UGANDA
GREEN ENTERPRISE
FINANCE ACCELERATOR

Banking on green business
Leveraging opportunities of the 4IR to operationalise green finance for SMEs

Abstract

The future of growth in Uganda is green. Reflected in government commitments to green growth, mitigating and adapting to climate change – including the recently passed Climate Change Bill –, and job creation, economic models that further environmental and social targets are gaining traction. This transition is reflected in the private sector, including among small and medium enterprises (SMEs) that bring low carbon products and services to the market, deliver solutions that build the resilience of communities to climate shocks, and create green quality jobs along their value chains.

The business case for investing in green SMEs is, however, muddied by a lack of aggregated information about the bankability and impact of these technologies and business models. For banks in Uganda to tap into the opportunity of providing green finance to SMEs, information on the performance of green technologies and business models as well as the impacts of investments must be made available. The Fourth Industrial Revolution (4IR) presents a unique opportunity to leverage the value and data generated by SMEs to enable the financial sector to invest in green growth and inform how we move towards a green and inclusive economy in Uganda.
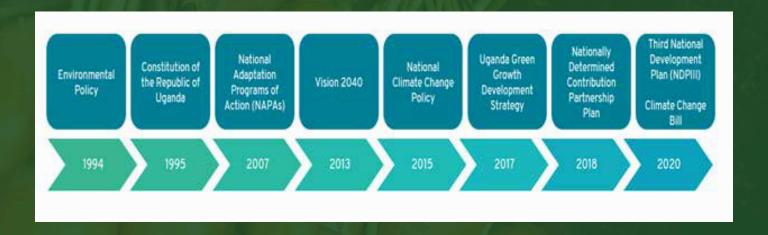
1. Opportunity: Investing in green growth through SMEs

New and scaled solutions are needed to tap into opportunities for quality job creation and sustainable growth, and to secure future well-being within ecological bounds. Solutions for sustainable, inclusive growth are developed and delivered at scale by a multitude of actors at different levels, from local to global. Small and medium enterprises (SMEs) play an important role in anchoring and adapting solutions to local needs, ensuring that green growth opportunities translate to impacts at a community level. The opportunity for investing in green growth driven by SMEs is informed by prioritisation of sectors and indicators at a national level, realised and planned activities of SMEs, and the development and roll-out of targeted financial products.

1.1 Green Growth and Investment in Uganda

The Uganda Vision 2040, Uganda Green Growth Development Strategy (2017), and Third National Development Plan (NDPIII) 2020/21 – 2024/25 outline clear commitments to environmentally sustainable and socially inclusive growth that prioritises green job creation, low carbon emissions, and climate resilience. The Uganda Green Growth Development Strategy focuses on five investment areas of agriculture, natural capital management, green cities, transport, and energy. The strategy targets accelerating annual economic growth from 5.2% (2012/13) to 7.8 percent by 2040, increasing per capita income from US$743 (2012/13) to US$9,500 by 2040, and increasing income distribution measured by the Gini coefficient from 0.43 (2010) to 0.32 by 2040, among others.

Policy Landscape For Green Growth in Uganda

To achieve these and other targets, financing needs to be mobilised – with a target of US$1.8 billion per year, compared to nominal GDP of $36.484 billion in 2020. This funding is expected to be contributed from multiple sources, including the public sector, environmental fiscal reforms and subsidy reforms, sustainable procurement, certification of sustainable production and trade and inclusive green social enterprises, green energy investments and incentives, green innovation and payments for ecosystem services, and international funding (UGGDS, 59). Within this, the banking sector in Uganda must play a central role in leveraging available funding.

1.2 SMEs as Drivers of Impact at Scale

SMEs are central economic players in Uganda, providing employment to over 2.5 million people and contributing around 90% of private sector production (FSDU 2015). Investing in SMEs that adopt a triple bottom line approach of valuing people, planet and profit is therefore fundamental to achieving key national policy objectives of job creation and environmental sustainability. SMEs integrate environmental considerations into their core business model or processes by (a) producing and distributing products and services that contribute to climate change mitigation, adaptation, or resilience-building, and/or (b) integrating cleaner and resource efficient production in their value chain.

