



Economic and Social Commission for Western Asia (ESCWA)

Technical Committee on Liberalization of Foreign Trade, Economic
Globalization and Financing for Development in the Countries
of the ESCWA Region

Ninth session

Amman, 7-8 April 2015

Item 8 of the provisional agenda

Innovative sources of financing for development

Summary

Since the launch of the Millennium Development Goals 15 years ago, financing for development has changed dramatically from a model based largely on domestic resource mobilization and official development assistance to new forms of financing. The Arab region is showing enormous potential for financial innovation; some steps have already been taken in various countries to create supportive frameworks and policies, but more still needs to be done.

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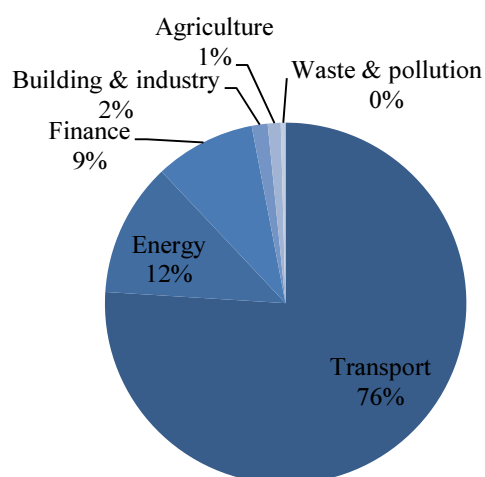
Introduction

1. Many innovative financing sources, such as green bonds, Islamic finance assets and green *sukuk*,¹ remain largely untapped in the Arab region, although they have the potential to finance the current funding gap of several Arab countries. The green bonds market was estimated at 40 billion United States dollars (\$) in 2014. Issuance of green bonds in 2014 alone surpassed that of the period 2007-2013, indicating a strong interest worldwide. Moreover, Islamic finance has grown over the last 25 years given its appeal to followers of the Islamic faith, its profit-sharing nature, its socially responsible plea, its linkages with underlying economic activities and its avoidance of speculation. Islamic finance assets hit \$1.8 trillion in 2013 and surpassed \$2 trillion in 2014. The *sukuk* market is the second fastest growing segment of Islamic finance, with an annual growth rate of 41.6 per cent on average between 2005 and 2012. Annual *sukuk* issuances reached \$120 billion in 2013. Green *sukuk* represent an opportunity to finance renewable energy generation projects, which are becoming increasingly popular given the shortage of fossil fuels and the climatic advantages that they represent.

I. GREEN BONDS

2. Green bonds are capital market debt instruments aimed at raising capital to fund clean energy and clean power projects, including carbon reduction, thereby reducing the risks associated with climate change. Eligible projects include wind farms, solar parks, renewable transmission and infrastructure projects, energy efficient technologies, smart grid installations, electric vehicles and green buildings. The green bonds market was estimated at \$40 billion in 2014.² Almost twice as many green bonds were issued in 2014 than over the period 2007-2013, signifying increasing awareness and interest by investors. The green bonds market is expected to reach \$100 billion in 2015.

Figure I. Sector breakdown of green bonds, 2013



Source: Sasana Kijang, “‘Socially responsible’ *sukuk*: a possible bridge product between Islamic and conventional finance”, presentation made at the Green Financing Dialogue, Kuala Lumpur, September 2014.

¹ Sharia compliant bonds.

² Climate Bonds Initiative data.

3. Green and climate bonds were initially issued by sovereign entities and multilateral development banks, including the European Investment Bank, the World Bank, the International Finance Corporation, the European Bank for Reconstruction and Development, in 2007 and 2008. With their advancement, corporate entities such as the Bank of America, Électricité de France and GDF SUEZ started venturing into the market in 2013, whose \$3.4 billion issue represents the largest corporate issue to date to fund projects in renewable energy and smart metering. In addition, cities and municipalities have also tapped into this booming market, such as Johannesburg (\$140 million to finance solar energy water heaters to produce 22 gigawatt-hours (GWh) per year). Huge demand has resulted in green labelled bond issues being significantly oversubscribed—with issuances from GDF Suez oversubscribed three times, Électricité de France twice, Unibail-Rodamco almost three and a half times, the Export-Import Bank of Korea three times and Italian utility Hera three times. Increasing awareness is also evidenced by retail investors starting to tap this market opportunity following steps taken by pension funds, fixed income managers and insurance companies.
4. Despite this huge interest in ethical and socially responsible investing, investors are unwilling to accept lower returns. They demand similar returns for green bonds that have comparable risk profiles as non-green bonds. However, in the case of similar risk/reward offering, green bonds are preferred by investors.³ Green bonds are also preferred by issuers, since they provide a reputational boost.
5. In October 2013, the African Development Bank issued green bonds whose proceeds were partially used to fund two projects in Arab countries, namely Egypt and Tunisia. However, no green bonds have been issued to date in the Arab region. The facts that the global bond market is estimated at \$100 trillion, there are over \$45 trillion of assets under management in the world supporting principles for responsible investment and over \$13 trillion of assets under management incorporating environment, social and corporate governance guidelines in their selection criteria,⁴ demonstrate this enormous yet unexploited opportunity for Arab countries, which would allow them to complement public sources with private funds.

