Greening the SMEs:
Improving SME Access to Green Finance in Mauritius

About PAGE Mauritius

The Partnership for Action on Green Economy (PAGE) seeks to put sustainability at the heart of economic policies and practices; and supports nations and regions in reframing economic policies and practices around sustainability to foster economic growth, create income and jobs, reduce poverty and inequality, and strengthen the ecological foundations of their economies. Complementary to UNEP FI, PAGE is a joint programme which brings together five UN agencies—UN Environment Programme, International Labour Organization, UN Development Programme, UN Industrial Development Organization, and UN Institute for Training and Research, to offer integrated and holistic support to countries on inclusive green economy, ensuring coherence and avoiding duplication. PAGE represents a mechanism to coordinate UN action on the green economy and to assist countries in achieving and monitoring the emerging SDGs.

Mauritius officially became a PAGE partner country in mid-2014 and since then, PAGE's work has supported national objectives as elaborated in a variety of strategic plans and government programmes, such as the *Mauritius National Vision*, the *Three-Year Strategic Plan: Rising to the challenges of Our Ambitions (2017/18–2019/20)*, *10-Year Masterplan for the SME Sector in Mauritius*, and "*Achieving Meaningful Change" (2016–2020).* Throughout this process, PAGE has worked with the Mauritian government as well as the private sector and civil society actors on a series of technical support programs and various green economy assessments. It seeks to promote innovation, increase efficiency of public institutions and develop skills in the labor force towards the advancement of shared and environmentally sustainable growth in Mauritius. PAGE activities in Mauritius are contributing to the achievement of: SDG 1(No poverty); SDG 4 (Quality Education); SDG 8 (Decent work and economic growth); SDG 9 (Industry, Innovation and Infrastructure); SDG 12 (Responsible Consumption and Production); SDG 13 (Climate Action) and SDG 17 (Partnerships for the Goals).

About UNEP FI

The United Nations Environment Programme Finance Initiative (UNEP FI) is a partnership between UNEP and the global financial sector to mobilize the private sector for sustainable development. It works with more than 300 members i.e. banks, insurers, and investors; and over 100 supporting institutions, to help create a financial sector that serves people and the planet while delivering positive impacts. The aim is to inspire, inform and enable financial institutions to improve people's quality of life without compromising that of future generations. By leveraging the UN's role, UNEP FI accelerates sustainable financing by supporting global finance sector principles to catalyze integration of sustainability into financial market practice, with the aim of creating the most effective network for sharing knowledge and best practice; and to amplify the collective voice of the finance sector in policy debate, engaging policymakers, regulators and supervisors on the role of the financial sector in contributing to sustainable development.

Disclaimer

The information contained in the report is meant for informational purposes only and is subject to change without notice. The content of the report is provided with the understanding that the authors and publishers are not herein engaged to render advice on legal, economic, or other professional issues and services.

Subsequently, UNEP FI is also not responsible for the content of web sites and information resources that may be referenced in the report. The access provided to these sites does not constitute an endorsement by UNEP FI of the sponsors of the sites or the information contained therein. Unless expressly stated otherwise, the opinions, findings, interpretations and conclusions expressed in the report are those of the various contributors to the report and do not necessarily represent the views of UNEP FI or the member institutions of the UNEP FI partnership, UNEP, the United Nations or its Member States.

While we have made every attempt to ensure that the information contained in the report has been obtained from reliable and up-to-date sources, the changing nature of statistics, laws, rules and regulations may result in delays, omissions or inaccuracies in information contained in this report. As such, UNEP FI makes no representations as to the accuracy or any other aspect of information contained in this report.

UNEP FI is not responsible for any errors or omissions, or for any decision made or action taken based on information contained in this report or for any consequential, special or similar damages, even if advised of the possibility of such damages.

All information in this report is provided 'as is', with no guarantee of completeness, accuracy, timeliness or of the results obtained from the use of this information, and without warranty of any kind, expressed or implied, including, but not limited to warranties of performance, merchantability and fitness for a particular purpose. The information and opinions contained in the report are provided without any warranty of any kind, either expressed or implied.

This publication has been produced with the support of PAGE funding partners. The contents of this publication are the sole responsibility of PAGE and can in no way be taken to reflect the views of any Government. The designations employed and the presentation of the material in this publication do not imply the expression of any opinion whatsoever on the part of the PAGE partners concerning the legal status of any country, territory, city or area or of its authorities, or concerning delimitation of its frontiers or boundaries. Moreover, the views expressed do not necessarily represent the decision or the stated policy of the PAGE partners, nor does citing of trade names or commercial processes constitute endorsement.

Rights and Permissions

Acknowledgements

This study was produced by the United Nations Environment Programme Finance Initiative under leadership of the Partnership for Action on Green Economy (PAGE).

The study was prepared by a team led by Reuben Wambui (Africa Regional Coordinator, UNEP FI) and supported by Mercy Okoth (Consultant, UNEP FI) and Diana Adhiambo. The team received overall support and guidance from Liesel Van Ast (Membership and Regional Co-ordination Manager, UNEP FI), Joya Bhandari (UN PAGE Mauritius National Coordinator), Beibei Gu (UN PAGE Mauritius Focal Point) and Adebiyi Odegbile. We are grateful to Robert Wilson for design and layout of the report.

UNEP and the partners of the PAGE initiative would like to thank the Government of Mauritius for its cooperation. In particular, representatives from a Working Group chaired by the Ministry of Industrial Development, SMEs and Cooperatives, provided invaluable guidance in the initial stages of the study, including Mr. Abdool Nooranee Oozeer and Mr. Dhanraj Conhye. The report benefited from suggestions and comments from a wide range of ministries including the Ministry of Finance, Economic Planning and Development (Ms. Waseefah Elahee Doomun), the Ministry of Industrial Development, SMEs, and Cooperatives (Mr. Nunramsing Baichoo and Mrs. Varsha Veeramah-Ramiah), to whom the team is thankful. Special thanks are due to SME Mauritius (Ms. Meera Chatooree) for mobilising the private sector to participate actively in the report survey. Special thanks also to the participating enterprises for their interest, collaboration and enthusiasm.

PAGE gratefully acknowledges the support of all its funding partners: European Union, Finland, Germany, Norway, Republic of Korea, Sweden, Switzerland and the United Arab Emirates.

Citation

PAGE (2021), Greening the SMEs: Improving SME Access to Green Finance in Mauritius.

Foreword

I would like, at the outset, to express my appreciation to UNEP FI and PAGE for extending their support to conduct this study on greening of SMEs, in particular, to improve access to green finance in Mauritius. The collaboration of my Ministry and the Ministry of Finance, Economic Planning and Development was roped in for the study.

This study comes at an opportune time.

On the one hand, after having supported and shielded SMEs from the full brunt of the COVID-19 pandemic, Government's present focus is on recovery and no stone is being left unturned to explore new business opportunities for SMEs.

On the other hand, we are fully conscious of the disastrous impacts of climate change on the planet and of our resolve to lower our carbon emissions in line with the "Paris Declaration". We, also, fully adhere to the "Glasgow Climate Pact" calling for renewed efforts to raise ambition on cutting emissions, climate finance, adaptation and the loss and damage already being caused by global warming.

The Report establishes that access to finance is a significant barrier to investment in green business projects by SMEs and existing financial facilities do not cater specifically for the green needs of SMEs, start-ups, young entrepreneurs and women entrepreneurs. It also proposes the development of a roadmap and an action plan to scale up green financing for SMEs.

We are conscious of the need to capitalise on green businesses, green solutions, green technologies, green jobs, investment in the low-carbon economy and recognise the economic opportunities that the green economy can offer to SMEs, in particular. Advancing the country on the path of inclusive and green growth is embedded in the Government Programme 2020–2024.

More investments by the Government have been directed towards sectors such as renewable energy, energy efficiency projects, green agriculture, improved waste management, green agriculture and low-carbon transport. Government will continue to play a key role in supporting SMEs in their green transition, facilitating adoption of new technologies and access to finance, and upskilling of employees.

We will work closely with concerned stakeholders and our development partners to give priority consideration to the development of the road map and action plan for our SMEs to fully engage in the green economy and adopt sustainable practices.

Hon. Soomilduth Bholah
Minister of Industrial Development, SMEs and Cooperatives of Mauritius

Foreword

Being a small island developing state, Mauritius is facing adverse effects of climate change resulting in considerable economic loss, humanitarian stresses and environmental degradation. Against a backdrop of a global pandemic, Mauritius' recovery actions towards climate change resilience and sustainable development are well encapsulated in the phrase "Think Global, Act Local". Mauritius development is heavily bound to the global economy, which saw the country's economy suffer adverse effects to its tourism, energy and food industries following global closure of borders due to the COVID-19 pandemic.

Going forward, building a green economy will require rethinking of the country's economic model to develop sustainable and productive local capabilities with a special focus on small and medium enterprises (SMEs). SMEs play a key role in overall economic development but also significantly contribute to overall industrial pollution, thus need to be prioritized in the transition to a green economy.

Access to finance remains a significant barrier to greening of SMEs. Integrating environmental criteria into SME financing is key to creating sustainable development outcomes. This report makes a timely contribution by assessing access to, and use of, green finance by SMEs in Mauritius and by extension the integration of sustainability in their business operations. It also discusses policy options as Mauritius continues to move towards a green economy. The report has three key messages.

First, Mauritian authorities have made commendable policy efforts towards incentivizing businesses to engage in sustainable practices, as seen in the 2020–2021 National Budget and the 10-year SME Master Plan. However, public financing alone cannot fully fund SME adoption of green practices. Thus, the

report also highlights innovative SME green financing schemes from commercial lenders towards advancing environmental sustainability.

Second, SMEs face knowledge, financial, policy and size barriers inhibiting them from accessing green finance. These barriers highlight areas of opportunity for policy intervention to support SMEs to adopt and finance appropriate green technologies and innovations. There is still a need to expand structures, strategies, initiatives and policies that are specific to green finance for SMEs. Further, awareness needs to be created on available support and initiatives, to allow SMEs to take full advantage of them. As a result, more SMEs will gain motivation to incorporate green projects within their operations and in turn acquire green financing.

Third, following increasing unemployment and income losses precipitated by the COVID pandemic, support measures are needed to protect small-scale enterprises and prevent them from reverting to negative coping strategies undoing the commendable progress made so far towards greener and more inclusive development. Towards national economic recovery from COVID-19 impacts, the government of Mauritius has launched a Green Recovery Project, with the technical assistance of the Partnership for Action on the Green Economy (PAGE) and funding from the German government. These activities are aimed at creating an enabling business environment and developing incentives to promote a sustainable agro-food industry and the expansion of SMEs in the sector.

Eric Usher
Head
UN Environment Programme Finance Initiative

Table of Contents

List of Tables

List of Figures

List of Acronyms

ADF	African Development Fund
AFD	Agence Française de Développement
AGF	African Guarantee Fund
BMCE	Morocco Bank of Foreign Commerce
BOM	Bank of Mauritius
CBRC	China Banking Regulatory Commission
CEB	Central Electricity Board
CCC	Climate Change Centre
CFP	Catalytic Finance Partner
CHUEE	China Utility-Based Energy Efficiency Finance Program
Cicero	Center for International Climate Research
COVID-19	Corona Virus Disease 2019
CSRC	China Securities Regulatory Commission
DAI	Development Alternatives, Inc.
DBM	Development Bank of Mauritius
DEM	Development and Enterprise Markets
DH	Moroccan dirham
EBRD	European Bank for Reconstruction and Development
EIB	European Investment Bank
ESCOs	Energy Service Companies
EU	European Union
EU NIF	European Union Neighborhood Investment Facility
EUR	Euro
FDI	Foreign Direct Investment
GAP	Green Action Plan
GDP	Gross Domestic Product
GEF	Global Environment Facility
GEFF	Green Economy Financing Facility
GIZ	German Development Cooperation Agency
GOF	Green Outcomes Fund
GVA	Gross Value Added
ICT	Information Communication Technology
IDC	Industrial Development Corporation
IFC	International Finance Corporation
ISP	Investment Support Programme
KfW	Kreditanstalt für Wiederaufbau
KWh	Kilowatt hour
LEMS	Leasing Equipment Modernization Scheme
LLRF	Loan Loss Reserve Fund
MARENA	Mauritius Renewable Energy Agency

MCB	Mauritius Commercial Bank
MCCI	Mauritius Chamber of Commerce and Industry
MEDIA	Mauritius Export Development and Investment Authority
MEPU	Ministry of Energy and Public Utilities
MoBEC	Ministry of Business, Enterprise and Cooperatives
MoESDDBM	Ministry of Environment, Sustainable Development, and Disaster and Beach Management
MorSEFF	Morocco Sustainable Energy Financing facility
MPCB	Mauritius Post and Cooperative Bank Ltd
MRC	Mauritius Research Council
MSMEs	Micro, Small and Medium sized Enterprises
MUR	Mauritian Rupee
MWh	Megawatt hour
NDF	Nordic Development Fund
NGFS	Network of Central Banks and Supervisors for Greening the Financial System
NSIS	National SME Incubator Scheme
OECD	Organization for Economic Cooperation and Development
ODI	Overseas Development Institute
PAGE	Partnership for Action on Green Economy
PET	Polyethylene terephthalate
PSEE	Private Sector Energy Efficiency
SACCO	Savings and Credit Cooperative
SBM	State Bank of Mauritius
SCP	Sustainable Consumption and Production
SDGs	Sustainable Development Goals
SEM	Stock Exchange of Mauritius
SEMDEM	Stock Exchange of Mauritius Development and Enterprise Market
SEMSI	Stock Exchange of Mauritius Sustainability Index
SGB	Small and Growing Businesses
SID	Small Island Developing States
SMEDA	Small and Medium Enterprises Development Authority
SMEs	Small and Medium-sized Enterprises
SSE	Sustainable Stock Exchanges
SUNREF	Sustainable Use of Natural Resources and Energy Finance
UNCTAD	United Nations Conference on Trade and Development
UNDESA	United Nations Department of Economic and Social Affairs
UNDP	United Nations Development Programme
UNEP	United Nations Environment Programme
UNEP FI	United Nations Environment Programme Finance Initiative
UNFCCC	United Nations Framework Convention on Climate Change
UNIDO	United Nations Industrial Development Organization
UNOPS	United Nations Office for Project Services
USD	United States Dollar
WHO	World Health Organization

A. Executive Summary

Small and Medium-sized Enterprises (SMEs) in Mauritius contribute significantly to job creation, innovation and shared prosperity. There is an increasing focus on SMEs as drivers of innovation for sustainable development. For Mauritius to accelerate the sustainability transition, further attention is required to support the financial needs of SMEs. This research study is an assessment of the access to, and use of, green finance by SMEs in Mauritius. The study by extension evaluates the integration of sustainability in the business operations of SMEs. The study identifies the gaps in green financing, explores lessons from other countries and regions, and proposes potential solutions to scale up green finance opportunities for SMEs.

The study acknowledges that the legal and the technical definition of SMES varies and thus makes it difficult to make any general assertion for SMEs as a group. The study adopts the definition proposed by the Small and Medium Enterprises Act 2017 based on annual turnover.

The landscape of SMEs in Mauritius is highly skewed towards enterprises with less than MUR 2 million annual turnover, with most requiring low-skills operations and involving low value addition activities. To support SMEs, the government set up tax incentives for SMEs' export profits and an SME equity fund that invests in SMEs in Mauritius. The 10-Year Master Plan for the SME Sector in Mauritius (2017) makes recommendations to reshape the entrepreneur landscape and sets targets for SMEs by 2026. In addition, through the annual national budgets, the government continues to make efforts to create favorable policies and incentives such as tax incentives and fee subsidies to support SMEs.

Sustainability is a key theme for the country's development. Moving towards sustainability and responsible investment, the government of Mauritius recently launched its new national programme for 2020–2024: *"Toward an Inclusive, High Income and Green Mauritius, Forging Ahead Together"*. Through the programme, the government is committed to developing environmentally sustainable development policy based on four pillars; investing in clean energy, mitigating risks from climate change, protection of marine resources and shifting to a cleaner and greener Mauritius. The government has also signed an agreement with the European Union (EU) to address climate change adaptation and mitigation. Further, it also has a national program on Sustainable Consumption and Production (SCP) which focuses on green practices with 13 projects successfully implemented.

Public and private sector engagement is picking up as shown by the number of financial institutions and actors that have taken the initiative to create a segment for the financing or incentivizing of SMEs whilst others provide green finance. The Mauritius Commercial Bank (MCB), State Bank of Mauritius (SBM) and AfrAsia Bank Limited (AfrAsia) through a credit line from the Agence Française de Développement (AFD) provide green loans to help firms save energy and reduce their carbon emissions. Institutions such as MauBank, Development Bank of Mauritius (DBM), and Mauritius Research and Innovation Council (MRIC) have schemes that support the growth and development of SMEs in Mauritius. Also, the Stock Exchange of Mauritius (SEM) developed sustainability indexes that identify companies based on strong sustainability practices. Furthermore, there exists programmes and initiatives that support the greening of the Mauritian economy such as the Switch Africa Green Programme and the Green Climate Fund.