Green SMEs span sectors, technologies and business models, and provide products and services that solve a multitude of environmental challenges ranging from access to clean energy for productive use, valorisation of waste, and preservation of biodiversity, among others (see, for example, the activities of WANA Energy Solutions, Tulima Solar, or Bodawerk International). By employing product monitoring systems and smart sensors, gathering customers insights, and collecting information on market dynamics, these SMEs generate valuable data on the demand for, uptake, and use of green products and services. An opportunity exists for investment in such bankable green SMEs to scale their solutions and for the generation of insights on the development of a green and inclusive economy.

1.3 Green Finance Ecosystem in Uganda

Opportunities for banks to align their products to the evolving needs of green SMEs are expanding

This brings potential benefits of both building a customer base of green SMEs in Uganda – thereby bolstering current SME portfolios – and accessing global green finance flows. Trends in overall green finance flows indicate that global capital earmarked for supporting green investments is expected to expand in coming years, with $867 billion in green finance committed since 2015 (CPI 2020). Global

green finance funding sources are gradually expanding capital earmarked for green investments into the private sector, including SMEs, as end beneficiaries (GCF 2016, 2020; GEF 2018; SEED 2020).

Some examples of banking sector support and opportunities for green SME finance in Uganda are outlined in the Green Banking Ecosystem in Uganda. Currently, the green banking ecosystem is concentrated primarily on clean energy and agriculture investments. The market potential for investment in a wider set of green investments (such as sustainable tourism, green manufacturing or waste management) is even larger. The potential for business growth within green finance is therefore yet to be fully realised within the Ugandan banking sector.

1.4 Green Banking Ecosystem in Uganda

Credit enhancement facilities are available to Ugandan banks from the Rural Electrification Agency, (on behalf of the Ministry of Energy and Mineral Development), notably as Solar Loans to support the costs of investing in a solar system at a household or on business premises. Furthermore, the Uganda Energy Credit Capitalisation Company (UECCC) extends financing to renewable energy companies through various products, particularly for solar, hydro and biomass working capital as well as capex facilities.

The Clean Technology Fund, from aBi Finance with support from KfW, offers direct financing to SMEs and indirect financing via financial institutions for agri-businesses to invest in clean technology, including soil and water management measures, waste reduction and management, energy efficient transportation/logistics, improved chemical efficiency and adoption of less environmentally harmful fertilisers, and more.

The AgrInvest Initiative is a blended finance initiative of the Uganda Development Bank (UDB), implemented by the Food and Agriculture Organisation of the United Nations (FAO) with EU support, that leverages public finance to secure private investment in the agrifood sector with a strong focus on green finance tools and investments.

The Green Climate Fund has allocated an estimated $73.8 million of total funding to support green investments in accordance with the Nationally Determined Contributions in Uganda, some of which has been dedicated to technical assistance, direct credit lines and other mechanisms to engage local financial institutions.

The Agricultural Enhancement Programme and Rural Enhancement Programme offered by the East African Development Bank (EADB) have partnered with commercial banks and microfinance institutions to offer over 2,000 loans valued at UGX 40 billion to rural SMEs and over 2,000 loans (totalling UGX 84 billion) to agricultural SMEs in Uganda as of 2019, thereby supporting 13,894 permanent and 18,040 temporary jobs. Though this portfolio is not wholly linked to green investments, EADB is actively expanding its strategic commitment to addressing environmental challenges.

2. Challenges: Reducing transaction costs and aggregating impacts

Despite an increasing focus and commitment to (through government policies and earmarked financing) green investments and the support of SMEs, a challenge remains in ensuring finance is effectively delivered to green SMEs as borrowers. As SMEs develop, test, and scale green business models in the market, they require access to external financing that supports them to secure the fixed capital and working capital necessary to deliver their products and solutions at scale.