II. ISLAMIC FINANCE

6. Islamic finance embodies profit sharing as one of its core principles. Its instruments include various forms of equity participation or profit sharing *sukuk*. It forbids investment in certain industries, including alcohol, pornography, gambling, arms and drugs, hence its appeal to investors that follow the prescriptions of the Islamic faith.
7. Islamic finance assets hit \$1.8 trillion in 2013 and surpassed \$2 trillion in 2014. The Islamic banking industry grew at a compound annual growth rate of 17.04 per cent over the period 2009-2013. Despite being dominated by the Gulf Cooperation Council countries and Malaysia, some new entry countries experienced a sizable growth rate in 2013, including Jordan, Libya, Morocco, Tunisia and Yemen. The largest Arab countries in terms of Islamic banking assets for 2011 were Saudi Arabia (19 per cent), the United Arab Emirates (7 per cent), Kuwait (6 per cent), Qatar (4 per cent), Bahrain (2 per cent) and the Sudan (1 per cent). Growth in financing and deposits post-2009 averaged above 20 per cent.⁵ It is estimated that, in every market, Islamic banks are growing at double or triple the growth rate of conventional banks.⁶
8. The growth of the Islamic finance industry stems from its underlying social responsibility appeal. Moreover, Islamic banking products offer competitive returns compared to traditional equity and fixed income

³ Climate Bonds Initiative.

⁴ Ibid.

⁵ Islamic Financial Services Board, *Islamic Financial Services Industry Stability Report* (Kuala Lumpur, 2014).

⁶ Gerald Hayes, "Islamic finance – the original SRI?", 30 September 2013. Available from www.globalcapital.com/article/jbxq453k6b0t/islamic-finance-the-original-sri.

investments and have developed structures that provide downside risk protection and exhibit lower risk correlation. They are also applauded for their link to underlying economic activities, their asset-backed nature and their avoidance of speculation, given that they are associated with real, tangible assets and services, thereby avoiding the drawbacks of financial engineering and synthetic products, which were the main drivers of the financial crisis. Islamic products are demand driven, with Islamic banks experiencing a growth in deposits, unmet by investment opportunities matching their orientation.⁷

III. GREEN SUKUK

9. Green *sukuk* represent another untapped financing means for Arab countries. They are a mix between the positive features of green bonds, with their ethical climate-friendly orientation and secondary market transferability on the one hand, and the attractive features of Islamic finance, with its asset-backed attributes, retail demand-driven features and profit sharing structure on the other hand. Moreover, green *sukuk* address the concerns of Sharia for preserving the environment and provide a window for “impact investing”—a common goal with green bonds. Green *sukuk* are expected to attract both domestic retail savings, given their Islamic features, and institutional funds, since Islamic banks tend to use different *sukuk* structures for liquidity management and capitalization purposes.⁸ Not only that, Islamic investment products are also in short supply, which presents a window of opportunity to channel Islamic deposits into green *sukuk*.⁹

10. Green *sukuk* represent a blend between green bonds and Islamic finance. Similarly to green bonds, they fund climate-friendly projects and are available on the secondary market. Similarly to Islamic finance products, they entail a profit sharing feature and are asset backed. Both have in common an ethical nature and require due diligence checks to placate investors.

11. The global outstanding *sukuk* market was estimated at \$272.96 billion as of the first quarter of 2014, a 15.9 per cent year-on-year growth since the first quarter of 2013.¹⁰ Total outstanding *sukuk* for the first half of 2013 was around \$245 billion. The *sukuk* market has been the second fastest growing segment of Islamic finance, with an annual growth rate of 41.6 per cent on average between 2005 and 2012. Annual *sukuk* issuances reached \$120 billion in 2013.¹¹

12. Green *sukuk* represent a great opportunity to fund climate-friendly projects, especially in the field of renewable energy generation. In various Arab countries, power demand has risen by about 6 per cent annually over the last 10 years. In 2020, electricity demand is expected to be 84 per cent higher than 2010 levels, which would require the installation of an additional 135 GWh of generation capacity, costing approximately \$450 billion.¹² At the same time, with increasingly scarce fossil fuels and the availability of climatic comparative advantages favouring wind and solar power generation,¹³ Arab countries are aiming to increase renewable

⁷ Ibid.

