding preference for green investment opportunities.

Ethical Finance for Funding Green Projects: Promising Prospects

The use of ethical finance to fund green projects is a promising business proposition given the synergies between the two concepts. There is a growing awareness among the global demographics on the need for ethical
financial solutions. A recent survey by the Economist Intelligence Unit (EIU) on private banking practices and strategies revealed that private bankers expected ethical investments to increase by an annual average of 9.1% for the next five years, with 31% of respondents forecasting a double-digit annual percentage increases\(^\text{17}\). As such, funding green projects using ethical finance provides a strategic combination.

In this regard, the prospects for Islamic finance to contribute towards a sustainable global ecosystem are tremendous. In Malaysia, the Islamic banking system has already contributed towards this agenda by supporting the Green Technology Financing Scheme of the government. This year, initiatives have been put in place to develop a green sukuk and green/ethical equities index in the country’s capital market. The government has firmly placed its support behind formulating a holistic Islamic financial ecosystem that is supportive of a sustainable and innovative growth of this sector. Malaysia is well position to lead the development of this sector given that its sukuk market is the largest in the world in terms of volumes in both the primary and secondary markets. As at 1H14, Malaysia’s new sukuk issuances for the year accounted for 63% of the global issuances while its sukuk market outstanding accounted for more than 57% of the global sukuk outstanding\(^\text{18}\). Meanwhile, Malaysian Islamic funds sector is host to the most number of Islamic funds in a domicile: 254 Islamic funds as at 30th April 2014\(^\text{19}\).

Moving forward, Islamic financial institutions now have to build their capacity and capabilities to capture the growth prospects and opportunities available in the green projects industry. It is expected Malaysia’s initiatives are likely to be followed by other key Islamic finance jurisdictions in the Middle East and Asia. Collectively, the global Islamic finance industry has an opportunity to penetrate into a new niche segment which has large untapped business potential.

Given the firm support by the world’s major bodies including the World Bank, United Nations, European Commission and others, the Green finance and economic sector is bound to experience strong growth in the near future. Consequently, the global Islamic finance industry, in turn, has tremendous opportunities moving forward to penetrate into this rapidly growing Green financing sector and expand its market outreach.

\(^{17}\) Economist Intelligence Unit (EIU); Outlook for the global private banking industry

\(^{18}\) KFH Research Database

\(^{19}\) Securities Commission Malaysia: List of Approved Islamic Funds