

South Africa

Overall Rank: 12

Type: Small Market; Small Market Share

The magnitude of South Africa’s planned renewable energy expansion over the next decade is expected to support U.S. exports across several subsectors. South Africa is already the largest clean energy market in Africa; and the market can provide a base of operations for business development in other African markets. However, severe local content requirements and the presence of one, vertically-integrated electric utility can make exports difficult.

Sub-Sector Rankings

Ethanol	Geothermal	Hydropower
25	N/A	10
Pellets	Solar	Wind
N/A	11	5

South Africa is typically the first African market most American exporters consider when developing an export strategy. Its energy demand growth and economic vitality make it an attractive destination, as well as a base for future projects in other African markets.

For renewable energy companies, South Africa also offers tremendous resource potential across a wide array of technologies. Yet the market can be complex with relatively few buyers for U.S. products and services and strong local content requirements, as well as a predilection to buy lower cost equipment.

Overview of Renewable Energy Market

Renewable energy has only recently become an important topic in South Africa, as non-hydro renewables account for less than one percent of South Africa’s current generating capacity. Today, the sector is dominated by a vertically integrated purchaser – the state-owned power company, Eskom – that is involved in all aspects of power generation, transmission, and distribution. In fact, Eskom generates roughly 95 percent of electricity consumed in South Africa, mostly from coal-fired power plants, and will continue to be the dominant player in the industry going forward.

While this can be good for U.S. exporters that provide products or services to Eskom, the market can be

difficult to enter for other firms without a strong prior relationship with the company. Fortunately, the South African Government has attempted to divide the power generation sector among Eskom and independent power producers (IPPs) to increase the participation of the private sector. ITA supports this effort, as it could create new buyers for American technology.

The South African Government expects the new IPPs will reduce costs for consumers through increased competition.¹ The South African Government also hopes the new IPPs will promote the development of new power plants, which are desperately needed. Several high profile electricity shortages have hit the country recently, threatening South Africa’s continued economic growth and forcing policy makers to consider cleaner, more sustainable alternatives.

According to the South African Energy Department, the country will need over 40 GW of new generation capacity by 2025 to meet future demand. To help meet this objective, South Africa launched the Renewable Energy Independent Power Producer Program (REIPP) in August 2011, which established a bidding process for renewable energy projects and outlined the further expansion of renewable energy in the country. The REIPP’s targets included 3,725 MW of renewable energy capacity to be installed by 2016. Of this, onshore wind was expected to contribute 1,850 MW,

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solar PV to contribute 1,450 MW, and concentrated solar power was expected to contribute an additional 200 MW.

In 2012, the South African Government increased its target, calling for an additional 3,200 MW to be added to the nation's electricity mix by 2020.² And in November 2011, it began the first of three tender announcements aimed at accelerating renewable energy development. In total, nearly 4 GW of new clean energy projects were tendered, with each receiving a 20-year power purchase agreement with ESKOM.³

As a result of the tenders, foreign investment – both from the private sector and international financial institutions – has grown considerably. The U.S. Government, through the Ex-Im Bank, and the Chinese Government, through the Industrial and Commercial Bank of China, each pledged to invest about \$2 billion to fund clean energy projects.⁴ And the Development Bank of Southern Africa approved a \$1.1 billion loan for renewable energy projects in 2012.

Ex-Im's investment was bolstered by the creation of the U.S.-Africa Clean Energy Development Finance Center (CEDFC), an initiative developed by the Overseas Private Investment Corporation and the U.S. Trade and Development Agency. The CEDFC offers an important opportunity for U.S. exporters, providing the financial support many projects need and also helping to link American manufacturers to those projects.

Challenges and Barriers to Renewable Energy Exports

Renewable energy exporters to South Africa face several challenges. The most impactful is likely the country's intensifying local content requirements, which threaten to undermine the ability of several U.S. firms to do business in the country. Previously, U.S. exporters faced only a moderate LCR. While detrimental to export competitiveness, the LCRs still allowed South African developers to purchase some products on international markets.

