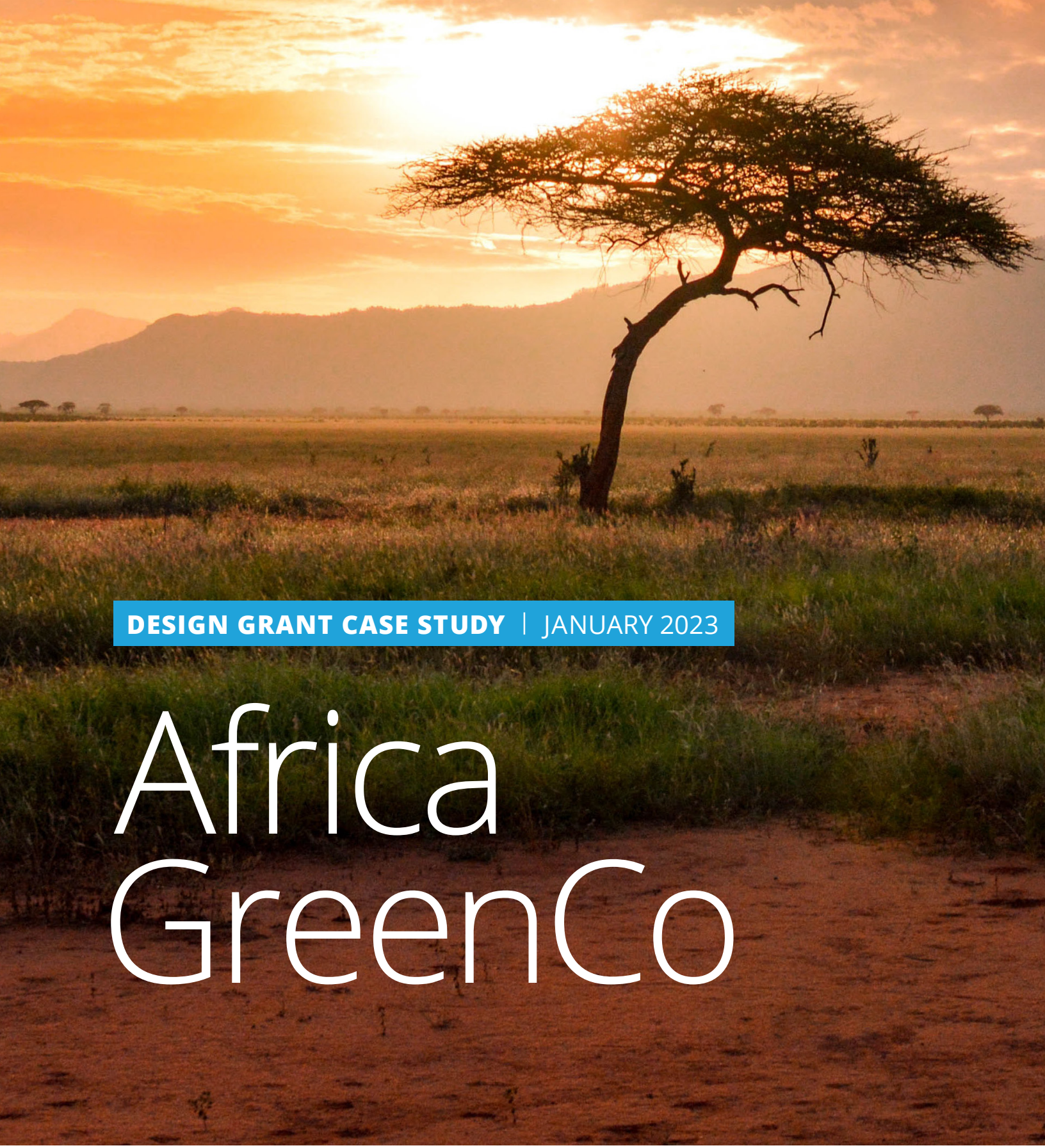

DESIGN GRANT CASE STUDY | JANUARY 2023

Africa GreenCo

CONVERGENCE
BLENDING GLOBAL FINANCE

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Executive Summary

African GreenCo (GreenCo) is a transformative renewable energy model that aims to attract private investment into energy generation in Sub-Saharan Africa by mitigating the credit risks associated with energy offtakers. In this way, GreenCo functions as a creditworthy renewable energy buyer and seller, that purchases power from renewable IPPs and sells electricity to a portfolio of utilities, private sector offtakers, and competitive markets within the Southern Africa Power Pool (SAPP).