Example: Bankable Green SMEs and Investment Needs

Green SMEs across sectors involved in the first year of the Uganda Green Enterprise Finance Accelerator (UGEFA) have proven business models with average annual revenue growth of 30-50%+ per year on average. These enterprises are looking to secure debt financing with an average ticket size of ~UGX 300m (EUR 70k) for:

Type of investment desired :	Common investment requests :
- Capital expenditure: 29% - Working capital: 17% - Both : 54%	• Production machinery • Buying raw materials • Vehicles for distribution • Expand geographically (sales branches) • Product development • Technology and software investment • Logistics collection and distribution centres

Often, these green SMEs face limitations in accessing financial products tailored to their businesses from banks due to limited information available on their markets (for example the market for sustainable tourism) and technologies, or a lack of awareness of available financial products suited to their needs. This points to a first challenge:

(a) Insufficient evidence of longer-term market performance of green technologies and business models across sectors
The scarcity of information on green technologies and business models is reflected in a limited expertise of green technology in banks, including at the level of loan officers, and insufficient marketing of product offers across bank branches (GIZ 2014; ACTADE 2017). This relates closely to a second key challenge:

(b) Lack of organisational capacities to assess the viability of green investment performance projections

This lack of market and performance information and expertise is exacerbated by the informal and disaggregated nature of information that is available. Together, this results in high transaction costs for both assessing and disbursing finance to SMEs seeking financing for green investments across sectors. It also hinders the capacity of the financial sector to fully assess and report on the opportunity for financing green SMEs.

3. Solutions: Data-driven green SME investment frameworks

Globally, momentum is building to mobilise the resources and information needed to finance the transition to a green and inclusive economy. The EU Green Deal acknowledges the need for tools catered to financial institutions to build trust in and an understanding of the meaning and broader environmental, business and societal impacts of "sustainable investments" across the financial sector. The EU taxonomy for sustainable activities directly echoes Green Deal commitments by classifying activities and products by their contributions to climate change mitigation, adaptation and broader contributions to environmental sustainability.

The taxonomy ensures that financial sector actors (and others) have trustworthy, transparent, evidence-backed tools to identify viable green investments in their financing decisions. This taxonomy has inspired and been informed by the proliferation of other tools and frameworks designed to support the financial sector in assuming its role in financing environmentally sustainable economies.

Global evidence and frameworks of green investments can be transferred and adapted to the specific market conditions and opportunities in Uganda. The adaptation of such insights will support collation and classification of evidence of the market and investment performance of green SMEs. Frameworks such as the EU taxonomy, adapted in line with the priority areas outlined in the Uganda Green Growth Development Strategy, for example, could help to determine the eligibility of SMEs for green financial products, the target audience to whom green financial products should be marketed, and align internal reporting frameworks within the banks.

It could also support the standardised aggregation of data to build information on green markets, technologies and business models in Uganda. By providing clear definitions of green investments underpinned by categories for data collection and reporting, banks are able to better design and market green finance products across sectors.

Activities are already underway to collate data and draw insights into the bankability of SME green investment projects in Uganda. Various actors have taken the first steps to leverage 4IR to deliver data-driven tools that facilitate green finance:

Data-driven green banking tools

Through the AgrInvest Initiative, the FAO is working with UDB staff to develop tools for environmental impact tracking, namely to calculate the carbon balance of an agricultural (EX-ACT) or livestock (GLEAM-I) projects. With UNCDF, the initiative supports the uptake of digital tools within the bank, from client profiling to risk assessment with reference to geodata to deliver loans using a digital payment

system, overcoming issues of reaching rural agribusiness customers. The bank applies big data analytics to better understand and monitor agricultural investments and how these investments contribute to poverty reduction.

Within its implementation of the Green Uganda's Urbanisation and Industrialisation project, GGGI has partnered with Makerere University to develop a knowledge and engagement platform to collate and share insights relating to green cities development around key areas of effective and efficient waste management.

The Uganda Green Enterprise Finance Accelerator (UGEFA) is collecting data and insights from working with green enterprises in Uganda to address existing information gaps within the financial sector. Over four years (2020-2023) the Accelerator will support over 200+ green SMEs in the sectors of clean energy, sustainable tourism, sustainable transport and mobility, waste management, and green manufacturing (including agro-processing). The programme will mobilise $14 million in financing for these enterprises. These businesses will be traced to develop a comprehensive understanding of common technologies, investment needs, and investment performance over time.