Specific barriers linked to insufficient green finance for SMEs include:

- Knowledge barriers that hinder the integration of green financing as SMEs' owners in Mauritius lack adequate awareness on green financing and executing green projects.
- Financial barriers that hinder SMEs from taking up green business projects due to larger initial capital costs, risk of investing in green SMEs and unfavorable financing terms.
- Regulation and policies on green finance are often inadequate and do not cater to the specific SME needs.
- Available incentives and products often ignore the life stages of SMEs, especially startups and are thus not tailored to their specific investment needs.

To improve the integration of green finance for SMEs in Mauritius, knowledge, finance, regulatory and policy barriers need to be addressed. The study makes some key recommendations:

- Scale up public investments channeled towards green projects for SMEs
- Adequate policy incentivization through green finance policies and incentives
- Improved SME sector awareness on commitments from the government and commercial lenders to green projects and green financing
- Financial institutions to enhance risk analysis of SMEs green projects
- Expanded green products/loans with favorable lending terms for SMEs

Over the years, Mauritius has taken certain green finance actions that have helped to promote and accelerate sustainable business offerings. This study proposes possible next steps which if taken could improve the integration of green finance for SMEs which include:

- The Government intensifying green finance policies and incentives
- Provision of green loans by development banks, local banks, and other financiers
- Provision of several SMEs schemes and funds specific to green business development e.g. the Switch Africa Green project whose current scope is manufacturing, agriculture and tourism sectors
- Awareness campaigns on green business development and securing green finance

The study also discusses practices, outcomes and lessons learned in the SME green finance space across different countries that can be adopted and tailored to fit the Mauritian local context.

Reducing waste through recycling contributes to sustainable development through pollution control, resource recovery among many more. The study looks at SME involvement in recycling, solutions to challenges faced by SMEs and avenues of development for SMEs to engage in recycling.

Finally, COVID-19 has brought global disruption, with unprecedented economic volatility and slowdown. Mauritius has been highly vulnerable especially in key sectors such as tourism, and the government has been keen to enact interventions to control the effects of the pandemic and boost economic recovery. While this poses a challenge for Mauritius, it also presents a watershed moment for the country to align economy recovering to more sustainable an inclusive practice and thus "Build Back Better". In response to the pandemic, the Government of Mauritius has outlined substantive policy interventions to support the private sector to mitigate the impact of COVID-19, and at the same time prevent its rapid spread.

B. Introduction and background

1. Study Context

Mauritius greenhouse emissions have been growing yearly, as the country continues to develop its economy. Specifically, carbon dioxide emissions grew substantially between 2010 and 2020 from 3,290 thousand tonnes to 5,200 thousand tonnes. Mauritius seeks to promote a paradigm shift to low-emissions and adapt to climate change as the country is among the highly vulnerable to climate change impacts. Thus, the government of Mauritius has been consistent in its efforts to develop policies, strategies and initiatives to transform Mauritius into a green economy. More investments by the government have been directed towards sectors such as renewable energy, energy efficiency projects, green agriculture, improved waste management, green agriculture and low-carbon transport.

Small and Medium-sized Enterprises (SMEs) play a key role in the economic development of Mauritius but have limited investment in controlling for their contribution to overall industrial pollution through their own operations or across their value chain. This presents a huge gap and therefore huge opportunity for SMEs to promote a sustainable and inclusive economy.

Green finance is a broad term that refers to any flow of finances, be it from banks, microcredit, insurance, investment, public sector and non-for-profits, offered under sustainability considerations specific to environmental factors and that are provided to promote environmentally responsible investments and stimulate low-carbon technologies, projects, industries and businesses.[1] Participation of financial institutions such as banks, and investors in green investment initiatives is crucial. The banking sector plays a major role in fostering green finance as microfinance banks are one of the main financiers to SMEs. The Agence Française de Développement (AFD) has partnered with two commercial banks in Mauritius to build on their capacity to drive and catalyze green investment decisions. These include customized loans, advisory services for clients and a grant.

This research study seeks to assess the extent to which sustainability has been integrated into financing SMEs. This includes loans and other financing facilities available for start-ups, young entrepreneurs and women entrepreneurs. Furthermore, the study seeks to identify the gaps that exist, possible solutions to the gaps, and the potential to scale up green financing for SMEs in Mauritius.

1 Hybrid definition of green finance as per UNEP and PwC

2. Study Objectives

The research study seeks to assess the level of integration of environmental sustainability in the financing of SMEs in Mauritius. The study examines the current state of green finance frameworks, practices and structures relevant to the financial sector and the potential to scale up green financing for the SME sector allowing increased access to green finance opportunities. Furthermore, it seeks to identify the gaps thereof and thereafter propose a roadmap and action plan to scale up green financing for SMEs in Mauritius.

3. Study Approach and Methodology

The study was conducted using the following methodologies:

- **Desktop review of existing literature:** We carried out desktop research on relevant information and key statistics of the financing of SMEs, with a focus on green finance in Mauritius using electronically available materials.
- **SMEs interviews:** Due to the COVID-19 restrictions and containment measures, we interviewed 40 SMES using self-administered surveys and phone interviews on green financing of SMEs in Mauritius.
- **Commercial lenders interviews:** Similar to SME interviews, we reached banks and other commercial lenders through a self-administered survey targeted at the commercial lenders on their green finance mechanisms and products.
- **Government interviews:** We carried out interviews with senior public sector leaders in Mauritius government ministries.
- **Development partners interviews:** The report was further enriched by input from development partners collected through interviews conducted over the phone and online video communication platforms.

C. Landscape of SMEs in Mauritius

1. SMEs in Mauritius

Definition of SMEs in Mauritius

The definition of SMEs varies across countries, institutions and different users, hence there is no standard definition. Generally, it is influenced by factors such as the value of firms' financial turnover, number of employees, number of customers, business sector, complexity of operations, and technology in use.

The study adopts the definition proposed by the Small and Medium Enterprises Act 2017 based on annual turnover as follows:

Table 1: Criteria for defining SMEs

Category	Annual Turnover (MUR)
Micro	<2 Million
Small	2–10 Million
Medium	10–50 Million

Source: SME Act 2017

2. Economic contribution and significance of SMEs

According to the World Bank, SMEs make up more than 90% of enterprises and 50% of employment worldwide. In Mauritius, SMEs contribute about 36% of gross value added in the economy and 49% of total employment as shown in table 2.[2] This number is significantly higher when informal SMEs are included. SMEs have a significant contribution to the overall economic growth and development as they provide opportunities for processing activities which generate sustainable revenue. Moreover, SMEs create linkages between small and large firms thus forming a flexible economic system which is vital in attracting foreign investment.

2 statsmauritius.govmu.org/Pages/Statistics/By_Subject/SME/SB_SME.aspx

Table 2: Value Added & Employment of SMEs for 2002, 2007, 2013 and, 2016, 2019

	2013	2016	2019
Value added of SMEs (MUR million)	114,094	128,161	156,037
GVA at basic prices (MUR million)	329,009	385,902	437,620
% contribution of SMEs to GVA	35	33	36
Employment in SMEs	264,920	277,620	284,574
Total Employment	552,000	567,200	582,000
% of SMS in total employment	48	49	49

Source: Statistics Mauritius Historical Data Series

As back as the 1980s, SMEs emerged as providers of direct services to the population at large. Such services included providing textile and garment factories, value addition and support services such as transport and catering. These services have evolved and have become dominant within the economy of Mauritius and play a significant role in economic growth and in improving living standards.

According to the latest data from Statistics Mauritius, the following trends have been observed from 2013–2019:

- **Employment:** The number of persons employed by SMEs increased by 14% from 264,900 to 284,574
- **Value added:** The total value added by SMEs increased by 42% from MUR 114,094 million to MUR 156,037 million
- **Exports:** The Contribution of SMEs in total domestic exports rose from 7.2% in 2013 to 11.7% in 2019.

Despite the increase in their value addition, the landscape of SMEs in Mauritius is highly skewed towards enterprises that are highly labour intensive with low value addition; with 47% of SMEs operating at almost subsistent levels with annual turnovers of less than MUR 2 million with five or fewer employees whereas 15% of SMEs are involved in high growth sectors such as ICT, financial and professional services.[3]

Generally, there has been an increase in the performance of SMEs in Mauritius since 2013. However, the contribution of small production units towards the gross domestic product is relatively low at 40%, a typical situation of a country trapped within the middle-income trap.

3 mcci.org/media/154352/sme-master-plan1.pdf

D. Policy and Regulatory Framework for SMEs

According to the World Bank (2020), the Mauritian policy environment for SMEs has been observed to be more enabling and friendlier as compared to many nations in Africa and the Indian Subcontinent. Policies play a major role in devising the right entrepreneurial ecosystem for SMEs to thrive as market forces alone are not adequate. The government is a key policy enabler and facilitator for demand-driven support programmes and schemes for SMEs. The private sector is often consulted before policy programmes and initiatives are implemented and their views also shape policies.

SME-focused government policies in Mauritius include:

- **SME equity fund:** This is a fund that invests in start-ups, expansion projects and new lines of business. It provides equity, quasi-equity financing to SMEs in Mauritius.
- **Tax incentives for exports:** To encourage domestic firms to expand their export capacity and seek new markets, especially the SMEs, the government implemented tax reforms so profits from exports of goods would be taxed at the lower rate of 3% instead of 15%.[4]
- **The 10-Year Master Plan for the SME Sector in Mauritius (2017)**: The master plan makes recommendations to reshape the entrepreneur landscape and sets targets for SMEs by 2026. The plan also recommends thematic actions for the greening of SMEs in Mauritius.

1. The 10-year master plan for the SME sector

The master plan was set up in 2017[5] by the Ministry of Business, Enterprise and Cooperatives (MoBEC) and is driven by the government's vision of making SMEs competitive and the sector an engine for growth. The objectives within the master plan are to:

- **Improve SME competitiveness:** SMEs have productivity levels estimated to be about 45% to 60% (garment manufacturing) as compared to more than 85% in larger enterprises, thus SMEs are showing the characteristics of sluggish players. 45% of SMEs stagnate largely because of the use of outdated technology, low labour productivity and product quality that seldom matches international standards. Under such condi-

4 mof.govmu.org/Documents/Documents/Budget%202017-2018/Budget2017-2018/2017_18budgetspeech.pdf
5 enterbusiness.govmu.org/SiteAssets/MofedStyles/Documents/SME%20Master%20Plan_Full%20Version_FINAL.pdf

tions, Mauritian SMEs cannot compete with low-cost and high-volume producers from China and India, etc. SMEs need to significantly raise their competitiveness to be able to compete globally.

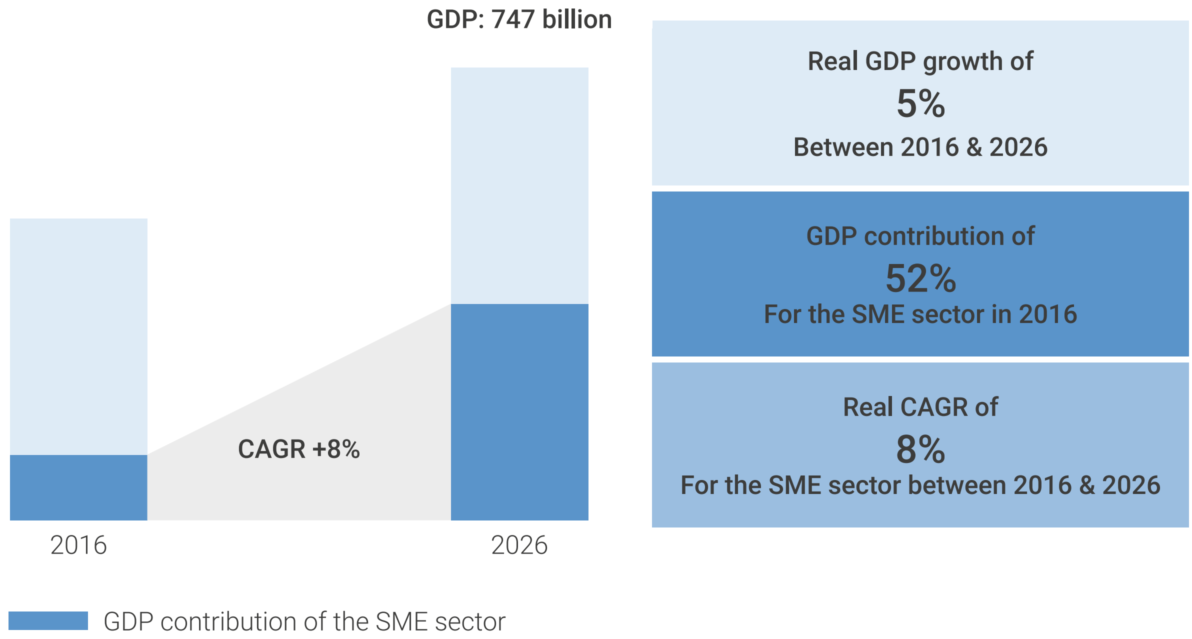
- **Foster high growth potential SMEs**: With 59% of stagnating SMEs with a turnover of less than MUR 2 million, new start-ups should be encouraged to do business in high growth potential sectors such as ICT, finance and professional services, and knowledge-based activities. Additionally, targeted incentives should be developed to encourage new startups to develop value-addition ventures in traditional sectors such as fishing, farming and agriculture. However, it should be recognized that they will have different needs at different stages of their business evolution and a 'one size fit all policy' will not be effective.
- **Upgrade skills and job opportunities:** Entrepreneurs have a difficult time attracting the right talent and retaining the best resources they have developed over time. Recruiting candidates with the appropriate experience and skill set is difficult, compared to recruiting labor with the appropriate academic qualifications, which is relatively simple. There is a pressing need to close the skills gap in the labor market and provide satisfying and financially rewarding job opportunities. Universities and business schools must teach specific skills and attitudes to their graduates in order for them to be job-ready for start-ups and SMEs. Similarly, the private sector should recognize the need for specific human resource requirements for entrepreneurship to thrive and support the government's efforts in this area.
- **Improve value creation:** To foster an innovation-driven economy, the entire spectrum of the business landscape needs to devote enough resources to research and development. Entrepreneurs should be empowered to be innovative for value addition across the value chain: products and services differentiation and upgrading; raising the efficiency of procurement systems; production process redesign; and revamping distribution and marketing channels. By strategically embedding innovation in their business models, SMEs are in a better position to target remunerative market niches with differentiated and branded offerings. It is therefore important that the IP protection framework is strengthened to encourage investments in research and development (R&D) for distinct and high-value products, proprietary technologies and branding.
- **Increase market share:** SMEs must be given the necessary support to develop export markets and enter regional commercial openings to increase their footprints and overcome the size limitation constraints of the domestic territory. SMEs are faced with several marketing constraints, mainly due to their limited marketing capabilities. Policies that improve the market by providing SMEs with intelligence, market development support and logistics to integrate the global supply chain, should be prioritized.