The GreenCo concept has been ambitious from the start; spearheaded by a small women-led team, GreenCo's goal was to create a new entity that could fundamentally change energy markets in Africa. Over the course of the past seven years, GreenCo has had to clear impressive hurdles to operationalize, including convincing donors and investors to back a novel and untested business model, identify a national government willing to implement legislative changes that would allow GreenCo to serve as the sole offtaker for Independent Power Producers (IPPs), and gain admission into a regional power pool where all members were government-owned – and all without the benefit of the name and backing from a strategic champion

In spite of funding delays, challenges with country governments, and the Covid-19 pandemic, GreenCo started operations, shortly after completing a second close of $15.5 million of equity funding in 2022. GreenCo has benefited from multiple types of blended capital over the years, including several rounds of grant funding to complete feasibility and proof of concept work, as well as concessional debt from DFIs. As GreenCo continues to build its track record in the coming years, the model aims to attract commercial financing from private investors.

Key insights from this case study include:

- A tenacious team can be paramount to the success of new business models.
- Grants can offer essential support during critical junctures for new start-up business models, when facing "death valley".
- Identifying a supportive national government with an open regulatory environment can be instrumental to the success of new business models that require public sector buy-in.
- Truly transformative models take time to launch.

SYNOPSIS

Mission	Addressing creditworthiness to increase generation and growth of renewable energy markets through partnerships and innovative solutions
Capital Structure	$17 million in equity (including converted convertible loans) $7.5 million in grant funding
Target returns (anchor funders)	Low double digits
Anchor funders	EDFI ElectriFI, InfraCo Africa, Investment Fund for Developing Countries (IFU)
Target Countries	Zambia (Pilot Project), SAPP Countries
Pilot Project	Illute Solar (25MW solar PV generation facility)
Key Stakeholders	Convergence, SADC Project Preparation and Development Facility managed by Development Bank of Southern Africa (DBSA), Rockefeller Foundation, Partnerships for Growth (P4G), Zambian government, ZESCO
Target Impact metrics	Avoided sovereign guarantees, commercial capital mobilized, tCO_2 avoided

Introduction

Renewable energy projects hold great potential to provide reliable, affordable electricity in Sub-Saharan Africa. Converting this potential into reality, however, faces several challenges. Namely, the power sector must overcome the follow barriers: structural weaknesses, non-cost reflective tariffs, political and currency risk, and the weak financial position of energy utilities, who are often state-owned and serve as the primary off-takers for energy projects. Energy projects thus often rely on host governments to assume the significant liabilities by backing the obligations of the utility, which is increasingly unsustainable as capacity is increased. With commercial financiers often unwilling to take on the risk of financing renewable projects due to the above challenges, this leaves multilateral banks (MDBs) and development finance institutions (DFIs) to finance such projects, often on an ad hoc basis. This model is insufficient to meet the scale of financing needed, can increase costs and create delays, and does not address the underlying structural weaknesses.

Against this backdrop, the Africa GreenCo (GreenCo) model was conceptualized to specifically address energy off-takers' lack of credit-worthiness. The weak balance sheets and poor payment track records of many national utilities, who often struggle with below-cost tariffs, is one of the reasons commercial banks have been unwilling to fund IPPs, resulting in limited competition and a high cost of capital. GreenCo is designed to sit between renewable IPPs on the one hand, and the competitive markets of the regional power pool (SAPP) and state-owned and private sector off-takers on the other. In addition to its role as a creditworthy intermediary, GreenCo will act as a power trader, enabling cross-border trading through participation in SAPP. GreenCo aims to make private investment in the sector attractive to new sources of capital at a lower cost, while reducing the fiscal burden currently held by national governments. The development of the GreenCo model has benefitted from concessional funding and from development financing to support its current capital requirements. As GreenCo grows and develops a track record, it is expected that there will be increasing private sector investment both within GreenCo and towards the IPPs supported by GreenCo.

Given the transformative functions of GreenCo, the model required significant grant support through its early years to complete its feasibility study and proof of concept. GreenCo completed a first close in October 2020, securing equity investments from two DFIs: $1.5 million from InfraCo Africa (part of the Private Infrastructure Development Group) and IFU (the Danish Investment Fund for Developing Countries). In 2022, GreenCo achieved a larger second close, securing an additional $15.5 million from InfraCo Africa, IFU and the EU-funded Electrification Financing Initiative (EDFI ElectriFI) to back an initial portfolio of projects and to build a track record of operations.

Design & Fundraising

To appreciate the innovation of the GreenCo model, it is instructive to understand the bilateral IPP model under which IPPs are executed in SSA today:

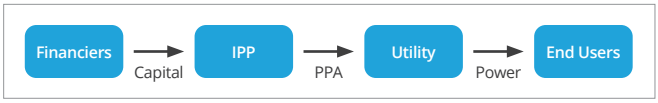

Figure 1: Model with bilateral IPP

Investors allocate capital to IPPs, who set up Power Purchase Agreements (PPAs) with utilities, who then sell power to end users. In Sub-Saharan Africa (SSA), IPPs are structured on a bilateral basis (i.e., with a single buyer and seller). This creates a significant concentration risk for IPP and its investors, who are wholly reliant on a single off-taker.