Drawing from the opportunities of the 4IR, data-driven green SME investment frameworks can support banks to assess, access and report on the business opportunity of lending to green SMEs. In particular, by ensuring information transparency and decentralised decision making, these frameworks can address the current high transaction costs resulting from information gaps.

3.1 Ensuring Information Transparency

Ensuring information transparency enables the financial sector to develop green SME products that are backed by convincing evidence of green SME market and investment performance. This evidence could include market demand for the products and services provided by SMEs, financing needs and impact potential of common green business models and technologies, and the performance of financial

transactions with green SMEs. Core activities related to the development of transparent information on the performance of green SMEs include:

• Classifying green SME business models (accounting for sector, technology and business activities) linked to standardised global impact indicators.

• Collating validated data on the market and investment performance of these green SME businesses.

• Standardising financial products to benchmark green technologies against environmental impact data (e.g. emission savings, resource efficiency) and performance of common investments in the sector.

• Using information gathered to target marketing and development of financial products to the needs of green SMEs and to align reporting.

3.2 Decentralised Decision Making

Enabling decentralised green SME competences at the level of bank branches and loan officers can help build the green SME customer base. Operating in a wide range of sectors – from sustainable tourism to climate-smart or organic agriculture, and waste management – green SMEs are dispersed across the country. SME loan officers need to be empowered and equipped with clear green banking policies to apply the green SME investment taxonomy in their lending decisions. Core activities in this area include:

• Facilitating the development of green banking policies and processes within banks that are informed by available green investment information and assessment of the business case for offering green finance products and services.

• Leveraging these green banking policies and available tools to build the capacities of loan officers to make sound lending decisions in favour of green investments.

4. Key Recommendations

Starting with this year's Annual Bankers Conference, further insights and collaborative efforts from across the banking sector are needed to:

• Inform how banks can access trustworthy, transparent, evidence-backed tools (building on opportunities in the 4IR) to identify viable green investments in their financing decisions.

• Align on opportunities for SME support within priority green sectors in Uganda and the likely impacts of green investments in these areas.

• Respond to common challenges of accessing and deploying financing to a pipeline of bankable green SMEs, building the capacity of financial institutions and enterprise support programmes to operationalise green finance.

• Build a common understanding of green banking opportunities across the financial sector, both at the individual bank and national policy levels.

• Establish a hub for green financing capacity building and knowledge sharing with strong leadership from the Uganda Bankers' Association.

5. Author Biographies

Maggie Sloan is a Consultant at adelphi specialising in Green Entrepreneurship in the SEED and Uganda Green Enterprise Finance Accelerator (UGEFA) programmes. She co-leads the SEED Practitioner Labs for Climate Finance to guide financial actors to develop financial instruments targeting climate-smart SMEs. She co-leads Outreach and Partnerships and Impact Measurement and Monitoring for UGEFA. Her previous experience includes working for a disaster risk reduction and climate change adaptation project in Peru as well as on a clean cooking initiative in Indonesia. She received a Master of Science in Environmental Governance from the University of Oxford, concentrating in corporate environmental management.

Camilla Shearman is a Consultant at adelphi focused on Green Entrepreneurship in the SEED and Uganda Green Enterprise Finance Accelerator (UGEFA) programmes. Camilla leads the Catalyser programme and co-leads Impact Measurement and Monitoring at UGEFA. Her work has included the development of enterprise support tools, implementation of business advisor trainings, and facilitation of multi-stakeholder dialogues. Camilla studied her Masters in Economics and Business with a focus on sustainability at Sciences Po Paris, and conducted her capstone project with the European Investment Bank on civil society engagement in international financial institutions.

Martin Rohler is an independent consultant and Senior Associate at adelphi. He provides support for the adelphi finance and green entrepreneurship teams, including the Uganda Green Enterprise Finance Accelerator (UGEFA), in the areas of energy efficiency, SME and agricultural finance. A banker with roots in agriculture, Martin has successfully filled roles as a consultant, CEO, entrepreneur and board member with extensive project, product, budget and personnel responsibility. He has over 20 years of experience in over 35 countries with a focus on emerging and transition economies.