GREEN CLIMATE FUND

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Consideration of funding proposals – Addendum

Funding Proposal Summary for FP005

Summary

This addendum contains the following two parts:

(a) A funding proposal summary entitled "KawiSafi Ventures Fund" submitted by Acumen containing summary information on the programme; and

(b) No-objection letter(s) issued by the national designated authority(ies) or focal point(s).

These documents are presented as submitted by the accredited entity and the national designated authority(is) or focal point(s), respectively. Pursuant to GCF Interim Information Disclosure Practice, the funding proposal entitled "KawiSafi Ventures Fund" submitted by Acumen is being circulated on a limited distribution basis only to Board Members and Alternate Board Members to ensure confidentiality of certain proprietary, legally privileged or commercially sensitive information of the entity.

* The agenda item number will be determined when the final sequence of items in the provisional agenda is confirmed by the Co-Chairs.

** This document is revised and replaces the previously published document as per the request of Acumen.

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I. Brief Programme information

1.1 Programme Executive Summary

Acumen is raising a new impact fund, KawiSafi Ventures Fund (the "Fund"), that will seek to catalyze a thriving off-grid solar ecosystem in East Africa, demonstrating that nations can leapfrog fossil-fuel grids to clean energy. The fund will be comprised of portfolio companies in the clean energy sector in East Africa that provide overlapping impact with primarily the climate change mitigation objectives of the GCF, but also will have overlapping impact with the adaptation goals of the GCF. The Fund will initially focus on Rwanda and Kenya, but may also expand to other East African countries such as Uganda throughout the life of the Fund. We are requesting $20M of equity capital from GCF that will be invested in the Fund and $5M of grant capital to be used for specific technical assistance purposes subject to an upgrade of Acumen's accreditation status to allow it to receive grant capital from GCF detailed in the sections below. Acumen will seek to upgrade Acumen's accreditation status.

Acumen is targeting a $100M total size for the Fund and expect that GCF's anchoring investment will help to catalyze the remaining investment capital into the Fund. Acumen will invest at least $5M and up to $7M into the Fund and Acumen has also secured several verbal commitments from a group of individual investors for the Fund. Acumen is targeting a first close of $40M by the end of the year, providing a strong foundation to raise the remaining balance of the Fund in a second close.

This Fund would be one of the first, if not the first, of its kind in the sense that it is a climate change focused fund that is targeting an ecosystem approach to investing in small-medium enterprises ("SMEs") that serve bottom-of-the-pyramid ("BoP") customers. The Fund will seek to bring off-grid solar power and clean energy products and services to a target of 15 million people in East Africa and will attempt to demonstrate a blueprint to a clean-energy future that can be followed by other nations. The Fund expects that its investment capital will be leveraged roughly 6:1 as the companies it will invest in will require additional investment capital from co-investors and will also receive targeted technical assistance funding for specific business and impact related purposes. Within the impact investing industry, it is the industry standard to account for lives impacted based on the total lives reached by the company, not just lives that are attributed to the portion of capital and single investor invested. More detail on the calculation and rationale for lives impacted is included in sections below.

The Fund will seek to invest in 10 – 15 companies. 60-70% of investments will be in businesses that have proven solutions to bring energy access to the masses such as solar lanterns, solar home systems and solar mini-grids, while 30-40% will be invested to build-out parts of the eco-system, which are weak or missing. Examples of investments in the latter category include consumer financing vehicles, mobile payment and remote monitoring / meter technologies, and working capital facilities.

The Fund is unique in that social impact is built into the operations and incentive structure of the Fund. The Fund Manager will only achieve a share of the Fund's profits if both a financial hurdle rate and Impact Target have been achieved. If the Fund achieves the financial hurdle rate but only a portion of the Impact Target, the Fund Manager's share in profits will be adjusted downward in proportion to the percentage of the Impact Target achieved.

The Fund will track multiple social impact metrics of the portfolio companies and report those to the GCF and the Fund's Investors. Acumen will report on the number of lives impacted, number of individuals/households with improved energy products, poverty levels of the households that have been reached, gender impact of its investments, and number of tons of CO_2 reduced. The Fund may also report on other metrics as it sees fit.

II. Financing / Cost Information

2.1 Description of Financial Elements of the Programme

Early stage enterprises require equity capital to finance growth until positive cash flow is achieved, whereby they can attract debt capital. This Fund will provide both equity and debt capital to companies based on their individual capital requirements. The long-term life of the Fund, 12 years with two 1 year extensions, provides the time these innovative, early stage companies to develop, iterate, refine, and build financially viable business models that have scaled social impact. The companies the Fund will invest in will be addressing the needs of off-grid households, which are typically rural, low-income and difficult to reach. Thus, the type of long-term investment capital that the Fund is required to invest in these enterprises as traditional investors are weary of the risks and relatively long-time it takes to build companies and achieve a financial return.

The Fund will invest in 10-15 enterprises. Acumen will conduct detailed diligence on all relevant aspects of each investment, including the cost structure of each enterprise and the financial viability of each enterprise. As such, the underlying cost components of each investee company will be detailed in specific investment memoranda for those investments.

Acumen expects that the majority, if not all, of its investments will be denominated in US dollars or EUR. Given the economies in which Acumen's investments will be operating, and the cost to hedge currencies of those economies, Acumen may not be able to secure a hedge for investments. In order to protect against fluctuations in the value of local currencies, the Fund expects that the vast majority, if not all, of its investments will be US-dollar denominated or EUR denominated investments. The Fund will put a cap of 20% on investments that are not US dollar or EUR denominated.

Technical Assistance Facility ("TAF")

Acumen is seeking to raise a $10M Technical Assistance Facility ("TAF") that will be funded by grant capital. Acumen anticipates that the funders of the TAF will be a mix of private and public institutions. The purpose of the TAF is to augment the Fund's investment strategy of building profitable, scaling, and socially responsible businesses that serve BoP markets and provide a financial return to the Fund and its investors. Acumen has more than a decade of experience investing in early stage investments that serve BoP markets and understands the increased level of social and financial resources required by such companies to scale, reach profitability, and track and monitor social impact metrics. The TAF will identify and address the core needs of portfolio companies that will enable their scale and financial viability.

It is contemplated that the TAF will be governed by a Technical Assistance Committee ("TAC"). The structure and governing policies of the TAC are currently under development. The TAC will seek to engage with relevant stakeholders when making decisions related to uses of capital in the TA facility. Engagement with local and appropriate stakeholders in the context of skills training and any interventions related to the capital ring-fenced for consumer protection will be especially important.

The table below summarizes the potential uses of TAF funds and more details around the potential uses are included below the table. TAF resources will not be used for capital expenditures.

	Facility Allocation	USD
Funding from GCF for consumer protections in case any of the solar companies become insolvent and/or declare bankruptcy	30%	*$3,000,000*
Business Development Services (BDS) and Management / Employee Training	25%	*$2,500,000*
Funding from GCF for gender specific interventions	20%	*$2,000,000*
Impact Monitoring, Evaluation and Annual Assessments and ESG Audits	15%	*$1,500,000*
Other (TA Audit Fees / Legal Fees / Corp Governance Improvements)	10%	*$1,000,000*
Total	**100%**	***$10,000,000***

The following are potential uses of TAF funds:

1. Funding from GCF for consumer protections in case any of the solar companies become insolvent and/or declare bankruptcy. Potential uses may include the following items:
    a. Capital to service installed solar home systems in the event a solar company goes bankrupt, most likely through partnership with an existing service provider
    b. Capital to facilitate an acquisition of / partnership with a defunct company by a viable company so that consumers will still receive after-sales support
    c. Mechanism to provide some level of monetary value to consumers for their purchased products in the event of a company bankruptcy and the products can no longer be serviced

2. Business development support and employee training which will increase company efficiencies and augment portfolio companies' ability to pursue growth strategies:
    a. Improve financial controls (i.e. upgrade accounting system)
    b. MIS review and upgrades
    c. Market studies to better understand consumer behavior
    d. Market Feedback Survey to assist with product development
    e. Develop plans to transfer proven business models across different markets
    f. Conduct feasibility studies to increase market access
    g. Implement operational review to improve production process or reduce costs
    h. Improve distribution platforms
    i. Build capacity to provide high-quality after sales-support to ensure products function properly and customers have a positive experiences
    j. Executive recruitment services
    k. Enable access to industry experts across different markets to advise company management
    l. Expand current management skills for company expansion and growth

3. Funding from GCF for gender specific interventions. Potential uses of this funding could include the following:
    a. Provide training to women to become solar technicians, sales agents and other related job opportunities of companies working in the off-grid energy sector
    b. Provide market education and consumer awareness to women about the positive health and safety effects of replacing kerosene usage with solar products at the household level
    c. Work with women-focused MFIs and savings groups to create demand for and access to clean energy products

4. Corporate governance improvements:
    a. Improve transparency and corporate governance structures
    b. Appoint experienced practitioners/advisers at the board or management level

5. Investment impact monitoring and evaluation frameworks:
    a. Monthly tracking of core output-level data on lives impacted and jobs created or supported
    b. Data on poverty level of customers based on Progress out of Poverty Index, or similar relevant measure
    c. Develop the collection plan of outcome-based data with the company, complemented by independent observational-based surveying
    d. Support for improved company data management systems for impact tracking, including use of mobile technology and cloud-based data management
    e. Annual progress reports on impact

2.2 Project Financing Information

Target Programme Size	Share of GCF Participation
USD 100 million for equity investment USD 10 million for a Technical Assistance Facility (Grant)	USD 20 million for equity investment USD 5 million for a Technical Assistance Facility

2.3 Financial Market Overview

The Fund is unique in that social impact is built into the operations and incentive structure of the Fund. The Fund Manager will only achieve a share of the Fund's profits if both a financial hurdle rate and Impact target have been achieved. If the Fund achieves the financial hurdle rate but only a portion of the Impact Target, the Fund Manager's share in profits will be adjusted downward in proportion to the percentage of the Impact Target achieved.

The Fund will seek to exit its investments within a 5-7 year timeframe. Given the relatively early state of the impact investing sector, and more specifically venture capital and impact investments in off-grid markets in East Africa, there are limited relevant and comparable data points from other funds that could provide comparable data points for expected financial returns. The Fund's expected financial return is developed from Acumen's history of investing in these markets, its projected financial return of its current investment fund (ACM I), its focus on the solar energy sector in East Africa, and it understanding of the business and macroeconomic (i.e. currency) risks of the investments it intends to make from this Fund. The Fund will utilize equity, equity-like, convertible debt, and self-liquidating investment structures in the investments it makes.

The Fund will initially focus on investments in Rwanda and Kenya, and may also expand its activities to Uganda, Each country has different total banking assets, debt capital markets and equity capital markets sizes. Please let us know if you need more specific information from us.

Country	1-year T-Bill	5-year rate	10-year rate
Kenya	10.808%[1]	13.193%[2]	13.31%[3]
Uganda	16.369[4]	16.833[5]	17.693[6]
Rwanda	5.500[7]	12.00[8]	13.00[9]

Due to the nature of private investing vehicles, it is difficult to ascertain the expected and realized returns of other funds that are comparable to this Fund. Further, this Fund would be one of the first, if not the first, of its kind in the sense that it is a climate change focused fund that is targeting investments in SMEs that serve low-income populations. The expected return on this proposed fund is higher than that of ACM I, Acumen's first fund, because this new fund will be entirely composed of energy investments in East Africa, which we believe have a better overall financial return profile than 1) other sectors such as agriculture, health, and education and 2) other geographical regions.

III. Detailed Programme Description

3.1 Strategic Context

Rwanda

In Rwanda, over 70 percent of the population (~8.5M people) live off the grid, and the current best estimate is that cutting that figure to 30 percent will cost between $700 million and $1 billion per year for the next several years. This cost, which amounts to 10 to15 percent of the GDP, will still leave 3.5 million people in the dark. Moreover, the government's current best plan reluctantly calls for 50 percent of the desperately needed new power generation to be sourced from fossil fuels.

On the other hand, Rwanda has unique advantages in that the country has: 1) Abundant, undeveloped renewable natural resources, including solar and hydropower, 2) A progressive government that has focused sharply on reducing the non-electrified proportion of its population from 70 to 30 percent, and 3) more than half of the power infrastructure planned for 2018 is not yet financed or under construction, so the generation source is not yet locked in.

Households that do not have electricity rely on kerosene lanterns and candles to meet their lighting needs. But these sources of light are dangerous, low quality and expensive. Customers pay $1 a week for kerosene for lighting, and $1 more for phone charging. In Rwanda, electricity costs are among the highest in the world, and higher than neighboring countries in region, with grid-connected users paying roughly$0.20/kWh compared to $0.12 in U.S. (high tariffs, heavily subsidized). In addition to high costs, power supply is unreliable. Rwanda sees the high cost and insufficient and unreliable supply as the number one barrier to stronger business and industrial growth.

The Rwanda Environment Management Authority (REMA) is the non-sectorial institution mandated to facilitate coordination and oversight of the implementation of national environmental policy and subsequent

[1] www.centralbank.go.ke
[2] www.centralbank.go.ke
[3] http://www.tradingeconomics.com
[4] http://www.africanbondmarkets.org/
[5] Bank of Uganda
[6] http://www.africanbondmarkets.org/
[7] http://www.africanbondmarkets.org/
[8] National Bank of Rwanda
[9] National Bank of Rwanda

legislation. REMA has a key role to play towards the achievement of the national goal of sustainable development as set out in the National Development Vision 2020.

The protection and management of the environment are among the pillars of Vision 2020. The objective of the Government is that by 2020, it will have built a nation in which pressure on natural resources, particularly on land, water, biomass and biodiversity, has significantly been reduced and the process of environmental pollution and degradation has been reversed.

The environment is also one of the first priorities identified by the Poverty Reduction Strategy in Rwanda and is among the leading fundamental programs selected within agriculture transformation and rural development. The Poverty Reduction Strategy recommends actions in the energy sector by promoting the rational use of wood and the promotion of alternative sources of energy.

Rwanda depends heavily on imported oil to run diesel generator power plants— one key reason Rwanda's electricity cost is high relative to the region. Power plant fuel imports represent a large share of the total national import burden. Oil price volatility has an immediate impact on Rwanda's ability to fund other budget priorities. Supply security and strategic reserves are low.The government is keenly aware of this, and is actively seeking to reduce its dependence on oil, and replace high cost diesel and fuel oil generation with lower cost renewable sources.

Rwanda has a number of agencies and policies dedicated to promoting renewable energy sources for off-grid communitites. The overall energy planning process is driven by the government and supported by international donor organizations (e.g., World Bank, AfDB, DFID, EU). EWSA implements most programs. Recent examples include:

- **Capital Access for Renewable Energy (CARE2**): Global Village Energy Partnership (GVEP). GVEP project manager Herbert Nyagas. GVEP Funded.
- **Increase Rural Energy Access in Rwanda through Public Private Partnership (IREA RPPP)**[10] (2008-2013): Contracts with private sector to install/operate PV systems for schools, health centers; 350 institutions electrified. EU funded.
- **Prepaid Energy: Rent-to-Own solar systems Off-Grid**[11] (2014-current): EWSA and Mobisol provide energy solution to the rural poor. EU Funded.
- **Electricity Roll-Out Action Program II (EARP)**[12](2013-2018): the [13] African Development Bank funded.
- **Results-Based Financing Program** (2014)—Financing solar lighting and village grids; private firms paid by Urwego Opportunity Bank upon results. EnDev funded.

Policies and Plans to Support Off-Grid Power

Several other policy intentions and plans are laid out in the Energy Sector Strategic Plan:

- **Tax reform to reduce consumption of kerosene and increase use of solar:** Goal is to phase out kerosene use through affordable solar alternatives. Currently kerosene is the only fuel exempt from excise duty. The government plans to study impact of phasing out kerosene "subsidy," and to reintroduce excise duty on kerosene and promote solar solutions instead.