GreenCo mitigates this off-take risk by functioning as an independently managed creditworthy off-taker. GreenCo will sell the purchased electricity to SAPP and to utilities and larger private consumers. By building a diversified portfolio of IPPs on one side, and a diversified portfolio of consumers on the other, GreenCo will have much greater ability to mitigate payment risk compared to if those IPPs were in bilateral arrangements.

Crucial to GreenCo's innovation is its ability to operate as a power trader in a regional pool. In the event of a default, GreenCo is equipped with the capacity to redirect sales to alternative buyers and/or to SAPP's competitive markets. This also enables greater efficiency and liquidity in the market.

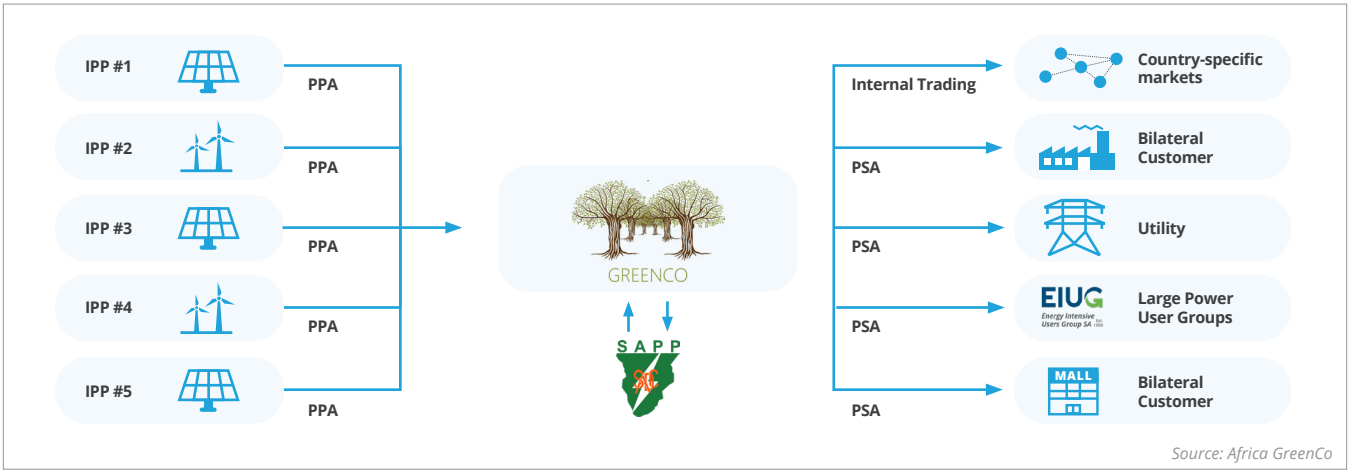

Figure 2: New model with AGC acting as intermediary, with multiple IPPs and offtakers within each power pool

EARLY DESIGN

While the GreenCo model is the first of its kind in the Africa region, it draws inspiration from the success of the Power Trading Corporation of India (PTC India). Established by the Government of India, PTC India was also set up as a creditworthy off-taker for privately financed power generators that would otherwise have had to sell to the financially constrained state utilities. The model, which has now been in operation for over 17 years, has demonstrated great success at catalyzing the Indian regional power sector trading market. GreenCo was conceived to adapt a similar model to the African power market, while addressing key differences (notably, PTC India was developed within a single country, with higher levels of federal government support).

One of the early catalysts for the GreenCo model can be traced to 2015, when GreenCo, then comprised of a small team of women entrepreneurs, applied for the Bloomberg Fire Awards. GreenCo's initial concept, while similar to the current model, was envisioned to be a public-private partnership between national utilities, DFIs, and private investors. Given GreenCo's reliance on political buy-in from national governments and dependence on local regulatory frameworks, the model was ultimately not chosen for the award, as the competition focused mainly on private sector models. Nevertheless, the Bloomberg Awards were instrumental for the early momentum of GreenCo, kicking off stakeholder engagements and the development of an early concept paper for the model.

A key output of this engagement was GreenCo's introduction to the Rockefeller Foundation's Zero Gap Portfolio, which subsequently awarded the team $550,000 to complete a feasibility assessment of the model. Here, Rockefeller Foundation identified with GreenCo's ambition to bring a paradigm shift to the African power market and catalyze higher levels of private investment. The feasibility grant allowed GreenCo to explore a number of key questions about how the GreenCo model would work, including the relevant legal, regulatory, financial, and technical issues related to the GreenCo model.

