

Fund Prospectus - Clean Capital – South Africa Pilot Fund

An impact investing fund to lead the sustainable waste management industry in Sub-Saharan Africa



Challenge: low electrification and inadequate waste management

Low rate of Electrification

Across Sub-Saharan Africa (SSA), electricity demand outstrips supply by about 86%. Two-thirds of the population has no access to electricity in their homes. This lack of electricity has impeded economic growth and is a major determinant of poverty in SSA. Workdays and study hours are cut short by the lack of adequate light and neither milk nor vaccines can be kept cool. Manufacturers across the region experience power outages on an average of 56 days a year. Electrification is recognized as an essential factor in eliminating slum and rural poverty in SSA.

Inadequate Waste Management

Rapid urbanization in an economic setting of negligible industrial growth and transformation has led to 70% of urban population living in slums with growing filth and health challenges. Unsustainable waste management practices have resulted in major public health, economic and environmental challenges. Open neighborhood dumps become breeding grounds for mosquitoes and related diseases, emission of obnoxious odours and greenhouse effect-inducing methane. Whilst flooding as a result of choked drainage systems are not uncommon in most African cities. Smart, sustainable waste-management solutions are desperately needed.

Local companies recognize waste-to-energy as a win-win endeavor

Using this waste to create energy is a viable option for most African cities. Waste can be transformed in various ways to produce heat or electricity. There is high level of organic content of waste generated in most African cities. In Ghana, for example, about 66% of the total waste generated is organic. Local companies in SSA are looking to harness their own waste streams to power their energy needs onsite, via small-scale sustainable waste-to-energy (W2E) solutions. However, these companies face a number of issues when it comes to financing:

- Difficulty to finance the CAPEX for W2E due to lack of creditworthiness and operational track record of local companies and inefficiency of local banking system
- Uncertainty of cash flows given the volatility in price of electricity
- Difficulty for international financiers to maintain operational oversight and non-familiarity with operational risks of running a W2E plant

As a result, local SMEs and even larger companies do not benefit from sustainable W2E technologies today and have to rely on expensive, polluting diesel aggregators to generate their power.

Opportunity:

"An urgent response to the world's mounting waste problem is not only a public health and environmental necessity, but also a sound economic investment. Inaction is costing countries 5-10 times more than investments in proper waste management." UNEP Executive Director Achim Steiner

There is tremendous opportunity for urban and rural W2E projects to transform waste, generate energy, water and natural compost whilst providing jobs by cleaning up cities. Whilst national governments and large foreign SPVs are committing billions of US dollars to building new coal plants, the lack of basic grid infrastructure will keep this polluting power from reaching remote areas or even city outskirts for years to come. Small-scale W2E provides a great opportunity for giving 'power (back) to the people'. The market potential is huge. For example, in South Africa alone, there is an estimated appetite for 10,000 installations at hospitals, hotels, schools, universities, shopping malls, small municipalities, football stadiums, large bakeries, breweries, supermarket chains, agri-coops and the like.

Direct impact W2E	Per Installation	Potential for S. Africa
Organic waste diverted from urban streets & landfills	438 tons	4,380,000 tons
Organic waste to be used	2.5 tons / day	25,000 tons/day
Water recovered to be reused	700 liters / day	7.7 million liters / day
Dried, rich compost recovered	22 kg / day	2,200 tons / day
Annual Energy produced	32 MWh (40kW * 8,000 hrs.)	3,200 GWh (400MW * 8,000 hrs.)
Job creation	3 jobs	30,000 jobs

Solution: Clean Capital

Clean Capital aims to address the above challenges and leverage the opportunity by investing in collateralized debt of Original Equipment Manufacturer (OEM)-entrepreneur joint ventures to get W2E machines on the ground. Clean Capital aims to become the W2E-industry driver and leader, the same way aircraft lease companies lead the aviation industry.

Clean Capital's model addresses the financing needs and builds valuable and trusted partnerships for the local community. Clean Capital will boost the W2E industry in SSA with partners like "The Waste Transformers" (TWT). TWT is a niche player in the W2E of organic waste, with proven technologies, in

installations the size of sea-containers, and a unique business proposition. TWT has undertaken pilot projects to prove the business model of small, highly efficient, re-deployable and sustainable W2E sites. These sites generate electricity, clean water and recover natural resources in a way that is both green and economically sound. The TWT model introduces a 'business in a box' concept for rapid replication and high-impact positive change through local entrepreneurs. Clean Capital's investment will allow this business model to be scalable:

- A wider geographic reach - The pilot fund will enable 100 installations in South Africa and create a healthy track record in organic waste. This will facilitate future funds that will address the broader SSA market.
- A broader spectrum of W2E products – The initial partnership with TWT and local partners will focus on organic W2E projects. Future funds will focus on a wide variety of W2E solutions with technology sophistication.