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[10] http://database.energyfacilitymonitoring.eu/acpeu/project/4331/.
[11] http://database.energyfacilitymonitoring.eu/acpeu/project/4616/.
[12] http://www.afdb.org/fileadmin/uploads/afdb/Documents/Project-and-Operations/Rwanda%20-%20Scaling%20Up%20Energy%20Access%20Project%20-%20Appraisal%20Report.pdf.
[13] The 2013-2018 Energy Sector Strategic Plan (June 2013) call out off-grid in two key sections: 3.3.1 EARP Program and Off-Grid Solutions and 3.3.1.2 Off Grid Solutions.

- **Piloting innovative partnerships to increase rural access:** Innovative public-private partnerships to be tested, including for deployment of solar home systems or solar/hybrid mini-grids in the medium-term. Goal is to attract funding from FONERWA and other climate and renewable energy financing from development partners. Intend pilots to be accompanied by awareness campaigns to support market development and be rigorously evaluated to determine impact.

- **Facilitate private sector off-grid activities**: The private sector is expected to deliver the majority of off-grid electricity to end-consumers. Along with the development of an off-grid strategy and innovative PPPs, GoR plans to continue to improve the legal and regulatory framework to support the private sector. Depending on the outcomes of the off-grid strategy, this will include increasing consumer awareness.

- **Rooftop Solar Installations:** Small rooftop solar installations ($50- $500 depending on the appliances they power) are a priority, delivered by the private sector. Government willing to support the industry by sharing information, helping define a deployment approach, educating the local population, and testing innovative solutions.

- **Mini-grid and SPDs - Simplify licensing and stimulate small-scale (off-grid) power distributors:** The GoR's simplified licensing framework is being revised, based on experience with private sector pilots, to make the regulatory environment clearer and more facilitating to SPDs. GoR intends to examine eventual inclusion of SPDs and mini-grids into the grid as the grid expands, but doesn't have a plan or policy today. To ensure affordability and accountability, community-based consultations to deliver informed decision-making on energy technologies are to take place and be documented as part of the required Environmental Impact Assessment and license application process. EARP will publish electrification plans in the public domain, which will be valid for a period of 3 years. This will make it clearer to both consumers and private developers where potential for off-grid activities exists.

- **Off-grid hydro projects**: Off-grid hydro projects will be encouraged through mini-grids where economically feasible and the least-cost option. This will be done by establishing enabling regulatory frameworks and licensing that promote mini-grids; consumer education and awareness of off-grid energy solutions; and providing training and financial incentives to rural communities to operate micro hydro systems.

Guiding Policy Documents

- **Vision 2020 (2000):** Outlines vision to fundamentally transform Rwanda into a middle-income country by 2020.
- **Medium-Term Economic Development and Poverty Reduction Strategy for 2013-2018 (EDPRS-II)**: High-level guidance on energy sector development to provide appropriate, reliable, affordable energy that will enable Rwanda to become a middle-income country by 2020.
- **Rwanda Energy Policy (2015)**: Provides high-level direction on long-term goals, priorities and approaches needed in the sector.
- **Energy Sector Strategic Plan (ESSP) (2013-2017):** Focused action plan measuring short-term progress towards longer-term goals and objectives. Updated annually, with sub-sector Action Plans for seven areas including solar.
- **National Energy Strategy (2008-2020):** Objectives for the development of renewable energy and energy efficiency are included in the strategy.
- **Green Growth and Climate Resilient Strategy (2011):** Launched at COP17 with a vision for Rwanda to be a developed climate-resilient, low-carbon economy by 2050 with economic growth and poverty reduction.

Anticipated Policy & Regulatory Developments

- The development of a regulatory framework for renewable energy is considered integral to the National Energy Policy. This is still being developed and is expected to be finalized soon.
- The planned off-grid policy is likely to include provisions for maintenance and support, "anti-obsolescence" and eco-sustainability (recycling and disposal).
- EWSA will attempt to transition away from operational subsidies and become a financially independent grid utility.
- Law on Public-Private Partnership (PPP) in final draft, pending approval by Cabinet
- Consolidation and integration of various laws and regulations into a unified national energy code

Kenya

In Kenya, only 20% of the population is connected to the grid, leaving 35M people without access to affordable and reliable electricity. This lack of grid connectivity hinders the productivity as it limits daily activities such as schoolwork, household chores, and business at night or in the early morning. Given the slow rates of electrification coupled with high population growth, the grid supply versus demand crises will only be exacerbated. 92% of rural households rely on kerosene for lighting but it is expensive and takes up a huge proportion of family budgets[14]. Rural Kenyan households spend around 26% of their income on lighting, or roughly $.42 per day on kerosene fuel at a far higher rate per hour of lighting than if the same was provided by the grid.

The Environment and Policy Management Component under the Natural Resource Management Programme (NRMP) supports the Government of Kenya in the implementation of the first medium-term plan (2008-2012) in general and, particularly, in relation to strategies and goals for environmental planning and governance.

The mandate of the Ministry of Environment and Mineral Resources (MEMR) is to "to protect, conserve and manage the environment and mineral resources through sustainable exploitation for socio-economic and political development" and its mission is "to promote, conserve, protect, monitor and sustainably manage the environment and mineral resources for national development".

MEMR produced a strategic plan for climate change, entitled "National Climate Change Action Plan 2013-2017". Excerpts from the plan that show how the Fund's activities fit within the plan are below.

Kenya Vision 2030 – the long-term development blueprint for the country – aims to transform Kenya into "a newly industrialising, middle-income country providing a high quality of life to all its citizens in a clean and secure environment." A low carbon climate resilient development pathway, as set out in this National Climate Change Action Plan (NCCAP), can help meet Vision 2030's goals through actions that address both sustainable development and climate change. This pathway can also help the Government achieve the Millennium Development Goals (MDGs) and other internationally agreed development goals without compromising the environment and the natural resource base.

The Government and other stakeholders are implementing many interventions that have direct and/or indirect relevance to climate change adaptation and mitigation. The interventions cover a wide range of sectors including: agriculture, water, energy and infrastructure. Examples include:

- **Agriculture:** promoting irrigated agriculture, promoting conservation agriculture, value addition to agricultural products, developing weather indexed crop insurance schemes, support for community-based adaptation including provision of climate information to farmers, enhanced financial and technical support to drought resistant crops.
- **Energy**: promoting the use of alternative energy including geothermal, wind, solar and mini hydro power generation; and the promotion of improved cook stoves.

[14] SolarAid Kenya Country Report 2014.

Vision 2030 – Kenya's long-term development blueprint – aims to transform Kenya into a newly industrializing middle-income country by 2030. As Kenya moves to achieve its development aspirations, greenhouse gas (GHG) emissions will rise. This mitigation assessment, available in detail in the Mitigation Analysis Reports, concludes that transitioning to a low-carbon development pathway would ensure that the country's contribution to global emissions remains low and, importantly, deliver other important benefits:

- **International climate finance** – Nesting low carbon development within Vision 2030 and Kenya's development planning process means that development partners can ensure their climate-related investments align with Government of Kenya priorities. International climate finance for low carbon development options can potentially be obtained through bilateral and multilateral support, the Green Climate Fund, the emerging NAMA and REDD+ mechanisms or the carbon markets.

Kenya's low-carbon development opportunities

a) Energy:

The analysis of low-carbon development options in the energy sector considered two categories: 1) electricity supply; and 2) energy demand – including options such as energy efficiency and fuel switching.

In terms of electricity supply, the installed capacity in Kenya in 2011 was 1,411 megawatts. Generation was dominated by hydroelectricity, geothermal power and medium-speed diesel, which respectively accounted for 49, 29 and 21 per cent of electricity sent to the national grid. Rapidly increasing demand for electricity and fluctuating hydroelectric output have led to an increase in diesel-based generation in recent years. In addition, there has been a strong focus on expanding geothermal power, which is considered a key enabler for Kenya's economic growth. Although geothermal is the most promising renewable energy source, Kenya also has excellent bioenergy, solar, wind and hydro resources for the supply of electricity.

<u>Uganda</u>

The electrification rate of Uganda ranges from roughly 10% - 18%, depending on various sources.[15] While electrification has reached almost 43% of the urban households, rural electrification is still very low at 4%. Only 0.4% of the population has access to modern cooking fuel and almost 86% still rely on fuel wood for cooking.[16] An average Ugandan household spends between USD 4 and 10 per month on kerosene for lighting and between USD 1 and 2 per month on phone charging.[17]

The primary energy sources consist of biomass, imported oil products and hydro. Total installed electricity capacity (2010) is 539.5 MW (Thermal 31.5%, Hydroelectric 65.4% and Biomass (bagasse) 3.1%). With droughts severely affecting the water levels in Lake Victoria and River Nile, Uganda's overdependence on large scale hydro power may prove problematic.[18]

Renewable energy generation and potential:

An estimated 200MW of Solar PV electrical capacity exist. There is also significant potential for Solar cooking with a large number of the population living in well insolate areas. There is hydropower potential for 3000MW in the country but only less than 10% has been exploited. There is as estimated geothermal resource potential of 450MW and feasibility studies are recommended to promote its development. Wind power is insufficient for large-scale power generation but possible uses include water pumping and small-

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[15] http://data.worldbank.org/indicator/EG.ELC.ACCS.ZS; https://hivos.org/sites/default/files/uganda_profile.pdf.

[16] https://hivos.org/sites/default/files/uganda_profile.pdf.

[17] http://www.barefootpower.com/index.php/social-impact/74-impact-in-uganda.

[18] https://hivos.org/sites/default/files/uganda_profile.pdf; Renewable Energy Country Profiles (IRENA 2010), Policy and regulation review (REEEP), Uganda Gap Analysis (SEFA).

scale power generation in mountainous areas. There is also identified potential for biomass cogeneration from agricultural waste and the existing 'peat' resource.[19]

The Rural Electrification Agency is working to connect over 500,000 new customers to the main or independent grids, or to solar PV systems over 2013-22. The goal: universal access by 2035. Uganda has been a renewable energy fledgling to date but the government hopes that its 'GET FiT' program will help change this. It aims to fast-track some 15-20 small renewable projects a year, through a results-based top-up on Uganda's existing feedin tariff, as well as grant funding for solar PV projects.[20]

The Renewable Energy Policy 2007- 2017 (REP) was approved in 2007 following Government's commitment through NEP 2002 to the development and utilization of renewable energy resources and technologies. The overall policy goal is ''to increase the use of modern renewable energy from the current 4% to 61% of the total energy consumption by the year 2017''. The objectives include increasing access to modern, affordable and reliable energy services as a contribution to poverty eradication. This comprises general public access to electricity and enhancing the modernisation of biomass conversion technologies. REP also established a Standardised Power Purchase Agreement and Feed-in Tariffs for renewable energy generation projects.[21]

Excerpts from Uganda National Climate Change Policy

Energy: Sectoral Context and Challenges:

- Uganda depends predominantly on biomass energy—mainly from firewood and charcoal
- The country also depends on hydropower for electricity
- Electricity shortages in the recent past caused an energy crisis that led to an increase in thermal electricity generation
- However, the country's energy demand is increasing. With climate change, the situation is likely to worsen, as extreme events like frequent and prolonged droughts lead to a reduction of water levels in dams and reservoirs, thereby reducing hydropower production potential

To address these challenges, the GoU will pursue the following policy priority. Specific strategies for tackling this sectoral policy priority will include the following:

- Promote and participate in water resource regulation so as to ensure the availability of water for hydropower production Promote and participate in water catchment protection as part of hydroelectric power infrastructure development
- Diversify energy sources by promoting the use of alternative renewable energy sources (such as solar, biomass, mini-hydro, geothermal and wind) that are less sensitive to climate change
- Promote energy-efficient firewood cook stoves and solar and liquefied petroleum gas (LPG) cookers
- Conduct research to determine the potential impacts of climate change elements like rainstorms on the country's power supply chain

[19] https://hivos.org/sites/default/files/uganda_profile.pdf; Renewable Energy Country Profiles (IRENA 2010), Policy and regulation review (REEEP), Uganda Gap Analysis (SEFA).
[20] http://global-climatescope.org/en/country/uganda/#/details.
[21] https://hivos.org/sites/default/files/uganda_profile.pdf; Renewable Energy Country Profiles (IRENA 2010), Policy and regulation review (REEEP), Uganda Gap Analysis (SEFA).

3.2 Programme Objective Against Baseline

[Baseline Scenario]

The United Nations Sustainable Development Goals identify electricity as essential to eradicating poverty. The goal of the Sustainable Development Goals is to ensure universal access to affordable, reliable, and modern energy services to all by 2030.

More than 1.5 billion people lack access to electricity, most relying on kerosene lanterns and candles for their lighting needs. But these sources of light are dangerous, low quality and expensive. Customers pay $1 a week for kerosene for lighting, and $1 or more for phone charging. Burning of kerosene also creates significant Indoor Air Pollution, which is very harmful to people's health.

Kerosene lamps produce carbon dioxide (CO_2). It is estimated that each kerosene lantern with a weekly fuel consumption of one liter of kerosene produces 0.1 tons of CO_2 each year. In general, fuel-based lighting in the developing world is a source of 244 million tons of CO_2 emissions to the atmosphere each year. This amounts to 58% of the CO_2 emissions from residential electric lighting.[22]

The portfolio will seek to address the challenges of lack of electricity and high kerosene use through affordable household clean energy products and services, such as solar powered lanterns, solar home systems and mini-grids to connect those currently without access to electricity. Due to the rapidly declining price in solar technology, specifically the cost of solar panels over the last two decades, solar products are cost competitive with traditional fuels, such as kerosene and diesel. For cheaper products, such as lanterns that cost between $5 - $40, consumers can buy these products with cash upfront and receive a payback period of just a few months as they no longer need to pay a $1 a week ($4 per month) for kerosene. For more expensive systems, such as a $150 solar home system that provides 3 lights, a phone charger, and a radio, the cost of the solar home system is still cost competitive to kerosene over time, but often the consumer needs to pay for the product over time because they don't have enough money to pay for the entire system upfront. In these instance, companies charge a down-payment at point of purchase, but then users make payments on a weekly or as needed basis for usually 12 – 36 months (depending on the size of the system), until they have paid for the system. Different models exists where either the customer takes ownership of the system or the customer continues to pay for the energy provided as a service.

[Goal and anticipated outcome against the baseline scenario]

The main goal of this project is to create an energy access and climate change focused fund that serves low income populations in East Africa and attempts to bring off-grid solar power to 15 million people in East Africa. The Fund believes that its investment capital could be leveraged on a roughly 6:1 basis as the companies it invests in will require, and attract, investment capital from co-investors and grant capital for specific technical assistance initiatives. This Fund seeks to create a blueprint for a clean-energy future that can be followed by other nations and that could attract billions of dollar of private capital. Key to this is to prove that off-grid solar can power a region to full economic development, and is therefore is not a temporary solution while the grid is expanded, but rather a permanent model for providing meaning levels of productive power to off-grid communities. The social enterprises Acumen will invest in will be providing critical goods and services to the poor in order to address the unfortunate baseline scenario described above, providing safe-reliable electricity and decreasing kerosene use.

The Fund will aim to bring clean and renewable energy products and services to off-grid populations and also to reduce CO2 emissions through the displacement of kerosene used at the household level. The Fund will report on multiple impact metrics, including the following three categories.

[22] http://www.lightsforlife.org/need.