The desired combined outcomes of the five objectives lead towards the target 2026 of the Master Plan which are GDP growth, employment creation, increased exports and value addition. The targets for SMEs by 2026 from 2016 are as follows:

- **GDP contribution:** Raising contribution to GDP from 40% to 52% with an average overall GDP growth of 5% and 8% for the SME sector as shown in figure 2

- **National employment:** Raising SMEs' share of total national employment from 55% to 64%
- **Export contribution:** Increasing current exports from less than 3% to about 18%
- **Value addition:** Raising the value addition from MUR 175 billion to 388 billion

Figure 1: Contribution of the SME sector 10-year plan



Source: 10-year Master Plan for The SME Sector in Mauritius

2. National budget

In the **budget year 2017–2018,**[6] there was an allocation of MUR 100 million towards the implementation of the SME 10-year master plan over the next three years. Other measures introduced under the budget were as follows:

- **DBM interest rates**: DBM was to provide credit facilities of SMEs at an interest rate of 6% and micro-enterprises at the rate of 3%
- **Tax reform:** To encourage domestic firms to expand their export capacity and seek new markets, especially the SMEs, the government implemented tax reforms so profits from exports of goods would be taxed at the lower rate of 3% instead of 15%[7]
- **Loan collaterals:** Movable assets to be used as loan collaterals
- **Export financing facility**: Loans to be issued at concessionary rates

6 mof.govmu.org/Documents/Documents/Budget%202017-2018/Budget2017-2018/2017_18budgetspeech.pdf
7 mof.govmu.org/Documents/Documents/Budget%202017-2018/Budget2017-2018/2017_18budgetspeech.pdf

The national budget 2019–2020[8] put the following policies in place to support the SMEs sector:

- **DBM Maximum loan:** Maximum loan increased from MUR 250,000 to MUR 500,000 under DBM Micro-Credit Loan Scheme
- **SME Financing Scheme:** An extension of the SME Financing Scheme for three years
- **SME Factoring scheme interest rate:** A reduction of the interest rate from 5.5% to 3.9% under the SME Factoring Scheme
- **Manufacturing and trading SMEs tax incentive:** SMEs with an annual turnover of MUR 10 Million and engaged in manufacturing or trading of goods would be given an option to pay 1% of turnover as final income tax on business income or file normal income tax return (MCCI, 2019)

More recently in the **Budget Speech 2020–2021,**[9] the government has embarked on a mission to support and foster entrepreneurship and protect the livelihoods of SMEs. The government plans to do the following:

- **Public procurement preference:** Provide a margin of preference of 30% on public purchases to manufacturing SMEs
- **Dedicated Venture Capital Market:** Set up a dedicated Venture Capital Market that will be set up at the Stock Exchange of Mauritius for start-ups and SMEs
- **Factoring fee subsidy:** The Investment Support Programme (ISP) Ltd is expected to subsidize 50% of the factoring fee per invoice for SMEs
- **Procurement of specific goods and services:** The Procurement Policy Office will require Public Bodies to procure specific goods and services from SMEs only
- **Payment period for goods and services:** Public Bodies will pay SMEs within 14 days from the date of invoices in respect of the supply of goods and services
- **Contribution Sociale Generalisee:** Under the Contribution Sociale Generalisee, there will be a movement towards a more progressive system of contribution which will benefit SMEs
- **'Made in Moris' label preference**: SMEs holding the 'Made in Moris' label will benefit from a Margin of Preference of 40% instead of 30% under Public Procurement

In a quest to secure a greener and more inclusive development while preserving a strong social fabric, the government earmarked MUR 100 Billion on the National Budget 2020–2021. In addition, there are plans to introduce Green and Blue bond frameworks by the Bank of Mauritius to enhance the competitiveness of the financial service sector.

8 mof.govmu.org/Documents/Documents/2019/2019_20budgetspeech.pdf
9 mof.govmu.org/Documents/Documents/Budget%202020-2021/Budget%20Speech%202020-2021%20%28English%29.pdf

E. State of Sustainability for SMEs in Mauritius

1. Sustainability in Mauritius

Sustainability is a key theme for the country's development, especially given that Mauritius is a renowned biodiversity haven with impressive environmental conservation and marine life protection. Mauritius has taken efforts to invest in sustainable development projects that aim to protect its environment by curbing the effects of climate change and the reliance on high-carbon energy sources. The ministry signed an agreement with the European Union in 2018, to address climate change adaptation and mitigation in the Republic of Mauritius (Ministry of Social Security, 2018/2019). The Joint Monitoring framework aims to progress on 6 targets by 2020. The targets are as follows:

- Reduce greenhouse gas emissions
- Improve the resilience of the coastal zone
- Implement an effective national disaster risk reduction strategy
- Enhance resilience against high-intensity rainfall events in flood-prone areas
- Enhance native forest cover and tree plantation for an enhanced sink capacity and to increase use of renewable energy sources by 2030

Mauritius has a national program on Sustainable Consumption and Production[10] that prioritizes five areas (UNEP, Sustainable Consumption and Production in Africa, 2002–2012):

- **Resource efficiency in energy, water and sustainable buildings and constructions**: The initiation of energy auditing systems, energy-efficient public procurement; initiation of codes and regulations for water, audits and rainwater harvesting systems; initiation of guidelines and a rating system, amendment of building regulations, and financial incentives for sustainable building and construction.

- **Education and communication for sustainable lifestyles**: Promotion of national awareness; training; locally adapted education materials targeting SMEs and award programmes.

- **Waste management and recycling**: Promotion of supermarket waste recycling; diversion of organic wastes from the hotel sector; backyard composting; elaboration of integrated waste management plans in all local authorities.

10 wedocs.unep.org/bitstream/handle/20.500.11822/8779/SCP_AFRICA_Final_with_cover.pdf?sequence=3&isAllowed=y

- **Sustainable public service practices:** Implementation of a sustainable public procurement framework.

- **Market opportunities for sustainable products:** Development of national eco-labelling framework; financial incentives; capacity building for industry in life cycle management and corporate sustainability reporting.

According to a report by the United Nations Development Programme (UNDP) and the United Nations Department of Economic and Social Affairs (UNDESA), more than 13 projects have successfully been implemented under this program. They include:

- Development of Minimum Energy Performance Standards for key household appliances
- Capacity building of Energy Audit providers
- Green Building Rating system with Integrated Guidelines which promote sustainable buildings
- An action plan for Green Public Procurement, among others

The Mauritian government has embarked on a Blue Flag Programme to promote the sustainable use of the coastal resources and sound national policies on lagoon water quality, protection of the beaches, among other things.

In addition, based on the national budget speech 2020–2021, the Mauritian government plans to unlock the potential of the blue economy by implementing the following measures:

- **Investment in fishing activities:** Mauritius Investment Corporation will invest in joint ventures engaged in fishing activities and its value chain

- **Tax holiday & VAT exemption:** Inland aquaculture scheme will introduce an 8-year tax holiday and duty and VAT exemption on equipment

- **Bad weather allowance:** Bad weather allowance to fishermen will increase from MUR 365 to MUR 425 per day

- **Blue bond framework:** Introduction of a blue bond framework by the Bank of Mauritius

The Mauritian government also gives a strong signal towards becoming a greener economy. The government is set to do the following:

- **Eco-label scheme:** Introduce an eco-label scheme for the environment and sustainability of the tourism sector

- **Green jobs:** The target is to increase the percentage of green jobs from 6.3% to 10% by 2020

- **Sound Marine Spatial Planting:** The government is pursuing a programme underpinned by Sound Marine Spatial Planting and it also encourages measures such as community-based coral planting

- **Green bond framework:** Introduction of a green bond framework by the Bank of Mauritius

2. Green Projects for SMEs in Mauritius

SMEs play a key role in the economic development of Mauritius but they also contribute significantly towards the overall industrial pollution. While large-scale industries produce more pollution than SMEs, their preferential access to capital investments and new technologies makes it comparatively easier and more economical for them to control their pollution (Ramjeawon, 2004). Several factors hinder industrial pollution control by SMEs. These include:

- lack of access to resources to aid in investments in pollution control
- low level of technology
- lack of space
- non-availability of trained personnel
- the unwillingness of management to invest in environmental protection due to commercial viability

Most large industries in Mauritius are well structured and organized and are sometimes supported by internationally reputable mother companies whereas SMEs in Mauritius are mostly family owned or owned by a small group of shareholders. The environmental management approaches adopted by these two types of enterprises differ considerably.

The SME 10-year master plan recommends opportunities to develop high growth potential sectors such as green energy, bio farming and ocean economy. Switching to green manufacturing methods is strongly advocated for SMEs, as it is seen as a crucial growth element that may favorably affect demand and shift supply to more sustainable production and consumption modes. Once SMEs switch to green production and consumption, they will be able to access green finance products.

F. Green Finance Options in Mauritius

1. Green Financing in Mauritius

The term "Green Finance" complements Sustainable Development by taking care of economic benefits along with environmental benefits. Green finance is a broad term that refers to any flow of finances (be it from banks, microcredit, insurance, investment, public sector and non-for-profits) offered under sustainability considerations specific to environmental factors and that are provided to promote environmentally responsible investments and stimulate low-carbon technologies, projects, industries and businesses.[11]

Green Finance is an inevitable component for ensuring sustainable development because a green and human-friendly environment for present and future generations cannot be thought of without making necessary human-friendly financial arrangements in investment activities. This type of financing is becoming more prominent, driven by the scale and urgency of the challenge of financing sustainable development, and the realization that only a fraction of this can realistically come from public sources.

There is a growing need for green finance in Mauritius due to the shift to an Inclusive Green Economy, specifically to meet the SDGs. Based on the requirements of the regulatory framework and policymakers in Mauritius, banks are encouraged to adopt a more proactive and pragmatic approach towards designing their products and services to better serve their customers and cater for future developments. To do this, banks are encouraged to develop a sustainability development culture in line with the 'greening' of Mauritius. In addition, Mauritius hosts a Blue carbon award to reward private sector initiatives that reduce their carbon emission and they highlight opportunities for other private companies.

Mauritius joined the Sustainable Stock Exchanges (SSE) Initiative and developed sustainability strategies and requirements. It introduced sustainability reporting guidelines on a voluntary basis by using a market education and engagement approach. The main driver being, demands and concerns from international institutional investors and their desires to demonstrate international best practices in corporate governance. There is massive encouragement towards sustainability reporting which has led companies within Mauritius to adopt environmental and ethical management standards and practices. Furthermore, the Mauritius stock exchange developed sustainability indexes that identify companies based on strong sustainability practices by using a set of internationally aligned and locally relevant environmental, economic, social and governance criteria.

11 Hybrid definition of green finance as per UNEP and PwC

Between 2010 and 2015, Mauritius received a funding of USD 448.1 million for activities that mainly targeted climate change objectives, with USD 413.5 million in form of loans and the remaining USD 34.6 million in form of grants.[12] Most of the funding was from France and it was meant to target general environmental protection, renewable energy generation, and water supply and sanitation. A significant share of the funding was provided to support the energy sector in Mauritius and a credit line for Mauritius banks for renewable energy (Canales, Atteridge, & Sturesson, 2017).

On the financial regulation front, the Bank of Mauritius (BOM) has been a member of the Network of Central Banks and Supervisors for Greening the Financial System (NGFS) since July 2020. In September 2021, BOM issued a draft guideline on climate-related and environmental financial risk management to banks and non-bank deposit taking institutions. In October 2021, BOM launched the Climate Change Centre (CCC). The objectives of the CCC, inter alia, is to integrate climate-related and environmental financial risks into the Bank's operations, look into enhancing disclosures on climate-related and environmental financial risks, and to support the development of sustainable finance in Mauritius.

2. Status of Green finance options

Green Loans

A green loan is a loan aimed at advancing and conserving environmental sustainability. Green loans may be issued by individuals or commercial lenders such as banks or peer lending from groups of private individuals. These loans finance projects that focus on renewable energy, waste management, pollution prevention, conservation and other environmental-friendly projects.

In Mauritius, banks that have products specialized for green financing include the Mauritius Commercial Bank (MCB), State Bank of Mauritius (SBM) and the Development Bank of Mauritius (DBM).

Green and blue Bonds

Since 2007, green bonds have emerged as an innovative financial instrument and are helping economies to address infrastructure, climate and broader economic challenges. Green bonds are financial instruments that seek to reduce carbon emissions and build a climate-resilient future, while at the same time minimizing negative impacts on the local environment.

12 sei.org/wp-content/uploads/2018/03/climate-finance-for-the-indian-ocean-and-african-small-island-developing-states.pdf

In the 2020/2021 Budget, the Minister of Finance, Economic Planning and Development announced that the Bank of Mauritius (BOM) would develop a framework for blue and green bonds. This has since been done with a Sustainable Bonds Framework published in June 2021. The framework provides the requirements and process for the issuance of sustainable bonds and their listing on exchanges licensed in Mauritius.

Issuing and listing green bonds on the SEM will create the opportunity for public and private sector issuers to access lower-cost capital to finance their green projects. Projects financed by green bonds include: renewable energy projects, waste management, pollution prevention, conservation and environmentally friendly transport. However, the SEM only brings support to listed companies that actively pursue sustainability initiatives whereas most SMEs are not listed as they mostly rely on personal savings, loans from friends, loans from Savings and Credit Cooperatives (SACCOs) and financing from banks.

G. Green Finance Institutions and Initiatives

1. Commercial Banks

Mauritius Commercial Bank (MCB)

The Mauritius Commercial Bank was formulated in 1838 and is the largest banking institution in Mauritius. It is also the oldest banking institution south of the Sahara with its headquarters located in Port Louis, Mauritius.

The bank has shown continuous efforts towards sustainable development. It constructed a green building as a flagship of its commitment towards sustainable development and strives to set an example for local companies. It also adheres to the United Nations Global Compact, the world's largest voluntary corporate responsibility initiative for businesses committed to harmonizing their operations and strategies with 10 universally accepted principles in human rights, labour, environment and anti-corruption areas.

Through its partnership with the Agence Française de Développement (AFD) and the European Union, the bank receives a credit line, under the SUNREF Programme, which it uses to finance green projects in the form of green loans. The projects financed within the loan include: renewable energy projects, energy-efficient equipment and installation, water-saving installations, rainwater harvesting, seawater desalination, thermal insulation, and green building techniques.

State Bank of Mauritius (SBM)

The State Bank of Mauritius was incorporated in 1973 and is currently the second largest bank in Mauritius with a market share of about 25% of domestic banking assets.

The bank actively supports a clean environment policy, with a focus on the protection of the environment through the use of high energy-efficient equipment and compliance with applicable environmental laws, regulations and standards. It has implemented an initiative to:

- Reduce paper consumption
- Introduced emailing statement of accounts
- Continuously educates customers to use the internet banking facility to access their statement of account

The bank finances green projects through the Ecoloan, which helps to contribute to reducing pollution, protecting natural resources and other environmentally friendly initiatives. The projects financed by the loan include: the acquisition and installation of energy-efficient and renewable energy equipment such as the harnessing of aeolian, hydro, cogeneration, waves and solar energy. In addition, it finances photovoltaic and wind systems for the production of electricity for consumption.

SBM, together with MCB and AfrAsia Bank Ltd (AfrAsia), receives a line of credit from Agence Française de Développement (AFD). Thus, the two banks have been able to finance more than 4100 green projects (MCB Group) from 2009 to 2018. A third edition of the green finance programme (SUNREF) of AFD has been launched in 2018 in partnership with three banks (MCB, SBM and AfrAsia Bank) and is still ongoing.

Maubank- Mauritius Bank

Maubank, formerly known as Mauritius Post and Cooperative Bank Ltd (MPCB) acquired the assets and liabilities of the National Commercial Bank Ltd in 2016 and subsequently changed its name from MPCB to Maubank Ltd. The main shareholder of the bank is MauBank Holdings Limited which is a wholly-owned state company. The bank offers a specialized product for SMEs known as the SME Development Scheme whose features are as follows:

- Maximum loan amount of MUR 20 million
- Loan amount of 90% project value
- Tenor of up to 10 years
- No processing fees

In addition, the bank has a SME Equity Fund that invests in start-ups, expansion projects and new lines of business. Specifically, it provides equity financing to SMEs established in Mauritius where the majority of the shareholders are Mauritian nationals.

In the National budget 2020–2021, the government plans to ease cash flow of SMEs by encouraging the broadening of access to factoring facilities through Maubank. The eligible sectors within the scheme include: Manufacturing, ICT and other export services, bio-farming, renewable and green energy, handicraft, aquaculture and other economy related activities.

2. Development Banks

Development Bank of Mauritius Limited (DBM Ltd)

The Development Bank of Mauritius was established in 1964 as a parastatal body to facilitate the industrial, agricultural and economic development of the country. The bank plays an important role in development banking and the financial services sector and acts as the government's main financial intermediary in implementing tailor-made loan schemes and other budgetary financial measures. Loan sanctions by the bank focus on the SME, agricultural, tourism and industrial sectors.

DBM has a SME Financial scheme that grants loans to SMEs. The scheme's loan features are as follows:

- Maximum loan amount of 75% cost of project up to a ceiling of MUR 3 million
- Interest rate of 6% p.a.
- Penalty rate of 2% above interest rate
- Repayment period of up to 5 years depending on the project

The bank provides green financing to SMEs, parastatals and public institutions that invest in renewable energy projects, green building and construction and land use and forestry. Such green projects include: setting up of solar panels, solar system and rainwater harvesting system.

Based on the National Budget 2020–21, DBM took the following actions to support SMEs:

- Earmarked MUR 10 billion to support distressed SMEs and Cooperative Societies during the COVID-19 pandemic
- Under the DBM Enterprise Modernization Scheme, SMEs and cooperative societies will benefit from a grant of 15% on the cost of assets of up to a maximum of MUR 150,000

3. Multilateral Institutions

Switch Africa Green Programme

SWITCH Africa Green is a programme developed and funded by the EU and implemented by the UNEP in partnership with EU delegations in participating countries. Since 2013, SWITCH Africa Green supports countries in Africa to achieve sustainable development by transitioning to an SCP-based inclusive green economy. This includes support to policymakers, business and non-state actors in making the switch to SCP practices that generate growth, create decent jobs and reduce poverty.