⁸ Islamic Financial Services Board, *Islamic Financial Services Industry Stability Report*.

⁹ Hayes, “Islamic finance – the original SRI?”.

¹⁰ Sasana Kijang, “‘Socially responsible’ *sukuk*: a possible bridge product between Islamic and conventional finance”.

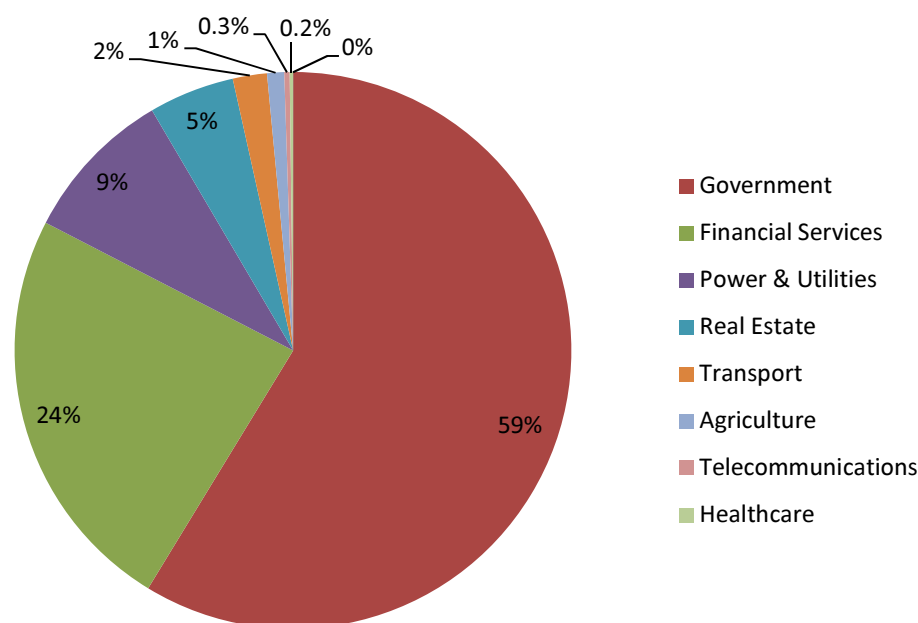
¹¹ Islamic Financial Services Board, *Islamic Financial Services Industry Stability Report*.

¹² International Renewable Energy Agency and League of Arab States, *Pan-Arab Renewable Energy Strategy 2030: Roadmap of Actions for Implementation* (Abu Dhabi, 2014).

¹³ As reported in the *Pan-Arab Renewable Energy Strategy 2030: Roadmap of Actions for Implementation*, concentrated solar power technologies could generate 100 times more electricity in the Middle East and North Africa than all the electricity consumption of the Arab region and Europe. Furthermore, photovoltaic radiation is in the range of 1,920 kWh/m²/year in Lebanon and 2,450 kWh/m²/year in Egypt, which are some of the highest values in the world. Finally, the Red Sea coasts have the potential for large wind farms, given that the wind speed in this area frequently exceeds 6.9 metres per second, which is the economic feasibility threshold.

energy generation from 12 GWh in 2013 (representing only 6 per cent of power generation) to about 75 GWh by 2030 to meet their energy gap.¹⁴

Figure II. Sector breakdown of *sukuk* issuance, first quarter of 2014



Source: Sasana Kijang, “‘Socially responsible’ *sukuk*: a possible bridge product between Islamic and conventional finance”.

RENEWABLE ENERGY CAPACITY

Country	Renewable energy (percentage of installed capacity)	
	Current	Under construction
Algeria	0.25	0.13
Bahrain	0.14	0.08
Comoros	0.00	Not applicable
Djibouti	1.19	Not applicable
Egypt	2.00	1.09
Iraq	0.02	0.00
Jordan	0.29	0.00
Kuwait	0.01	0.00
Lebanon	0.04	0.00
Libya	0.06	0.84
Mauritania	7.71	13.64
Morocco	4.85	20.74
Oman	0.01	Not applicable

¹⁴ If hydropower is excluded, renewable energy generation will only represent 1 per cent of total power generation.