Lives Impacted: Target of 15 million lives reached

- The Fund expects that its investment capital will be leveraged roughly 6:1 as the companies it will invest in will require additional investment capital from co-investors and will also receive targeted technical assistance funding for specific business and impact related purposes. Within the impact investing industry, it is the industry standard to account for lives impacted based on the total lives reached by the company, not just lives that are attributed to the portion of capital and single investor invested.
- The analysis below provides a high-level summary of how the target of 15 million lives could be achieved through investments in illustrative companies and their scale. The analysis assumes that the companies grow at 30% year. We know that some existing companies are growing at 100% per year, but would expect that growth to decrease over time. The Fund may invest in these types of companies after they have operated for a few years, so the Fund would not be able to claim credit for all lives impacted, however this analysis is just to provide a rough example of how a portfolio of 4 solar home system companies and other enabling companies could reach 15 million lives.

				Units Sold from Year 3 - Year 8, Assumes Annual Growth of 30.0%							8 Year Holding Period	
	Operational	3 Yrs. Cumulative		Forecasted Growth							Cumulative	
Company	Yrs	Units	Lives	Yr 3	Yr 4	Yr 5	Yr 6	Yr 7	Yr 8		Units	Lives
Company A	3	200,000	1,000,000	100,000	130,000	169,000	219,700	285,610	371,293		1,375,603	6,878,015
Company B	3	120,000	600,000	60,000	78,000	101,400	131,820	171,366	222,776		825,362	4,126,809
Company C	3	30,000	150,000	15,000	19,500	25,350	32,955	42,842	55,694		206,340	1,031,702
Company D	3	30,000	150,000	15,000	19,500	25,350	32,955	42,842	55,694		206,340	1,031,702
										Totals	**2,613,646**	**13,068,229**
										Others*	386,354	1,931,772
										Target	**3,000,000**	**15,000,000**

* Includes mini-grids and enabling companies, such as mobile payment providers and remote monitoring / metering devices that enable products and grids to reach people.

CO2 Emission Reductions: Target of 1.5 million tonnes of CO2 reduced

- Details of this target are provided in the sections below

Gender Impact

- Acumen is currently finalizing its formal Gender Policy, which it will submit to the GCF in the coming week.
- The Fund will develop specific metrics to track and report on related to gender impact of its investments. The summary of the intended reporting related to gender impact is as follows:

- The Fund will invest in companies that bring clean, solar energy to households and thus will benefit women as they are part of the household and will benefit from any displacement of kerosene. The Fund will use surveys and market research to report on how many women are reached from its investments.
  Acumen has seen evidence from previous investments that women are often employed as sales agents or other employees of clean energy companies. The Fund will report on the number of women employed by its portfolio companies.

The Technical Assistance facility will have dedicated funds for gender specific initiatives, such as training women solar technicians and creating increased awareness about the benefits of clean energy products at the household level, thus creating direct impact on women. The fund will report on the number of women technicians trained / employed.

3.3 Programme Description

The Fund intends to target solutions that provide access to clean, safe and affordable energy for those living at the BoP. The Fund will invest in approximately 10-15 companies, with in investment range of approximately $2M - $10M per portfolio company. In accordance with Acumen's accreditation, the Fund will not invest greater than $10 million in one portfolio company and will ensure that investments fall within ESS Category C of companies that have minimal or no adverse environmental and/or social risk and/or impacts. We estimate that approximately 60-70% of investments will be in businesses that have proven solutions to bring energy access to the masses such as solar lanterns, solar home systems and solar mini-grids, while 30-40% will be invested to build-out parts of the eco-system, which are weak or missing. Examples of investments in the latter category include consumer financing vehicles, mobile payment and remote monitoring / meter technologies, and working capital facilities.

3.4 Background Information on Programme Sponsors

Acumen was launched in 2001 and has been investing for the past 13 years. Acumen's initial focus was on funding health care technology start-ups that could provide widespread benefits to BoP populations, such as (a) a low-cost hearing aid; (b) an inexpensive electromagnetic immunosensor for early detection of diseases; and (c) a handheld device for gathering and disseminating health information quickly and affordably. As Acumen grew, it searched for global innovations that could offer a voice to low-income communities and encouraged the market to develop businesses offering a broader array of critical goods and services to low-income communities. The first two years of operations taught Acumen the limitations of funding healthcare technology start-ups, in particular the challenges of effective and cost-efficient distribution of products to BoP populations.

From 2002-2003, Acumen enhanced several core investment processes, including: (a) formalizing a due diligence process to vet financial viability and projected social impact; (b) organizing investments into thematic portfolios (e.g., healthcare, energy and agriculture); (c) implementing a metrics reporting system to help portfolio companies focus on financial and social goals while allowing Acumen to learn from their performance; and (d) shifting away from providing grants toward debt and equity investments. Underlying this final change was a recognition that debt and equity investments, combined with hands-on management assistance from Acumen, represent a more effective use of resources than grant making. By 2004, Acumen had identified suitable business opportunities in India, Pakistan, Tanzania, Kenya, South Africa and Egypt and had completed investments in an organic products company, a telemedicine venture with a renowned eye hospital, a microfinance operation, an anti-malarial bed net manufacturer, a network of personal digital assistants (PDAs) for disease monitoring, a low-income housing development, an HIV/AIDS treatment service and a health care franchise network.

In 2006, Acumen began preparing for the next five years of growth by deepening and solidifying investment processes while expanding local bases of support. Recognizing that it needed local knowledge and local experience to build deal flow and to best support portfolio companies, Acumen committed to an on-the-ground presence in each of its target investment geographies, leading to more decentralized operations and the opening of offices in Karachi, Pakistan and Hyderabad, India (subsequently moved to Mumbai). These new offices introduced increasingly viable investment opportunities for Acumen in existing business enterprises serving low-income customers. In 2007, Acumen followed suit in East Africa, launching another regional office in Nairobi, Kenya. Acumen continued to expand its sector and geographic focus in subsequent years, launching an energy portfolio in 2007, an agriculture portfolio in 2008, an education portfolio in 2011, and a West Africa office in 2011.

In 2009, Acumen closed ACM I, a $15.9 million private equity fund that invests in small- and medium-sized enterprises that operate in the healthcare, energy, agriculture, education, housing, and water and sanitation sectors and have social impact missions consistent with that of Acumen. The key difference between ACM I and Acumen's philanthropically backed investments is that ACM I targeted enterprises which were later-stage in the lifecycle of a business, and which thus presented a relatively lower-risk investment with increased potential for financial return.

ACM I's investment strategy was consistent with Acumen's charitable mission, and Acumen served as its Portfolio Manager. Acumen, as the Portfolio Manager of the fund, leveraged its existing investment process and global team in India, Pakistan and East Africa to identify potential investment targets for ACM I, to work with the management of prospective portfolio companies to refine business strategies, to understand the associated risks and to provide guidance on financing, marketing, and operational issues, amongst other items. To pursue its social impact and financial return goals, ACM I adopted the following investment criteria:

- Market-based delivery of a critical good or service (such as healthcare, energy, agriculture, housing, or water and sanitation) to a BoP market
- Location in Acumen's target geographical areas
- Enterprise with an established business model and revenue stream
- Innovative product or service with high scale and/or replication potential
- Top-quality leadership and management with a proven track record and demonstrated commitment to targeting BoP markets
- Potential for Acumen to add significant value through its expertise and networks
- Willingness to work collaboratively and to meet pre-determined milestones
- Typical investment size of approximately $250,000 to $2.0 million

As of December 31, 2014, ACM I had disbursed $11.0 million of capital to 12 companies. The investment period of ACM I ended in 2014, and no more capital investments will be made into new companies.

<u>Social and Financial Impact to Date</u>

Since 2001, through its investment portfolio, Acumen has impacted 125 million lives, creating access to critical goods and services such as clean energy, clean water, improved agricultural inputs and quality healthcare. Acumen's portfolio companies have collectively created more than 60,000 jobs. Ten of Acumen's portfolio companies have impacted at least 1 million people.

<u>Energy</u>

Since 2007, Acumen has invested $14 million in 14 energy companies in East Africa, India and Pakistan. Acumen has invested in a wide-range of energy companies, including mini-grids (solar, hydro and biomass), solar lantern and solar home system companies, and cookstove companies. Acumen's energy portfolio has reach approximately 50 million lives and has reduced approximately 4.5 million tons of CO_2[23]. In East Africa alone, Acumen has invested 5.4 million in 6 investments across solar, biomass and cookstove companies, reaching approximately 27 million lives and reducing approximately 2.5 million tons of CO_2. [24] Below are estimates of Acumen's energy portfolio impact to-date by specific investment.

[23] Metrics are approximations derived from industry research, company data, and various assumptions and methodologies and have not been verified by a 3rd party.

[24] Metrics are approximations derived from industry research, company data, and various assumptions and methodologies and have not been verified by a 3rd party.

Region	Sub-Sector	Company	Lives Impacted	Tons of CO_2 Reduced
India & East Africa	Solar Lanterns	A	51M	4M
India & East Africa	Solar Home System	B	370K	110K
East Africa	Solar Home System	C	1M	260K
East Africa	Solar Home System	D	815K	6K
India	Mini-Grid	E	200K	60K
India & East Africa	Cookstove	F	270K	270K
India	Cookstove	G	21K	8K

Acumen is currently raising a new impact fund that will be comprised of portfolio companies in the energy sector in East Africa that provide overlapping impact with the objectives of the GCF. We are requesting $20M of funding from GCF that will be invested in the Fund. We are targeting a $100M total fund size for the Fund. The Fund will seek to invest in 10 – 15 companies in the clean energy and agriculture. We are also requesting $5M of grant capital from the GCF for specific technical assistance activities such as creating a capital reserve to finance consumer protection interventions if a company goes bankrupt and training women to be solar technicians.

The Fund will be managed by a wholly owned subsidiary of Acumen. Acumen will invest up to $7 million in the Fund and seek outside investments for a total of $100 million fund size.

3.5 Market Overview

[Market Overview]

Energy is critical for human development and determines access to critical basic goods and services like food, water, healthcare and sanitation. Still approximately 2.4 billion people globally lack access to reliable electricity, including approximately 1.5 billion people who lack access to any electricity at all, the majority of which live in sub-Saharan Africa.

The market for off-grid solar products has seen rapid growth over the last 5 years as the costs of solar panels and decreased and innovative business models have emerged in order to distribute and finance solar lanterns and solar home systems. Institutions such as the IFC, through its Lighting Global programs, and ENEA Consulting have conducted market research and provide estimates of the market size for solar products. Estimations for market size for solar lanterns and solar home systems in the next 10 years range from roughly $5bn - $10bn. Current penetration are still low, with estimates ranging from about 5% - 10%.

Acumen's investees bring innovative new models of delivery that are affordable and sustainable, and scalable solutions that have the potential to create big impact. As an example, d.light, one of Acumen's investees, was founded in 2007 with the goal of replacing kerosene lamps with solar energy. d.light has developed a suite of solar home products and is now brining energy to over 50M people in the developing world.

[Key Competitor]

The Fund expects to invest in multiple companies within the energy sector in East Africa. We cannot guarantee specific investments at this time although we do have a robust pipeline of investments. As such, competitive dynamics will vary based on each investment opportunity. Acumen considers these factors within its investment process and these will be reflected in the investment memorandums.

In summary, there are 5 primary types of energy products / services that form the competitive environment in which the Fund's investments will operations. These include 1) status quo products such as kerosene, charcoal, biomass, and wood for lighting and cooking purposes; 2) solar lanterns; 3) solar home systems; 4) community level mini-grids, and 5) the national grid. Different countries have different tariffs and regulatory policies towards these different buckets of energy products and services as well as different levels of subsidies. Off-grid communities that are rural and difficult to reach by the grid will be served by solar home systems, lanterns, and mini-grids, and companies that provides those services will compete with each other and will also compete with the status quo fuel alternatives. For communities that are close to the grid, solar home systems and mini-grids will face competition from the grid if it expands into those communities.

[Pricing Structure]

The Fund expects to invest in multiple companies within the energy sector in East Africa. We cannot guarantee specific investments at this time although we do have a robust pipeline of investments. As such, pricing structures will vary based on each investment opportunity. Acumen considers these factors within its investment process and these will be reflected in the investment memorandums.

In general, solar solutions for off-grid markets in East Africa make economic sense given their relative price for consumers and the price of alternatives – such as kerosene and diesel for lighting and power needs. The price of solar lanterns and home systems have declined rapidly over the last decade due in large part to the price reduction in solar panels. These price reductions have made the products more affordable to low income populations and many companies are now seeing these populations as viable markets for commercial sales of solar products. We also anticipate that governments will look to help scale solar solutions with programs such as credit guarantee mechanisms for consumer financed sales and improved regulatory and tariff policies which "level the playing field" against heavily subsidized fossil fuels.

To date, solar lantern and solar home system companies have operated outside of government's regulations related to power providers (i.e. the utility companies). Subsidies and tariffs vary by country and by solar product, so the Fund will diligence the relevant regulatory and tariff policies with regard to each investment opportunity.

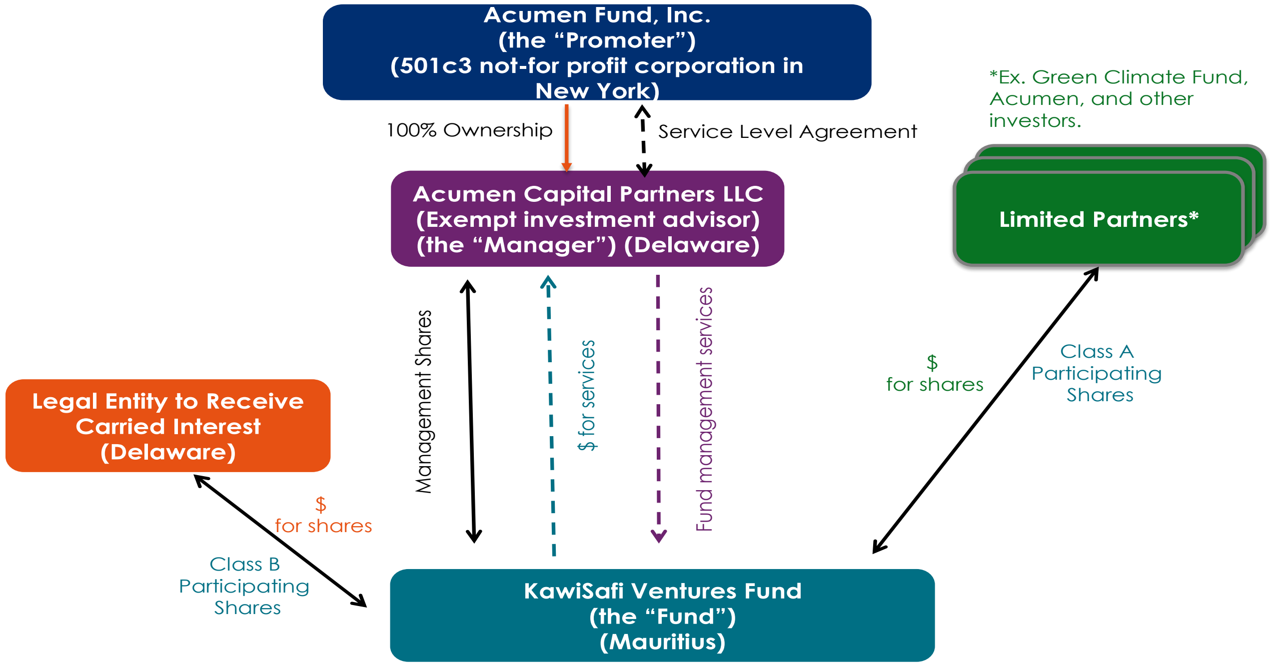
3.6 Regulation, Taxation and Insurance

The Fund will carry out the relevant due diligence on its portfolio companies to understand if they comply with the appropriate regulatory environment and under the applicable licenses.

