



Renewable energy in Egypt

The green opportunity

February 2017

www.kpmg.com/uk

Renewable energy in Egypt

Egypt has embarked on an ambitious project to build the biggest solar photovoltaic plant in the world at Benban, Aswan.

The push towards renewable energy in emerging markets continues to pique the interest of investors, financiers and operators alike. For this paper, we turn our attention towards Egypt which is attempting to address a 10 year-long energy crisis by transforming its energy mix to include an installed capacity share target of 20% renewables (10GW) by 2020.

The Egyptian government envisages that 12% of clean energy will be generated by wind power projects. However, the current focus is on trying to realize the Benban project which – if successful - would be the largest solar PV project in the world.

Contribution of renewable energy



The investment opportunity

At this scale, Benban is widely seen as the Egyptian government's flagship renewable energy project, which will be used to set an example for future initiatives in the sector.

Located in the south of the Egyptian territory, the project has an estimated total cost of up to Us\$4 billion and will produce 1.8GW of power when operational. The project site consists of a 37 square kilometre plot divided into 39 projects of approximately 50MW each and allocated to special purpose project companies owned by developers and investors.¹

The investment opportunity has excited the international renewable energy community. The final call for tenders to participate in Phase I of the Benban project took place at

the end of 2014. The call received interest from over 175 multinational energy companies and international financial institutions, who submitted proposals under a newly implemented feed-in tariffs (FiTs) scheme.² Successful candidates signed agreements in principle throughout 2015 and are currently in negotiations over the details of the financial terms.

Companies, investment firms and foreign investors from various countries including Italy, France, Bahrain, Jordan and Switzerland have signed agreements to develop and fund Benban projects. In addition, contracts have been signed with more than a dozen local and international investors to supply Benban projects with support around security, accommodation, facilities, recruitment and related areas.



The heightened interest from the international community partly reflects the Egyptian government's efforts to place renewable energy at the center of its energy agenda and to promote a conducive policy framework and investor-friendly environment for the sector, including financial incentives such as tax breaks and preferential lending rates from local banks.³

Despite these efforts, however, recent events have caused certain investors to question whether this is the right time to enter the Egyptian solar energy market

¹ Strategic Environmental & Social Impact assessment Benban 1.8 GW Photovoltaic solar Park (NREA), Egypt. Final Report. February 2016

² <http://www.solargcc.com/wp-content/uploads/2014/12/SolarinEgypt.pdf>
³ <http://www.greenprophet.com/2012/10/egypt-renewable-energy/>

Sticking points

Concerns have been raised in two main areas, namely: (i) the dispute resolution mechanism proposed by the government for Benban projects and (ii) the impact of currency volatility and local funding restrictions on the FIT scheme.

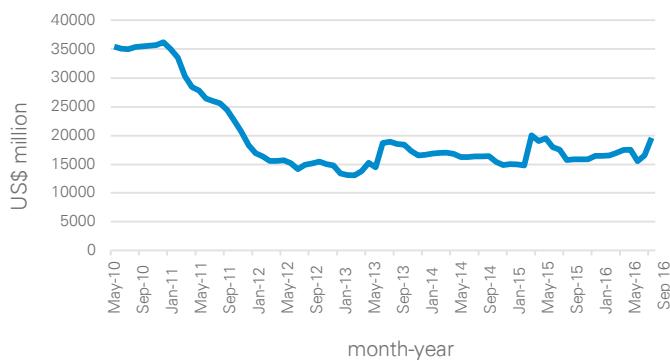
(i) Dispute resolution

Benban projects were facing a stand-still after the Egyptian Minister of Electricity introduced a new requirement that disputes between parties should be resolved domestically through the Cairo International Arbitration Centre, whereas investors have called for international arbitration. The issue sparked protests from both Egyptian and international companies amidst fears that the condition would compromise their ability to quickly and fairly resolve disputes.

In September 2016, the Minister of Electricity announced the second round of the FIT program, following months of negotiations between the government and investors on the mechanisms of dispute resolution. The Minister said that a compromise has been reached, in which arbitration will be governed by the rules of the Cairo Regional Centre for International Commercial Arbitration while the seat of the arbitration itself can take place offshore. Investors have welcomed the move but remain uncertain about the practical implications of the requirement.

Many producers had withdrawn from the first phase of the FIT scheme and certain international lenders had withheld their lines of credit pending resolution of the logjam. The Ministry of Electricity has extended the deadline for Phase I developers to terminate their projects to 27 October 2016, after which termination penalties will apply.