The Pilot Fund with TWT in South Africa

Clean Capital will partner with TWT with an initial focus on South Africa (SA). SA offers a highly promising market for W2E solutions, being the largest African market, both in waste disposal and electricity production. SA's shortage of electricity production capacity is confounded by problems with grid infrastructure. In a relatively sparsely populated, yet very large country, decentralized energy production solutions rise to the challenges identified by Clean Capital.

The environmental and social impact of the proposed solution, onsite W2E that converts waste where it is created and generates water and electricity where it is consumed, is tremendous:

- Minimum impact in terms of land requirement
- Digester needs no external utilities (electricity, water) to run
- Prevents contamination of ground, surface water and underground water supply by diverting waste from landfills
- Job creation becomes a core capability of the fund

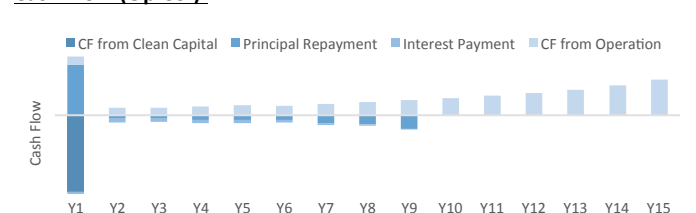
Fund Overview:

Fund Size	US\$ 20M, which can help build ~110 sites
Fund Maturity	10 years + potential 2 years for FX overrun payments
Asset Class	Fixed Income
Underlying Asset	Loans for Investing to W2E project in South Africa
Minimum ticket	US\$ 1M
Target Investors	Institutions, Development Banks, Family Offices, Foundations
Coupon	4%
Mgmt. Fee	2% management fee
Other Fees	2% contingency buffer, no initial fee for investors; 0.5% of principal for secondary transactions

Underlying Loan Overview:

Lender	Clean Capital
Borrower	Local Entrepreneur (Op Co.)
Loan Size	\$175K (70% loan to value)
Loan Maturity	9 years (with 3 year break clause)
Collateral	Machine avg. cost ~US\$250k
Interest	8%
Repayment Schedule	Principle repayment is weighted 25% over first 4 years, 75% over remaining 5 years
Conditions	Loan granted upon satisfying all the requirements of Clean Capital including completing the construction of the machine by the OEM

Cash Flow (Op Co.):



Scaling in SSA:

Clean Capital will build a portfolio of both urban and agricultural W2E digesters, networking with local energy customers and maintenance companies beyond being the most powerful financing partner for OEMs and W2E project companies.

One W2E digester has a capacity of handling at least 125 tons of concentrated urban waste per annum. South Africa alone could host 10,000 W2E projects and outside of Johannesburg-Pretoria there are six other megacities in SSA,

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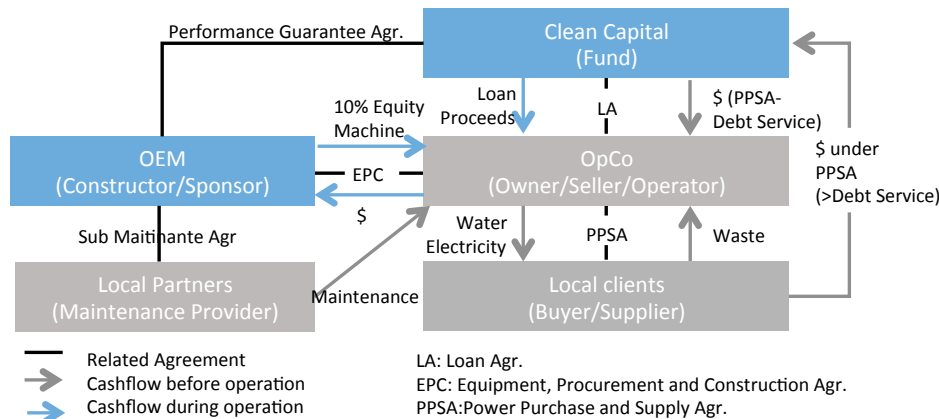


Nairobi, Lagos, Kinshasa-Brazzaville, Cairo, Accra and Khartoum where Clean Capital can run future funds.