Acumen assesses regulatory, tax and insurance concerns in the diligence process of each investment opportunity. Acumen expects that the social enterprises it invests in operate within the appropriate regulatory environment and obtain all the appropriate licenses within each country. Acumen will monitor its portfolio companies and ask for relevant documentation and information proving continued to compliance with relevant laws and regulations.

3.7 Institutional / Implementation Arrangements

Acumen Capital Partners is a wholly owned subsidiary of Acumen. ACP and the Fund will adhere to all the relevant policies of Acumen that the GCF reviewed in the accreditation of Acumen. There will be some policies that differ between ACP and Acumen because ACP, unlike Acumen, is not a tax exempt entity. These policies will be relevant for tax purposes and not related to the fiduciary, social and environmental, anti-corruption, and investment diligence processes upon which Acumen was accredited. During the implementation, Acumen will provide oversight and quality assurance in accordance with its policies and procedures and any specific requirements in the Accreditation Master Agreement (AMA) and project confirmation to be agreed with GCF. A diagram of the legal structure for Acumen, ACP, the Fund, and Investors is below.



All members of the Investment Team will have multiple years of experience in banking, private equity, emerging market investing and/or impact investing. The proposed structure of the team includes the following team members:

- 1 Managing Director
- 2 Portfolio Managers
- 2 Portfolio Associates
- 1 Investor Relations Associate
- 1 Office Assistant

All due diligence and deal execution of Fund investments will be led by an Investment Team member. In addition to their own resources, Investment Team members will also leverage the resources of Acumen's global portfolio team and Acumen's broad networks in the sourcing and execution of new investments. All investments that meet the Fund's investment criteria will be directed to an investment professional on the Investment Team who will lead the diligence and execution of the investment. Each Portfolio Manager will follow the investment processes of the Fund. The Managing Director of the Investment Team will review Acumen's entire pipeline of potential investments to ensure that all available investment opportunities consistent with the Fund's investment criteria are appropriately considered for investment from the Fund.

The Investment Committee of the Fund (the "IC") is the core decision-making body for the Fund and controls all decision gates in the investment process prior to its final approval or rejection of a deal and in connection with exits.The primary responsibilities of the IC will be to:

1. Approve/reject deals at key decision gates in the investment process and at exit
2. Review current pipeline, post-investment management activities and deal outcomes
3. Review investment and portfolio performance against annual goals and recommend potential corrective action, if necessary
4. Review and provide guidance on global investment and portfolio management strategy

The IC will typically meet at least two or three times per prospective investment prior to the final meeting at which a deal is approved or rejected. A majority of the members of the IC will constitute a quorum. Any decision by the IC must be unanimous by those participating in a meeting where a quorum is present. The IC will be comprised of up to five members. Initially, the IC will include, Jacqueline Novogratz, CEO of Acumen, Sachin Rudra, Chief Investment Officer of Acumen, C. Hunter Boll, Formerly Managing Director of Thomas H. Lee Partners, and the Managing Director of the Fund.

IV. Rationale behind GCF involvement

4.1 Value Added for GCF Involvement

Investment from the GCF will enable Acumen to create the world's first climate change fund focused on BoP populations in developing countries that seeks to generate social, environmental and financial returns. The brand and resources of the GCF will excite other investors and provide a strong incentive for them to partner with Acumen and GCF in this Fund.

GCF's investment will be catalyzed to create the first climate mitigation fund to utilize SMEs to affect the lives of low-income populations in developing countries. We expect GCF's investment will catalyze capital from leading foundations, development institutions and impact investors.

GCF is enabling Acumen to build further expertise and a deep track-record in the renewable energy sector, which will enable Acumen to raise more money in the future, make more investments, and increase its impact in the world.

4.2 Exit Strategy

Preparing for successful exits is a core element of Acumen's investment strategy. Acumen's investment professionals expend significant effort understanding the strategies and operational components of each portfolio company that can create a financially sustainable enterprise and help attract a later-stage purchaser.

Overall, Acumen seeks to create investment structures that will allow for a clear path to exit, create liquidity in the medium term, and compensate for the risk of the investment. As a result, the Fund is expected to invest in preferred equity (with or without a dividend), convertible debt, debt with warrants, and debt with a share of revenue or EBITDA. Potential exit opportunities are expected to include sales to a later-stage growth investor, a strategic buyer or a management buyout. Initial public offerings are not seen as practical exit opportunities, and, in lieu of identifiable exit opportunities at the time of investment, Acumen may structure the Fund's investments using self-liquidating, quasi-equity instruments.

The Investment Team of the Fund will have ongoing relationships with potential strategic acquirers of portfolio companies and growth stage investment firms to help improve exit opportunities for the Fund's investments. We have seen larger investment firms start to make small investments in companies that serve off-grid markets as they want to learn about the economic viability of these markets. Examples of these investment firms include Google Ventures, RRE, Draper Fisher Jurvetson, and Deutsche Bank. We have also seen many large energy companies start to invest in companies that are providing solar systems for off-grid homes and businesses. Examples of these companies that have invested are Schneider Electric, Caterpillar, First Solar, and General Electric.

These companies represent potential acquirers for companies that Fund is seeking to invest in if those companies are successful in scaling their operations. The Fund's catalytic investment in early stage SMEs in off-grid markets will enable them to reach economies of scales, which will reduce the cost of products and services and create financially viable business models. Successful companies will serve as proof points for later stage investors and corporations that the off-grid solar market is economically viable and companies can build profitable business models.

The Portfolio Manager will prepare an exit memorandum (the "Exit Memo") at the completion of each investment, which occurs when the Fund is no longer a stakeholder in the portfolio company. The purpose of the Exit Memo is to summarize the key takeaways from the entire investment process in order to improve Acumen's understanding of effective strategies for marketing critical goods and services to the poor, and assessing performance against intended impact and financial return goals.

V. Expected Performance Against Investment Criteria

5.1 Impact Potential

5.1.1 Mitigation / adaptation impact potential

- Climate impact potential
  - Demonstrating that nations can leapfrog fossil-fuel grids to clean energy
  - Reduction of CO_2 emissions through displacement of kerosene use at the household level from adoption of solar lanterns and home systems and reduction of CO_2 emissions from displacement of diesel generators and other dirty fuels through renewable energy mini-grids.

- Paradigm shift potential
  - This Fund will be the world's first climate change fund that is focused on SMEs that serve BoP populations in developing countries. With partnership from the GCF, this Fund will allow Acumen to demonstrate that nations can leapfrog fossil-fuel grids to clean energy. The Fund will create a blueprint to a clean-energy future that is aligned with GCF's goals and can be followed by other nations.
  - The Fund's investments will develop, prove and scale innovative clean energy technologies and products that will reduce the need for grid extension and construction of new grids that are reliant on dirty fuel (i.e. coal). Success stories from such investments should attract further private sector capital into those same companies and similar companies that arise to compete, which ultimately will serve to increase the scale and impact of clean energy companies operating locally within countries.

- Sustainable development potential
  - Due to Acumen's focus on BoP populations, Acumen's investments will also bring livelihood improvements to low-income populations. Such benefits could include increased income, safer and healthier household environments, improved food/water security and increased access to information.
  - The Fund's focus on clean energy and renewable energy investments, such as solar-powered home systems and appliances and mini-grids, are considered environmentally sustainable and produce both economic and environmental benefits to end users.

- Needs of the recipient
  - Acumen targets low-income populations in developing countries, which is different than many traditional emerging markets focused investment funds. Acumen has experience working in a number of countries in South Asia and Sub-Saharan Africa and expects to have investments in Least Developed Countries ("LDCs").

- Country ownership
  - Acumen is committed to local country operations and expertise. Acumen has local offices in each of the regions it invests in (East Africa, West Africa, India, Pakistan and Latin America) with local employees that understand consumer needs and cultural context. Acumen's team works with relevant local government, NGO and private sector partners to execute on its investment and impact goals.
  - All of the Fund's investments will have significant, if not all, operations within the specific countries of focus. Such investments serve to create employment opportunities, local institutional knowledge that can be shared within public and private sectors, strengthen local supply and distribution channels required for scaling sustainable businesses.

- Efficiency and effectiveness
  - Acumen has a track record of deploying and returning capital. Acumen has appropriate internal controls to monitor its investments and report to investors. The Fund will conduct an annual review of its portfolio companies and will collect monthly and/or quarterly data from its portfolio companies to monitor performance and assist in execution of strategy and operations. Acumen has an ESG policy that the Fund will adhere to for all portfolio companies. The Fund will use a portfolio management system developed by eFront, an industry leader in portfolio management systems for private investment firms. Members of the Investment Team or other representatives of the Fund will normally sit on the board of the portfolio companies to assist in strategic decisions and growth of the company. The Fund will seek to generate a positive financial return to investors.

5.1.2 Key Impact Potential Indicator

GCF core indicators	*Expected tonnes of carbon dioxide equivalent (t CO_2 eq) to be reduced or avoided (Mitigation only)*	*Annual*	**125,000**
		Lifetime	**1,500,000**
	Expected total number of direct and indirect beneficiaries (reduced vulnerability or increased resilience); number of beneficiaries relative to total population (adaptation only)	*Total*	**15,000,000**
		Percentage (%)	16% of the total population of the three target countries (93.7 mil)
Other relevant indicators	• *Expected increase in the number of households with access to low-emission energy* ○ 2.1 mil households with access to low-emission energy through solar lanterns, solar home systems and mini-grid systems		

The calculation of "<u>CO_2 Reduction</u>" for each portfolio company is as follows:

- Acumen's research and knowledge of existing portfolio companies, as well as industry research and standards for reduction of specific interventions, have informed these estimates of the number of CO_2 emissions reduction from its investments. A CO_2 reduction factor over a product's lifetime is applied to the estimated number of products sold within the investment.
- **<u>Solar Lanterns:</u>** A solar lantern will reduce approximately 0.1 tons of CO_2 per year. Assuming a 3-year lifetime for solar lanterns, Acumen estimates each solar lantern investment reducing approximately 0.3 tons of CO_2.

- **Solar Grid Systems:** A solar home system will reduce approximately 0.2 tons of CO_2 per year. Assuming a solar grid system can last a family 4 years, Acumen estimates each solar grid system reducing approximately 0.8 tons of CO_2 emissions.
- **Mini Grids:** Each mini-grid connection will displace approximately 2 kerosene lanterns and will therefore reduce approximately 0.2 tons of CO_2 per year. Assuming a 7-year lifecycle, Acumen estimates each mini-grid connection reducing approximately 1.4 tons of CO_2 emissions.

CO2 Emissions Reduction Model

Portfolio Assumptions

Target Fund Size	100,000,000
GCF Investment	20,000,000
Lives Impacted	15,000,000
Households	10,500,000
Institutions	4,500,000
Household Multiplier	5
# of Households Imapcted	2,100,000
# of Investments	10
Consumer Product/ Distribution	4
Mini-Grid Power Generation	2
Mobile based Credit Scoring	2
Mobile Technology Enablers	2

CO2 Baseline Assumptions

Product	Lifetime (Yrs.)	# Kerosene Lamps	Annual Tonnes CO2 Reductions	Product Life CO2 Reductions	Comments
Kerosene			*0.1*		*CO2 emissions*
Solar Lanterns	3	1	0.1	0.3	offset 1 kerosene lantern
Solar Home Systems	3	2	0.2	0.6	offset 2 kerosene lantern
Mini-Grid Power Generation	6	2	0.2	1.2	offset 2 kerosene lantern

CO2 Reductions Calculation

	# of companies	# of Households	Tons of CO2 Reduced
Portfolio	**6**	**2,100,000**	**1,500,000**
Solar Home Systems	4	1,700,000	1,020,000
Mini-Grid Power Generation	2	400,000	480,000

CO2 Cost Calculation

Tons of CO2 Reduction (Lifetime)		1,500,000
Estimated cost per tCO2eq	$	66.67
Estimated GCF cost per tCO2eq remc	$	13.33

Acumen will work with the GCF to develop appropriate social impact metrics related to climate change mitigation and adaptation. The Fund will focus on portfolio companies that provide critical goods and services targeting the needs of BoP populations. Further, each potential portfolio company must demonstrate the ability or plan to grow its operations significantly

The calculation of "Lives Impacted" for each portfolio company is as follows:

- Where there is a 1:1 correlation between one unit of a company's product or service and one individual reached (e.g., an individual visit to a health clinic), Acumen currently uses and Acumen will similarly use data from the portfolio companies on products or services sold as equivalent to Lives Impacted.
- Where a product or service impacts the lives of more than one individual (e.g., wiring a home with electricity), Acumen currently multiplies, and will similarly multiply, data from the company's products or services sold by a multiplier. This multiplier is agreed with the company and verified

either by field visits, and/or using census data as appropriate, to arrive at a total beneficiaries figure. For the majority of Acumen's historical and current investments, the social impact multiplier used is "household size," and typically is approximately 5 people per household. Acumen will use the "household size" multiplier for the Fund's investments.

The calculation of "CO_2 Reduction" for each portfolio company is as follows:

- Acumen's research and knowledge of existing portfolio companies, as well as industry research and standards for reduction of specific interventions, have informed these estimates of the number of CO_2 emissions reduction from its investments. A CO_2 reduction factor over a product's lifetime is applied to the estimated number of products sold within the investment.
- **Solar Lanterns:** A solar lantern will reduce approximately 0.1 tons of CO_2 per year. Assuming a 3-year lifetime for solar lanterns, Acumen estimates each solar lantern investment reducing approximately 0.3 tons of CO_2.
- **Solar Grid Systems:** A solar home system will reduce approximately 0.2 tons of CO_2 per year. Assuming a solar grid system can last a family 4 years, Acumen estimates each solar grid system reducing approximately 0.8 tons of CO_2 emissions.
- **Mini Grids:** Each mini-grid connection will displace approximately 2 kerosene lanterns and will therefore reduce approximately 0.2 tons of CO_2 per year. Assuming a 7-year lifecycle, Acumen estimates each mini-grid connection reducing approximately 1.4 tons of CO_2 emissions.

In order to estimate the number of CO_2 emissions reduction from its investments, Acumen also looks at best practices and industry reports in the field.

- **Solar Lanterns:** The United Nations Framework Convention on Climate Change estimates 0.092 tons of CO_2 per solar lantern per year and assumes a 5-year lifetime for solar lanterns. This number is in line with Light for Life and Lighting Africa programs which estimate 0.1 tons of CO_2 per solar lantern per year.
- **Solar Grid Systems:** The Energy Technology Systems Analysis Program's Off Grid Power in Rural India study estimates a solar home lighting system reducing ~0.3 tons of CO_2 per year. A UNFCCC report, which estimates that a high-power level 3 certified solar system replacing kerosene would reduce 0.723 tons of CO_2 over its lifetime.
- **Mini Grids:** Electricity sold through microgrids displaces generator fuel used by commercial users at approx. 0.5 litres/kWh sold. Conversion factor: 0.00232 Tonnes of CO_2/litre of petrol. Electricity sold also displaces kerosene use at approx. 0.1 litres/household/day. Conversion factor: 0.00254 Tonnes of CO_2/litre of kerosene[25]

Acumen has invested $14 million in 14 energy companies in East Africa, India and Pakistan. Acumen's energy portfolio has reach approximately 50 million lives and has reduced approximately 4.5 million tons of CO_2[26]. In East Africa alone, Acumen has invested 5.4 million in 6 investments across solar, biomass and cookstove companies, reaching approximately 27 million lives and reducing approximately 2.5 million tons of CO_2. [27] Below are estimates of Acumen's energy portfolio impact to-date by specific investment.

[25] http://www.eia.gov/environment/emissions/co2_vol_mass.cfm.