Key questions explored by the feasibility study included:

- Geographic scope: should the GreenCo model focus on regional (multi-country) projects or also operate at the national level?
- Fundraising: Who should be the capital providers (e.g., DFIs, institutional investors, governments)?
- Legal and regulatory frameworks: Should GreenCo be established under national or international law?

The feasibility study resulted in GreenCo establishing the following key aspects of its model:

1 TARGET MARKET

The feasibility study investigated several power pools in the region, ultimately identifying the Southern African Development Community (SADC) as the most appropriate region to undertake proof of concept, given the significant need for renewable energy in the region and relatively sophisticated regulatory environment. Following the decision to operate within SADC, GreenCo identified a pilot country within SADC where it could test its concept. Here, GreenCo considered Zambia, Botswana, Mozambique, and Namibia as suitable countries for its potential pilot project. Ultimately, GreenCo selected Zambia due to its:

i. centrality in the SAPP trade corridors,
ii. potential for renewable energy,
iii. aspirations to become a trading hub in SAPP, and
iv. openness to private sector participation in the power industry.

Indeed, Zambia was already on a path to an open access regime, and had previous experience working with non-state actors, with IPPs already operating in the country. It was therefore hypothesized that the country would be more prepared to interface with GreenCo compared to other more heavily state-owned markets.

2 FINANCIAL VIABILITY OF MODEL & CAPITAL STRUCTURE

GreenCo's initial capital structure would require a high level of cover given its proposition to continue to make PPA payments to its IPPs even following payment default by GreenCo's buyers under any Power Supply Agreement (PSA). To achieve its required level of risk-mitigation, it was envisioned that GreenCo would need to both raise equity and also secure a guarantee.

Given the initial capital structure is directly linked to the size of its portfolio, GreenCo modelled a hypothetical portfolio of 10 projects and calculated the capital to support such a portfolio based on 3 different capital structures. However, the ultimate structure would depend on stakeholder appetite and agreement on a reasonable size for GreenCo initially with such stakeholders. With the benefit of scale, a track record and further diversification, other forms of financing are possible for GreenCo, with the ability to attract commercial financing and to leverage its capital base.

3 LEGAL AND REGULATORY FRAMEWORK

The feasibility study explored GreenCo's legal structure, considering the procs and cons of national or international law. GreenCo ultimately decided to embed its model as a company incorporated under domestic legislations and regulation rather than as a treaty based organization.

In addition to the technical analysis conducted under Rockefeller's grant funding, Rockefeller Foundation's support also provided GreenCo with important opportunities to convene with stakeholders over the course of two successive workshops held at the Rockefeller Foundation's Bellagio Center in Northern Italy in 2016 and 2017. This represented the first time Rockefeller had hosted two workshops for a single grantee. GreenCo held

its first workshop in 2016, following the completion of its draft feasibility study. Here, stakeholders considered key questions that introducing a private intermediary could pose to the market. For example, in cases of off-taker default, what would be the consequences for end users? The workshop also presented an opportunity to investigate the capital structure and target levels of risk appetite amongst different investors groups.

In 2017, GreenCo completed its feasibility study, culminating in its Business Case and Business Plan. This was followed by a second workshop hosted at the Bellagio Center, this time focused on refining a group of key investors.

Over this time period, GreenCo secured two additional grants to support its transition to proof of concept – this would occur when:

i. GreenCo established and capitalized an implementation vehicle and
ii. entered into its first PPA and PSA.

Here, grant support included a design funding grant for $500,000 (CAD) from Convergence in 2017 to complete financial and legal due diligence and secure an anchor investor. Given delays in fundraising (highlighted below), this grant funding was also used to support operational funding amidst cashflow constraints. Moreover, Convergence also allowed GreenCo to count it's grant funding as Founder equity, in a show of confidence to other investors. GreenCo also received $2 million for external advisory costs from the SADC Project Preparation and Development Facility (PPDF), with support from KfW (as provider of funds) and Development Bank of Southern Africa (DBSA) as administer of funds. The SADC Project Preparation and Development Facility was launched to create a conducive environment for investment, through providing preparation funding for infrastructure projects based in at least one SADC Member State. The GreenCo team worked closely with DBSA to explain their model; while DBSA does not support power traders, GreenCo resonated with DBSA's intent to create long-term impact in static markets, and its ability to be replicated across multiple countries in the region. Subsequent support from SADC enabled GreenCo to begin launching tenders for external advisory services to finalize the structure and its operationalization in Zambia.