SWITCH Africa Green is active in seven countries: Burkina Faso, Ethiopia, Ghana, Kenya, Mauritius, South Africa, Uganda. Within these countries, the program has four focus sectors: agriculture, manufacturing, integrated waste management and tourism. Within these focus sectors, actions address five cross-cutting themes: energy efficiency, labelling and standards, water efficiency, eco-innovation and sustainable trade. Each country selects which of the four focus sectors it wishes to prioritize for its SWITCH Africa Green interventions, based on its specific national circumstances and opportunities and following country-level consultations with key stakeholders. Each country has a National Technical Coordination Committee that guides implementation at the national level.

The implementation of SWITCH Africa Green is through three strongly related components that are designed to be reinforcing at country level:

- **Policy support:** This component addresses specific needs of each participating country to create the enabling conditions for a green economy and sustainable consumption and production, building on and scaling up existing activities where possible. This component is implemented by UNEP.
- **Green business development:** component focuses specifically on supporting MSMEs in greening their business ventures, with an emphasis on SWITCH Africa Green's five cross-cutting themes. The component consists primarily of grants awarded following a call for proposals for the provision of services that will enable MSMEs to start or develop a green business or switch over to more SCP practices. This component is implemented by the European Union delegation in each country, guided by the National Technical Coordination Committee.
- **Networking Facility:** The purpose of the networking facility is to manage the knowledge generated by SWITCH Africa Green and to facilitate the exchange of information and best practices, both within the programme and between it and other related programmes, projects and initiatives at the national, regional and global levels. Activities under the networking facility component combine the expertise and network of the United Nations Environment Programme, the African Roundtable on Sustainable Consumption and Production, the Global Network for Resource Efficient and Cleaner Production and other institutions that support sustainable consumption and production in Africa. It also draws on related activities and information under the European Union's SWITCH to Green flagship initiative and the One Planet Network and its programmes.

Agence Française de Développement (AFD)

The Agence Française de Développement (AFD) is a public financial institution that implements the policy defined by the French government to work towards combating poverty and promoting sustainable development.

The SUNREF Initiative

AFD has a green finance label known as the SUNREF (Sustainable Use of Natural Resources and Energy Finance) programme through which AFD lent a total of EUR 100 million to banks in Mauritius by 2014, with the aim of improving green energy and sustainable resource management. Through the programme, the banks were able to issue loans to companies (SMEs and big corporates) and individuals that wished to reduce their carbon footprint and seize opportunities of the energy transition (AFD, 2019). Under the programme, SMEs receive technical and financial support to invest in equipment and innovative green technologies. This enables them to take advantage of green business opportunities, increase their competitiveness and access new markets.

Currently, AFD has partnered with the MCB, SBM, and AfrAsia to foster green and inclusive growth (AFD, 2019). MCB and SBM represent the biggest market share in terms of loans and deposits in Mauritius. With a new credit line of EUR 85 million and the support of the European Union, this part of the programme is meant to support professional gender equality, climate change mitigation and adaptation, whilst encouraging green investments. Through the partnership, the partner banks aim to reduce the vulnerability of Mauritius to the effects of climate change such as cyclones, preserve drinking water sources, fight against coastal erosion, etc. Small scale investment projects are eligible for investment grants for:

Table 3: SUNREF Eligible Projects

Projects	Terms
Climate Change Mitigation Projects	▪ 5% of the eligible loan amount ▪ 1% additional investment bonus granted to companies willing to assess and promote women's employment and professional equality *via a self-assessment questionnaire and the development of a gender action plan)
Climate Change Adaptation Projects	▪ 5% of the eligible loan amount ▪ 10% extra grant for eligible climate change adaptation projects ▪ 1% additional investment bonus granted to companies willing to assess and promote women's employment and professional equality *via a self-assessment questionnaire and the development of a gender action plan)
Gender Projects	▪ 5% of the eligible loan amount ▪ 5% grant on new investments resulting from the gender action plan. The overall grant for a "gender-related" project stemming from the gender action plan will then be 10% (5%+5%)

Source: SUNREF Mauritius, sunref.org

Furthermore, when companies apply to MCB, SBM or AfrAsia for green loans, they are systematically offered technical assistance to carry out a gender equality assessment of their organization, as well as financial support to implement investments needed in this area. The partnering banks get the following benefits under the AFD Green Credit Lines:

- Improved reputation and enhanced stakeholder reputation
- Provision of technical expertise and advisory services
- Broader risk management extending beyond conventional credit and interest rate risk which promotes a holistic approach towards credit assessment as both financial and non-financial elements are taken into account
- Increased opportunity to tap into new markets that are both financially viable and eco-friendly

Green Climate Fund

Mauritius received a funding of USD 63.3 million from the Green Climate Fund, a fund set up by the UNFCCC and dedicated to helping developing countries reduce their greenhouse gas emissions and enhance their ability to adapt and respond to climate change. The fund finances three projects on adaptation and the mitigation of climate change effects, with Mauritius as a beneficiary in each (Green Climate Fund). The projects are as follows:

- **Mauritius:** The project aims at enabling the Government of Mauritius to meet its target of using renewables to supply 35% of the country's energy by 2025 thus reducing its dependence on fossil fuels to enhance energy security, climate change mitigation and improve the country's balance of payments. The project is in two phases:
  - Supporting grid-connected, intermittent renewable energy
  - Establishing a photovoltaic mini-power grid for Mauritius' principal outer island, Agalega
- **Mauritius, Comoros, Madagascar, and Seychelles:** The project seeks to promote ecosystem-based adaptation in the Indian Ocean.
- **Multiple countries (Mauritius included):** The main objective of this programme is to scale up climate finance, redirect financial flows, and reinforce the capacity of local partners in climate-related sectors. This will be done through the provision of loans to local partner financial institutions who will in turn lend to borrowers in energy efficiency, sustainable energy, forestry, housing, agriculture, and water and waste management. The programme will also provide technical support to its local partners.

4. Other Institutions and Initiatives

The Stock Exchange of Mauritius (SEM)

Over the past few years, there has been increasing awareness of the need to include the sustainability variable in the business equation by corporates in Mauritius. The SEM found itself in a unique position to bring support to listed companies that actively pursue sustainability initiatives given its pivotal role in the economy. As a result, it launched the SEM Sustainability Index (SEMSI) in 2015.

The index identifies companies based on strong sustainability practices using a set of internationally aligned and locally relevant economic, environmental, social and governance criteria. However, the exchange does not currently have a sustainability bond listing segment. The SEM hosted a green bond information session in 2018. The session was to ensure that training programmes are tailored to the jurisdiction and technical needs of key stakeholders that would be involved in issuing and investing in green bonds (UNEP FI).

In May 2018, PAGE/UNEP FI in partnership with the Frankfurt school which is the UNEP Collaborating Centre for Climate & Sustainable Energy Finance, the Climate Bonds Initiative and the Center for International Climate Research (Cicero), held workshops for potential green bond investors, issuers and second party opinion providers. It is spearheading a project based on capacity-building for the development of a Green Bonds

Market in Mauritius (SSE, 2019) and based on the national budget speech 2020–2021, the government plans to introduce a green and blue bond framework through the Bank of Mauritius.

The green bonds initiative was part of SEM's drive to promote sustainability as a partner of the Sustainable Stock Exchange Initiative (SSE). The development of local green bonds market will create the opportunity for both the private and public sector issuers to access low-cost capital to finance their green projects by issuing and listing green bonds for the SEM. Green bond financing includes projects that focus on renewable energy, pollution prevention, conservation and environmentally-friendly transport.

Based on the national budget speech 2019-2020, the Government's aim was to take up a framework consistent with the 'Marrakech Pledge' which is a continental coalition of African Capital Markets Regulators and Exchanges committed to nurturing green financing on the African continent in order to diversify their IFC product base (Minister of Home Affairs, 2019). It also intended to come up with a new trading platform at the SEM to allow medium-sized profitable enterprises that do not qualify for listing on the exchange and DEM markets to raise capital and trade their shares. Thus, based on the national budget 2020-2021, the government plans to set up a dedicated Venture Capital Market that will be set up at the Stock Exchange of Mauritius for start-ups and SMEs.

The SEM launched the Development and Enterprise Market in August 2006, designed for SMEs and newly set-up companies.

SME Mauritius Ltd

SME Mauritius was incorporated in 2017 and is a private company wholly owned by the Government of Mauritius. Its primary aim is to promote a conducive SME ecosystem and develop entrepreneurship at national level. It also aims to improve the accessibility of the market by SMEs and improving competitiveness in both the local and export markets. SME Mauritius offers various schemes for SMEs:

- **Internal Capability Development Scheme (ICDS) –** ICDS aims to help SMEs improve the efficiency of their value chain, responsiveness to customers requirements and market dynamics, and offers professional and technical input for SMEs to improve their overall competitiveness
- **Technology and Innovation Scheme (TINNS) –** TINNS aims to enable SMEs to continuously invest in technology and automated production capabilities, and create technology-based integrated and sustainable SMEs
- **SME Marketing Support Scheme (MSS) –** MSS aims to support SMEs to improve their market accessibility and competitiveness in both local and export markets, and respond to more stringent requirements of diverse customer bases
- **Inclusiveness and Integration Scheme (INC) –** INC aims to encourage SMEs to work together, favour inclusiveness, interlinkages and networking, and collaborate and synergize for mutual benefit
- **SME Utility Connection Assistance Scheme (UCA) –** UCA aims to connect SME operation sites to mains of utility suppliers (CEB and CWA)

Economic Development Board (EDB)

The EDB is a statutory body that commenced its operations in 2018 following the merger between the Board of Investment, Enterprise Mauritius and the Financial Services Promotion Agency. The overarching objective of the EDB is to ensure greater coherence and effectiveness in economic policymaking and implementation in Mauritius. The mandate includes promoting Mauritius as an attractive investment and business centre, a competitive export platform, as well as an International Financial Centre. As the main institution responsible for country branding for investment promotion, EDB seeks to facilitate both inward and outward investment and ensure a conducive business environment.

The Mauritius Research and Innovation Council (MRIC)

The MRIC is a corporate body set up through the proclamation of the Mauritius Research and Innovation Council Act 2019. The Council is the apex body advising the Government on matters of applied research, innovation and research and development issues. Part of the objective of the MIRIC, as enunciated in the Act, is to enhance private sector participation in research and development and innovation, and to promote commercial utilization of the results of research and development and innovation, in the national interest.

The Mauritius Renewable Energy Agency (MARENA)

MARENA is a body corporate, owned by the Government of Mauritius, set up in January 2016 to oversee and promote the development of renewable energy in Mauritius. It operates under the aegis of the Ministry of Energy and Public Utilities (MEPU) and is regulated by the MARENA Act of 2015.

Business Mauritius

Business Mauritius is an independent association stemming from a merger of Mauritius Employers Federation and the Joint Economic Council in October 2015. The association represents over 1200 local businesses delivering services that sustain the businesses and the community at large.

Based on its members' feedback, Business Mauritius co-constructed the SigneNatir Pact; a community-led initiative that provides five key priority areas translated into commitments that businesses can adopt for the development of a sustainable and inclusive business environment. These include:

- **Energy Transition** – Commitment to shift to a low-carbon economy to consolidate resilient development
- **Biodiversity** – Commitment to protect biodiversity and natural heritage through mindful development and adapting to climate change collaboratively
- **Vibrant Communities** – Commitment to make the island safe, pleasant, and valorize cultural and historical heritage for the well-being of communities

- **Circular Economy** – Commitment to engage in sustainable consumption and production, including a local agricultural value chain, through producer/importer and consumer responsibility to valorize and optimize resources and by-products
- **Inclusive Development** – Commitment to adopt inclusive development practices

Each commitment contains 30 business actions that companies can choose from and commit to undertake. SMEs and big corporates are encouraged to put in place programmes and initiatives that meet the objectives under their chosen commitments. Through SigneNatir SMEs benefit from technical assistance, training sessions, certification as well as a platform for collaboration with international partners.

H. Study Findings

1. Green Finance Barriers for SMEs

a. Knowledge Barriers

Without a suitably trained workforce, the green economy transition of Mauritius will face the challenge of skills gap within SMEs. Most SMEs lack the knowledge and expertise required to execute green projects. From our SME, fifty-five percent of respondents cite lack of awareness on green finance as the greatest barrier.

In addition, some major micro-finance institutions and the development bank which are better equipped to serve SMEs in Mauritius, lack the knowledge and business acumen on financing green projects. Based on our survey with the DBM, this is the greatest barrier to green finance. These institutions are less likely to appreciate the importance and future prosperity of green business development and so are at a greater risk of over-looking the sector (East African Development Bank, 2019). This poses a great challenge to SMEs that seek financing for their green projects as these financing institutions may fail to take into account the specific needs of these enterprises.

b. Financial Barriers

Most SMEs do not recognize the business case of going green as some businesses still perceive tackling environmental issues as too expensive rather than cost-effective through increased savings from energy and market efficiency (Sultan & Harsdorff, 2014). This makes them reluctant to green their workplace and invest in new green products and services due to commercial viability. Half of SMEs interviewed find it difficult to start and operate green projects due to high capital costs reducing commercial viability of the projects.

Evidently, green business projects tend to incur larger initial capital costs than less environmentally friendly counterparts. Green technology tends to be more expensive because it is termed as newer. However, it typically has low operational costs. When calculated over the long term, the cost of green interventions diminishes substantially. For example, domestic solar generators which are efficient in sunny climates may offer free power to a household once installed despite the high upfront cost incurred.

Green SMEs are less likely to acquire financial support with longer repayment terms from traditional channels such as banks. Instead, to get long-term financing, SMEs are prone to turn more to informal sources which may be unreliable and may have exorbitant interest rates. This poses a risk to the long-term viability of SMEs dependent on financing.

Finally, the size of SMEs limits their investment capacity and the financial competence of their staff. Therefore, they are perceived to be of greater risk to investors in terms of solvency and management. In addition, green SMEs may suffer considerably due to their lack of adequate collateral even for less-stringent credit facilities; and due to the greater perceived risk in financing green projects as they are termed to be new technologies and the banks' concerned viability for green projects.

c. Regulatory and Policy Barriers

SMEs unlike large enterprises do not have the reputation to assure risk-averse financiers and they are not large enough to transact in capital markets.

The financial markets in Mauritius have inadequate regulation and policies that specifically incentivize green financing of SMEs. Therefore, microfinance institutions and other banks often fail to adapt their financial products and to increase the clarity and simplicity of lending conditions to green SMEs. This prevents SMEs from taking up green projects as green finance products in existence are not aligned to their needs.

Green financial instruments offered in Mauritius are not diversified to cater for the needs of SMEs. Most financial instruments developed for green projects such as green bonds and green loans are not specific to SMEs. In addition, capital markets are dominated by short-term government securities which are not favorable for green SMEs which often prefer long-term repayment periods. Most financial instruments in Mauritius have features that are most suited for large enterprises and not SMEs. Thus, these instruments remain to be inaccessible to SMEs as their terms are unsuitable.

Forty-eight percent of SMEs interviewed noted that strategies and initiatives by the government and other institutions based on green financing are not specific to SMEs. Some enterprises have undertaken green initiatives but such improvements tend to go unnoticed. This prevents the acceleration of the take up of green projects by SMEs as they lack the motivation to 'go green'.

As a net importer, lack of sufficient regulation of imports poses a threat to the growth of SMEs as a whole but especially SMEs in green business. Local food produce from green SMEs face stiff competition from imports, which are often cheaper, due to the absence of economies of scale, high initial capital and technological costs for small-scale green production. Lack of sufficient import regulation impacts the profitability of SMEs further disincentivizing them from greening their production activities.

d. Production Barriers

Eight percent of SMEs interviewed, whose activities are mostly focused on green energy production, cite lack of access to essential factors of production such as land and labour.

On land use, real estate speculation has resulted in channeling of arable land from agriculture to construction of luxury resorts leading to lost opportunities for transition to sustainable agriculture and energy. Land available to small planters, which are often; by the river side, by the beach, on steep slopes, experience severe climate change effects and therefore should be the focus of climate change priorities.

Innovation and adoption of green business activities often require technological understanding, operation skills and managerial skills. Due to higher wages, skilled labour is diverted to large corporates. SME owners themselves lack technical and managerial skills to green their businesses. New agricultural projects are also challenged by lack of connection to the national electricity grid, and those that are connected have to pay high electricity and water charges. These costs exacerbate the high capital requirements for green projects.

e. Size Barriers

As a net importer of food and energy products, Mauritius suffered a food supply shock during the COVID-19 pandemic period which saw the country look inwards towards local food sustainability. With the right support, small planters can grow to fill this gap, however, due to their small size and lack of structure, they are unable to receive financial and technical support from existing initiatives.

When applying for loans, medium-sized enterprises are often classified as too large to qualify for micro-enterprise funding, or too small to qualify for large enterprise funding from commercial lenders. The growth of green SMEs in this category is therefore stunted as there are few tailored initiatives from banks to cater to them.