RENEWABLE ENERGY CAPACITY (*continued*)

Renewable energy (percentage of installed capacity)		
Country	Current	Under construction
Palestine	0.98	0.96
Qatar	0.47	Not applicable
Saudi Arabia	0.01	0.02
Somalia	0.00	Not applicable
Sudan	0.00	0.00
Syrian Arab Republic	0.01	0.00
Tunisia	4.35	2.08
United Arab Emirates	0.49	0.00
Yemen	0.10	0.03

Source: International Renewable Energy Agency and League of Arab States, *Pan-Arab Renewable Energy Strategy 2030: Roadmap of Actions for Implementation*.

13. The deployment of Green *sukuk* cannot be done in isolation from legal and regulatory setups and the supporting technical and human capacity needed to develop related projects. Gaps identified for renewable energy deployment in Arab countries include political, legal, regulatory and institutional issues; financial, market and economic issues; and technological infrastructure and human capacity.¹⁵ In addition, the infrastructure for green *sukuk* as financing instruments requires a set of strategic supporting factors, primarily the availability of country- and region-wide strategies for encouraging green investments.

14. In this regard, many Arab States, including Algeria, Egypt, Jordan, Palestine and the Syrian Arab Republic, are taking steps to formulate their renewable energy strategy and policies by creating dedicated agencies for renewable energy, setting feed-in tariffs and allowing for net metering and competitive bidding. In Algeria, Egypt, Jordan, Morocco, Palestine, the Syrian Arab Republic and Tunisia, renewable energy laws or part of the electricity laws are dedicated to renewable energy. However, the major bottleneck to date is that renewable power generation remains more costly than conventional power plants,¹⁶ which is further exacerbated by subsidized electricity prices, making renewable energy even less attractive. Algeria, Iraq, Libya and the Syrian Arab Republic are the highest electricity subsidizing Arab countries, while Jordan, Morocco and Palestine display the lowest subsidy levels. Other Arab countries, such as Egypt, Lebanon, the Sudan, Tunisia and Yemen, have moderate subsidy levels.¹⁷ The unattractiveness of renewables is further increased by the recent fall in oil prices, reaching \$53-60 per barrel.

15. Despite those hurdles, almost half of the new electricity capacity installed in the world comes from renewables, while technological advancement is continuously driving down costs.¹⁸ Furthermore, the acute need for electricity generation faced by developing countries in the Arab region and energy shortages in many non-oil exporting countries are encouraging them to gradually start reducing their energy subsidies.

¹⁵ International Renewable Energy Agency and League of Arab States, *Pan-Arab Renewable Energy Strategy 2030: Roadmap of Actions for Implementation*.

¹⁶ International Renewable Energy Agency, *Renewable Power Generation Costs in 2012: An Overview* (Abu Dhabi, 2013).

¹⁷ International Renewable Energy Agency and League of Arab States, *Pan-Arab Renewable Energy Strategy 2030: Roadmap of Actions for Implementation*.

¹⁸ Ibid.

IV. REAPING THE BENEFITS OF GREEN BONDS/*SUKUK* IN THE ARAB REGION

16. To reap the benefits of the green bonds/*sukuk* market in the Arab region, energy policies need to be formulated in the framework of countrywide strategies, based on thorough surveys that help identify the comparative advantages in each renewable energy segment and optimize the mix between various renewable energy sources. Starting with renewable energy projects that are more feasible would help minimize the related financial burdens; yet this should be balanced against the existing energy gap and the speed at which it should be filled. Moreover, projects for off-grid and rural areas that are suffering from low access to electricity should give priority to renewable energy to help spur equitable development and reduce the load on existing power supply capacity.

17. Private funding is a result of the long-term off-take by Governments to assure investors of the commercial feasibility of their investment and mitigate their currency exposure. Public-private partnership projects in Egypt, Morocco and the United Arab Emirates demonstrate that, with government off-take and the proper structuring, it could be possible to encourage private financing in renewable energy. Targeted forms of fiscal support, such as custom duty and tax exemptions or reductions and tax credits, might be needed in the renewable energy field in the initial stages. About 14 Arab countries do not currently have such fiscal advantages. Other forms of funding, including grants, soft loans and microcredit, could prove useful. For example, Egypt is about to embark on a subsidized loan scheme for home owners to encourage the installation of solar rooftops;¹⁹ a measure which can be replicated in other countries.

18. However, green bonds and *sukuk* have several advantages over other private funding sources. Firstly, they represent a tradable capital market instrument, allowing for transferability and ease of exit, thus transforming an otherwise illiquid instrument into a liquid one.²⁰ Secondly, green bonds can be based on a pool of portfolio projects, which generally entails risk diversification, resulting in a low required return threshold. This could be a way to address the current economic feasibility challenges in renewable energy deployment.