Given the scope of work needed to bring GreenCo to market, the team secured further development funding in the form of two grants, totalling $1.6 million, from the Partnerships for Growth (P4G) in 2018 and 2019. Support provided by P4G enabled GreenCo to expand its team and benefit from the organization's partnership network, including an introduction to the Danish Ministry of Foreign Affairs.

STAKEHOLDER ENGAGEMENT

To promote its concept, GreenCo would need to embark on a robust campaign at regional and international levels, to convince both a national government and a regional power pool to accept the novel GreenCo model. This included engaging with the Government of Zambia officials, the SAPP, and regional regulators, including the Regional Electricity Regulators Association of Southern Africa (known as RERA).

ENGAGEMENT WITH ZAMBIA

Following the selection of Zambia as its pilot country, GreenCo entered into prolonged discussions with various Zambian stakeholders, commencing in 2017. Under the leadership of the Zambian Ministry of Energy, GreenCo convened with ZESCO, the Zambian national utility, the Ministry of Finance, the Ministry of National Development Planning, the Ministry of Environment, IPPs, and others to investigate the concept in detail and advise the Ministry of Energy, Finance and National Development Planning on the feasibility of the concept. This engagement was particularly timely as Zambia was in the process of reviewing legislation to permit increased private sector participation in its power markets. As a result, GreenCo was given the opportunity to provide inputs into that review process. A notable achievement occurred in 2019, when the Zambian Cabinet approved intermediary off-takers as part of the industry structure. This eventually culminated in the new Electricity and Regulations Act in 2020, which gave explicit provisions to permit and license intermediary off-takers in the country.

SAPP ENGAGEMENT

In parallel to GreenCo's engagement in Zambia, GreenCo continued to strengthen its relationship with regional stakeholders, particularly SAPP. SAPP membership is a prerequisite for eligibility to trade on its competitive markets. In order to secure membership, GreenCo needed to:

i. gain permission from the national utility (ZESCO), and
ii. secure an operating license from Zambia to undertake cross border trading.

Following the fulfillment of these requirements over the course of 2020, GreenCo was accepted as a SAPP member in October 2021, under a new category of "Market Participant". GreenCo is the first and, to date, the only market participant. The admission of GreenCo to SAPP is a key milestone and essential for operations.

Fundraising

GreenCo sought to initially raise investment from two types of investors:

i. equity investors, and

ii. guarantee providers.

EQUITY INVESTORS

Based on findings from the feasibility study, the GreenCo team envisaged approaching a combination of donors, DFIs, and commercial investors to suit its various equity tranches. An early fundraising thesis held by GreenCo was that government buy-in would be important factor to provide comfort to other investors and IPPs, particularly around sales to state utilities. Therefore, an equity investment from the Government of Zambia was initially prioritized.

During the initial period, GreenCo garnered support from a group of interested investors. These parties included DFIs such as InfraCo Africa, IFU and multi-donor organizations such as the Green Climate Fund (GCF). However, it was recognized that securing investment support would be challenging. Not only was the model a departure from the traditional single buyer system, but it would need to clear significant policy hurdles to operationalize, namely adoption within the Zambian regulatory environment as well as SAPP membership. Moreover, GreenCo's role as a non-asset owning intermediary also posed a challenge when fundraising from DFIs, who traditionally invested in IPPs directly. Lastly, while GreenCo's model aims to transform power markets in Africa, the impact of the model is a few steps removed from its end beneficiaries (i.e., the general population). This can be challenging for DFIs and donors, who are required to capture end beneficiary impact in their investment requirements. At the same time, GreenCo resonated with funders given its focus on renewable energy and potential to bring in additional private investment to the energy sector.

In 2017, GreenCo submitted a concept note under the Green Climate Fund "Mobilizing Funds at Scale" Request for Proposals (RfP) for an equity investment, with DBSA acting as the Accredited Entity. The GreenCo concept was shortlisted among the highest scored concept notes of the 35 received. Significant time was spent by, and with, both the DBSA and GCF team during second half of 2018 and early 2019 to progress a funding proposal and credit due diligence, including a positive review by GCF's independent technical advisory panel. Unfortunately, the wider impacts of Covid-19, discussed further below, meant this proposal could not be concluded, but might be considered for later funding rounds.

GUARANTEE PROVIDERS

In tandem with equity fundraising, GreenCo also worked to identify providers of guarantees. Here, GreenCo found support from AFD and the European Commission. AFD submitted an application to the European Commission for a partial counter-guarantee under the External Investment Plan's (EIP) European Fund for Sustainable Development. The EIP operational board approved the GreenCo counter-guarantee, for a size of $45 million, which would provide sufficient cover to execute GreenCo's first phase of operations in Zambia.