[26] Metrics are approximations derived from industry research, company data, and various assumptions and methodologies and have not been verified by a 3rd party.

[27] Metrics are approximations derived from industry research, company data, and various assumptions and methodologies and have not been verified by a 3rd party.

Region	Sub-Sector	Company	Lives Impacted	Tons of CO_2 Reduced
India & East Africa	Solar Lanterns	A	51M	4M
India & East Africa	Solar Home System	B	370K	110K
East Africa	Solar Home System	C	1M	260K
East Africa	Solar Home System	D	815K	6K
India	Mini-Grid	E	200K	60K
India & East Africa	Cookstove	F	270K	270K
India	Cookstove	G	21K	8K

These metrics are approximations derived from industry research, company data, and various assumptions and methodologies, as described above, and have not been verified by a 3rd party.

5.2 Paradigm Shift Potential

5.2.1 Potential for Scaling up and replication

The Fund will be the world's first climate change fund that is focused on SMEs that serve BoP populations in developing countries. With partnership from the GCG, this Fund will demonstrate that nations can leapfrog fossil-fuel grids to clean energy, and create a blueprint to a clean-energy future that can be followed by other nations and that will attract billions of dollars in private capital. This will allow Acumen to develop a strong track record and will enable Acumen to raise future, larger funds to invest in more companies that are aligned with the GCF's impact goals.

By investing in for-profit companies, Acumen, GCF and other investors in the Fund will be creating financially sustainable enterprises that continue to operate through internal profits and follow-on investment capital even after the Fund has made its investments. By investing in these companies and creating a track record of success, Acumen can raise a second fund in year 5 or 6 of the Fund to invest in more companies that are aligned with the impact objectives of the GCF. Thus, GCF is enabling Acumen to build further expertise and a deep track-record in the renewable energy sector, which will enable Acumen to raise more money in the future and make more investments.

The Fund's investments will develop, prove and scale innovative clean energy technologies and products that will reduce the need for grid extension and construction of new grids that are reliant on dirty fuel (i.e. coal). Success stories from such investments should attract further private sector capital into those same companies and similar companies that arise to compete, which ultimately will serve to increase the scale and impact of clean energy companies operating locally within countries. The Fund's focus on clean energy and renewable energy investments, such as solar-powered home systems and appliances and mini-grids, are considered environmentally sustainable and produce both economic and environmental benefits to end users.

All of the Fund's investments will have significant, if not all, operations within the specific countries of focus. Such investments serve to create employment opportunities, local institutional knowledge that can be shared within public and private sectors, strengthen local supply and distribution channels required for scaling sustainable businesses.

Investing in for-profit, financially viable companies can create enterprises that are sustainable over the long-term. While it is true that products have useful lives, the benefits of investing in financially sustainable companies is that those enterprises can continue to serve customers with new products once products have reached their useful lives. Also, the company is incentivized to provide ongoing service and maintenance for its products to ensure that its customers are satisfied with their product and experience and keep being customers of the company.

In order to contribute to the long-term sustainability of the impact on consumers, the Fund will dedicate a portion of its Technical Assistance Facility to specific initiatives that contribute to long-term impact. Examples of these initiatives include a reserve fund to help provide maintenance and service to customers if a company they bought a product from goes bankrupt and funds to help train women become solar technicians so that they can achieve employment and income generation.

5.2.2 Contribution to the creation of an enabling environment

Acumen is requesting that the GCF invest equity capital into a 12-year fund. This vehicle, and GCF's anchoring investment, will enable Acumen to raise additional capital from like-minded investors that want to achieve the same goals of the GCF and Acumen. We think we can leverage GCF's capital on a 4:1 ratio. Acumen will use the Fund's capital to make equity, equity-like and convertible debt investments in SMEs that are serving low-income populations and achieving the desired environmental impacts. The 12-year time horizon of the Fund will enable the companies Acumen invests in several years to scale their businesses and impact. Further, the Fund will enable Acumen to invest both equity and quasi-equity capital, both of which are needed by the targeted investment. By organizing the Fund as a for-profit fund, Acumen and GCF can crowd-in private sector capital that is looking for a financial return on its investment.

Additionally, not only will Acumen be attracting capital from outside investors, but Acumen's investment in companies will help bring in other capital into those companies, or will help fill out a round if other investors are there first, thus enabling the company's intended impact to be achieved.

Further, many of the companies that the Fund will target often utilize grant capital from foundations or public subsidies from governments to test-out innovation and jump-start markets. Thus, SMEs play a critical role in demonstrating how partnerships with civil organizations and government can be effective, especially when targeting low-income populations. Over time, insights from these partnerships and from operating experience in the market can prove out successful business models and attract larger sums of investment capital and enterprises that are striving for social and environmental impact.

The Fund will target investments in SMEs whose business models employ innovation at the product, service and/or operating level that enables the SME to affordably and profitably serve its intended population. Such innovations require highly risk-tolerant capital to allow the models to iterate and learn from market and customer feedback. The investment capital from GCF through this Fund will enable these companies to achieve their intended impact. Further, once new technologies and business models are proven, these innovations can be replicated by other actors in the economy.

5.2.3 Contribution to regulatory framework and policies

This Fund will be the world's first climate change fund that is focused on SMEs that serve BoP populations in developing countries. This Fund will contain approval of the local NDAs and be operating within the goals and regulations of the national policies referenced in section E.5. This investment vehicle will serve as a way for investors with climate focused impact strategies to achieve these country environmental goals.

5.2.4 Potential for knowledge and learning

Acumen shares the insights learned to make us collectively more effective. Acumen has used the data drawn from its portfolio to author sector-defining reports such as *From Blueprint to Scale* alongside Monitor Inclusive Markets, and most recently *Growing Prosperity: Developing repeatable business models to scale the adoption of agricultural innovation*, in collaboration with Bain & Company. Acumen also shares its expertise on impact measurement in a range of forums and advisories. In the last year alone, we held positions on the IRIS strategic advisory board, Clinton Global Initiative Metrics Advisory Council, and the Progress out of Poverty Index Strategic Task Force.

We analyze the data we gather to teach us new information about our impact performance on our individual investments. With data collected across multiple companies, sectors and geographies we can also synthesize this to generate new crosscutting insights.

Acumen will be open to providing a report on the actions and outcomes of the Fund.

5.3 Sustainable Development Potential

5.3.1 Environmental, social and economic co-benefits, including gender-sensitive development impact

- *Economic co-benefits*

Due to Acumen's focus on BoP populations in developing countries, Acumen's investments will provide economic savings and/or livelihood improvements. Such benefits include increased income due to the displacement of kerosene from the cheaper solar alternatives. Saving for a household can range from approximately $75 - $200 per year depending on the daily cost of kerosene, the amount of kerosene displaced, and the cost of the solar lantern / solar home system in the specific geographic market. Further, more powerful Solar Home Systems have the ability to power micro and small business to increase income for consumers. Thirdly, the solar home systems can be used for agricultural inventions – such as solar powered irrigation pumps and refrigeration – which can increase farmer yields and ultimate incomes.

- *Social co-benefits*
  - *Improved access to education*

Families report that solar lights are predominantly used by children to do their homework after dark. With access to this bright, safe and clean light, children are doing an extra hour of homework each day[28]
When children do well at school, they are likely to stay there longer and gain a higher level of education benefiting themselves, their families and their communities.

  - *Improved health and safety*

Each solar light bought by a household results in the elimination of the regular use of one kerosene lamp and this means there is less indoor air pollution. Over half of families notice an improvement in health as a result; including a reduction in coughing, chest problems, eye irritation and illness.[29]

- *Environmental co-benefits*
  - *Improved air quality*

Each solar light bought by a household results in the elimination of the regular use of one kerosene lamp and this means there is less indoor air pollution. Over half of families notice an improvement in health as a result; including a reduction in coughing, chest problems, eye irritation and illness.[30]

- *Gender-sensitive development impact*
  - Proportion of men and women in jobs created

Many of the goods and services provided by the companies the Fund expects to invest in will have direct impact on women, such as solar lanterns and home systems which can lead to the reduction of kerosene use

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[28] http://solar-aid.org/impact/
[29] http://solar-aid.org/impact/
[30] http://solar-aid.org/impact/

and related indoor air pollution. Given the direct impact of these goods and services on women, many of these companies also hire women employees, providing income and empowerment for women. Acumen will seek to understand the impact that its investments have on women through company-provided data, diligence visits and company visits by members of the Fund's investment team, and 3rd party research and data collection. Historically, Acumen has conducted its own research on the impact on women of certain of its portfolio companies and has also partnered with organizations like the International Center for Research on Women to research and better understand gender impact. Acumen expects to provide similar research for investments made by the Fund and will share that with the GCF.
Acumen is currently finalizing its formal Gender Policy, which it will submit to the GCF in the coming weeks. The Fund will develop specific metrics to track and report on related to gender impact of its investments.

The summary of the intended reporting related to gender impact is as follows:

- The Fund will invest in companies that bring clean, solar energy to households and thus will benefit women as they are part of the household and will benefit from any displacement of kerosene. The Fund will use surveys and market research to report on how many women are reached from its investments.
- Acumen has seen evidence from previous investments that women are often employed as sales agents or other employees of clean energy companies. The Fund will report on the number of women employed by its portfolio companies.
- The Technical Assistance facility may be able to use funds to train women solar technicians, thus creating direct impact on women. The fund will report on the number of women technicians trained / employed.

Acumen is working with the International Center for Research on Women (ICRW) to better understand how our companies are engaging women, and how engaging women can affect the social and business performance of a company. After conducting the broad review of trends in the gender lens impact investment sector and assessment of what social enterprises are doing to engage, reach and impact women across various sectors, ICRW conducted a deeper analysis of some of the enterprises in which Acumen invests. Together with ICRW, we have developed the framework for the study, which will be anchored in identifying both the impact case and the business case for targeting women, and how the two can reinforce each other. We expect to have the final report in October 2015. The report will offer sector-level insights, identifying not only where our investees are currently targeting women but also places of opportunity, things that are not yet happening, but should be in order to create impact for women and communities.

- *Other*

Due to Acumen's focus on BoP populations, Acumen's investments will also bringlivelihood improvements to low-income populations. Such benefits could include increased income, safer and healthier household environments, improved food/water security, and increased access to information.

5.4 Needs of the Recipients

5.4.1 Vulnerability of country and beneficiary groups

In Rwanda, over 70 percent of the population (~8.5M people) live off the grid, and the current best estimate is that cutting that figure to 30 percent will cost between $700 million and $1 billion per year for the next several years. This cost, which amounts to 10 to15 percent of the GDP, will still leave 3.5 million people in the dark. Moreover, the government's current best plan reluctantly calls for 50 percent of the desperately needed new power generation to be sourced from fossil fuels.

In Rwanda, less than 30% of the population has access to stable electricity. Most Households that do not have electricity rely on kerosene lanterns and candles to meet their lighting needs. But these sources of light are dangerous, low quality and expensive. Customers pay $1 a week for kerosene for lighting, and $1 more for phone charging. In Rwanda, electricity costs are among the highest in the world, and higher than neighboring countries in region, with grid-connected users paying roughly—~$0.20/kWh compared to $0.12 in U.S. (high tariffs, heavily subsidized). In addition to high costs, power supply is unreliable. Rwanda sees the high cost and insufficient and unreliable supply as the number one barrier to stronger business and industrial growth.

In Kenya, only 20% of the population is connected to the grid, leaving 35M people without access to affordable and reliable electricity. This lack of grid connectivity hinders the productivity as it limits daily activities such as schoolwork, household chores, and business at night or in the early morning. Given the slow rates of electrification coupled with high population growth, the grid supply versus demand crises will only be exacerbated. 92% of rural households rely on kerosene for lighting but it is expensive and takes up a huge proportion of family budgets. Rural Kenyan households spend around 2 of their income on lighting, or roughly $.42 per day on kerosene fuel at a far higher rate per hour of lighting than if the same was provided by the grid.

Uganda

The electrification rate of Uganda ranges from roughly 10% - 18%, depending on various sources. While electrification has reached almost 43% of the urban households, rural electrification is still very low at 4%. Only 0.4% of the population has access to modern cooking fuel and almost 86% still rely on fuel wood for cooking. An average Ugandan household spends between USD 4 and 10 per month on kerosene for lighting and between USD 1 and 2 per month on phone charging.

The primary energy sources consist of biomass, imported oil products and hydro. Total installed electricity capacity (2010) is 539.5 MW (Thermal 31.5%, Hydroelectric 65.4% and Biomass (bagasse) 3.1%). With droughts severely affecting the water levels in Lake Victoria and River Nile, Uganda's overdependence on large scale hydro power may prove problematic.

The main goal of this project is to create the world's first climate change fund focused on bottom-of-the-pyramid populations in developing countries. The Fund will seek to catalyze a thriving off-grid solar ecosystem in East Africa, demonstrating that nations can leapfrog fossil-fuel grids to clean energy. The social enterprises Acumen will invest in will be providing critical goods and services to the poor in order to address the unfortunate baseline scenario described above, providing safe-reliable electricity and decreasing kerosene use. The Fund will bring off-grid solar power to a target of 15 million people in East Africa and will create a blueprint to a clean-energy future that can be followed by other nations.

Solar home systems and appliances will aim to completely eliminate the use of kerosene in the household, eliminating the 0.1 tons of CO_2 emissions per liter of kerosene per year.

The Fund also expects some of its portfolio companies to have cross-cutting impact across the GCF's mitigation and adaptation goals. With specific regard to adaptation goals, it is likely that a number of the solar companies the Fund invests in will provide solar products and systems to institutions such as schools, agri-businesses, and small and micro businesses that create incremental income for vulnerable populations. One of Acumen's current investees, SolarNow, has several solar systems that are being used by schools and affecting hundreds of children in each school. Other companies are also using solar power for various agricultural related activities. Examples of these include solar-powered irrigation pumps and power for small businesses such as rice processors. Farmers also use lanterns when they work in the field for safety reasons and to enhance productivity. Other than agri-businesses, entrepreneurs are using solar systems for income generating activities such as mobile phone charging, cosmetic services, cooling services, and simply extending business hours.

It is hard to predict what percentage of solar systems will serve households, businesses, and schools. However, we have identified targets for what that mix may be based on only a few data points we know of from existing solar companies in the market. These are very rough estimates and are largely unsubstantiated.

The Fund will report on the breakdown of systems used at homes, schools and healthcare facilities, and agri-business and other businesses.

The estimates for the distribution of systems are as follows:

- Homes: 70%
- Agribusiness / Other Business: 20%
- Schools / Healthcare facilities: 10%

5.4.2 Financial, economic, social and institutional needs

Over the last decade, numerous social enterprises have been formed to address the needs of people living at the BoP. However, many of these enterprises have struggled to obtain investment capital for growth, in part because many traditional investors typically will not accept the financial risk and reward profile of these enterprises. Concurrently, several funding organizations and vehicles known as "impact investors" that target both social impact and financial return (and who often accept lower than market rates of financial return in exchange for outsized social impact of an investment) have formed to address the financing needs of these enterprises and capitalize on the potential commercial opportunity presented by them. However, early- to mid-stage social enterprises have struggled to attract investment capital even from impact investors as the majority of those investors have provided capital to relatively later-stage companies with lower risk, or have focused on the small sub-segment of these enterprises that present a higher financial return profile. Thus, even self-described impact investors often avoid the higher risk, lower margin businesses that directly touch the needs of individuals living at the BoP. A 2011 study of the social enterprise landscape in Africa done by Monitor Group highlights this point, noting that "only 6 of 84 funds investing in Africa offered early stage capital."

