



zensar

Financial Services in South Africa

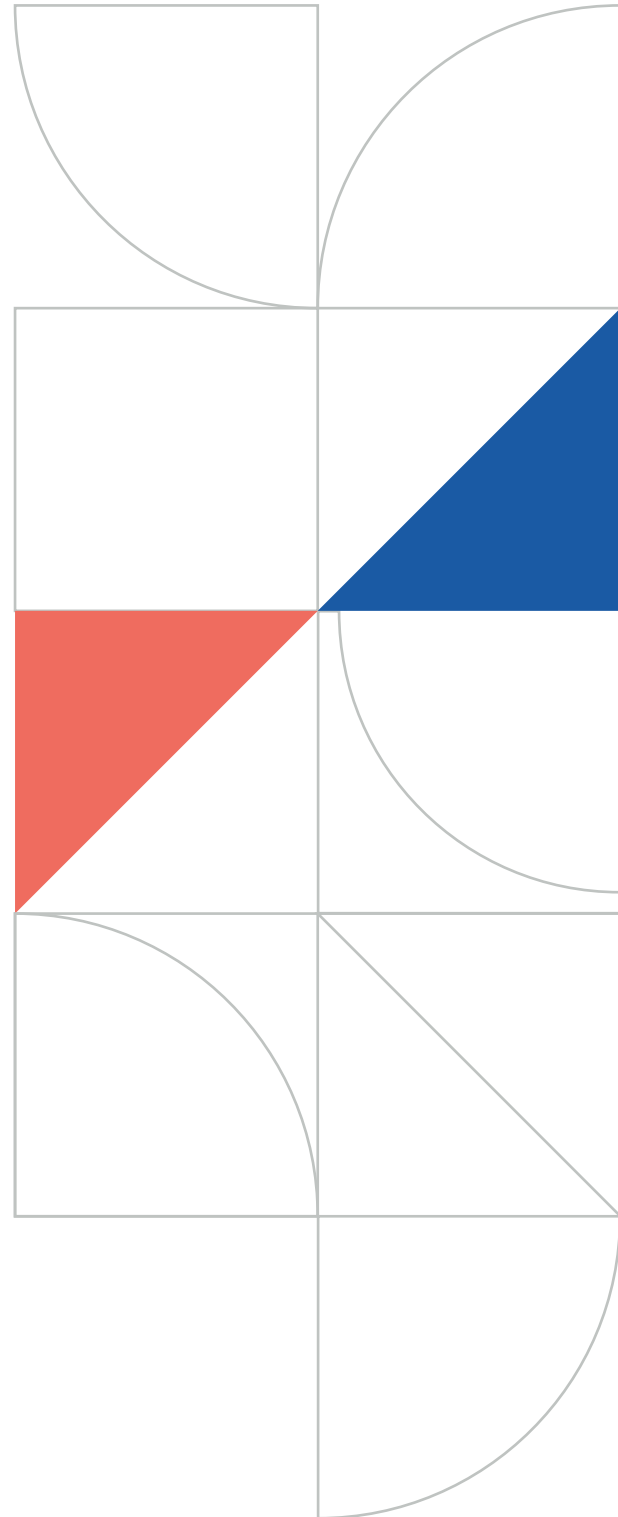
Preparing for the Boom
in Green Financing

An  **RPG** Company

Introduction

The energy crisis in South Africa has reached a peak. Six to 12 hours of power cuts a day are routine, with power grids on the brink of a collapse. The impact on the economy is telling, costing the country an estimated \$250 million a day, which could erode a projected one to five percent of national GDP. The situation is made worse by an unemployment rate of 34.5 percent — which means an increasing number of citizens cannot afford to pay growing power bills. The South African government has put a solution in place. It has set in motion policy changes via the South African Renewables Initiative (SARI) and the Renewable Energy Independent Power Producer Procurement Programme (REIPPPP) that aim to create financing for renewable energy. The goal is to make energy affordable, create energy security, improve industrial output, and lower emissions as part of the Paris Agreement. This catastrophic energy shortage and the new policies have resulted in fresh opportunities for financial services. If banks step up to provide green financing tailored for customers, South Africa can move toward containing the crisis.