Lastly, the government is usually an attractive client for SMEs as well as big corporates due to the large quantities of goods and services it demands. Due to their size, large enterprises have higher financial and technical capacity to deliver on these government procurement contracts, locking out SMEs. In the event that SMEs win these supply contracts, they are faced with cash flow challenges due to the wait time from delivery of the goods and services and the contract payment time, making these contracts even more inaccessible.

f. Other Barriers

Public financial sources cannot fully finance the green transformation taking into account the wide range of estimates of the financing needs of green investments. Hence, a significant amount of private capital is needed. However, private green finance is still scarce due to a range of microeconomic challenges, including problems in internalizing environmental externalities, information asymmetry (for example, between investors and recipients), inadequate analytical capacity of issuers and investors, and the lack of generally accepted green definitions. Also, another key issue to note is that the unclear definition of green finance leaves room for "greenwashing", as some issuers of "green assets" may make misleading claims about the environmentally friendly nature of their assets.

2. Green Finance Case Studies

We highlight a few cases studies on green financing in Mauritius

Case 1: MCB Green loan

Under MCB's programme aimed at promoting environment-friendly practices and in collaboration with Agence Française de Développement, MCB provides green loans to help firms save energy and reduce carbon emissions. The bank offers green loans with the following terms:

- Preferential interest rates for green loans
- Investment grants of:
  - 5% on climate change mitigation projects such as renewable energy projects, energy-efficient equipment and installations
  - 15% on climate change adaptation projects such as water savings installations, rainwater harvesting, seawater desalination, thermal insulation building techniques
  - Additional grants offered to clients committing to assess organizational gender balance and undertake a gender action plan, as well as gender equality-related investments
- Repayment period of between 4 and 10 years
- Financing of up to 100% of the investment, subject to the eligibility criteria (MCB, 2019)
- Minimum loan amount of MUR 50,000
- Annual percentage rate from 6%

Outcomes

As per the MCB Sustainability Report (2019), the green loan consisted of a EUR 45 million line of credit dedicated towards sustainable development. About 95.6% of the individuals and SMEs in Mauritius were exposed to the green loan. The following are the environmental benefits of the green projects financed by MCB as at 30th June 2019:

- 12,240 m^3 of waste water reduced
- 7,000 litres of diesel saved
- 86,808 tonnes of CO_2 emissions reduction
- 50.9 gWh of electricity saved
- 56,600 tonnes of fly ash recycled
- 57,000 tonnes of import of pozzolanic construction material
- 529,903 m^3 of clean water saved
- 14,400 tonnes of grate ash recycled
- 36,500 kg of liquefied petroleum gas saved
- 3,730,270 litres of heavy fuel oil saved

Case 2: MCB 'Lokal is Beautiful'

In 2019, MCB launched 'Lokal is Beautiful', a credit facility scheme targeted at SMEs, characterized with lower interest rates and more flexibility. The scheme was initially designed to finance capital expenditure; however, plans are underway to widen its scope to make it a general-purpose loan through the adoption of sustainability-linked loan principles. The scheme focusses on three avenues to stimulate local entrepreneurship and the emergence of new local industries:

- A maker island—Developing micro-factories, incubators, start-ups and company partnerships
- A circular island—Increasing the ability to produce locally with recycled resources
- A smart island—Creating value through business models based on digital solutions

The scheme offers loans under the following terms:

- Up to 100% financing of a project
- Low interest rate (MCB PLR +2%)
- Moratorium on capital repayment for the first year
- Reduced disbursement fee (0.5% of financed amount, Min MUR 1k)
- Financing over a period of 5 to 7 years

Case 3: SBM Ecoloan

The State bank of Mauritius introduced the SBM EcoLoan whose aim was to give individual clients and SMEs the opportunity to take up loans for the purchase of solar panels. Currently, the loan finances green projects that involve the acquisition and installation of 'energy-efficient' and 'renewable energy' equipment such as: the harnessing of aeolian, hydro, cogeneration, waves and solar energy, photovoltaic and wind systems for the production of electricity. The features of the loan are as follows:

- Minimum loan amount is MUR 100,000
- 100% financing of the acquisition and installation costs (including VAT)
- Repayment period up to 10 years

Furthermore, SBM received a credit line from Agence Française de Développement, through which it finances green projects through the SUNREF programme.

Outcomes

Through the SUNREF programme, SBM has been able to finance the following projects (SUNREF):

- Solar Field installed a 2 MW photovoltaic farm to supply more than 4 million kWh/year to the grid thus significantly reducing the use of fossil fuels and carbon emissions.
- Omnicane, a sugar company, has made important investments to build an ethanol production factory, a project in line with the government policy to reshape the sugar industry and move towards the ecological transition.
- An individual installed photovoltaic panels on his roof. The installation covers his electricity needs and allows him to sell the excess of energy produced to the Central Electricity Board (CEB) which helps him contribute to the supply to the national grid and participate in the national target of 35% renewables by 2025.

Case 4: DBM Green loan

The Development Bank of Mauritius issues green financing to SMEs, parastatals and public institutions that invest in renewable energy projects, green building and construction, and land use and forestry. Such green projects include: setting up of solar panels, solar system and rainwater harvesting system etc.

Currently, the bank is setting up policies and guidelines on green finance. The bank has a specific fund for green finance with policies on interest rates and pricing. The bank offers:

- Preferential interest rates for green finance
- Mentoring on green business development to SMEs
- Loan tenors of 5–10 years

There are plans to expand green finance by the bank by offering preferential interest rates, issuance of guarantee/insurance, favorable repayment periods, expand loan amounts on offer, mentoring and handholding of SMEs interested in taking up green projects.

3. The Landscape and Opportunity for Green Finance

Over the years, the government of Mauritius has shown commendable efforts towards a greener, sustainable, low emission and climate-resilient economy. The development of the green economy is a great opportunity for Mauritius, since it can result in significant economic growth and employment creation. Thus, based on the National Budget 2020–2021, the government has earmarked MUR 100 billion towards greening the economy.

A policy review has been carried out by the Ministry of Environment, Sustainable Development, and Disaster and Beach Management (MoESDDBM) and has made recommendations on the policy, legal and regulatory framework as well as on strategic projects to be implemented by the government. The three target sectors for Mauritius are manufacturing, tourism and agriculture. Furthermore, the 10-year SME Master Plan has been aligned with these proposals and it recommends thematic actions for greening of SMEs.

Experts argue that the existing taxonomies of green projects do not sufficiently capture the various facets of preservation and protection of marine life. Given that the Indian Ocean is a huge part of the environment of Mauritius, blue bonds are essential. These sets of bonds are used to raise capital specifically to finance projects that contribute to the ocean and coastal habitats. Thus, the government not only seeks to introduce a green bond framework, but also a blue bond framework through the Bank of Mauritius to further enhance competitiveness of the Financial Services Sector. If green and blue bonds are issued, it would mobilize resources in the form of both domestic and international capital towards projects meant for climate adaptation, renewables and other forms of environmental conservation.

The ability of SMEs to adopt appropriate green technologies and innovations is essential to facilitate the greening of Mauritius. Thus, SMEs need to be encouraged to switch to green production methods as this is a critical growth factor which can positively influence demand and transform supply to more sustainable production and consumption modes. SMEs need to understand that viable business options exist in the green and the eco-business sector.

In the green sector, Mauritian SMEs are primarily engaged in low-value-added activities such as waste recycling (for example, paper, glass bottles, used oil, plastic, electronic waste, household appliances, and batteries) and medium-value-added activities such as solar water heater installation and photovoltaic panel installation.

Green retrofitting, pollution control (e.g. industrial and household noise abatement services), manufacturing of electric bikes, design/construction/operation of micro wind plants for households, water leak detection services for municipal, commercial, and residential clients, and so on are examples of higher value-added activities that SMEs should pursue.

With the greening of SMEs, commercial banks and other lending institutions need to structure their products to fit the needs of these SMEs. Examples of such products are green loans issued by the MCB, SBM and DBM. These loans are issued to companies engaged in green investment projects such as renewable energy, energy efficiency, environmental performance and eco-business.

In addition, the expansion of Foreign Direct Investment (FDI) inflows into Mauritius will undoubtedly benefit green SMEs by increasing the range of investments sought by financiers and by introducing a wider pool of financial instruments, some of which may meet the demands of green SMEs better. According to the (UNCTAD World Investment Report, 2020), the FDI flows to Mauritius reached USD 472 million in 2019, up from USD 372 million in the previous year.[13]

4. Practices on Green Finance: Lessons from elsewhere

Exhibit 1: Morocco Sustainable Energy Financing Facility (MorSEFF)

Morocco Sustainable Energy Financing Facility (MorSEFF) is a credit line facility of up to EUR 110 million to financing institutions in Morocco to on-lend to businesses and Energy Service Companies (ESCOs) investing in energy efficiency and renewable energy projects. The facility was launched in 2015 and included financial contributions from the European Bank for Reconstruction and Development (EBRD), European Investment Bank (EIB), the European Union (EU), Agence Française de Développement (AFD) and Kreditanstalt für Wiederaufbau (KfW).

Facility Structure

The facility took the form of bundling local bank services, investment incentives, and free technical assistance to support participating companies, as follows:

- **Project financing:** Financing of up to 3,000,000 DH for small-scale projects and up to 50,000,000 DH for larger or more complex investment projects
- **Investment incentives**: Incentives of 10% of financing amount funded by grants from the EU Neighborhood Investment Facility (EU NIF)
- **Free technical assistance:** Assistance offered for project assessment and implementation by a dedicated Project Consultant, and verification of projects post-implementation by a Verification Consultant
- **Local bank:** Local distribution of financing done through Moroccan Participating Banks

Despite a favorable regulatory environment, a solid existing base of financing for SMEs and a well-developed financial sector, Moroccan banks were initially reluctant to participate in MorSEFF. The banks had difficulty grasping the added value of the project and it took the initiators of the facility time and effort to demonstrate the impact of the project on their clients' businesses. However, eventually the Banque Marocaine du Commerce Extérieur (BMCE) and Groupe Banque Populaire joined the project, and the first investment was disbursed in 2015, two years after the launch of the project.

13 unctad.org/system/files/official-document/wir2020_en.pdf

The scope of the activities within the facility was to provide partner financial institutions with assistance in developing marketing strategies and activities to fill the pipeline with clean energy projects; to work with the government, business associations and development finance institutions to promote the facility and; to train energy auditors, designers, architects and local engineers to prepare bankable sustainable energy projects.

The United Nations Industrial Development Organization (UNIDO) and the German Development Cooperation Agency (GIZ) informally supported the EBRD in identifying SMEs eligible for funding from MorSEFF. While the UNIDO identified technical measures eligible for MorSEFF financing and supported loan applications, GIZ conducted energy audits with a small number of potential clients of MorSEFF. Both GIZ and UNIDO received awards for excellent collaboration under the MorSEFF Programme (Cochu & Hausotter, 2019).

Outcomes

The EUR 110 million was fully utilized with EUR 55 million allocated to BMCE Bank of Africa/Maghrebail and the remaining EUR 55 million allocated to Groupe Banque Populaire/ Maroc Leasing. MorSEFF achieved significant outcomes in reduced carbon emissions and energy savings through the business financing, awareness raising and training of bank officers and engineers. The facility was able to achieve the following (MORSEFF):

- Financed 260 projects; 230 projects financed for EUR 100 million and 30 projects finalized for a total of EUR 10 million
- 80% of the projects financed were SMEs
- Raised awareness of energy efficiency in the SME sector by supporting financial institutions in marketing through industry workshops
- Trained 278 credit officers and 40 engineers on energy efficiency financing
- Spurred the development of a local production base for energy efficiency and renewable energy technologies

As a result, MorSEFF is credited with helping Morocco to avoid 102,725 tons of carbon equivalent emissions annually and it resulted in 207,289 megawatt hours of annual energy savings (DAI).

Later in 2017, EBRD developed the Green Economy Financing Facility (GEFF) to demonstrate the benefits of green investments in the retail sector in Morocco using the financial intermediation model already being used by the EBRD in other sectors and countries. This built on the success of the MorSEFF.

Exhibit 2: South Africa's Green Funds

Green Energy Efficiency Fund

The Green Energy Efficiency Fund supports the introduction of energy efficiency and renewable energy technologies through affordable loans with funding of R500 million. The fund was launched by the national finance institution, Industrial Development Corporation (IDC) and the German Development Bank (KfW) in 2011. It strives to improve South African SMEs' energy efficiency.

GEEF gives loans to entrepreneurs and businesses that want to invest in renewable energy technologies and energy efficiency. The fund's loan features are as follows:

- Loan amount of R1 million to a maximum of R50 million
- Discounted interest rate of prime less than 2%
- Pay-back period of up to 15 years

Priority is given to companies that have yearly revenues of less than R51 million, assets less than R55 million and employing no more than 200 people. The benefits for the businesses under the fund include (SME South Africa, 2015):

- Technical support for energy assessments based on the size and complexity of your proposed project
- Investment risk reduction through energy efficiency validation checks
- Modernization of industrial equipment and the use of energy-efficient technologies that result in reduced energy and other costs
- Improved product quality and production capacity while increasing the company's profitability
- Improved company image and value due to the alignment with South Africa's development goals and the reduction of carbon footprint

Outcomes

Through the fund, the IDC has been able to fund the following projects (PSEE):

- The installation of a biogas cogeneration system to produce energy for electricity, heating and cooling at an abattoir in the Northern Cape, whereby energy is generated from the waste. Annual energy savings were 760MWh in power and 1,250MWh in heating.
- The installation of high-pressure solar water heaters to commercial and residential clients. Energy savings were 1,578MWh per annum with a payback period of 4 years.

Green Outcomes Fund

The Green Outcome Fund was a World Bank initiative to test the viability of an impact investment fund mechanism based on environmental outcomes and the growth of the green economy in South Africa.[14] The fund was formed through a partnership between the National Treasury's Jobs Fund and the Green Cape in January 2020. The fund is the

14 afrik21.africa/en/south-africa-greencape-launches-investment-fund-for-green-smes/

result of a World Bank pilot programme on climate technology launched in 2016, by the Bertha Centre, GreenCape and World Wildlife Fund-South Africa.

The amount allocated for the fund is approximately R488 million (Africa Global Funds, 2020). The fund provides concessional funding to local investment funds who in turn allocate finance to local MSMEs that make a demonstrable contribution to South Africa's green economy. Specifically, the businesses financed are those that can generate verifiable green outcomes whilst creating job opportunities. Several local investment funds have been selected to take over the GOF's investments. They include Mergence Investment Managers, Conservation International Ventures, Edge Growth Ventures and Business Partners South Africa.

The fund provides incentives to local fund managers to promote increased investments in MSMEs and it builds a common set of green metrics within the local investment industry. The aim is to achieve clearly defined green outcomes and in turn encourage greater capital allocation to green businesses by local fund managers, and catalyze increased and consistent green impacts. The Green Outcome's Fund Process is as follows (Green Cape):

- Step 1: Funder commitment
- Step 2: Agreement on green outcomes among GOF manager, the funder and Catalytic Finance Partner
- Step 3: CFP manager invests in green SMMEs
- Step 4: Green SMMEs achieve green outcomes
- Step 5: Funder receives impact report every 6 months
- Step 6: GOF manager disburses payments for verified outcomes
- Step 7: GOF manager verifies outcomes reported
- Step 8: CFP Fund managers' report achieved outcomes to GOF manager
- Step 9: CFP fund managers monitor and measure outcomes achieved by green SMMEs
- Step 10: CFP fund managers invest in green SMMEs
- Step 11: Green SMMEs achieve green outcomes

The fund seeks to address challenges that have long been faced by Small and Growing Businesses (SGBs) and Fund managers in South Africa as shown in table 3 below.[15]

15 green-cape.co.za/assets/Green-Outcomes-Fund_public-pitch-deck.pdf

Table 4: GOF response to challenges faced by South African SGBs and fund managers

Challenges affecting South African Green SGBs	Green Outcomes Fund (GOF) Response
Low local investor interest	Stimulates local investor interest by subsidizing green SGB investments
Lack of business development support	Pays for successful business development support
Limited access to market	Involves local investment community in growing green SGBs
Challenges Affecting South African Fund Managers	**Green Outcomes Fund (GOF) Response**
High start-up costs, especially for innovative (green) strategies	Stimulates local investor interest by subsidizing green SGB investments
Lack of quality green SGB pipeline	Supports sourcing of green SGBs through partners
Limited technical understanding of green issues	Provides technical support on green issues

Exhibit 3: Green Guarantee Instrument (Africa)

The Nordic Development Fund (NDF) partnered with the African Development Fund (ADF) in 2016 and subsequently launched a Green Guarantee Facility that was set to unlock financing for SMEs that invest in low carbon technologies. The main objective of the Green Guarantee Facility is to promote green growth and climate-resilient development across Africa by stimulating bank lending to SMEs for projects and investments directed towards climate change mitigation and adaptation (Nordic Development Fund, 2016).