Most renewable energy projects were able to satisfy South Africa's 35 percent local content requirement through construction costs. In the most recent tender, however, local content requirements have increased to at least 40 percent (concentrated solar power projects are mandated to meet a 45 percent threshold). Developers, however, must reach a 65 percent local content threshold to maximize their bids' "social

economic score."⁵ At this level of required local content, U.S. exports are severely threatened.

Another obstacle to U.S. renewable energy exports to South Africa is competition from foreign firms with support from their respective governments, particularly in the wind and solar sectors. Denmark, for instance, recently signed an agreement with South Africa pledging its financial support for wind power development, which is likely to help facilitate the use of Danish-made Vestas wind turbines.⁶

Chinese firms are particularly active in South Africa. Suntech, prior to its bankruptcy, was the first to enter the market, agreeing to supply PV equipment to two South African solar farms in July 2011. Jinko Solar and Yingli have also become active participants in the South African market and have offered bids in the country's public tenders.⁷ Both companies have been supported heavily by the Chinese Government.

Opportunities for U.S. Companies

While ITA remains skeptical that South Africa will meet its renewable energy goals by 2025, the sector's growth should be strong enough through 2015 to support significant U.S. exports. South Africa does not currently have the manufacturing capacity to meet its strict localization requirements. In the short-term, U.S. firms should therefore seek out export opportunities, particularly by partnering with local companies.

Wind

Opportunities for U.S. exporters will be greatest in the wind energy sector. Areas that could provide the most potential for U.S. exports are financial consulting, construction, and balance-of-plant equipment. Given the high cost of transportation and competition from lower-cost manufacturers either domestically or from Asia, it is unlikely that American firms will export turbines, blades, or larger turbine components competitively.

Ethanol

South Africa's emerging biofuels market holds only limited opportunities for U.S. exporters. In October 2013, South Africa announced that biofuels must comprise at least 5 percent of diesel and 2-10 percent of gasoline by October 2015. At the same time, the country announced that *all* grain needed for this production must be produced locally. Thus, although U.S. firms could have provided feedstocks or fuel to the market prior to this policy change, only service

providers, consultants, or engineers are likely to benefit from the planned market expansion.

Solar

Interest in the solar sector in South Africa, in both PV and CSP technologies, is high, but much of the sector's growth is expected to occur post-2015. Though the U.S. market share in South Africa's solar market will be small, South Africa is one of the few solar markets globally that does not manufacture enough solar products to meet its own domestic demand. This should support a modest amount of U.S. exports, particularly if the projects are supported by Ex-Im financing.

Upcoming Renewable Energy Trade Events for Exporters interested in South Africa:

- **West Africa Energy Business Development Trade Mission;** *May 18 -23, 2014* – Ghana and Nigeria
- **Webinar: Energy Opportunities in Sub-Saharan Africa;** *February 19; February 27; March 6* – all webinars at 10am Eastern.

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2014 Renewable Energy Top Markets Report



This *Top Markets* case study is part of a larger report that includes rankings of 75 different markets in terms of overall U.S. renewable energy exports through 2015, as well as specific rankings for the ethanol, geothermal, hydropower, biomass pellets, solar and wind sectors. To access the full report, visit <http://export.gov/reee/topmarkets>.

¹ "Energy Profile South Africa," <http://www.reegle.info/countries/south-africa-energy-profile/ZA>.

² Business Monitor International, "Industry Trend Analysis – Grand Renewable Plans Overly Ambitious," 7 December 2012.

³ *Bloomberg New Energy Finance*, "S. Africa Picks 17 Clean Energy Bidders, Studies More Candidate" (29 October 2013) and "Clean Energy – Research Note: South Africa Moves Full Steam Ahead into Round 3" (8 August 2013)

⁴ Ernst & Young, "Renewable energy country attractiveness indices – Issue 35," November 2012, pp. 23.

⁵ *Bloomberg New Energy Finance*, "Clean Energy – Research Note: South Africa Moves Full Steam Ahead into Round 3" (8 August 2013) pp. 5

⁶ Business Monitor International, "BMI Industry View – South Africa – Q2 2013," 28 March 2013.

⁷ *Bloomberg New Energy Finance*, "Clean Energy – Research Note: South Africa Moves Full Steam Ahead into Round 3" (8 August 2013) pp. 4

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