Clean Capital aims to invest its first pilot fund solely in South Africa, to build upon proof-of-concept by OEMs such as TWT. Upon full investment, Clean Capital aims to start individual country funds (to reduce operational complexity per fund), selecting countries where, such as in Cameroon or

Sierra Leone, there is little to no domestic fuel supply and where there are very low electrification rates. Given the available market size, Clean Capital aims to work with strong partners i.e. TWT and become the world's largest sustainable W2E asset manager, contributing to millions of people's improved quality of life and leading the W2E industry to a large installed base.

Fund Structure



Operational flow & key risk mitigations

Sourcing the deal (Risk: lack of quantity and quality of deals)	<ul style="list-style-type: none"> Clean Capital will partner with TWT who can sub-contract OEMs that have sufficient financial, technical and operational stability. OEM will be responsible to contract a local partner for maintenance of machines; special purpose company partially funded by local entrepreneur (Op Co.) and negotiate standardized agreements with local clients (suppliers of waste and buyers of water and electricity). The local clients should meet minimum revenue threshold of US\$2.5M per annum. OEMs will be obligated to provide training to Op Co.s in order to gain Clean Capital "certified" status.
Construction (Risk: delays in construction and quality standards of the machines)	<ul style="list-style-type: none"> The loan will be provided once Clean Capital confirms the completion per performance tests. OEM will inject 10% equity (mandatory) in the Op Co. incentivizing the OEM to complete the construction without substantial delays. Based on pilot projects by TWT a site can be operational within 2 months post equity injection. OEMs will put in place standardized warranties and guarantees covering liquidation damage and monitoring systems. EPC Contracts between OEM and Op Cos will be the turnkey, lump sum, and have the certain delivery date. OEM will cover the cost overrun and will pay performance-liquidated damages for 1 year to cover Op Cos' loan repayments OEM is obligated to source licenses required by the Op Co in accordance with laws and regulations.
Revenue (Risk: ability to generate sufficient funds to cover the costs)	<ul style="list-style-type: none"> The local clients will be selected per sourcing criteria to ensure viability of long-term US\$ priced contracts and to ensure benefit of steady electricity/water supply over spot market purchase. Op Co. receives the fees from local clients under the take-or-pay uncancellable contract (10 years). The local clients are obligated to purchase certain amount of electricity and water under certain price under such contract. The payment from the local clients will be used to cover the debt payment of the fund, and the fund will be assigned all the rights under the take-or-pay contracts and directly receive the fees from the local clients (off-shore account transaction). The fund will pay the rest to the Op Co. after the Fund covers the debt payment. The Op Co. can sell the extra water (and the electricity, and fertilizer) they can produce to the local community. Potentially, national/local governments to provide cash in-lieu for reducing government costs.
Expenses / Supply of RM (Risk: Control over Opex charges of the Op Co.)	<ul style="list-style-type: none"> 2% management fee plus 2% contingency buffer for Clean Capital (8% from the Op Co – 4% coupon). The local clients will supply the agricultural/food waste in exchange for water and electricity generated. In case of lack of sufficient waste, the local supplier will compensate the Op Co. for the contracted quantity. The machines do not require any external utilities (electricity, water, gas) to run. OEM is obligated to control the Opex of the Op Co., by approving the budget beforehand, etc.
Operation and Maintenance (Risk: Op Co. performance)	<ul style="list-style-type: none"> OEM will guarantee the performance of Op Co., for the duration of the fund. If the Op Co will fail to operate the W2E, OEM will be obligated to pay the debt service under the loan agreement. The Op Co. will sign maintenance agreement with OEM who will sub-contract to a local partner. The OEM will be responsible to solve any operational issue that the Op Co. faces. In case of underperformance of a particular site within 3 years, the machine can be redeployed and the 9-yr loan can be cancelled (3 year break clause in loan agreement)
FX risk	<ul style="list-style-type: none"> For pilot fund, contracts with minimum revenue companies via offshore accounts in Euro Hedging options explored upon scale up, e.g. include 50% of FX variability as Op Co. repayment post-principal and 50%
Other	<ul style="list-style-type: none"> Country risk may be mitigated by including Clean Capital in a geographically balanced portfolio After 3 years, if Op Co. does not operate as planned, Clean Capital will redeploy the W2E somewhere else or conduct mandatory changes. Force Majeure risks to be considered through insurance where reasonable. On future scalability of the projects the various risks may be shared with Clean Capital.