The projects financed by the fund include: sustainable energy and energy efficiency, cleaner production, climate-smart agriculture and natural resource management and, green services, etc. The guarantee products offered are (African Guarantee Fund, Green Guarantee Facility):

- **Loan guarantees**: Improve the availability of banking finance in situations where collateral is a problem. It also improves the solvency ratios of banking partners with better leverage on their capital and also partners with immediate liquidity in case of SME loan default
- **Equity guarantees:** Improve the level of capital for African SMEs
- **Green Fundraising Guarantee:** Enables banking partners to raise long term resources for SMEs' long-term needs
- **Green Capacity Development:** Promotes balanced risk sharing as opposed to risk transferring

The fund seeks to provide solutions in the financing of green SMEs as follows (African Guarantee Fund, Green Guarantee):

- To mobilize medium to long term funding
- Preferential pricing
- Flexible coverage
- Relevant tenor
- First-loss guarantee

The Green Guarantee Facility came up with a Capacity Development programme for both financial institutions and SMEs. The programme aims to increase awareness on the green economy to its partner financial institutions as well as to mitigate the risk associated with financing climate-friendly investment. The fund faces the following challenges in its quest to increase the green financing of SMEs:

- Banks inability to assess risk associated with new technologies
- Lack of historical data: a relatively new industry and business models are unproven
- Lack of experience and familiarity with climate and new renewable energy technology

Outcomes

The green guarantee facility has realized extensive impact with about 11% of the guarantee fund portfolio contributing to climate change as the fund has unlocked more than USD 150 million of financing to green SMEs. The facility has also led to the creation of more than 20,000 jobs for SMEs as well as increased access to clean energy by more than 1 million households in Africa (African Guarantee Fund).

Moreover, the grant support for high-capacity development by NDF enabled AGF to run a series of high-level green finance training and Conferences across Africa. Examples of countries where these trainings and conferences have been held include Zambia, Kenya, Ghana and Cote d'Ivoire. These events were used to build knowledge and capacity of financial institutions thus enabling them to scale up lending to the green economy.

Exhibit 4: AfricaGrow Fund

On behalf of the German Federal Ministry for Economic Cooperation and Development (BMZ), KfW Development Bank and Allianz Global Investors set up a fund of funds to provide equity capital for SMEs and start-ups which experience a significant funding gap primarily in countries associated with the G20 Compact with Africa (CwA). The fund aims to provide funding for SMEs whilst creating jobs to promote sustainable economic and social development.

The fund volume stemmed from cooperation between private and public partners with an initial investment of EUR 170 million. The KfW subsidiary DEG invested EUR 30 million, EUR 85 million came from the Federal

Ministry for Economic Cooperation and Development and EUR 55 to 70 million was from Allianz companies.[16]

16 kfw.de/KfW-Group/Newsroom/Latest-News/Pressemitteilungen-Details_552832.html

Intended Impact

- Provision of financing for 150 innovative SMEs by 2030
- Creation of 25,000 new jobs by 2030
- Measurable positive impact on environmental and social conditions required for investments

Exhibit 5: China's Green Policies and Incentives

Green Credit Guidelines

China developed a pioneering and comprehensive regulatory framework for sustainable finance with the Green Credit Guidelines issued by the China Banking Regulatory Commission (CBRC) in 2012 to build on earlier green finance measures. The guidelines were designed specifically to help banks in allocating capital to firms and projects with better environmental and social risk management. Lending institutions are urged to promote green credit in order to improve resource efficiency. The adoption of risk management techniques across the entire lending process is highly encouraged.

The Guidelines empower banks to impose explicit remedies for breach of environmental risk management and to require additional risk mitigation measures for clients the banks identify as presenting major environmental risk. In addition, they encourage banks to identify guarantors and other third parties who can share the environmental and social risk associated with a project.

Guidelines for Establishing the Green Financial System

The Guidelines for Establishing the Green Financial System was issued in 2015 by the People's Bank of China together with other government agencies (i.e. the Ministry of Finance, the National Development and Reform Commission, the Ministry of Environmental Protection, China Securities Regulatory Commission (CSRC), China Banking Regulatory Commission and China Insurance Regulatory Commission).

The guideline has policy incentives that support and incentivize green investment. The incentives include: relending operations by the People's Bank of China, specialized green guarantee programs, interest subsidies for green loan-supported projects, and the launch of a national-level green development fund. These guidelines are important, as they notably accomplish the following:

- Clarify the definition of green finance, which has also been adopted by the CSRC for listed companies
- Advocate for unified rules and regulations on green bond issuance (for example, third-party evaluation standards)
- Intend to create financial incentives for green investment
- Push forward the development of green insurance
- Support local governments and promote international cooperation in green finance

Utility-based Energy Efficiency Finance Programme (CHUEE)

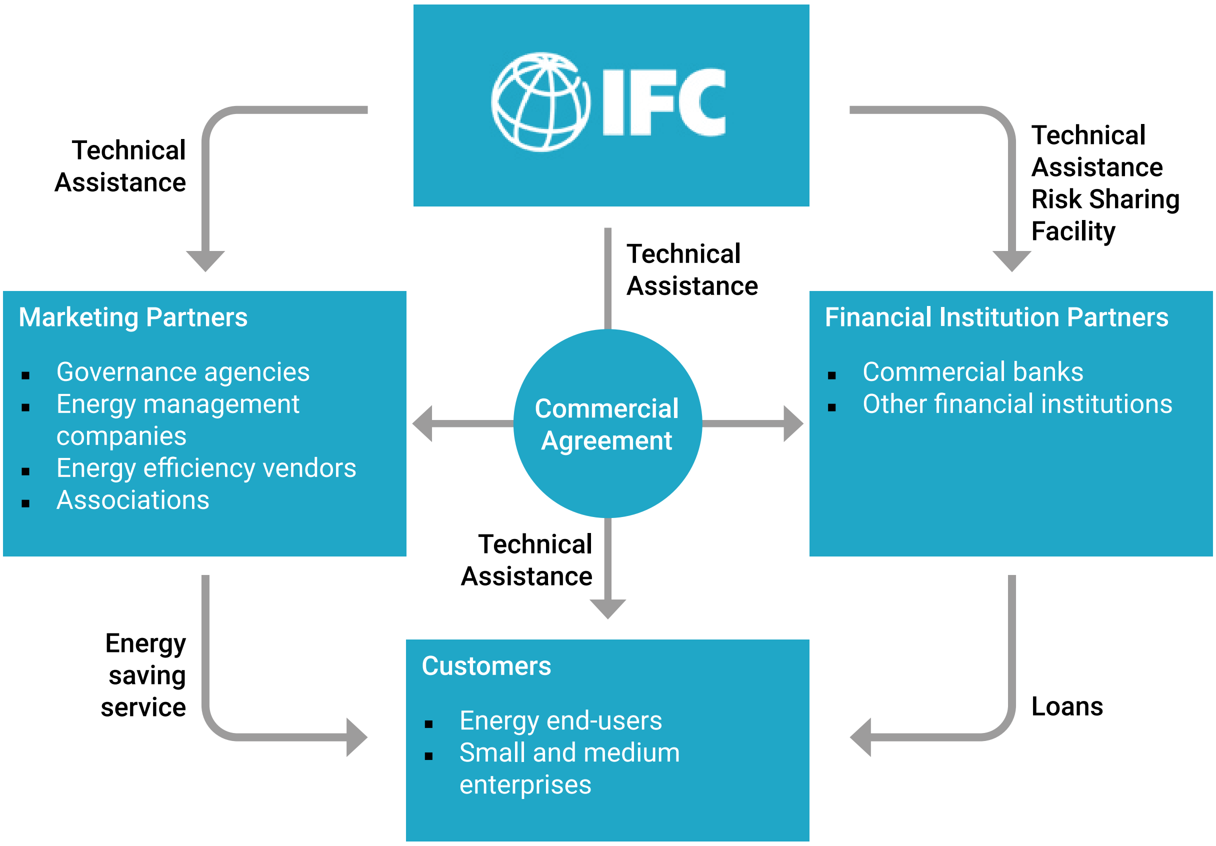
The Utility-based Energy Efficiency Finance Programme was established in 2006 by the International Finance Corporation (IFC), under the leadership of, and with financial support from, the Chinese Ministry of Finance, the Global Environment Facility (GEF), Finland and Norway. The programme was initially backed by a cooperative agreement signed by the Industrial Bank and IFC. Later on, four more banks joined the initiative, including the Banks of Beijing, Jiangsu, Shanghai and Nanjing; with the inclusion of a phase focusing on supporting investments by SMEs.

Access to credit by SMEs in China was difficult and commercial banks lacked experience in sustainable financing. A major challenge was faced by energy management companies in obtaining loans as banks requested fixed asset collateral rather than cash flow. Thus, it was difficult for SMEs to take up energy efficiency products. Therefore, the CHUEE programme was initiated to address these barriers.

The CHUEE programme provides risk facilities and technical assistance to support energy efficiency measures in China through an allocation of USD 50 million contributed by the IFC and GEF (Amin, Dimsdale, & Jaramillo, 2014). It is an innovative market-based solution to China's energy and environmental challenges that enables players such as banks, utility companies and government agencies, suppliers of energy efficiency equipment and services to collaborate in creating a sustainable financing model to reduce greenhouse emissions and promote cleaner production. This programme is a successful example of the use of guarantees to support private investment in energy efficiency measures with its process design shown in figure 3.

In CHUEE, a loan loss reserve fund (LLRF) is used to share the financial risks Chinese commercial banks face by guaranteeing loans they make to energy management companies who finance upgrades for their customers. The LLRF refunds 75% of the first 10% of the amount of the loan in case of default, and 40% of any losses on the remaining 90% of the loan amount.

Figure 2: CHUEE Process Design



Source: International Finance Corporation

Outcomes

CHUEE's impact is reflected in the growth and quality of the energy efficiency loan portfolio of the participating banks in China, as well as in their improved capacity to finance energy efficiency projects commercially and the demonstrated effects of the programme on non-participating banks.

As of June 2015, the CHUEE program's partner banks had provided loans worth over USD 625 million under the risk-sharing facilities provided by IFC, financing 222 energy efficiency/renewable energy projects. These investments reduce over 20 million tons of carbon dioxide emissions every year.

I. Roadmap and actions to scale up green finance for SMEs

1. Potential Solutions to Identified Barriers

a. Resolving Knowledge and Capacity Barriers

SME groups should be taken through mentoring, training and capacity building on green business development. This will aid in increasing the level of awareness and expertise required to incorporate green business developments within their business operations. They should also be educated on the forms of green financing products available to SMEs. This will improve the ability of SME owners to access green finance.

In addition, financial institutions need to issue training to their loan officers on green financing and on implementing green finance proposals. The gaining of such applied knowledge and learning will drive the transition towards an inclusive green economy both in the private and public sectors.

b. Resolving Finance Barriers

Naturally, SMEs are financially constrained when conducting green business development. Thus, more funds should be directed towards financing green SMEs.

Financial institutions need to build their business model around sustainable inclusiveness by looking at the impact that green SMEs have on the economy, the society and the environment. Commercial banks and other lending institutions need to come up with products that are specific to financing SMEs that take up green projects. Such financing ought to have friendly terms i.e. preferential interest rates, extended grace periods and favorable repayment periods. From our interview surveys with the DBM and SMEs in Mauritius, this bank intervention is the most suitable in attracting more SMEs to take up green financing.

Furthermore, applying financial engineering to SMEs' risk analysis could significantly boost green SMEs in Mauritius, as standard risk assessment processes designed for large companies often overestimate the risk of default presented by SMEs, resulting in funding denial or a high and discouraging cost of capital (Jean-Mermoz Konandi, 2018).

Furthermore, SMEs need high-quality collateral for green borrowing to improve their access to green finance, and the government should give green lending incentives and guarantee programmes to boost green lending by banks to SMEs.

SMEs should not overlook the long-run operational cost-benefit or the overlooked cost benefit to the environment when considering the larger upfront costs of green investments. These costs become cheaper in the long term. Therefore, installing green technologies earlier to aid economic activity, rather than transitioning at a later date, may be the least cost option. SMEs adopting green business development benefit from the opportunity to move past less efficient technology and practices and immediately embrace newer, green and more efficient technologies. The faster uptake of more viable and modern green innovations by SMEs will increase their efficiency and competitive edge. Having viable projects is the most suitable SME intervention in gaining more access to green finance based on our survey with the DBM and SMEs in Mauritius.

c. Resolving Policy Barriers

To enhance private capital for green investment, it is necessary to design an enabling environment that facilitates green finance. A coordinated approach by both the public and private actors of the financial system is needed. The Mauritius policymakers need to support green finance by backing the strategic framework for green finance for SMEs. They need to provide clear policy signals and incentives for SMEs and lending institutions that finance green projects. The financial, regulatory and environmental policies should be coordinated. Moreover, the authorities need to establish a communication channel through which green initiatives and measures are undertaken by enterprises and fully documented and disseminated to the public. It would also be helpful for the government and financial regulators to take active lead in harmonization of the definition and practice of green finance to prevent instances of 'greenwashing'.

Regulation of imports should be prioritized to protect local economies. Encouraging food sovereignty with emphasis on growing local sustainable food economies, will encourage SMEs to take up production of affordable, healthy and diverse food and create employment for locals. This applies to other economic sectors as well. The government should encourage high-quality local production of goods and delivery of services where possible.

Monoculture, while efficient and income-generating, poses a threat to biodiversity and sustainable agriculture. From the survey conducted for this study, SMEs attribute monoculture with increased pesticide use, higher water use, soil degradation and fertility loss. Crop rotation can help reduce the effects of monoculture. Some of the land used for sugarcane farming can be channeled to growth of other productive sectors.

d. Resolving Production Barriers

New green projects are often very capital intensive by nature. The government can play an active role in easing these costs through:

- Providing crown land at near-zero, or "nominal-charge-lease-costs" via a publicly accessible database. Where crown land is unavailable, the government can offer subsidies on leasing privately owned land
- Offer a guarantee to provide water and electrical power to SME projects within a stipulated time frame
- Offer a Government grant to cover 50% of capital costs to implement rainwater harvesting infrastructure to incentivize new projects to achieve maximum water self-sufficiency, lessening their burden on the state
- Where necessary, review electricity costs in new agriculture projects, to limit energy costs from taking a disproportionate share of total farm income
- Offer fully supported government grants or subsidies to enable adoption of renewable energy systems

e. Resolving Size Barriers

SMEs such as small planters should be a focus of access to sustainable financing. These businesses do not have the financial and technical capacity to position themselves as eligible for the current green initiatives available in the market. Initiatives that are currently available often serve business ventures that are already structured and well established, locking out micro enterprises. The Government of Mauritius can borrow from initiatives from other countries such as:

- Enterprise Singapore initiative[17] – a Singapore government agency championing enterprise development through early-stage funding, mentoring, insurance policies, tax incentives and technical capacity to support businesses across different stages of growth to build their capacity and structure.
- SME Corporation Malaysia[18] – a central coordinating agency that coordinates the implementation of development programmes for SMEs. The agency provides SMEs with technical assistance in business advisory, brand development, technological training and market access.

17 Enterprise Mauritius, enterprisesg.gov.sg/
18 smecorp.gov.my/index.php/en/

2. Further recommendations

a. Channeling more public investments towards green projects for SMEs

Public procurement should be geared towards SME green projects to create momentum that would get the financial sector in Mauritius to focus on such projects.

Based on the Mauritian national budget 2020–2021, the government allocated MUR 100 billion towards the greening of its economy. The government needs to direct some of these funds to green projects that are specific to SMEs given that the general perception based on our interview surveys on the level of funding dedicated towards green finance is low in Mauritius. This way, SMEs would also benefit from the amount of funds directed to the greening of the Mauritius economy as they also significantly contribute to greenhouse gas emissions. The government could do this through special funds offering green financing to SMEs.

b. Green finance policies and incentives

The government needs to further intensify green finance policies and incentives specific to SMEs. Policy incentivisation is important to encourage and facilitate SMEs to incorporate green projects within their business models. One of the government interventions cited by SMEs in the surveys is that the government needs to develop green lending subsidies to financiers such as banks and green guarantee schemes to encourage green lending. This would encourage banks to come up with more green products specific to SMEs whilst encouraging SMEs to incorporate green projects within their business model.

c. Raising awareness on green projects and green financing

There is a need to educate and disseminate information on green finance through campaigns and training forums. SMEs need to be mentored and trained to equip them with the expertise required in executing green projects. This should help them embrace green projects as it would help reduce the common perception that green projects are expensive and that over the long term the costs outweigh the benefit.