The need is for financial product innovations to support the initiatives of the SARI and the REIPPPP. Fortunately, South Africa has a geographical advantage with an annual 24-hour global solar radiation average of 220 watts per square meter (W/m²) compared to about 150 W/m² for parts of the the US and about 100 W/m² for Europe. In addition, the cost of solar photovoltaic (PV) installations has been falling steadily. The cost is now as low as \$1.90/watt for systems larger than 200 kilowatts. The falling prices make the cost of power produced from renewable solar sources about 200 percent cheaper than current coal-based sources. Homes powered by solar systems can have reliable energy for as little as \$56 per year.



Solar Power (PV) Adoption In S.A: Our Perspective

Key Drivers

- Geographical Advantage
- ~300% Increased price of Power sourced from Coal based sources
- Frequent Load sheddings
- Reduced Capex* and Opex of PV Installations
- ~200% cheaper Prices of Power sourced from renewable sources
- S.A Government's Commitment of Reducing Carbon Footprint



Government Role

- Committed To Reduce GHG emissions and Carbon footprint under Paris Agreement
- Created REIPPPP under IRP 2019 to meet the growing energy demand and ESG commitments



Financial Services Play

- Banks - introducing new, retail green lending products
- NBFCs - Have introduced Solar lending products
- Banks - incorporating home-improvement type options on top of existing home loan products
- 70-100 percent of the capital costs 5-10 years loan terms.



End Consumer Benefits

- Very High IRR*
- Reduced Energy cost
- 70-100% Capital Cost financing
- Cost recouped in 5-8 years*
- Tax benefits
- Giving back to the grid and Earning through SSEG/Net Metering and REFIT



Pivoting the energy crisis

Several banks in South Africa recognize the impact they can have in turning around the energy crisis. They are focusing on providing products that encourage and support renewable energy production. Some banks are improving their ability to finance green loans through various innovative products, some are already extending financing for solar energy assets and solutions to customers that have existing home loans via access bonds. Customers who avail of such loans, covering 70 to 100 percent of the capital cost, can expect to offset the additional loan in a five to 10-year period through savings in energy bills. The banks providing these products are partnering with solar energy experts, ensuring their customers have access to vendors certified for their expertise, services, and quality.

The loans can cover solar panels, inverters, battery storage, and optional maintenance and insurance plans.

Customers who choose green energy loans have other advantages over and above reliability and lower energy costs that will improve demand for green loan products. For example, these customers will get a 100 percent tax deduction for the cost of installed solar equipment, up to a maximum of R75,000. They can also give back energy to the grid and earn through Metering for Small-Scale Embedded Generation (SSEG) and Renewable Energy Feed-in Tariff (REFIT) schemes that guarantee a minimum price for power exported to the grid.



Disruptive innovations in lending and financing

A significant boost to green financing can be expected from Access Bonds, a type of home loan that allows borrowers (who have paid extra money into their bond) to withdraw the extra money when they need it. Paying extra into the bond each month also saves a customer's interest over the long term. While the government creates more favorable policies

that promote investments in renewables, banks need to innovate around lending and financing options. It is easy to see that the success of such products and options depends on how sharply banks manage to customize the loans and the education campaigns they run around their products and services for renewables.

Boosting green financing with emerging technologies

Technology can play a crucial role in promoting green loans. The first is by using data and analytics to identify personas for green financing. Marketing platforms can then create customized campaigns to engage these customers, educate them, provide them with financial calculators, and assist them with customizing their loans.

The key is to have a platform that can scale the task of accepting loan applications, approving them, and bringing pinpoint focus to customizing the loans. In addition, these platforms must have automated workflows that minimize costs and speed up the process.