While the GreenCo team made good progress in 2018 and 2019 towards achieving first close, two simultaneous events caused unforeseen delays in its fundraising schedule:

i. the onset of the COVID-19 pandemic, and

ii. the subsequent sovereign downgrade of Zambia to "D" following default of its long-term foreign currency loans.

This event also implicated the national utility ZESCO given the requirement for sovereign support, who, given its financial position, could no longer act as the primary off-taker for GreenCo, nor for other planned projects.

This caused considerable challenges for GreenCo. Firstly, the onset of the pandemic resulted in many investors postponing investment decisions to deal with portfolio challenges created by the pandemic and were therefore unable to participate in first close. Moreover, with ZESCO no longer acting as primary off-taker, the GreenCo model needed to evolve to directly sell corporate off-takers in Zambia and to trade through SAPP. This presented a challenge to some DFIs, who required the presence of public actors to invest.

In response to these challenges, GreenCo revised its fundraising strategy. A first close of $1.5 million was secured in October 2020 from InfraCo Africa ($0.5 million) and IFU ($1 million). The timely creation of new fund within IFU, with a mandate to invest in high-risk high impact investments, allowed IFU to invest in first close. InfraCo's investment was facilitated by PIDG's technical assistance facility. Both IFU and InfraCo invested through convertible loan agreements, with the first close funds being utilised to bring on board additional staff and to set up the necessary systems to be ready for operations.

In April 2022, GreenCo achieved a larger second close, securing an additional $15.5 million from InfraCo ($5 million), IFU ($5 million) and EDFI ElectriFI ($5.5 million), enabling the build out of the initial portfolio. At the same time, the first close funding was converted into equity.

Capital Structure

While GreenCo initially envisioned raising multiple shares of equity capital as well as a guarantee, following multiple pivots in GreenCo's fundraising journey, GreenCo currently has a simple capital structure with a single class of shares. Going forward, additional tranches may be integrated to accommodate different investor requirements.

The quantum of capital required for the GreenCo model is directly linked to the size and nature of the underlying project portfolio. As GreenCo grows and its portfolio expands, further capital will be required to support its operations and back its credit standing and, in the medium term, credit rating. To be as capital efficient as possible, GreenCo will leverage its capital base and will aim for an investment grade rating that will help to attract further investors, including commercial investors (debt and equity). GreenCo is currently in discussion with additional investors.

Revenues will come from the margins made on the trading of energy. Here, revenues must balance covering GreenCo's operating costs and providing sufficient returns to meet the return expectations of its investors, whilst reducing wholesale tariffs to consumers. Returns expectations for anchor funders in the base case were low double digits with reasonable downsides, indicating capital preservation. GreenCo expects to provide returns that will attract commercial investment in the medium term with good upsides in the returns forecast.

Legal Structure & Governance

The GreenCo corporate structure has a parent company, Africa GreenCo Group Limited (AGG), based in the UK, which is the investment vehicle for the current investors. AGG's primary role is to determine and develop GreenCo's strategy and to oversee the rest of the group. The regulations within most countries require a local operating company and GreenCo currently has the following subsidiaries: GreenCo Power Services Limited (GreenCo Zambia), GreenCo Renewable Energy Services (Pty) Ltd (GreenCo Namibia), and GreenCo Power Services (Pty) Limited (GreenCo SA).

GreenCo Zambia was established in 2020 and is the operational hub for the group, with the head office in Lusaka, Zambia.

Operations

SELECTION OF IPP PROJECTS

GreenCo sought to first select a Pilot Project before launching a procurement process for its wider portfolio. This was done to

i. prove viability of the model and

ii. serve as a pathfinder for new regulatory provisions introduced by Zambian government.

While GreenCo will consider a wide range of renewables under its full portfolio, it was agreed with investors that GreenCo's first projects should be solar PV. These require the shortest time to become operational and will help mitigate climate change arising from recent droughts in the region. The procurement of the Pilot Project followed a typical procurement process with an initial Request for Qualification (RFQ), launched in March 2021, followed by a Request for Proposals (RFP) with certain qualified bidders.

The qualification criteria for the RFQ was designed such that only experienced developers with well advanced projects would progress to RFP stage.

Nine projects progressed to the RFP stage and in September 2021, GreenCo awarded a tender to Ilute Solar PV Project (Ilute Solar) to develop, engineer, construct and operate a 25MW solar PV generation facility in Sesheke, the Western Province of Zambia.

SELECTION OF CUSTOMERS

GreenCo will sell power produced by the Pilot Project and wider portfolio via the SAPP competitive markets, and directly to larger consumers with whom GreenCo enters into a PSA, including host utilities. The process to build a portfolio of buyers has begun but PSAs are only expected to be signed closer to the date for delivery of energy from GreenCo's portfolio.