Over the last 13 years, Acumen has developed deep sector knowledge and local market insights, through its investing work and extensive research projects, such as From Blueprint to Scale: The Case for Philanthropy in Impact Investing written by Harvey Koh and Ashish Karamchandani of Monitor Group and Robert Katz of Acumen in 2012. *From Blueprint to Scale* explains how impact investors are constrained by the tough realities of inclusive business, and introduces the phenomenon of the pioneer gap; describes the emerging practice of enterprise philanthropy, and how it is the key to establishing the inclusive business models into which capital can then be deployed; and analyzes a number of companies from Acumen's portfolio to understand both successes and setbacks.

Acumen believes there is an attractive opportunity to invest in an increasing number of post-proof-of-concept business models that serve BoP markets in a sustainable and scalable manner and provide the opportunity for a combination of social impact and financial return to investors. By investing in local growth-oriented investments, Acumen will help to build the distribution and service value chains, which are currently lacking, to provide critical goods and services to those at the poor.

5.5 Country Ownership

5.5.1 Existence of a national climate strategy and coherence with existing plans and policies, including NAMAs, NAPAs and NAPs

Acumen is committed to local country operations and expertise. Acumen has local offices in each of the regions it invests in (East Africa, West Africa, India, Pakistan and Latin America) with local employees that understand consumer needs and cultural context. Acumen's team works with relevant local government, NGOs and private sector partners to execute on its investment and impact goals, and ensure alignment with local policies. Country ownership will be ensured in that Acumen will receive a letter of "no objection" from relevant NDAs. Acumen will ensure that it receives a letter of "no-objection" from the relevant country NDA ahead of the Fund investing in any companies in that specific country.

Below are environmental policies for Kenya, Rwanda and Uganda. These policies directly align with Acumen's investment strategies and goals within these countries.

Kenya:

The Environment and Policy Management Component under the Natural Resource Management Programme (NRMP) supports the Government of Kenya in the implementation of the first medium-term plan (2008-2012) in general and, particularly, in relation to strategies and goals for environmental planning and governance.

The mandate of the Ministry of Environment and Mineral Resources (MEMR) is to "to protect, conserve and manage the environment and mineral resources through sustainable exploitation for socio-economic and political development" and its mission is "to promote, conserve, protect, monitor and sustainably manage the environment and mineral resources for national development".

MEMR's strategic plan includes reducing environmental degradation and strengthening the role of environment and natural resources in reducing poverty.[31]

Uganda

The National Environment Management Authority (NEMA) is the Manager agency in Uganda, charged with the responsibility of coordinating, monitoring, regulating and supervising environmental management in the country. NEMA spearheads the development of environmental policies, laws, regulations, standards and guidelines; and guides the Government on sound environmental management in Uganda. NEMA contributes to social-economic development and wise use of natural resources, focusing on providing support to the Government's main goal of ensuring sustainable development contributing to the National Vision, the National Development Plan (NPD), regional and global commitments including the Sustainable Development Goals (SDGs).[32]

Rwanda

Rwanda Environment Management Authority (REMA) is the non-sectorial institution mandated to facilitate coordination and oversight of the implementation of national environmental policy and subsequent legislation. REMA has a key role to play towards the achievement of the national goal of sustainable development as set out in the National Development Vision 2020.

The protection and management of the environment are among the pillars of Vision 2020. The objective of the Government is that by 2020, it will have built a nation in which pressure on natural resources, particularly on land, water, biomass and biodiversity, has significantly been reduced and the process of environmental pollution and degradation has been reversed.

The environment is also one of the first priorities identified by the Poverty Reduction Strategy in Rwanda and is among the leading fundamental programs selected within agriculture transformation and rural development. The Poverty Reduction Strategy recommends actions in the energy sector by promoting the rational use of wood and the promotion of alternative sources of energy.[33]

5.5.2 Capacity of accredited entities and executing entities to deliver

Since 2007, Acumen has invested $14 million in 14 energy companies in East Africa, India and Pakistan. Acumen has invested in a wide-range of energy companies, including mini-grids (solar, hydro and biomass),

[31] http://kenya.um.dk/en/danida-en/nrm/annual-natural-resource-management-form/environmental-policy-and-management/
[32] http://www.nemaug.org/
[33] http://www.rema.gov.rw/

solar lantern and solar home system companies, and cookstove companies. Acumen's energy portfolio has reach approximately 50 million lives and has reduced approximately 4.5 million tons of CO_2[34]. In East Africa alone, Acumen has invested 5.4 million in 6 investments across solar, biomass and cookstove companies, reaching approximately 27 million lives and reducing approximately 2.5 million tons of CO_2.[35] Below are estimates of Acumen's energy portfolio impact to-date by specific investment.

Region	Sub-Sector	Company	Lives Impacted	Tons of CO_2 Reduced
India & East Africa	Solar Lanterns	A	51M	4M
India & East Africa	Solar Home System	B	370K	110K
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East Africa	Solar Home System	D	815K	6K
India	Mini-Grid	E	200K	60K
India & East Africa	Cookstove	F	270K	270K
India	Cookstove	G	21K	8K

Acumen strongly believes that being able to utilize Acumen's local presence in the markets in which it will invest is critical to the success of the Fund. This presence will allow the Investment Team to continue developing a deep understanding of the local market dynamics in which Acumen's portfolio companies already operate, and to continue building strong relationships with local advisors and networks that already support the work of Acumen.

While the India and Pakistan offices focus on their single country of location, the Ghana and Kenya offices serve as regional hubs looking to make investments throughout the broader regions of West Africa and East Africa, respectively. Similarly, the Colombia office is a developing hub for the Latin America region, with an initial focus on Colombia and Peru. The New York office makes investments in companies that are global in nature and also exists to help source and develop potential investments in all regions. Companies deemed to be "global" are those that (i) domiciled outside of East Africa, West Africa, South Asia or Latin America but have significant operations in those geographies.

Through its local presence, Acumen has attracted experienced in-country senior leadership and built a strong network of well-respected local advisors who are influential members of their respective business communities. Due in part to this network, Acumen has built a powerful brand and is recognized as a leader amongst investing peers and entrepreneurs operating in the social impact sector. Acumen and the Investment Team will have access to in-country senior leadership and local advisors, and will leverage Acumen's prominent brand recognition to source and facilitate investment opportunities.

All of these factors provide Acumen with a competitive advantage in sourcing deal flow, specifically, allowing Acumen to source deals which are not seen by investors who lack the same local presence. Acumen is also plugged into many of the incubators and accelerators in the social impact sector, which serve as resources for potential Fund investments. Acumen actively monitors approximately 30 accelerators, incubators and business plan competitions that provide sources of early stage investment opportunities, some of which may be appropriate for the Fund.

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[34] Metrics are approximations derived from industry research, company data, and various assumptions and methodologies and have not been verified by a 3rd party.

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5.5.3 Engagement with civil society organizations and other relevant stakeholders

The Fund will work with governments and other partners to create the right market ecosystems to support rapid growth for clean energy. Acumen is currently in conversations with multiple Development Finance Institutions ("DFIs"), foundations, and High Net Worth individuals that are interested in investing in this Fund. African investors, companies and/or government are also expected to be investors in the Fund.

Further, Acumen has already identified 3 companies that are ready for investment and a number of other companies that could receive investment capital over the course of the next 6 – 12 months. Acumen has also been in contact with the GCF NDAs in Kenya, Uganda, and Rwanda, and expects to confer with the other relevant NDAs in countries in which Acumen intends to invest.

5.6 Strategic Context

5.6.1 Cost effectiveness and efficiency

Acumen is requesting that the GCF invest equity capital into a 12-year fund. This vehicle, and GCF's anchoring investment, will enable Acumen to raise additional capital from like-minded investors that want to achieve the same goals of the GCF and Acumen. We think we can leverage GCF's investment capital in the fund on a 4:1 ratio by raising a $100M fund. We are also targeting a $10M Technical Assistance Facility, so GCF's grant capital of $5M could be leveraged on a 1:1 ratio.

Acumen will use the fund's capital to make equity, quasi-equity and convertible debt investments in SMEs that are serving low-income populations and achieving the desired environmental impacts. The 12-year time horizon of the fund will enable the companies Acumen invests in several years to scale their businesses and impact. Further, the fund will invest both equity and equity-like capital, both of which are needed by the targeted investment given the relatively early stage nature of the enterprises and the risks involved in scaling the enterprises. By organizing the fund as a for-profit fund, Acumen and GCF can crowd-in impact-oriented private sector capital that is looking for a financial return on its investment as well as social impact. Given the impact focus of the fund and the risk / reward profile offered by the underlying investments of the fund, traditional private commercial capital is not interested in funding such an investment vehicle. Thus, the GCF's involvement will in no way b be crowing out private capital, but on the contrary, will potentially crowd-in private capital that is looking to achieve social impact along with financial return.

Lastly, Acumen has a strong track record of deploying and returning capital. Acumen has appropriate internal controls to monitor its investments and report to investors. The fund will seek to generate a positive financial return to investors.

Based on our proposed investment vehicle and the resulting reduction cost of $66.67 per tCO_2eq detailed in section E.6.5, we believe this proposal to be competitive amongst other interventions that have aimed to reduce CO_2 emissions.

EPA and other federal agencies use the social cost of carbon (SCC) to estimate the climate benefits of rulemakings. The SCC is an estimate of the economic damages associated with a small increase in carbon dioxide (CO_2) emissions, conventionally one metric ton, in a given year. This dollar figure also represents the value of damages avoided for a small emission reduction (i.e. the benefit of a CO_2 reduction). The EPA estimates the social cost of CO_2 to be between $12 and $220.[36]

[36] http://www.epa.gov/climatechange/EPAactivities/economics/scc.html

According to the journal of Natural Climate Change, the cost of one ton of CO_2 emissions is estimated to be around $220, significantly above the previous estimates of $37 per ton, which a government study had concluded.[37]

Vattenfall, a Swedish utility, estimated in 2005 the average cost of reducing one ton of CO_2 emissions in different regions of the world. This report found that the marginal abatement costs, in terms of Gross Domestic Product, are 4.5 times higher among the poorest countries than among the wealthiest ones, the average cost of CO_2 reduction for countries outside of North America, Europe, OECD, transitional economies and China was **€**18.2 ($24) at the time.[38]

We believe our proposal provides a cost effective means of reducing CO_2 emissions while also having significant social impact at the household level for BoP customers.

5.6.2 Co-financing, leveraging and mobilized long-term investments (mitigation only)

Acumen is requesting that the GCF invest equity capital into a 10-year fund. This vehicle, and GCF's anchoring investment, will enable Acumen to raise additional capital from like-minded investors that want to achieve the same goals of the GCF and Acumen. We think we can leverage GCF's capital on a 4:1 ratio.

The Fund is intended to create a blueprint to a clean-energy future that can be followed by other nations and that will attract billions of dollars in private capital.

5.6.3 Financial Viability

Without the anchoring investment of the GCF, Acumen believes it would be extremely difficult to raise such a Fund, if even possible at all.

By creating this new Fund, the GCF is enabling a new and unique investing vehicle to target clean energy interventions that reduce CO_2 emissions while also positively impacting the lives of low-income populations in developing countries. If this new Fund can prove that there are viable investment opportunities in this target sector over the next couple years, Acumen and other investors could raise multiple funds on the back of this success, which will serve to scale the GCF's mitigation and adaptation goals. Thus, the GCF's investment in this first Fund could catalyze multiple follow-on investment vehicles. Further, because this Fund is focused on for-profit enterprises, these companies should be able to continue to scale and remain financially viable once the investment capital from the Fund has been returned.

Overall, Acumen seeks to create investment structures that will allow for exits, either through 1) sales to a later-stage growth investor, a strategic buyer or a management buyout or 2) self-liquidating instruments such as convertible debt and quasi-equity investment structures (i.e. instruments with shares of revenue or EBITDA). Initial public offerings are not seen as practical exit opportunities given the relatively immature capital markets in the economies in which the fund will invest.

As an investor in Acumen's proposed Fund, the GCF will receive its share of financial distributions from the fund when any liquidity events occur from the underlying portfolio companies. Such liquidity events could include a sale of the Fund's shares of the company or payment of principal, interest and/or dividend payments from a portfolio company to the Fund. The specific timing and manner of financial distributions from the Fund to the GCF will be agreed upon in a Shareholder's agreement between the GCF, the Fund, and other investors in the Fund.

[37] http://news.stanford.edu/news/2015/january/emissions-social-costs-011215.html
[38] http://www.econweekly.com/2007/09/on-cost-of-reducing-co2-emissions.html

5.6.4 Application of Best Practices

Acumen invests in innovative companies that are bringing high quality products to vulnerable populations. Those products consist of break-through technologies as well as older technologies whose costs have come down over time, thus making them accessible to Acumen's target market of low-income consumers. Such technologies include, refined solar panel technologies, innovative remote monitoring technologies, mobile payment, data and systems, emerging credit scoring models and algorithms to assess customer bankability as well as human centered design practices for product development.

5.6.5 Key efficiency and effectiveness indicators

Estimated cost per t CO_2 eq, defined as total investment cost / expected lifetime emission reductions:

(a) Total project financing	**US$ 100,000,000**
(b) Requested GCF amount	**US$ 20,000,000**
(c) Expected lifetime emission reductions overtime	**1,500,000 tCO_2eq**
(d) Estimated cost per tCO_2eq (d = a / c)	**US$ 66.67 / tCO_2eq**
(e) Estimated GCF cost per tCO_2eq removed (e = b / c)	**US$ 13.33 / tCO_2eq**

The calculation of "CO_2 Reduction" for each portfolio company is as follows:

- Acumen's research and knowledge of existing portfolio companies, as well as industry research and standards for reduction of specific interventions, have informed these estimates of the number of CO_2 emissions reduction from its investments. A CO_2 reduction factor over a product's lifetime is applied to the estimated number of products sold within the investment.
- **Solar Lanterns:** A solar lantern will reduce approximately 0.1 tons of CO_2 per year. Assuming a 3-year lifetime for solar lanterns, Acumen estimates each solar lantern investment reducing approximately 0.3 tons of CO_2.
- **Solar Grid Systems:** A solar home system will reduce approximately 0.2 tons of CO_2 per year. Assuming a solar grid system can last a family 4 years, Acumen estimates each solar grid system reducing approximately 0.8 tons of CO_2 emissions.
- **Mini Grids:** Each mini-grid connection will displace approximately 2 kerosene lanterns and will therefore reduce approximately 0.2 tons of CO_2 per year. Assuming a 7-year lifecycle, Acumen estimates each mini-grid connection reducing approximately 1.4 tons of CO_2 emissions.

In order to estimate the number of CO_2 emissions reduction from its investments, Acumen also looks at best practices and industry reports in the field.

- **Solar Lanterns:** The United Nations Framework Convention on Climate Change estimates 0.092 tons of CO_2 per solar lantern per year and assumes a 5-year lifetime for solar lanterns. This number is in line with Light for Life and Lighting Africa programs which estimate 0.1 tons of CO_2 per solar lantern per year.
- **Solar Grid Systems:** The Energy Technology Systems Analysis Program's Off Grid Power in Rural India study estimates a solar home lighting system reducing ~0.3 tons of CO_2 per year. A UNFCCC report, which estimates that a high-power level 3 certified solar system replacing kerosene would reduce 0.723 tons of CO_2 over its lifetime.
- **Mini Grids:** Electricity sold through microgrids displaces generator fuel used by commercial users at approx. 0.5 litres/kWh sold. Conversion factor: 0.00232 Tonnes of CO_2/litre of petrol. Electricity sold also displaces kerosene use at approx. 0.1 litres/household/day. Conversion factor: 0.00254 Tonnes of CO_2/litre of kerosene[39]

[39] http://www.eia.gov/environment/emissions/co2_vol_mass.cfm

Acumen has invested $14 million in 14 energy companies in East Africa, India and Pakistan. Acumen's energy portfolio has reach approximately 50 million lives and has reduced approximately 4.5 million tons of CO_2[40]. In East Africa alone, Acumen has invested 5.4 million in 6 investments across solar, biomass and cookstove companies, reaching approximately 27 million lives and reducing approximately 2.5 million tons of CO_2.[41] Below are estimates of Acumen's energy portfolio impact to-date by specific investment.