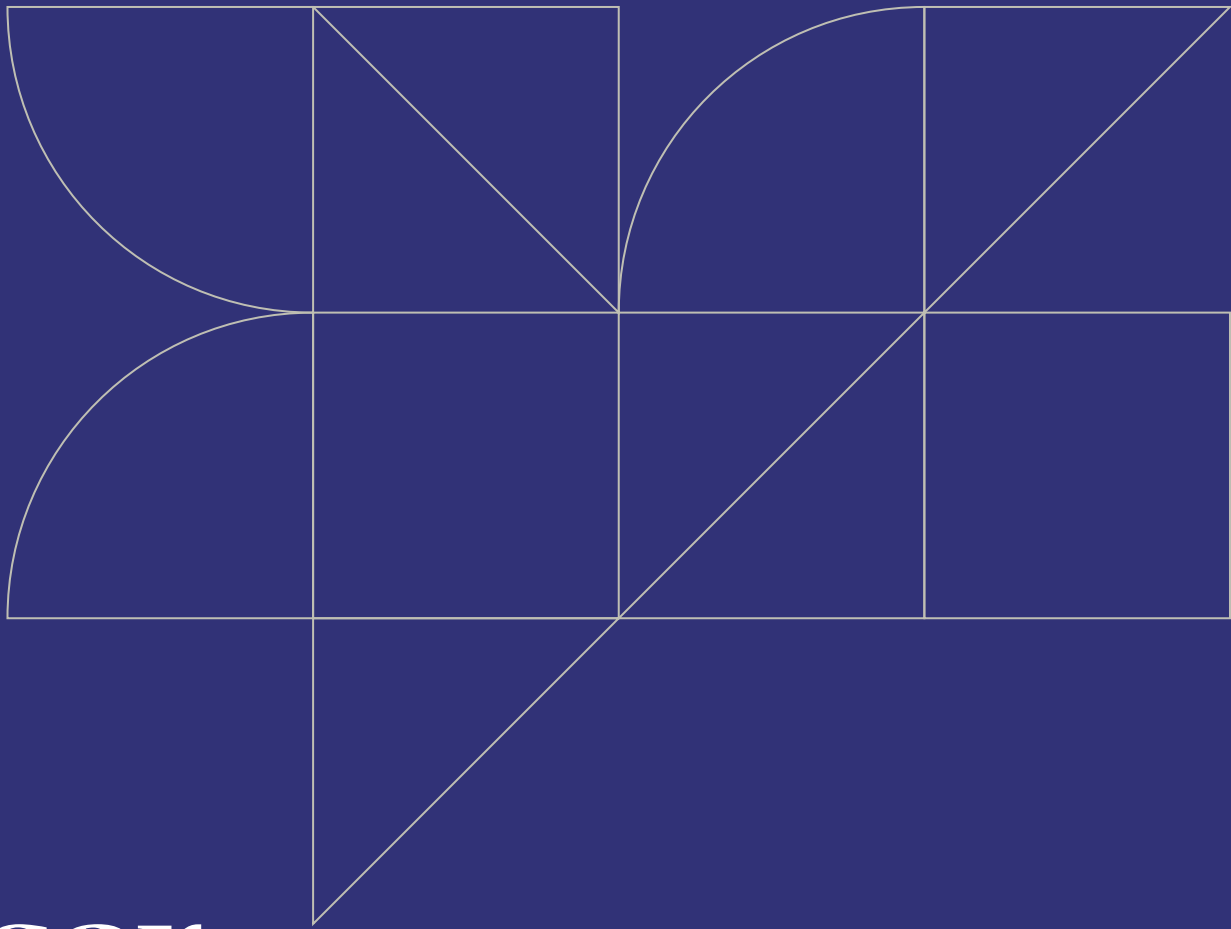
Finally, banks must optimize their legacy lending platforms and combine them with modern

applications that provide customers with self-help processes. These processes must be designed to dynamically change loan terms based on the customer's needs and reduce the operational burden on banks.

Until recently, the sole target of green financing in South Africa was the business user. However, given the crisis, retail financial products are about to get a significant boost.

Solar energy product vendors are bullish about future growth, forecasted at a 29.7 percent CAGR between 2022 and 2026. They are preparing to meet demand by increasing production. However, it remains for banks to enable financing through retail customer loans.

¹PV prices have seen hikes in recent months owing to price hike of polysilicon and almost 4-5X increase in freight charges. However, the prices are expected to return to normal level in a 3-6months period.



zensar
An  **RPG** Company

We conceptualize, build, and manage digital products through experience design, data engineering, and advanced analytics for over 130 leading companies. Our solutions leverage industry-leading platforms to help our clients be competitive, agile, and disruptive while moving with velocity through change and opportunity.

With headquarters in Pune, India, our 11,500+ associates work across 33 locations, including Johannesburg, Cape Town, San Jose, Seattle, Princeton, London, Singapore, and Mexico City.

For more information please contact: velocity@zensar.com | www.zensar.com