FIELDSTONE AFRICA
RENEWABLES INDEX

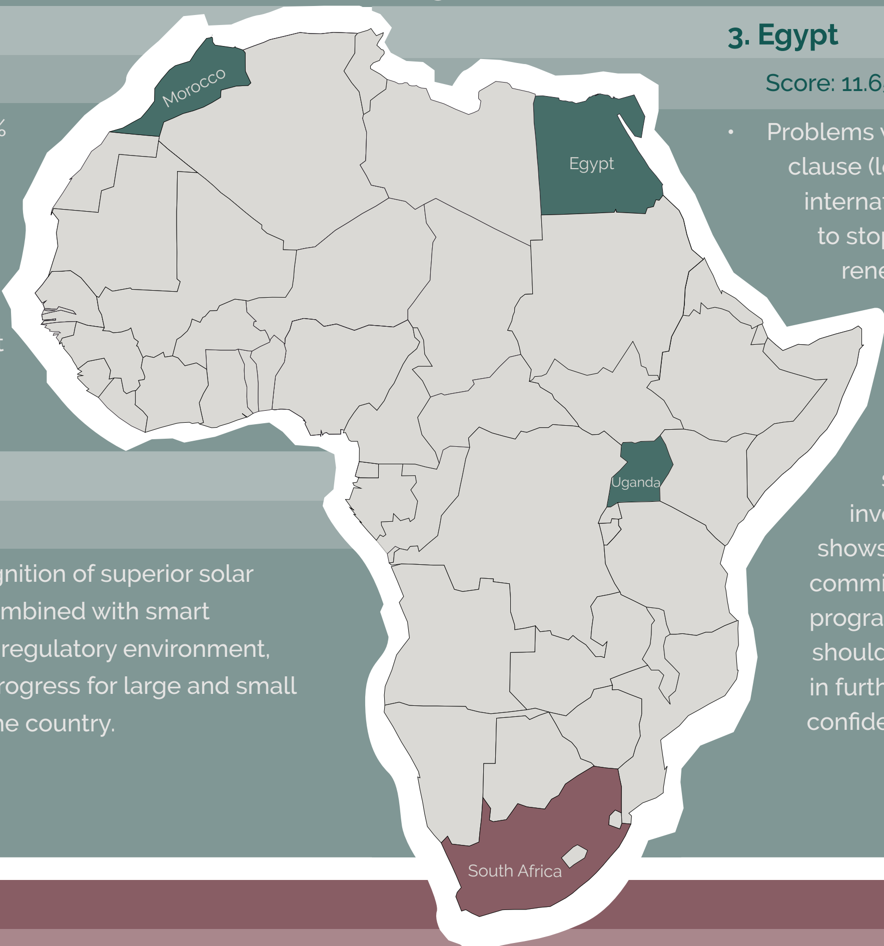
Second Edition, October 2016 - Report Summary

It has been a slower year for utility-scale renewable programmes on the African continent than many had anticipated. However, despite the economic difficulties, several countries have pushed forward with legal and regulatory groundwork that may improve prospects for 2017 and beyond. Unlike most thermal-generation projects, renewable projects can be executed quickly if the framework and political will are in place.

- **The Big Five** – markets in which a renewable investment is currently most compelling (if there are too few, we hold spots open).
- **Honourable Mention** – markets in which evidence points to significant progress towards investable opportunities.
- **Little Gems** - smaller markets that may not host large-scale opportunity, but where conditions are conducive for project development.
- Due to market developments, we have added a special category, **Sleeping Giant.**

Further information on previous rankings and the reduction in The Big Five are included in the full text at www.fieldstoneafrica.com/FARI

The Big 5



1. Morocco

Score: 12.15

- Enormous ambition (42% renewable generation by 2020, projects upwards of US$6 billion in the pipeline), coupled with a demonstrated record of closing projects, put Morocco at the top of the FARI list.

2. Uganda

Score: 11.98

- Electrification and recognition of superior solar and hydro resources, combined with smart interplay of an enabling regulatory environment, have resulted in great progress for large and small generation projects in the country.

3. Egypt

Score: 11.65

- Problems with the arbitration clause (local versus international) threatened to stop Egypt's ambitious renewable plans by blocking financeability.
- Willingness to reconsider and compensate for some of the negative investor sentiment shows the government's commitment to the programme and investors should return to take part in further rounds with confidence restored.

Sleeping Giant

South Africa

- The lights have stayed on in South Africa over the last year, in no small part because of economic contraction (-4 000MW from mining and industrial demand) and additional renewable generation (+6 000MW).
- As cited as a danger in June's FARI, Eskom has now taken a firm line against renewables based on its contention that they are too expensive and sporadic.
- The current round of bids related to renewables is now uncertain, leaving international bidders less enthusiastic about expending development resources in South Africa's energy sector.

For full text of FARI as well as well previous Edition see www.fieldstoneafrica.com/FARI

Honourable mention

Algeria
- The goal of 4 500MW of renewables by 2020, the opening of the process to private companies and the long-term commitment to harness the renewable potential of the country put Algeria in the forefront of the Middle East and North Africa region.