Impact

IMPACT METRICS

GreenCo aims to increase renewable generation, and more broadly, support the development of the national and regional power markets and to unburden host governments from increasing demands for sovereign support.

That being said, measuring the development aspects of every impact is a challenge. While the development benefits from increasing the supply of energy generated from renewables is well documented, so are the difficulties when attributing indirect benefits, such as job creation. Moreover, GreenCo's ultimate goal, "cheaper cost of power" , will rest on the model's ability to effectively lower the cost of tariffs for end users. This metric is challenging to track and is the same issue faced by based IPPs.

PORTFOLIO DEVELOPMENT IMPACT

The anticipated key metrics for the Second Close Portfolio of 110MW are summarised in the table below, as is the impact of adding an additional 10MW that very roughly equates to each USD 1 million of further investment to support the LB, and based on recognized methodologies used by others in the market.

MW Built	**Commercial Capital Mobilised** (USDm)	**Leverage effect of donor capital**	**New connections facilitated**	**Total Jobs** (Direct and Indirect)	**CO_2 avoided** (tCO_2e)
Second Close 110MW	24.15	0.4x	110,130	9,597	4.3m
Each additional 10MW	242.4	3.8x	520,616	70,676	24.0m

Table 1: Key Metrics for Second Close Portfolio

MARKET DEVELOPMENT IMPACT

GreenCo has already impacted certain market developments through its activities, particularly in Zambia, Namibia and, more recently, South Africa, to ensure that intermediaries/traders, such as GreenCo, are recognised in the market developments that have occurred recently.

The principal quantifiable market-level impacts of GreenCo's business model can be summarised as follows:

IMPACT 1: AVOIDED SOVEREIGN GUARANTEES

By establishing a creditworthy offtaker with the ability to diversify risk across a number of purchasers, GreenCo introduces stability into a system currently defined by high risk. This risk currently raises costs throughout the system: higher financing costs for IPPs leads to higher tariffs, which in turn dampen the growth prospects for the entire region. Mitigation is currently being achieved via sovereign guarantees covering the host utility's payment obligations – an unsustainable position for many countries – and usually backed in turn by multilateral guarantees of the sovereign.

In markets where GreenCo acts an independent offtaker, the requirement for sovereign guarantees is reduced or removed. As international regulatory requirements for transparent reporting of contingent liabilities are stiffened, the reality of lower quasi-fiscal liabilities should have broad stability and portfolio effects, given the significance of the power sector on public balance sheets. A sovereign default in Zambia in 2020, for example, placed, once again, the spotlight on other regional sovereigns that currently have precarious external debt positions.

GreenCo's preliminary modelling, subject to external review, suggests the business-as-usual approach to procuring a 25MWac solar PV IPP asset - reflective of the Pilot Project - could generate approximately USD 34 million in contingent liabilities via sovereign guarantees.

IMPACT 2: AVOIDED CAPEX VIA REGIONAL INTEGRATION

By contributing to the growth of regional power trade and SAPP integration, GreenCo is leveraging access to multiple supply and demand centres to lower the requirement for reserve capacity and peaking plants.

The avoided cost of this generation infrastructure is a SAPP-wide impact. Public savings in particular can be redirected to support the delivery of other critical public services and infrastructure.

IMPACT 3: SAVINGS VIA POWER-MARKET PRICE EFFICIENCY

Reserve capacity and peaking plants are typically sources of more expensive electricity. By evolving and improving the liquidity of the regional power market, GreenCo enables consumers to have better access to the cheapest source of power from across the region, delivering further savings

Next Steps

GreenCo intends to expand its operations into other SAPP-connected countries and is in advanced discussions with the regulators and utilities in several countries, including South Africa and Zimbabwe, and has submitted an application for a licence in Namibia. Such operations will comprise both

- providing access to SAPP's markets for generators and larger consumers and
- committing to long term fixed price PPAs to facilitate greenfield development.

GreenCo has invited developers in Zambia to register their interest in respect to the balance of second close investment not currently allocated to projects and thereafter, for developers across the SADC region to register their interest in selling to GreenCo under its next phase for approximately 350-500MW of renewable energy capacity and of mixed technology.

Key Insights

A TENACIOUS TEAM CAN BE PARAMOUNT TO THE SUCCESS OF NEW BUSINESS MODELS:

The success of GreenCo in proving its validity as a new business model can be directly attributed to the dedication of its management team. GreenCo was conceptualized and championed by its founder Ana Hajduka, who had an innovative idea of how to transform African power markets. A small team of likeminded visionaries, including Cathy Oxby, Johannes Baake and Pug Bennet have helped to bring the concept from idea to fruition, which has required years of tirelessly networking with stakeholders, regulators, potential investors and donors and a necessity to be both flexible, in order to deal with challenges, and tenacious with pushing the concept. It has also required significant periods of working at risk to manage scare funding resources. As the business model progressed, GreenCo has slowly grown its team, adding additional capacity to provide the technical skills needed to operationalize the model. The strength of the team was a direct incentive for many funders and donors, who recognized the competence and resolve of GreenCo's staff. The GreenCo story reveals the importance of an effective, diligent, and dedicated team, with complimentary skills when bringing innovative, transformative models to fruition.