Foreign currency reserves



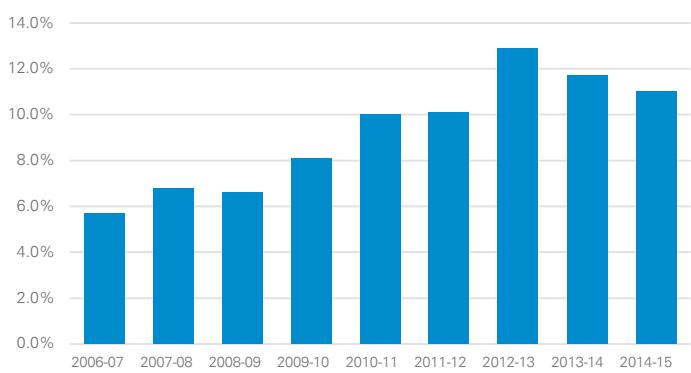
(ii) Impact of the foreign exchange crisis on feed-in tariffs

Foreign investors' reluctance to accept local arbitration has been accentuated by Egypt's forex crisis, which directly affects the Egyptian government's capacity to meet its commitments in the FIT scheme, especially after the continuous devaluation of the Egyptian pound against the dollar since the beginning of 2016. In August, investors expressed surprise when the Minister of Electricity advanced a requirement that project companies should obtain at least 15% of financing from local banks.

Critics decried the new requirement as an "impossible condition"⁴ as the lack of foreign currency available domestically would subject investors to the volatility of the local currency.

The stand-still has directly affected the bankability of renewable energy projects in Egypt, especially those lead by international financial institutions. The Egyptian government is currently in talks with the International Monetary Fund (IMF) for a loan worth US\$1.2 billion, expected to relieve the foreign currency crisis and stabilise the value of the Egyptian pound against the US dollar.

Cash deficit as a percentage of GDP (%)



Navigating the investment challenges

For those looking to participate in Egypt's renewable energy sector, it will be important to closely monitor the situation as the Egyptian government attempts to balance fiscal and political pressures with investors' concerns around dispute resolution, currency fluctuations and restrictions on international financing. This is especially in light of the current rumors of an imminent fluctuation of the Egyptian pound.

In order to do so it will be important to understand what is happening beneath the surface and how decision-makers are likely to react considering the many stakeholders involved in the sector, their overlapping spheres of influence and competing priorities.

This should be assessed in the context of a relatively new government which is attempting to address an energy and financial crisis in the wake of the unprecedented shift in political fault lines that has occurred since 2011.

Alongside these macro factors, investors and operators in the Egyptian renewable energy sector will need to consider a range of project-specific considerations such as managing their supply chain, security and community relations issues which may arise when projects are built in remote areas.

Conclusion

Despite the existence of some obstacles, the government's commitment to developing Benban and the wider renewable energy sector remains firm. Companies that are able to anticipate and navigate the evolving landscape will be best placed to take advantage of the considerable opportunities in the sector.

⁴ <http://www.dailynegypt.com/2016/08/15/534544/>

Our MENA experts



Sarah El Ashmawy

Research Analyst- Corporate Intelligence,
KPMG Forensic

T: +44 (0) 20 76942089
E: Sarah.ElAshmawy@kpmg.co.uk

Function and Specialization

Corporate Intelligence, Political Risk Analysis,
MENA Region, Egypt

Languages

English, Arabic, French

Education, Licenses & Certifications

MA, Violence, Conflict and Development,
School of Oriental and African Studies (SOAS)
BA, Political Sciences and International Law,
American University in Cairo (AUC)

Sarah El Ashmawy joined KPMG's Corporate Intelligence practice in 2015. She has over 3 years' experience undertaking research and development projects on the key political and socio-economic issues in Egypt, as well as across the Middle East and North Africa (MENA).

In her role at KPMG, Sarah works on the Corporate Intelligence team's Middle East desk, focusing on providing clients with a variety of forensic services that cover the jurisdictions of North Africa, the GCC and Iran.

Prior to joining KPMG, Sarah was the Egypt Program Manager at an international human rights organisation based in Cairo and London, where she implemented advocacy and networking activities in Egypt and the MENA region.

Professional and industry experience

Sarah has experience conducting research and mapping stakeholders for a range of sectors. Her research and analysis experience includes:

- Assisting on a Nile-basin project to map and formulate impact of infrastructure projects on different stakeholders.
- Leading research on and analysis of existing and future legislation in Egypt regarding equality and diversity, on the social, economic and political level.
- Co-authoring a chapter on the democratic transition in Egypt, as part of a regional comparative research project conducted by the American University in Beirut and to be published by Cambridge Press University in 2015/16.



Karim El Assir

Assistant Manager- Corporate
Intelligence, KPMG Forensic

T: +44 (0) 20 76942089
E: karim.lassir@kpmg.co.uk

Function and Specialisation

Corporate Intelligence, Political Risk Analysis,
MENA Region

Languages

English, Arabic

Education, Licenses & Certifications

MA, Near and Middle Eastern Studies, School
of Oriental and African Studies (SOAS) BA,
International Relations, University College
Maastricht (UCM)

Karim El Assir joined KPMG's Corporate Intelligence practice in 2015. He has over four years' experience providing clients with research and advice on the key risks associated with several markets across the Middle East and North Africa (MENA).

In his role at KPMG, Karim leads the Corporate Intelligence team's Middle East desk, focusing on providing clients with a variety of forensic services that cover the jurisdictions of North Africa, the GCC and Iran.

Prior to joining KPMG, Karim was a Senior Political Analyst at a political and economic risk consultancy based in Cairo, where he led the firm's research on the political environments of several MENA states, advising businesses across a range of sectors and providing regular analysis to domestic and international media outlets.