Region	Sub-Sector	Company	Lives Impacted	Tons of CO_2 Reduced
India & East Africa	Solar Lanterns	A	51M	4M
India & East Africa	Solar Home System	B	370K	110K
East Africa	Solar Home System	C	1M	260K
East Africa	Solar Home System	D	815K	6K
India	Mini-Grid	E	200K	60K
India & East Africa	Cookstove	F	270K	270K
India	Cookstove	G	21K	8K

These metrics are approximations derived from industry research, company data, and various assumptions and methodologies, as described above, and have not been verified by a 3rd party.

Expected volume of finance to be leveraged by the proposed programme:

Acumen is requesting that the GCF invest equity capital into a 12-year fund. This vehicle, and GCF's anchoring investment, will enable Acumen to raise additional capital from like-minded investors that want to achieve the same goals of the GCF and Acumen. We think we can leverage GCF's capital on a 4:1 ratio.

By anchoring the Fund with a $20M investment, we believe Acumen can raise an additional $80M from other investors, including up to $5M from Acumen. Further, the creation of this new investment vehicle, and the resulting investments from this Fund, will attract capital from co-investors into the underlying portfolio companies as Acumen has a strong reputation and multiple value-add resources it can offer the portfolio company. It is harder to estimate an exact amount of how much capital will be invested in these companies as a result of Acumen investing in them with this Fund, however it is reasonable to expect that GCF's creation of Acumen's Fund will catalyze further capital from co-investors in the underlying portfolio companies of the Fund.

We think a $20M anchor investment from the GCF is not only catalytic but also crucial to Acumen's ability to raise this Fund. Furthermore, we believe being able to raise a 100M fund and leveraging GCF's capital in a 4:1 ratio is a strong use of GCF's capital.

A $20M investment from GCF will enable Acumen to create the world's first climate change fund focused on BoP populations in developing countries. This anchor investment will be not only catalytic but also crucial to enable Acumen to create the first climate mitigation fund to utilize SMEs to affect the lives of low-income populations in developing countries. We believe being able to raise a $100M fund and leverage GCF's capital in a 4:1 ratio is a strong use of GCF's capital.

[40] Metrics are approximations derived from industry research, company data, and various assumptions and methodologies and have not been verified by a 3rd party.
[41] Metrics are approximations derived from industry research, company data, and various assumptions and methodologies and have not been verified by a 3rd party.

VI. Appraisal Summary

6.1 Economic and Financial Analysis

The forecasted financial return to investors in this Fund accounts for, amongst other factors, Acumen's expectations of the ability of its underlying investments to scale and reach profitability, the size of the impact capital and commercial capital markets that are willing to take the risks stated above and invest in companies, and potential movements in foreign currency relationships over the life of the Fund.[42] The economics of the Fund also account for the expenses that will be incurred in managing a portfolio of companies that operate in these challenging operating environments.

Higher-level macro-economic factors such as currency risk and political risk are factored into the forecasted financial return of each investment.

The Fund expects to make investments in illiquid markets, which have disproportionate risk relative to financial returns given the Acumen's significant social objectives. As such traditional commercial capital, and even segments of "impact investors" that are still focused on achieving "market rate returns" are not interested in taking the risk of investing in the types of investment opportunities that Acumen's Fund will be targeting. Specific risk factors and reasons that justify the concessionality of the GFC funding include 1) Liquidity Event/Exit, 2) Inflation and Interest Rate Risk, 3) Foreign Currency, Exchange Rate and Market Risks, and 4) Accounting Standards, Limited Availability of Information, and Due Diligence.

6.2 Technical Evaluation

Acumen invests in innovative companies that are bringing high quality products to vulnerable populations. Those products consist of break-through technologies as well as older technologies whose costs have come down over time, thus making them accessible to Acumen's target market of low-income consumers. Such technologies include, refined solar panel technologies, innovative remote monitoring technologies, mobile payment, data and systems, emerging credit scoring models and algorithms to assess customer bankability as well as human centered design practices for product development.

6.3 Environmental, Social Assessment, including Gender Considerations

Acumen has formalized robust ESG diligence, monitoring and reporting processes, which are based on industry standards, as well as guidelines outlined by several prospective Investors for its global portfolio (elaborate by stating the checklists that will be used) from leading organizations like the IFC and FMO. The ESG diligence process and reports include assessment of the 8 IFC Performance Standards and an overall rating on Environmental, Social, Business Integrity, and Corporate Governance risks of the enterprise Acumen will include a formal ESG process for conduct a formal ESG process for all investments of the Fund. Acumen will designate a person in charge of all ESG matters related to the Fund and its investments, and will also ensure all members of the Investment Team have been adequately trained with respect to appropriate ESG processes. As per its accreditation by the GCF, and with respect to ESS risks, the Fund will only target Category C projects for investment.

[42] The Fund will make investments based on the Manager's estimates or projections of internal rates of return and current returns. Investors have no assurance that the Fund will achieve its total return objectives on its investments. In addition, the Manager may adjust targeted returns to reflect any changes in market conditions.

As with any solar related project or intervention, one of the environmental issues to contemplate is the waste management of solar products after their useful lives. Some countries have policies and processes in place to handle waste management, while others are still developing the appropriate regulations and procedures. The Fund will seek to ensure to the best of its abilities that its portfolio companies comply with the relevant local policies and procedures regarding effective waste management. Example of initiatives that are being developed in places like Rwanda include recycling programs, quality standards to ensure products have long useful lives, and trade-in programs.

In Initial Due Diligence, the Portfoliot Manager will analyze potential ESG risks and financial management and governance risks, based in part on the company's sector, sub-sector and geography, as well as on an initial understanding of the company's operations. Based on these factors, the deal team will rate potential ESG risks as Low, Medium or High. These risks ratings will be presented as part of the Preliminary Investment Memo ("PIM"), and will ultimately serve to guide the team as it prepares its formal diligence plan.

During Formal Due Diligence, the Portfolio Manager will conduct extensive ESG diligence, focusing on areas highlighted from the initial ESG risk evaluation. The ESG diligence is meant to uncover ESG risks, identify potential risk mitigants and/or the lack thereof, as well as evaluate areas for potential ESG improvements. Upon completion of formal ESG diligence, the Portfolio Manager will rate each of the ESG risks as Low, Medium or High and come to a conclusion on whether the investment remains appropriate given this assessment. The Portfolio Manager will also complete an ESG Action Plan, which outlines steps that the company will take going forward to remedy or mitigate any ESG issues or risks deemed unacceptable. These elements will be presented to the IC in the Investment Memo ("IM").

In areas where the Portfolio Manager identifies high ESG risks, and which require specific and deep domain expertise (e.g., supply chain audit), Acumen will typically engage external experts as consultants to aid in diligence and verification. Acumen will, to the extent available, attempt to cover the costs of these external consultants from the Technical Assistance ("TA") Facility raised in conjunction with the Fund, but such costs will otherwise be borne by the Fund.

Given that the Fund will be focused on SME, the environmental and social risks are less than compared to larger infrastructure projects. Having said that, Acumen does understand these risks as they related to SMEs and has an ESG process, outlined above, in place that all investments will have to undergo before Acumen's approves investment in them. This ESG process was built from industry standard practices of the IFC and its Performance Standards. Because of the relatively low environmental impact of the SMEs that the Fund will target, as well as the limited resources of the SMEs, Acumen does not typically require a formal ESMS at its investment companies. However, in situations in which potential more materials ESS risks are identified, Acumen would seek to leverage technical assistance funding to enable portfolio companies to implement an ESMS and those provide more robust monitoring and reporting capabilities. However, the Fund will adhere to Acumen's ESG diligence and monitoring policies and will thus inherently require the portfolio company to provide sufficient information and risk mitigating practices related to ESS, even if the company does not have a specialized ESMS in place.

With specific regard to women, many of Acumen's investments positively impact women in such areas as health, safety, and livelihood. Solar lanterns can replace the use of kerosene, thus making lighting in the household higher quality and reducing the fumes that women and children are exposed to.

Acumen is currently formalizing its Gender Policy, which will outline specific gender issues related to the governance and human resource aspects of Acumen the institution, as well as the specific gender indicators that the Fund will report on with respects to the gender impact of its portfolio companies. This policy will be approved by Acumen's board and will be posted on the website so it can be seen and reviewed by the public. Acumen will have this formal Gender Policy in place before disbursement of any funds from the GCF to Acumen.

Regarding gender impact, many of the goods and services provided by the companies the Fund expects to invest in will have direct impact on women, such as solar lanterns and home systems which can lead to the reduction of kerosene use and related indoor air pollution. Given the direct impact of these goods and services on women, many of these companies also hire women employees, providing income and empowerment for women. Acumen will seek to understand the impact that its investments have on women through company-provided data, diligence visits and company visits by members of the Fund's investment team, and 3rd party research and data collection. Historically, Acumen has conducted its own research on the impact on women of certain of its portfolio companies and has also partnered with organizations like the International Center for Research on Women to research and better understand gender impact. Acumen expects to provide similar research for investments made by the Fund and will share that with the GCF.

Acumen is working with the International Center for Research on Women (ICRW) to better understand how our companies are engaging women, and how engaging women can affect the social and business performance of a company. After conducting the broad review of trends in the gender lens impact investment sector and assessment of what social enterprises are doing to engage, reach and impact women across various sectors, ICRW conducted a deeper analysis of some of the enterprises in which Acumen invests. Together with ICRW, we have developed the framework for the study, which will be anchored in identifying both the impact case and the business case for targeting women, and how the two can reinforce each other. We expect to have the final report in October 2015. The report will offer sector-level insights, identifying not only where our investees are currently targeting women but also places of opportunity, things that are not yet happening, but should be in order to create impact for women and communities.

6.4 Financial Management and Procurement

Acumen has appropriate internal policies and procedures in place with regards to financial accounting, disbursement, wiring and receipt of Fund, and audits of financials. Acumen undergoes a financial audit ever year and can share audited financial statements and/or auditor engagement letters upon request. Acumen can also share any requested details on internal controls related to disbursement and wiring procedures and policies regarding Acumen's Finance and Audit Committee.

In its due diligence of investment opportunities, Acumen conducts, and the Fund will conduct, in-depth analysis and diligence of the financial and procurement operations of potential portfolio companies. Amongst many other items, diligence includes assessment of internal financial controls, relationships with suppliers and relevant procurement policies, and accounting systems and reports. Acumen requires that is portfolio company have audited financial statements once the company receives investment from Acumen. Acumen also ensures that its portfolio companies are in compliance with its anti-money laundering and anti-corruption policies.

The Manager plans to utilize investment capital from the Fund for growth-oriented investments in portfolio companies that are more developed than start-up enterprises, but are still relatively early-stage, high-risk companies in the context of traditional investing. The Manager will target portfolio companies that have shown proof of concept, have established business models and that have a clear path towards profitability. The Manager will also prioritize a strong management team with a track record of execution and operational experience.

The Fund will seek to make minority (i.e.,less than 50% ownership) equity and equity-linked debt investments totaling from $2.0 million to $10.0 million per portfolio company. Detailed investment criteria of the Fund with respect to target portfolio companies and investment structures are described in the table below.

KSV Target Investment Criteria	
Company Leadership	• Experienced entrepreneur with proven ability to execute • Complete or plan for completing management team
Idea	• Proof of concept around business and revenue model • No ambiguity around proving product or market
Execution*	• Clear and quantifiable path to scaling operations and impact • Historical operations showing ability to execute; at least 1 year of operations
Financials*	• Revenue generating • Positive gross margins
Organization	• Basic structure and systems in place
Market & Consumer	• Proof of customer adoption and market receptivity
Competition/Substitution	• Identified as a potential leader in the defined market
Regulatory & Legal	• Defined and established legal and regulatory environment
ESG status	• Satisfactory results from environmental, social, and corporate governance assessment
Integrity standards	• Satisfactory result from Patriot Act/Anti-Money Laundering checks on entrepreneurs, senior management, board members, and existing investors

* Up to 20% of the portfolio companies in which the Program invests may be in an earlier stage; in such cases, the investment committee should approve that a company warrants early-stage investments for clear reasons, which must be elaborated in the investment memo for the company.

VII. Risk Assessment and Management

7.1 Risk Assessment Summary

As an investment fund focusing on innovative businesses in developing markets, the Fund and the portfolio companies in which it plans to invest may face a host of challenges. Acumen believes that these challenges can be summarized in three categories, across 1) Execution Challenges and Risks, 2) Financial Risks, and 3) Legal and Regulatory Risks. Acumen's general strategies for risk management in each of these risk categories are outlined in the sections below.

The Managing Director and Investment Director will regularly evaluate the overall risk of the Fund and its investments. They will also prepare a quarterly report for the IC, which identifies risks from the previous quarter and includes recommendations for procedures to mitigate and address such risks.

7.2 Risk Factors and Mitigation Measures

RISK FACTOR 1

Description	Risk category	Level of risk	Probability of risk occurring
Execution Challenges & Risks • The Fund will invest in early stage, innovative companies. By definition, these enterprises operate with a lot of unknowns around business model, company operations, and market dynamics. These enterprises may fail or may take longer than anticipated to achieve financially viable business models • The Fund generally will seek significant minority stakes with strong contractual rights, though it sometimes may have a majority position in consortium with other co-investors. As such, the Fund does not expect to control the activities of its portfolio companies. • Many of the Fund's investments will involve selling and distributing consumer goods in rural, off-grid markets. These areas typically have very poor infrastructure and accidents can happen with respect to damages of goods and services while in transport and during / after product purchase or installation. • The Fund will invest in enterprises that provide high quality products, those companies will face competitive pressure from cheaper and lower quality products • Products provided by the Fund's investees are intended to last for multiple years. Issues related to quality of the products, environment and weather, and user error could affect the actual useful life of products	Technical and operational	Medium (5.1-20% of project value)	Medium

Mitigation Measure(s)
The Fund has rigorous due diligence processes which include analysis of financial, operational, market and ESS issues. The due diligence process provides the Fund with the ability to asses high quality investment opportunities and select enterprises with strong management teams, high quality products, and strong brand names and reputation. The fund will not only provide investment capital, but will provide strategic advice and additional resources through such actions as sitting on the Board of companies, identifying and working with co-investors, providing access to local networks of experts and value-add partners, and offering specific technical assistance programs. Example of technical assistance programs could include a financial reserve to service products after purchase if a company goes bankrupt, training of women to become solar technicians, implementation of MIS and ESM systems, market research and impact measurement.

RISK FACTOR 2

Description	Risk category	Level of risk	Probability of risk occurring
Legal Challenges & Risks • Countries in which the Fund seeks to invest lack fully developed legal systems, and many of the countries in which the Fund seeks to invest control the repatriation of investment income, and capital and profit that result from foreign investment. Some of the Fund's investments may work in partnership with local, regional and/or national governments. Risks for corruption and bribery could be heightened within these partnerships • Understanding of local legal frameworks in multiple countries in East Africa could be difficult	Technical and operational	Medium (5.1-20% of project value)	Medium

Mitigation Measure(s)
In order to mitigate legal risks, Acumen will rely on its experienced, local, in-house legal team as well as outside counsel. Acumen's General Counsel has over 15 years of corporate law experience. Acumen has developed strong relationships with global law firms and local law firms in the countries in which Acumen invests who provide guidance and support on deal execution and other legal matters. The in-house legal team also is involved in deal research, diligence, structuring, closing and as needed, post-investment monitoring. The team develops strategies and processes for navigating regulations pertinent to specific geographies, industries and situations. Additionally, the legal team works to recommend deal structures that minimize legal challenges and risks. With regard to issues of repatriation of investment income and other capital, the risk exposure of the Fund of such capital controls seems to be relatively lower in the three target countries of Kenya, Rwanda and Uganda compared to other countries in the region. Excerpts

from documents from the US Department of State regarding capital controls in these countries are provided below.