19. Countries such as Algeria, Egypt, Jordan, Morocco and Tunisia have already created national renewable energy funds to invest in renewable energy projects. Yet, many other Arab countries are still lagging behind. Moreover, not all funds are yet fully operational, because of undetermined sources of funding, unidentified disbursement procedures, or unselected managers. These funds will either be financed by public budgetary sources, including tax levies, and foreign donations or through other possible sources of funding, yet to be identified.

20. In this context, intra-Arab cooperation could play an important role for the formulation of energy policies and for the provision of funding and grants, taking into account national security considerations. Electricity trade among Arab countries has been minimal, accounting for less than 2 per cent of total capacity in the region. Regarding development assistance and grants, Jordan, Mauritania and Morocco have received grants from Gulf Cooperation Council countries to support renewable energy deployment.²¹ Sovereign wealth funds could incorporate in their existing policies a minimum threshold to encourage renewable energy in the Arab region as part of their investment strategy to save future generations.

¹⁹ Interview with Mr. Atter Hannoura, Head of the Public-Private Partnerships Central Unit, Ministry of Finance, Egypt, 29 December 2014.

²⁰ Naturally, liquidity increases with time; funds and investors of a buy-and-hold nature will tap the market first.

²¹ International Renewable Energy Agency and League of Arab States, *Pan-Arab Renewable Energy Strategy 2030: Roadmap of Actions for Implementation*.

21. A possible funding vehicle is an Arab green climate fund, similar to the Green Climate Fund established in December 2011 within the United Nations Framework Convention on Climate Change. The Green Climate Fund had gathered \$10.19 billion as at 31 December 2014,²² with the main purpose of advancing sustainable development by assisting developing countries in adaptation and mitigation efforts to combat climate change. An Arab green climate fund could be used to redistribute money from high income Arab countries to middle income and least developed Arab countries. The Green Climate Fund also created a Private Sector Facility aimed at raising money from pension funds and institutional investors. Obtaining funding from private sources along with that received from Governments – and possibly sovereign wealth funds – represent another form of public-private collaboration that could be applied in a regional Arab framework.

V. POLICY RECOMMENDATIONS

A. RENEWABLE ENERGY DEPLOYMENT

22. Arab countries should take the following measures for renewable energy deployment:

(a) Comprehensive countrywide renewable energy policies should be put in place to determine the highest yielding sustainable infrastructure and renewable energy sources, including biomass, hydropower, geothermal electricity, wind, solar photovoltaic and concentrated solar plants, and applying an optimal mix of all sources;

(b) Renewable energy should be considered in remote areas to promote sustainable development and equitable access to government services;

(c) Supporting legal, institutional, capacity and technological frameworks should be put in place, building on the experiences of other countries and with the technical support of donor organizations.

B. USING GREEN BONDS/*SUKUK* AND OTHER COMPLEMENTARY MEASURES FOR RENEWABLE ENERGY DEVELOPMENT

23. When using green bonds/*sukuk* and other complementary measures for renewable energy deployment, Arab countries should take the following into consideration:

(a) Green bonds/*sukuk* should not only be utilized for funding on a project by project basis, but also as a means of financing portfolios of projects, especially small scale ones (for example, the installation of electricity water heaters in specific cities);

(b) Renewable energy equity funds should complement the debt offering of green bonds/*sukuk* with an equity offering, to allow for the same risk diversification feature as green bonds when used for a portfolio of projects;

(c) The green *sukuk* guidelines and other supportive legal, institutional, capacity and technological frameworks should be put in place, building on the experiences of other countries and with the technical support of donor organizations.

²² See http://news.gcfund.org/wp-content/uploads/2015/02/pledges_GCF_dec14.pdf.

C. INTRA-ARAB COOPERATION

24. Arab countries can strengthen development financing through cooperation by undertaking the following:

(a) Intra-Arab cooperation should allow for a coordinated effort in setting national energy priorities, bearing in mind national security considerations;

(b) Electricity trade should be further increased to benefit from regional integration and green bonds/*sukuk* should be considered as a possible funding source;

(c) Arab development assistance, Arab grants and Arab sovereign wealth funds should increasingly focus on renewable energy and cooperation in the implementation of new projects, as well as the development of necessary infrastructure for financing;

(d) An Arab green climate fund could be established to help in combating climate change, reducing green-house gas emissions and channelling funds from high income Arab countries to middle income and least developed countries.