His work has included travel to Egypt, Lebanon, Jordan, and the UAE. Karim has also lived and studied in Morocco and Saudi Arabia.

Professional and industry experience

Karim has experience providing analysis to clients across a range of sectors. His consulting experience includes:

- Advising an oil major on their long term strategy in Egypt, which involved leading a large project to forecast the country's political and economic trajectory at several stages over a 10 year period.
- Leading work to provide a global bank with regular in-depth reports and consultation on Egypt's macro-political and security environment. The work entailed the analysis of political developments, mapping security risks and curating the sentiments of the country's business community over a two year period.
- Writing weekly in-depth reports on both Egypt's security environment and the MENA region's political and economic trends sent to a subscriber base that included international corporates and large risk firms based in the UK.
- Working on several due diligence assignments assessing the reputational risks of companies across the Middle East and Africa.



Andrew Sekandi

Associate Director, Corporate Intelligence, KPMG Forensic

T: +44 (20) 7694 3578

E: andrew.sekandi@kpmg.co.uk

Function and Specialization

Corporate Intelligence, New market intelligence, Integrity Due Diligence, Anti-Bribery & Corruption and Litigation support.

Languages

English, French (intermediate)

Education, Licenses & Certifications

B.A LLB, University of Cape Town, South Africa

Andrew joined KPMG's Corporate Intelligence practice in 2016. He has seven years of experience advising clients on how to minimise reputational and regulatory risks associated with doing business across the African continent, with a strong focus on anti-bribery and corruption.

Prior to joining KPMG, he was a senior member of the respective Africa teams at Control Risks Group and Kroll, where he gained significant experience leading integrity due diligence projects as well as compliance and anti-corruption consulting assignments across a range of industries, including oil & gas, mining, banking, telecoms, consumer goods and renewable energy.

Andrew previously worked as a lawyer for one of the leading law firms in Namibia, where he advised domestic and international clients on their local investments. His work has included travel to Nigeria, Burkina Faso, Cameroon, Kenya, Tanzania, Namibia and South Africa.

Relevant consulting experience includes:

- Leading numerous pre-investment investigative due diligence assignments for foreign and domestic organisations with interests in various jurisdictions across Sub Saharan Africa, including in the East Africa renewable energy sector.
- Delivering Africa-focused integrity and anti-corruption workshops to senior executives in the Nordic region, including Copenhagen, Oslo, Helsinki and Stockholm;
- Providing anti-corruption and political risk intelligence to clients looking at investments in Nigeria, in the context of the shifting political landscape and the new administration which took power following the elections in 2015.



Alexandra Maddy

Director, UK Corporate Intelligence lead, KPMG Forensic

T: +44 (0) 20 7694 1301

M: +44 7785 387634

Function and Specialization

Corporate Intelligence, Integrity Due Diligence, Anti-Bribery & Corruption and Litigation support.

Languages

English, French

Education, Licenses & Certifications

MA, Geography, St Catharine's College, Cambridge University

MA, International Studies, School of Oriental and African Studies (SOAS)

Alexandra Maddy joined KPMG's Corporate Intelligence practice in 2011. She has ten years' experience advising clients on a range of business intelligence, risk assessment, investigation and litigation support assignments, with a focus on emerging markets. In her role Alex manages a team of corporate intelligence specialists focusing on projects throughout the EMEA region. She regularly advises senior management teams on integrity and business risks in emerging markets and how to access information in challenging situations and jurisdictions.

Prior to joining KPMG, Alex led the Africa practice for corporate investigations/intelligence at Control Risks, where she gained significant experience advising international clients on a range of business, integrity and political risks across Africa. Alex's work has included travel to Nigeria, Côte d'Ivoire, Kenya, the Democratic Republic of Congo, Zimbabwe and South Africa.

Relevant consulting experience includes:

- Advising international energy companies and banks on their anticorruption programmes and strategy as they enter new markets in Africa, focusing on the impact of exposure to these markets on the companies' adherence to international anti-corruption legislation;
- Managing investigative due diligence assignments for a range of clients in the energy sector in Africa, with a focus on understanding reputational risks, the security of tenure of contracts under different political regimes, and community relations strategies;
- Advising an oil and gas company on its strategy for managing political stakeholders at a federal and state level and for its strategy in managing local community groups. The project included an in-depth assessment of the different political and commercial strategies of a variety of stakeholders affecting the client's operations in Nigeria.

kpmg.com/uk



The information contained herein is of a general nature and is not intended to address the circumstances of any particular individual or entity. Although we endeavour to provide accurate and timely information, there can be no guarantee that such information is accurate as of the date it is received or that it will continue to be accurate in the future. No one should act on such information without appropriate professional advice after a thorough examination of the particular situation.

© 2017 KPMG LLP, a UK limited liability partnership and a member firm of the KPMG network of independent member firms affiliated with KPMG International Cooperative ("KPMG International"), a Swiss entity. All rights reserved. The KPMG name and logo are registered trademarks or trademarks of KPMG International.

CREATE | February 2017 | CRT065936