On the other hand, loan officers also need to be trained on how to execute green finance proposals. This could be done through forums and workshops on green financing initiated by the bank associations. In addition, the government could consider creating an agency that offers technical support and acts as an advisor to banks on green programmes and projects.

Banks and other financiers should come up with a specialized green loan product for SMEs. This product should incorporate favorable features that match the needs of SMEs. Specifically, it needs to have preferential lending rates and favorable repayment periods. This way, SMEs will be encouraged to borrow green finance from banks and other formal sources as opposed to informal sources that could be unreliable.

Moreover, banks need to accept viable green projects as collateral for loans to SMEs. This will enable more SMEs to access green finance.

d. Suitable risk analysis for SMEs

Financiers need to adapt proper ways of analyzing risk for SMEs through financial engineering because standardized risk assessment processes suitable for large companies tend to overestimate the risk of default by SMEs, which often results in the denial of funding, or a high and discouraging cost of capital. This would lead to more loans issued to SMEs with viable green projects.

3. Quick wins and next steps

a. Policies and incentives for green products

The government continues to promote policies and incentives to support green products. These policies include: Tax reforms, subsidies, preferential tariffs and trade policies, polluter-pays principle, integrated product policies, and consumer protection policies. A possible next step by the government would be to further develop green finance policies and incentives for green financing that are specific to SMEs:

Table 5: Case Studies of Grants, Subsidies and Technical Assistance for SMEs

Program	Incentive
Ecology Premium Programme – Belgium	A subsidy provided to enterprises that invest in environmental technologies. The size of the subsidy depends on the environmental performance of the technology, measured by an environmental performance sector. SMEs can receive a subsidy with a maximum of 35% of the investment made but not exceeding EUR 3.6 million.
Enterprise Ireland – Ireland	This public industrial development agency provides up to 50 percent grants to SMEs as a percentage of consultancy costs for the identification and implementation of resource efficiency.

Source: (OECD, 2018)

Table 6: Case Studies of Tax Incentives for SMEs

Program	Incentives
Tax Exemption – Netherlands	The Environmental Investment Allowance (MIA) enables companies to deduct environmental investments up to 36% of the investment cost.
Accelerated Depreciation – France	As of 2004, the accelerated depreciation and reduced property and professional taxes policy to stimulate purchases of renewable energy and energy-efficient equipment.

Source: (OECD, 2018)

b. Green loans

The Development Bank of Mauritius finances green projects by SMEs whereas the Mauritius Commercial bank (MCB) and the State Bank of Mauritius (SBM) have been able to finance more than 100 green projects in Mauritius through a credit line received from the Agence Française de Développement. The government also set up the National Environment and Climate Change Fund, to rehabilitate the coastlines, strengthen environmental monitoring, clean up the country, and promote greening of the economy. A possible next step by most lending institutions would be the creation of specialized green loans for SMEs. Institutions like DBM, MCB and MauBank have schemes that support the growth and development of SMEs in Mauritius. A possible next step would be the development of funds or schemes that are specific to green business development.

c. Green finance awareness campaigns

Given the requirements of the regulatory framework and policymakers in Mauritius, banks are encouraged to adopt a more proactive and pragmatic approach towards designing their products and services to better serve their customers and cater for future developments. In 2018, the ministry held training sessions for capacity building of some 20 relevant stakeholders for the preparation of Bankable Projects to Access Climate Finance (Ministry of Social Security, 2018/2019). A possible next step would be to have more of such sessions to improve the integration of green finance for SMEs.

d. Green business development sensitization sessions

Based on the annual report of the (Ministry of Social Security, 2018/2019), two capacity-building/sensitization sessions were held by the Cooperatives sector and Women Associations to share information and experience on best practices to green their business sectors. As a result, 140 persons were trained and sensitized on green skills development in the Agricultural, Manufacturing and Tourism sectors. Moreover, evaluation missions were carried out to evaluate the uptake of green practices in the grant projects under the SWITCH Africa Green initiative carried out in Rodrigues. The Ministry secured grant funding for the implementation of the following climate change related projects:

- Technical support to the tune of USD 325,000 was secured in September 2018 from the Green Climate Fund through the Climate Technology Centre Network to assess the Port's vulnerability with a view to enhance the port's resilience to the adverse impacts of climate change.
- The preparation of the Fourth National Communication, assistance to the tune of USD 500,000 was secured from the Global Environment Facility through the UN Environment Programme.

A possible next step would be to have more of such sessions to improve the integration of green business development for SMEs.

J. Green Recovery in Mauritius – "Building Back Green"

1. The COVID-19 Pandemic

Earlier in 2018, the World Health Organization (WHO) confirmed the outbreak of a new type of Coronavirus, later named COVID-19. Later the outbreak would be declared a Public Health Emergency of International Concern and thereafter declared a pandemic.

The COVID-19 is more than a health crisis due to its potential to create devastating social, economic and political crises and is thus the defining global health crisis and the greatest challenge faced since World War II. According to ODI (2020), adverse trade effects of COVID-19 are likely to be more severe than those of the global financial crisis of 2008–2009 because they comprise both demand and supply-side shocks.

Since its emergence, the Coronavirus has spread to every continent. Cases rise daily in Africa, North and South America, and Europe. By 23rd August 2021, the number of confirmed cases of COVID-19 globally was 211,730,035 with 4,430,697 confirmed deaths.[19] Countries in Africa responded with declarations of states of emergency, immigration restriction, travel bans and rolled out economic and social assistance packages resulting in massive job and income losses.

2. COVID-19 in Mauritius

COVID-19 has brought global disruption, spurring unprecedented economic volatility and disruption. Mauritius has been highly vulnerable given its high dependency on tourism. The tourism sector accounts for 23.8% of the 2019 GDP and it accounts for 22% of employment and 35% of total exports. With sharp falls in tourism revenues and remittance flows, Mauritius is likely to experience the most pronounced contraction in 2020, further aggravating its vulnerability to economic and climatic shocks. Despite the country being classified as a high-income country, the impact of the COVID-19 pandemic is expected to be significant.

19 who.int/emergencies/diseases/novel-coronavirus-2019/

As at 2020, Mauritius' public sector debt is estimated at 92% of GDP a sharp increase from 84.6% in 2019.[20] This limits its ability to deploy countercyclical fiscal policy to buffer the economy in the face of shocks such as the current situation of the country from stable to negative outlook. Disproportionately high debt-servicing burdens may weaken its external balance, potentially increasing the likelihood of debt defaults.

Expected impact of COVID-19 on the Mauritian economy

- **Tourism sector:** The number of tourist arrivals in 2020 decreased by 77.7% to 308,980 compared to 1,383,488 in 2019.
- **Unemployment**: Total unemployment rate rose from 6.7% in 2019 to 9.2% in 2020, an overall increase of 2.5%. Youth unemployment was affected significantly by the COVID-19 increasing by 3.3%.[21]
- **GDP**: In 2020, GDP contracted by 14.9% due to the COVID-19 pandemic as opposed to a growth of 3% in 2019.[22]
- **Production capacity**: The pandemic has affected the production capacity across the continent, with manufacturing operations, travel/hospitality and transportation services performing worst. In Mauritius, firms were found to operate at 50% capacity, anticipating a contraction of revenue by 31%-40% (UN Mauritius COVID-19 Socioeconomic Recovery Plan, 2020).
- **Local company losses**: Local companies are expected to suffer a staggering loss of MUR 170bn in revenue, MUR 50bn in profits, and consequently the State coffers will be short of corporate tax of about MUR 7.5bn if the economy cannot be rebooted effectively in a timely manner.[23]
- **Lending**: All-time-high levels of excess liquidity indicate that banks are being extremely cautious in lending in the current environment. With the massive budget deficit that the government is expected to run, financing to the private sector may dry out.

The Impact of COVID-19 on SMEs

While the COVID-19 pandemic poses a significant threat to mainstream industry and commerce, SMEs, farm workers, the self-employed, daily wage earners, refugees and migrant workers are likely to be the hardest hit. Business and liquidity have dried up, entrepreneurs curtailed if not closed their businesses, at least temporarily and numerous jobs have been lost.

20 imf.org/en/News/Articles/2021/06/23/pr21194-mauritius-imf-executive-board-concludes-2021-article-iv-consultation
21 statsmauritius.govmu.org/Documents/Statistics/ESI/2021/EI1583/LF_Emp_Unemp_Yr20_180521.pdf
22 statsmauritius.govmu.org/Documents/Statistics/ESI/2021/EI1593/NAE_Jun21_300621.pdf
23 mauriceactu.mu/wp-content/uploads/2020/05/200515-COVID-19-Aftermath.pdf

The unprecedented fall in Mauritius' GDP will have spillover effects on corporate revenue and earnings. The impact on SMEs is as follows:

- **Costs:** Corporates will scramble to cut costs as best as they can, but will remain short due to the shrinking revenue velocity.
- **Corporate tax:** Corporate tax is expected to fall by around MUR 7.5bn.[24]
- **Spending:** Spending cuts are projected to follow revenue and profit decreases. Even those who are somewhat less burdened, on the other hand, are likely to be more cautious about capital expenditures, business expansion, and financial spending than in previous years. The more corporations focus on debt reduction and spending cuts, the more difficult it will be for economic growth and company profitability to recover to previous levels.
- **Debt:** Left with much lower profits and a shortfall of cash, companies are likely to come out on the other side of the COVID-19 with a much higher need for debt. With the increased perceived risk of SMEs, refinancing will be harder to access. Banks are not ready to lend yet as it has been observed by the peaking excess liquidity in the financial system. In addition, funding available to corporates is expected to dry out given the massive budget deficit that the Government will run which will crowd out corporate financing.

3. COVID-19 Recovery Plans

Increased social protection measures are needed within the national COVID-19 response, such as income support measures for vulnerable households experiencing a drop in resources; measures to protect small-scale enterprises as well as informal measures to prevent long-term impacts on livelihoods. Private-sector support and business stimulus measures should also target sectors where women are employed such as SMEs and the service sector.

The COVID-19 response requires urgent and immediate implementation, so as to minimize the extensive related economic impact. Capacitating MSMEs in healthcare, food, agriculture and other key sectors can help in the immediate response to disruption caused by the pandemic. Public and private players are rapidly introducing initiatives to support financial institutions and MSMEs during this phase. However, the capital-raising process is too manual and antiquated at the moment as matching investors with assets is fraught with challenges and is time-consuming. This project shall actively work with MSMEs stakeholders such the businesses, SME Mauritius Ltd, the national agency for promotion of entrepreneurship locally and finance providers to explore needs for liquidity and best practices to deal with the economic decline that trails COVID-19 in Mauritius.

Enabling the continued activity of small producers, informal workers and SMEs across sectors is vital, as it ensures the production of, and access to, food and other essential goods and services. Stimulus packages that support income and decent employment

24 SWAN-COVID-19, 2020. Its aftermath on the Mauritian Economy

are critical to prevent disruptions in key employment sectors that could result in riots, violence and erosion of trust in institutions and governments. Particularly in the context of Mauritius, environmental considerations are central to the response and recovery efforts. Stimulus packages can assist in the transition to a healthier, resource-efficient green and circular economy, based on sustainable consumption and production patterns linked to sustainable value chains.

Government response

In response to the pandemic, the Government of Mauritius outlined substantive policy interventions to support the private sector to mitigate the impact of COVID-19, and at the same time prevent its rapid spread. The Plan aimed at supporting the private sector using a range of business stimulus packages and relieving tax obligations.[25] Measures include:

- Establishment of revolving credit through the Development Bank
- Reductions in taxes and levies on import and cargo
- Deferral of loan payments for businesses and private individuals

At sectoral level, the Government aims to boost local production of food crops to mitigate the loss and reduced capacity of vital supply chains. Measures include:

- Seeking available estates for small planters to have additional rotational land for the cultivation of crops like potatoes, onions, pulses and other vegetables
- Provide seeds for the cultivation of potatoes, garlic, beans and onions through the Seed Purchase Scheme
- Purchase products such as potatoes, garlic, beans and other pulses, and onions on a long-term basis at a guaranteed price

In addition to continuing to provide for social security, the Ministry of Finance announced the provisions made to support the informal sector[26] through a number of measures which include:

- Providing financial support through cash
- Transfers to self-employed individuals
- A 6-month moratorium on capital and interest (re)payments for SMEs
- The provision of loan facilities through the DBM
- A waiver of rent for lessees of the DBM estates during the curfew period

Fees for market stalls have also been waived as have the fees payable by sellers of vegetables and general merchandise in markets during the curfew period. The implication of this business stimulus, social spending and self-employed and SME support is that the economic shock of a COVID epidemic in Mauritius will present considerable strain on an already overstretched national budget. Resources will be needed to continue social protection schemes and maintain a health system under pressure; while foregoing a significant amount of tax and non-tax revenue.

25 cabri-sbo.org/uploads/files/Covid19BudgetDocuments/Plan-de-Soutien_13-March-2020.pdf

26 mcci.org/en/media-news-events/business-updates/assistance-scheme-to-the-informal-sector/

Finally, based on the National budget speech 2020–2021, the government came up with a series of measures to reduce the cost of doing business in the aftermath of the COVID-19 pandemic. They include:

- The Mauritius Revenue Authority regulating fees charged by freight forwarders for Groupage cargo
- The fees for reinstating companies will be reviewed downwards from MUR 15,000 to MUR 5,000 and the requirements for giving notice shall be done online
- Application fee for a Building and Land Use Permit will be waived
- For distressed companies affected directly by the pandemic in the agricultural sector, the DBM will provide loans at the concessional rate of 0.5% per annum

Green economy response

According to the UN, Comprehensive Response to COVID-19 (2020), emerging from the COVID-19 crisis would be an opportunity for a transformative change towards a green, more resilient and inclusive economy. It would be an opportunity to address climate crisis, exclusion, inequalities and gaps in social protection systems.

Instead of going back to unsustainable systems, the economy needs to have a Sustainable Development Agenda to guide the economy to transition to renewable energy, green jobs and infrastructure, sustainable food systems, and other green systems and approaches such as permanent reductions in air pollution, clean and safe means of transportation, such as cycling and walking, investments in and subsidies for small businesses and enterprises, investments in reliable, safe and energy-efficient housing and expanded areas of green, public spaces.

Based on the national budget 2020–2021, the government's strategy is to secure a greener and more inclusive development while preserving a strong social fabric. Thus, the government has earmarked MUR 100 Billion towards the greening of Mauritius. The national vision is to have a livelihood programme rolled out that is centered on reskilling workers for a green economy (UN Mauritius COVID-19 Socioeconomic Recovery Plan, 2020). Greening the economy needs to be a priority, thus Mauritius needs to embed long-term sustainability and inclusion in its COVID-19 response and recovery package.

4. Green Business Opportunities in Mauritius

Mauritian small business owners are reaping commercial benefits from innovative green business ideas. SME interviews for this study uncovered green business opportunities that Mauritians can take advantage of towards cleaner energy, water savings, green agriculture and sustainable construction. Some of these ideas are already being implemented at a small scale.