GRANTS CAN OFFER ESSENTIAL SUPPORT DURING CRITICAL JUNCTURES FOR NEW START-UP BUSINESS MODELS, WHEN FACING "DEATH VALLEY":

Transformative models are more likely than other concepts to hit multiple valleys of death. The team in this case obtained grant funding and in-kind support at several crucial junctures that allowed it to continue. Indeed, GreenCo has befitted from multiple sources of grant support over its evolution from concept to launch, starting with a feasibility grant provided by Rockefeller Foundation in 2017. To transition its model to proof of concept, GreenCo received design funding from Convergence and grant funding from the SADC Project Preparation and Development Facility. As mentioned earlier, Convergence also agreed to have its grant funding serve as operational funding amidst cashflow constraints, as well as count as Founder equity. GreenCo received additional grant support, to assist with fundraising and staff costs from P4G, as well as technical assistance grants from InfraCo. Without such grant funding, and the flexibility shown by funders, GreenCo would simply not have reached operations and would have remained an interesting concept. The significance of grant funding in laying the groundwork and developing the business case for new financial models, as well as to support core operational funding, was therefore a critical component.

FIRST-TIME DEAL SPONSORS SHOULD INCORPORATE FLEXIBILITY WHEN STRUCTURING NEW BLENDED FINANCE MODELS:

While GreenCo has remained true to the original concept, the delivery model has had to evolve, both in response to challenges that have arisen and to take advantage of opportunities. For example, while GreenCo initially envisioned a tranched capital structure with a guarantee, the capital stack has been ultimately shaped (and will continue to evolve) based on the preferences and availability of its funders. Similarly, GreenCo shifted its model to sell directly to commercial offtakers following ZESCO's decision to no longer act as primary offtaker. Flexibility in design and delivery has therefore been an important element in the success of GreenCo and its journey to launch.

IDENTIFYING A WILLING NATIONAL GOVERNMENT WITH AN OPEN REGULATORY ENVIRONMENT CAN BE INSTRUMENTAL TO THE SUCCESS OF NEW BUSINESS MODELS THAT REQUIRE PUBLIC SECTOR BUY-IN:

Structural reforms don't occur in a vacuum. In the case of GreenCo, finding a national government that was receptive to opening up the power sector to include private sector participation was vital to GreenCo becoming operational. In this way, Zambia was already on a path to an open access regime, and had previous experience working with non-state actors, with IPPs already operating in the country. Moreover, Zambia was in the process of reviewing legislation to permit increased private sector participation in its power markets, and provided an opportunity for GreenCo to participate in its review process. This eventually culminated in the new Electricity and Regulations Act in 2020, which gave explicit provisions to permit and license intermediary off-takers in the country. Without the cooperation and interest from Zambian authorities, including the regulator, the utility and other electricity sector stakeholders, the GreenCo model would not have been feasible within the country. Other countries have embraced, or are more recently keenly embracing, an open access regime, including those countries targeted for GreenCo's expansion.

TRULY TRANSFORMATIVE MODELS TAKE TIME TO LAUNCH:

The GreenCo model has taken over seven years to operationalize with over $17 million in equity raised to date, requiring significant time and cost compared to other standard investment opportunities. The reasons for this are multi-fold. Firstly, GreenCo faced many pivots in its fundraising journey, with many development funders unwilling or unable to consider novel business models within their established investment outlook, which tend to be project-focused with clear forecasts and milestones. Also, GreenCo relies on public sector buy-in from its host national government, which made the model inappropriate for certain funders, such as the Bloomberg Fire Awards, who were looking for purely private sector models. At the same time, with ZESCO no longer able to act as a primary offtaker, the model evolved once again to sell directly to commercial off takers, which posed challenges to DFIs who wanted more public participation. Moreover, the fact that GreenCo was a non-asset owning intermediary was a further challenge for DFIs and MDBs who typically invest in assets/IIPs directly. Beyond these fundraising challenges, GreenCo was contingent on legislative changes which can be lengthy and complex to implement. While GreenCo has raised a small project size with only a few IPPs contracted to date, the true value of the model has been proven by its admission to the SAPP, the first market participant of its kind, and ability to contract directly with IPPs. Practitioners should be aware of the long journey to launch when considering transformative models.

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