Kenya: (http://www.state.gov/e/eb/rls/othr/ics/2012/191175.htm)
"Kenya's Foreign Investment Protection Act (FIPA) guarantees capital repatriation and remittance of dividends and interest to foreign investors, who are free to convert and repatriate profits including un-capitalized retained profits (proceeds of an investment after payment of the relevant taxes and the principal and interest associated with any loan). Kenya has no restrictions on converting or transferring funds associated with investment. Kenyan law requires the declaration of amounts above Ksh 500,000 (about $5,600) as a formal check against money laundering. Foreign exchange is readily available from commercial banks and foreign exchange bureaus and can be freely bought and sold by local and foreign investors."

Rwanda (http://rwanda.usembassy.gov/investment_climate_.html)
There is no difficulty obtaining foreign exchange, or transferring funds associated with an investment into a usable currency and at a legal market-clearing rate. In 1995, the government abandoned the dollar peg and established a floating exchange rate regime, under which all lending and deposit interest rates were liberalized. The central bank holds daily foreign exchange sales freely accessed by commercial banks.
Investors can remit payments only through authorized commercial banks. There is no limit on the inflow of funds, although local banks are required to notify the central bank of all transfers over USD 10,000 to mitigate the risk of potential money laundering. Additionally, there are some restrictions on the outflow of export earnings. Companies generally must repatriate export earnings within three months after the goods cross the border. Tea exporters must deposit sales proceeds shortly after auction in Mombasa. Repatriated export earnings deposited in commercial banks must match the exact declaration the exporter used crossing the border. Rwandans working overseas can make remittances to their home country without impediment.
It usually takes two to three days to transfer money using SWIFT financial services. Other financial services companies such as Western Union and Money Gram are also available to investors seeking to transfer funds.
Since January 2007, the Rwandan franc (Rwf) has been convertible for essentially all business transactions. Rwanda has a liberal monetary system and complies with International Monetary Fund (IMF) Article VIII and all Organization for Economic Cooperation and Development (OECD) convertibility requirements.

Uganda (http://www.state.gov/e/eb/rls/othr/ics/2013/204753.htm)
Uganda keeps open capital accounts, and Ugandan law imposes no restrictions on capital transfers in and out of Uganda. Investors can obtain foreign exchange and make transfers at commercial banks without approval from the Bank of Uganda in order to repatriate profits and dividends, and make payments for imports and services. Investors have reported no problems with their ability to perform currency transactions.

The Fund is registered in Mauritius as the country has a well-developed regulatory framework and understanding of investment fund operations due the vast amount of funds that are already registered in the country. Mauritius also has tax treaties with several countries, which is beneficial to investors in the Fund. Non-US investors prefer investment funds that are registered in Mauritius as opposed other areas because of the tax treaties and the favorable regulatory environment.

RISK FACTOR 3

Description	Risk category	Level of risk	Probability of risk occurring
Exit and Valuation Risks • The Fund will invest in companies in markets which have limited options for liquidity events / exits due to lack of developed financial markets, including lack of an abundance of private equity and venture capital firms • Many of the countries in which the Fund seeks to invest control, to some extent, the repatriation of investment income, and capital and profit that result from foreign investment. • Accounting standards in the countries in which the Fund seeks to invest do not generally correspond to international accounting standards, and national accounting, auditing and financial reporting standards are not yet in place in many target countries Many portfolio investments will generate revenue that is denominated in foreign currency, and changes to exchange rates may affect the value of the Fund's investments in portfolio companies.	Financial	Medium (5.1-20% of project value)	Medium
Mitigation Measure(s)			
In order to mitigate financial risks, the Fund expects to develop investment structures reflective of market conditions. For example, the Fund wil invest equity capital when appropriate, but will also look to invest in debt instruments and equity-like instruments that have a pre-determined liquidation date to help improve the likelihood of financial exits. The Fund also expects to capture ongoing upside through vehicles such as dividends and warrants to help offset the unpredictability of markets. The Investment Team of the Fund will have ongoing relationships with potential strategic acquirers of portfolio companies and growth stage investment firms to help improve exit opportunities for the Fund's investments. At times the Fund may employ currency-hedging strategies if those are available and affordable. The Fund will carefully monitor investments and utilize regional team to stay abreast of changing markets and company conditions. The Fund will require its portfolio companies to have financial audits in order to improve transparency of financials and accounting systems.			

VIII. Logic Framework

8.1 Paradigm Shift Objectives and Impacts at the Fund Level

Objective: Shift to low-emission sustainable development pathways

This Fund will be the world's first climate change fund that is focused on SMEs that serve BoP populations in developing countries. With partnership from the GCF, this Fund will allow Acumen to develop a strong track record and will enable Acumen to raise future, larger funds to invest in more companies that are aligned with the GCF's impact goals.

Expected Result	Indicator	Means of Verification (MoV)	Baseline	Target		Assumptions
				Mid-term	Final	
Fund-level impacts						
M1.0 Reduced emissions through increased low-emission energy access and power generation	Tonnes of carbon dioxide equivalent (tCO_2eq)	Company data and 3rd party validation and measurement	0		1,500,000 tons of CO_2 reduced	Each kerosene lantern displayed equals reducing 0.1 tons of CO_2 per year

8.1.1 Outcomes, Outputs, Activities and Inputs at Programme Level

Expected Result	Indicator	Means of Verification (MoV)	Baseline	Target		Assumptions
				Mid-term	Final	
Project/programme outcomes	**Outcomes that contribute to Fund-level impacts**					
M6.0 Increased number of small, medium and large low-emission power suppliers	Number of households, and individuals (males and females) with improved access to low-emission energy sources	Number of the direct beneficiaries	0		15 million individuals	The number of household (5 individuals at average) to purchase Solar Home System

Given the nature of equity investment, output could not be defined based on log-frame theory approach. Nonetheless, once the equity investment will be delivered, ACUMEN will track the number of sales/services delivered by each beneficiary company. This includes track social impact metrics within the portfolio of companies where ACUMEN has invested

8.2 Arrangements for Monitoring, Reporting and Evaluation

Acumen will track social impact metrics of the portfolio companies and report those to the GCF. Acumen will work with the GCF to define the appropriate metrics. Potential metrics could include number of lives impacted, number of individuals/households with improved energy products, number of tons of CO_2 reduced, amount of renewable energy generated, and increased income of smallholder farmers.

Along with detailed ESG analysis and monitoring, Portfolio Managers will work to understand the potential impact of a portfolio company as a function of multiple components, including: Focus on the Poor, Breadth of Impact and Depth of Impact; and appropriate metrics related to climate change mitigation and adaptation as defined by Acumen and GCF. Acumen currently has a dedicated Impact team that can work with Portfolio Managers and portfolio companies to assess the social impact of its portfolio companies. Portfolio Managers will have access to Acumen's knowledge and resources and will work with the Fund's portfolio companies and external parties to assess social impact through the Portfolio Managers' own diligence and analysis, metrics and insights provided by portfolio companies and partnerships with third parties interested in completing research and field studies.

Through close relationships with portfolio companies, developed in part by obtaining board seats or board observer roles for information and access to the extent such roles are available, Acumen will monitor numerous factors in relation to the health and activities of the Fund's portfolio companies. These factors include standard financial metrics, social performance tracking, ESG metrics, competitive positioning and ongoing market trends in the industries and geographies in which the Fund's portfolio companies operate, in each case as reported and audited by portfolio companies.

With respect to financial reporting, Acumen will pay particular attention to top and bottom line trends, cash balance, cash flow requirements as well as any other significant changes in financial performance and health. Acumen will also monitor operational metrics and ongoing working capital needs. With respect to social performance tracking, Acumen will monitor metrics which are agreed upon with each portfolio company's management at the time of initial investment. These typically include units sold as a proxy for Lives Impacted as well as other important social data points that are gathered as part of ongoing operations.

Acumen will actively monitor ESG matters in portfolio companies from point of investment onwards. This will typically include 1) monitoring ESG risk areas, 2) assessing progress made on the ESG Action Plan, and 3) evaluating any changes in the business, which might create additional ESG risks. The Portfolio Manager is expected to report all serious ESG issues (such as labor or manufacturing accidents) to Acumen. Additionally, Portfolio Managers and the Managing Director, with the support of Acumen's investor relations professionals, will update the investors on ESG progress, risks and other pertinent ESG updates as part of the Annual Review process (described below).

To monitor ongoing market trends, Acumen will typically inquire about key hires and departures, strategic priorities and any ongoing regulatory and legal processes. In some cases, the Fund's investments will be structured in tranches, with specific requirements for additional disbursements. In these scenarios, Acumen will monitor progress against established milestones in order to anticipate future disbursements.

Specific documents, systems and processes used to carry out the above monitoring include:

a) 100-Day Plan

Portfolio Managers for Fund investments will develop a "100-Day Plan" at the time of an investment in collaboration with the management of the relevant portfolio company. This document identifies the key near-term action items the company has committed to completing, as well as the challenges the company may face and the actions that can be taken to mitigate those challenges. The Fund's internal processes will require a 100-Day Plan to be drafted before the Fund will disburse funds. The 100-Day Plan will typically target three to four key priorities that can each be broken down to two to three specific tasks with clear timeframes and lines of responsibility. Examples of areas that the 100-Day Plan may focus on include corporate governance, management capacity building, sales and marketing, and operations and information management. The Portfolio Manager will monitor the progress of the action items included in the 100-Day Plan, typically through monthly reports from the portfolio company along with general communication with its management.

b) Performance Management and Metrics

i. eFront FrontInvest

The Manager will utilize eFront's FrontInvest product, a leading portfolio management platform for private equity and venture capital firms. This platform will be used to house all data related to pipeline tracking, deal execution and management, and portfolio level analysis and valuation. The platform will also be used to produce regular reports, including on portfolio company operations and impact.

c) Annual Review Process

The annual review process is a culmination of the monthly and quarterly reviews that occur throughout the year. The purpose of the annual review is to assess the performance of the Fund's portfolio companies on financial, operational and social and environmental impact metrics; to identify those portfolio companies that are facing significant challenges as well as those that have seen superior performance; to foster detailed discussion and thought amongst the Investment Team members and the IC as to how best to support the portfolio companies going forward; and ultimately to inform strategic decisions related to the overall portfolio strategy.

The annual review document is supplemented by a Post-Investment Management Plan ("Post Plan") that outlines an engagement strategy with respect to each investment. The Post Plan is developed along the same timeline as the annual review document and is discussed in the same forum. The Post Plan identifies key post-investment management priorities and outlines quarterly deliverables for each. The annual review documents will also include an update report on ESG matters.

In conjunction with the above-described annual review, the Investment Director will conduct a review of the Fund's underlying portfolio investments and make any adjustments deemed necessary to the valuation of each of the investments, including write-downs of any impaired investments. Acumen will also host an annual investor conference for the investors.

No-objection letters issued by the national designated authorities

REPUBLIC OF KENYA
THE NATIONAL TREASURY

Telegraphic Address: 22921
Finance – Nairobi
FAX NO. 310833
Telephone: 2252299

THE NATIONAL TREASURY
P O BOX 30007 - 00100
NAIROBI

When Replying Please Quote

Ms. Héla Cheikhrouhou
Executive Director
G-Tower, 24-4 Songdo-dong,
Yeonsu-gu,
Incheon City, Republic of Korea

Date: 22ND Sept., 2015
Ref: Conf./MOF/281/02/91
Page: 1 of 2

Dear Ms. Cheikhrouhou

Subject: Letter of No Objection for a Proposal by Acumen Fund Inc to Establish A Green Energy and Resiliency Fund to the Green Climate Fund

Pursuant to paragraph (l) of Decision B.08/11, and subject to the cap on readiness commitments specified in paragraph (f) of Decision B.08/11, in my capacity as representative of the National Designated Authority for Kenya, duly designated pursuant to the letter from the National Treasury to the Fund dated 17 July 2014, I hereby approve the proposal by Acumen Fund Inc., a registered National Implementing Entity for Kenya to "***Establish A Green Energy and Resiliency Fund for promotion of clean energy development in Kenya and Rwanda***".

This project will support our National Climate Change Response Strategy (NCCS), National Climate Change Action Plan (NCCAP, Draft Climate Finance Policy, Green Economy Strategy and Implementation Plan among others. Specifically, it will help overcome hurdles for financing renewable energy projects, support up to 750MW of renewable energy, and mobilize private investment in renewable energy generation capacity and to reduce the perceived liquidity risk among lenders. We therefore support the urgent establishment of the proposed Regional Liquidity Support Facility.

ISO 9001:2008
Certified.

Name of entity: Acumen Fund, Inc
Contact person: Sean Moore/Duncan Onyango
Telephone: +254 -20- 0716252802/+254 20-720630028
Address: P. O Box 101883, 00101, Nairobi, Kenya
Email: donyango@acumen.org

Yours Sincerely

Dr. KAMAU THUGGE, EBS
THE PRINCIPAL SECRETARY/ THE NATIONAL TREASURY
GCF FOCAL POINT

REPUBLIC OF RWANDA

Kigali, on 0 8 OCT 2015
N°..1696......./DG/2015

RWANDA ENVIRONMENT MANAGEMENT AUTHORITY (REMA)
P.O. Box 7436 KIGALI

Ms. Héla Cheikhrouhou
The Executive Director of Green Climate Fund (GCF)
G-Tower, 24-4 Songdo-dong, Yeonsu-gu
Incheo City, Republic of Korea
Email: secretariat@gcfund.org

Re: Funding proposal for the GCF by Acumen Fund, Inc. regarding Acumen's KawiSafi Ventures Fund

Dear Madam,

We refer to the programme Acumen's KawiSafi Ventures Fund in Rwanda as included in the funding proposal submitted by Acumen Fund, Inc. to us on September 28, 2015.

The undersigned is the duly authorized representative of Rwanda Environment Management Authority, the National Designated Authority of Rwanda.

Pursuant to GCF decision B.08/10, the content of which we acknowledge to have reviewed, we hereby communicate our no-objection to the programme as included in the funding proposal.

By communicating our no-objection, it is implied that:

(a) The Government of Rwanda has no-objection to the programme as included in the funding proposal;

(b) The programme as included in the funding proposal is in conformity with Rwanda's national priorities, strategies and plans;

(c) In accordance with the GCF's environmental and social safeguards, the programme as included in the funding proposal is in conformity with relevant national laws and regulations.

(d) Acumen and its delivery Partner organizations will work collaboratively with Government of Rwanda on the one hand and the GCF on the other, to ensure transparent communication through the life of the fund;

(e) Acumen and its delivery Partners will report on progress against goals and use of the fund's capital to among others, assure the Government of Rwanda of accountability as well as optimum sustainable development results for beneficiaries through the use of the funds. RK

We also confirm that our national process for ascertaining no-objection to the programme as included in the funding proposal has been duly followed.

We acknowledge that this letter will be made publicly available on the GCF website.

Kind regards,

Mukankomeje Rose

Dr. Rose MUKANKOMEJE
Director General of REMA
National Designated Authority (NDA)

<u>CC:</u>
The Chief Executive Officer
Acumen
76 Ninth Avenue, Suite 315
New York, NY 10011