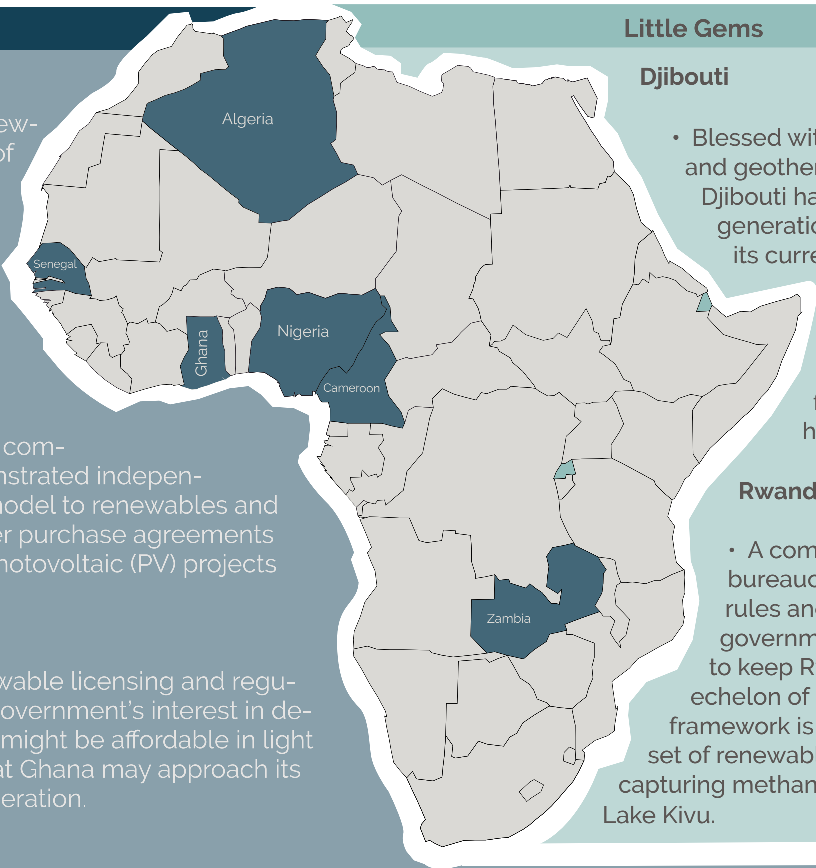
Cameroon (new)
- The government has cited a commitment to extend its demonstrated independent power producer (IPP) model to renewables and it seems probable that power purchase agreements will be offered to selected photovoltaic (PV) projects in the coming months.

Ghana
- A conducive system of renewable licensing and regulation, and evidence of the government's interest in developing smaller plants that might be affordable in light of debt constraints, show that Ghana may approach its 10% target of renewable generation.

Nigeria
- Notwithstanding the economic challenges it faces, the government has pushed forward with 14 projects (about 1 150MW) into the security bond phase in a PV programme.
- Significant investment interest has been noted, with many developers and investors observing from the sidelines and hoping for a successful first round.

Senegal (new)
- Senegal seems to finally be progressing toward the realisation of its Renewable Energy Act of 2010 and this could set off a substantial round of development, as the governmental strategy calls for up to 400MW of renewable generation to be put in place.

Zambia
- Drought has led to load shedding, Renewables could have mitigated this but have not moved fast enough, despite wide (if sometimes uncoordinated) support from development finance institutions/donors).
- Anticipated increased mining activity will lead to further demand. The need to go beyond depending on geographically concentrated hydro-energy in the country's south will make alternative power sources a priority.



Little Gems

Djibouti
- Blessed with excellent solar and geothermal resource, Djibouti has a 100% renewable-generation goal to replace its current reliance on imported fossil fuel. It is hard to assess the actual outcome, but developer and funding interest is high.

Rwanda
- A competent, accessible bureaucracy and clear rules and goals reflect the government's commitment to keep Rwanda in the upper echelon of FARI. Added to that framework is an unusually diverse set of renewable sources, including capturing methane release from Lake Kivu.

Markets included in the June FARI honourable mention list, but not retained in the current lineup:

Ethiopia has an ambitious programme and has engaged government personnel who continue to stress IPP involvement. The offsetting factors are the security situation (which has caused some investors to retrench) and a lingering doubt about the government releasing sufficient control to reach a "market" standard, so as to make the project financeable. Perhaps structured deals instead of auction will work.

Kenya has confirmed the doubts expressed in the last FARI. The lack of transparency, complexity of the system and perceived resistance of the incumbent utilities have led to very little development, despite admirable laws on paper.

Ivory Coast continues to be an impressive economic performer on the continent, but has not made significant progress on renewables.

Mali has potential, but has not followed through with its concession programme and has understated its transmission infrastructure requirements. Combined with lingering security issues, these factors have slowed progress.

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