Table 7: Green Business Opportunities in Mauritius

Sector	Activity
Agriculture	▪ Aquaponics—where waste produced by farmed fish supply nutrients for plants grown hydroponically thus reducing agricultural land used ▪ Rooftop greenhouse farming which leads to reduced heat emission, less use of agricultural land and easier water collection
Waste Energy	▪ Creation of diesel through decomposition of plastics ▪ Creation of biogas from vegetables and fruits to produce heat and electricity ▪ Creation of biodiesel for cooking oil ▪ Production of biomass energy from wood and plant waste ▪ Use of waste water to produce heat and electricity
Manufacturing	▪ Manufacturing of bricks from bagasse ash (residue of burning sugarcane) ▪ Recycling of sawdust and compost for brick manufacturing ▪ Melting of plastics to make construction bricks ▪ Manufacturing of eco-friendly pens and pencils using waste paper ▪ Making medicinal herbs and herd-infused oils ▪ Manufacturing of bags and baskets from eco-friendly material such as jute and banana leaves fiber ▪ Eco-friendly household products and jewelry from magazines and waste paper ▪ Manufacturing for swimwear, sportswear, towels using leftover fabric for locals and tourists ▪ Manufacture of wooden cutleries, paper straw, plates following the single-use plastic ban
Tourism	▪ Eco-lodges and glamping pods set up in nature
Waste Management	▪ Upcycling – Shift from a linear model to a circular model where products at end of life, waste materials or unwanted products are valorized into new products

Source: Own analysis and SME Interviews

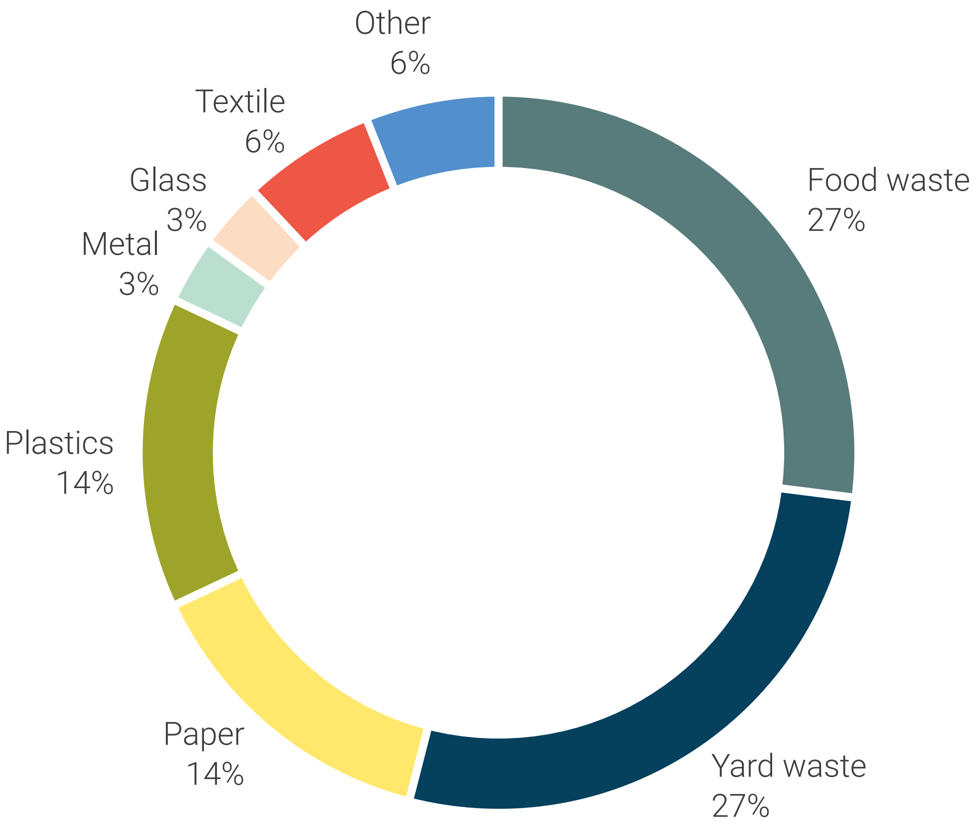
5. Recycling

a. Recycling in Mauritius

Mauritius generates about 1,488 tonnes of waste each day. Most of the residual solid waste is disposed of at the island's sole landfill Mare Chicose. Solid waste is also exported where value can be recovered. Organic, plastic and paper waste constitute the majority of waste produced at 54%, 14% and 14% respectively.[27] The per capita total solid waste landfilled increased by 21.3% from 0.94 kg/day in 2011 to 1.14 kg/day in 2020. Landfills are characterized with production of harmful chemicals and greenhouse gasses necessitating the importance of reducing, recycling and repurposing waste products to reduce the overall impact on the environment.

27 environment.govmu.org/Pages/swmd/SWMD-Solid-Waste-Management-In-Mauritius0206-559.aspx

Figure 3: Waste Composition in Mauritius



Source: Ministry of Environment, Solid Waste Management and Climate Change

The above waste composition shows potential and opportunities for recycling. SMEs in Mauritius are developing innovative products and processes from recycling existing waste. From the survey conducted, SMEs are adopting recycling through:

- Resource Recovery where paper and plastic waste are crushed and new products made
- Conversion of waste cooking oil to biodiesel
- Incorporation of farm waste materials in the manufacture of construction blocks
- Composting of farm waste to organic fertilizer, packaging and selling for individual and industrial use
- Converting plastic, tyre and paper waste to useful items such as toys, artwork, ornaments and bags
- Manufacturing of swimwear and sportswear from waste fabric

High costs of acquiring new recycling technology and machinery are slowing down SME efforts to adopt recycling. SMEs also lack training on how to make recycling profitable which limits their capacity to securing funding from commercial lenders. Several SMEs whose primary business activity is not recycling, are also keen on greening their operations by adopting eco-friendly practices. However, lack of facilities to separate waste at source, high waste collection and transport charges, lack of electronic waste disposal facilities disincentivizes these small businesses from recycling. General ignorance on the value of waste materials and importance of recycling for commercial and environmental reasons is also a major challenge.

b. Proposed solutions to challenges

The Ministry of Environment, Solid Waste Management and Climate Change is responsible for waste management in Mauritius. Regulations passed under the ministry such as the Environment Protection (Banning of Plastic Bags) Regulations 2020[28] are part of the government's 2020–2024 program towards making Mauritius a plastic-free country. This law bans the importation, manufacture, possession, sale, supply and use of not less than 10 non-biodegradable single-use plastic products thus reducing the amounts of plastic waste going to landfills. This has incentivized the use of reusable and recyclable packaging material.

The ministry can further incentivize adoption of recycling through:

- Public education and awareness programs on the importance of waste recycling through national sensitization campaigns, facilitating SME training and social media campaigns.
- Legislative interventions in the manufacturing sector to limit use of non-recyclable packaging material.
- Implementing green procurement policies such as product certification indicating the recyclability of products.
- Government assistance in finding and building markets for recycled materials locally and internationally.
- Subsidizing the price of recycled materials when resale values are high to ensure price stability.
- Enhancing the community-based recycling system through supporting small businesses in recycling.

c. Recycling Case Studies

Germany

Germany's transition into a sustainable society was propelled by the adoption of a circular economy. As at 2021, Germany leads the European Union in recycling of municipal waste at 67%.[29] The country has enacted several waste management laws and regulation since enacting the first waste law in 1972. The laws have provided a platform for the economy's shift to circularity. One notable law is the Closed Substance Cycle and Waste Management Act targeted at producers urging them to focus on waste avoidance, waste recovery and environmentally compatible disposal. Prevention of waste is prioritized through producer responsibility where producers of a commodity are required to take into account the environmental impacts of a product during its whole life cycle. The producer is also required to create a system that minimizes the adverse environmental impacts and maximizes the recovery of resources in collaboration with other industry players such as distributors, consumers and recycling companies.

28 Environmental Protection (Banning of Plastic Bags) 2020, environment.govmu.org/Pages/Legislations.aspx
29 ec.europa.eu/eurostat/databrowser/view/t2020_rt120/default/table?lang=en

Germany's packaging law (Verpackungsverordnung) passed in 1991, requires producers and distributors of consumer-oriented packaged goods to take responsibility for the collection, recycling, or disposal of their product's packaging. Several polices, and regulations have been implemented to ensure the circularity of materials. On waste electrical and electronic equipment (WEEE), electrical and electronic appliances are not be thrown out but are to be returned to producers who are obligated to accept them free of charge.[30]

Recycling is brewed into both law and culture. High standards are imposed on waste recovery where waste collected is also required to be sorted. Multiple recycling bins are provided to citizens requiring them to sort their waste themselves. Large scale sorting is mainly performed automatically using modern technology to ensure efficiency.

The Green Action Plan by the EU

The Green Action Plan (GAP), proposed by the European Commission in 2014, intended to assist small and medium-sized businesses (SMEs) in turning environmental challenges into business opportunities. The initiative aims to promote SMEs' understanding of resource efficiency improvements and the circular economy's productivity, competitiveness and business opportunities. The Green Action Plan aims to create an enabling business climate for SMEs so that green ideas can be easily developed, funded, and commercialized. The promotion of eco-innovation, facilitation of business partnerships and skills and knowledge exchange, are relevant initiatives under the plan.

From the SME survey small businesses are already taking part in circular economy activities such as industrial symbiosis which consists of sharing resources and services among related industries. One enterprise in food production took advantage of organic fish waste produced by farmed fish to supply nutrients for plants grown hydroponically. Another business owner interviewed, collects fabrics from small enterprises and manufactures and sells shoes.

Our survey also indicated that a few SMEs are taking part in closed loop production processes where businesses reuse material waste created during the production process for additional products, as well as use the recycled products to create new products. One business owner interviewed in the study, manufactures swimwear and sportswear as her main business activity. She then uses left over fabric to produce masks and left-over towels fabrics to produce baby towels, face towels and head bands. However, these SMEs cite lack of access to finance and skilled local labour support as barriers hinders then from further expanding their green projects.

30 eur-lex.europa.eu/homepage.html

K. Conclusion

Evidently, Mauritius has made strides to improve the business ecosystem for the growth of SMEs through policies and incentives that are SME-focused. However, the landscape of SMEs in Mauritius is still highly skewed towards enterprises that are highly labour intensive with low value addition. Thus, there is a need to further develop and promote policies and incentives that will help SMEs to shift to higher value-add activities.

In addition, similar efforts need to be made towards the greening of SMEs as stated in the 10-year SME master plan given that these enterprises have a significant contribution towards green gas emission in the economy. Moreover, more awareness needs to be created on the implementation of green business development practices that are commercially viable, to encourage SMEs to shift to green. Thus, there is a need for further enhancing structures, strategies, initiatives, policies and incentives that are specific to green finance for SMEs. This way, more SMEs will gain motivation to incorporate green projects within their operations and in turn get green financing. Hence, Mauritius will take steps closer to achieving its goal of becoming an environmentally sustainable and inclusive economy.

Developing the green economy is a significant opportunity for Mauritius as it can lead to substantive economic growth and job creation. There is potential to scale up green financing for SMEs in Mauritius as the government has initiated programmes and frameworks specific to greening the economy. More funds need to be directed towards green financing of SMEs to create momentum that would get the financial sector in Mauritius to focus on such projects. To date, Mauritius has been successful in implementing several projects based on green financing such as climate finance training sessions, green business development training sessions, the Switch Africa Green programme and the provision of green loans. Nonetheless, these practices and products need to be broadened and made accessible to SMEs and more institutions need to offer green products and schemes specific for SMEs.

While the COVID-19 pandemic poses a significant threat to mainstream industry and commerce, SMEs have been significantly affected. This crisis would be an opportunity for a transformative change towards a green, more resilient and inclusive economy. Greening the economy needs to be a priority, thus Mauritius needs to embed long-term sustainability and inclusion in its COVID-19 response and recovery package. Instead of going back to unsustainable systems, the economy needs to direct its investments and subsidies towards green SMEs.

Mauritius' green recovery response following economic disruption caused by the COVID-19 pandemic will require immediate implementation to minimize the economic impact. Stimulus measures that drive sustainability while boosting jobs, income and growth are needed to enhance the economy's resilience. Responses measures should be timely and appropriately targeted such as; income support measures to the most vulnerable, protection of small-scale enterprises and targeting MSMEs run by women who are disproportionally affected by the COVID-19 shock. These measures should also be spread out across key industries such as energy, industry, agriculture, forestry and waste management among others. This will require support initiatives from both the public and private sector, as well as SME stakeholders. Further, measuring and evaluating the environmental impacts of recovery policies over time is crucial and should be prioritized.

L. Recommendation for Further Study

According to the Ministry of Industrial Development, SMEs and Cooperatives (SMEs Division), since the launching of the 10 Year Master Plan in 2017, only 28% of the proposed activities for greening of SMEs have been implemented. There is still need for further analysis of circumstances under which the implementation has succeeded in achieving outcomes and the factors that have negatively affected implementation outcomes. There is also need for consistent monitoring, evaluation, regular data collection, data management and analysis across the master plan to help the government to allocate its resources to the most effective and cost-efficient efforts to support the achievement of the targets of the master plan.

The study has listed green business opportunities that have the potential to be taken up and implemented successfully in Mauritius. Future work should focus on realizing the value propositions of resultant business models. Further research can be done on minimum capital investment and technologies needed for these activities, market availability for the goods and services and resource constraints for undertaking these green activities. This research can also provide the government and relevant stakeholders such as banks and SME support organizations with an actionable framework to provide financial and technical support to SMEs to green their ventures, and encourage new startups to come up with green business models.

M. Appendix: Resource Toolkit on Green Finance

1. Green Finance and Programmes

Green Growth Knowledge Platform Partnership

The GGKP has three knowledge platforms: The Green Growth Knowledge Platform, the Green Industry Platform and the Green Finance Platform which offer access to the latest research, case studies, toolkits, learning products, principles, and protocols to empower policymakers and advisors, SMEs, and banks, insurance, and investment firms to make evidence-based decisions about how to green their operations.

Sample documentations include:

- Integrated Green Economy Modelling Framework
- Link Diversification and Cooperation in a Decarbonizing World: Climate strategies for fossil fuel dependent countries
- Link The World Bank Course – Circular Economy and Private Sector Development: Learning Series
- Ecological Economics for a Sustainable Future

SWITCH-Africa Green

SWITCH Africa Green is a UN programme that supports African countries in their transition to an Inclusive Green Economy, promoting a shift toward sustainable consumption and production (SCP) practices and patterns. It supports seven African countries: Burkina Faso, Ethiopia, Ghana, Kenya, Mauritius, South Africa and Uganda towards a green economy.

SWITCH-Asia

SWITCH-Asia is a Sustainable Consumption and Production programme supported by the EU in Southeast Asia, South Asia, Central Asia, Mongolia and China that seeks to promote sustainable development, to contribute to the economic prosperity and poverty reduction in Asia and Central Asia and to contribute to the transition towards a low-carbon, resource-efficient and circular economy. Sample documents by the programme include:

- Sustainable Waste Management in a Circular Economy
- SCP in Mongolia
- State of Food Security & Nutrition in the World

Green Climate Fund

The GCF is a dedicated fund that helps developing countries reduce their greenhouse gas emissions and enhance their ability to respond to climate change. Sample publications by the fund include:

- Enhancing access to climate finance through readiness support
- GCF spotlight: Small Island Developing States
- GCF in brief: Adaptation planning

African Development Bank

The objective of the AfDB Group is to spur sustainable economic development and social progress in its regional member countries, thus contributing to poverty reduction. Sample publications by the bank include:

- Climate Finance Newsletter
- African Economic Outlook 2021
- African Development Bank Green & Social Bond Newsletter
- Investing in Climate Resilient Livelihoods | Sustainable Land and Water Resources Management Project

Nordic Development Fund

The Nordic Development Fund is a development Fund institution that facilitates climate change investments, primarily in low-income countries. Examples of their projects include:

- Rwanda Catalytic Green Investment Bank
- Promotion of Solar PV cooling in Burkina Faso
- Innovative climate decision-support tools for enhancing SME resilience in Sri Lanka

SUNREF Programme

SUNREF provides solutions for the new energy and environmental transition by helping private sector to seize opportunities and encouraging local financial institutions to finance it. Their sample projects include:

- Promoting a green energy transition in South Africa
- A solar mini-grid to electrify a poultry farm in Benin
- A supermarket improves its energy mix in Senegal

FMO Entrepreneurial Development Bank

FMO is the Dutch development bank that supports sustainable private sector growth in developing and emerging markets by investing in businesses, projects and financial institutions.

FSD Africa

FSD Africa is a non-profit company limited by guarantee that works to reduce poverty through a 'market systems development' approach. It supports breakthrough ideas that can transform Africa's financial markets. Publications by the company include:

- Viability of gender bonds in sub-Saharan Africa
- De-risking in Africa: Illicit financial flows and regional economic hubs
- Regional economic hubs in sub-Saharan Africa

Africa Focus: Spring 2018

This article contains information on sustainability and green development in the following countries in Africa: Nigeria, Kenya, Angola, Morocco, Ethiopia, Namibia, Zambia, Ghana, Cote Ivoire, Gabon, DRC Congo, South Africa and Mozambique.

2. Carbon Markets and Pricing

African Carbon Asset Development Facility

The ACAD Facility is an innovative public-private partnership that collaborated not only with local project developers to enhance their awareness, expertise, and investment willingness in the African carbon market, but also with African financial institutions in order to raise awareness and knowledge of potential revenue streams from the carbon market.

Eastern Africa Alliance on Carbon Markets and Climate Finance

Eastern Africa Alliance on Carbon Markets and Climate Finance is a coalition of 6 member countries, Burundi, Ethiopia, Kenya, Rwanda, Tanzania and Uganda. It aims to strengthen capacities of the member countries as well as offer a platform where countries can share experiences and foster a regional approach towards the future international carbon mechanism and climate finance. Sample reports by the alliance include:

- Carbon pricing approaches in Eastern and Southern Africa
- Collaborative Instruments for Ambitious Climate Action
- Corresponding Adjustments Key accounting challenges for Article 6 outcomes of mitigation outcomes

West African Alliance on Carbon Markets and Climate Finance

West African Alliance on Carbon Markets and Climate Finance is a sub-regional initiative and anchored in institutions that serve the West African region with regard to carbon markets, technology transfer and climate finance. The alliance is a member-driven process where participating countries appoint government representatives that are involved in the negotiations on markets or climate finance. Countries that have formally joined the alliance are Senegal, Cote D'ivoire, Togo, Nigeria, Mauritania Guinea Bissau, Gambia, Niger, the Republic of Guinea, Mali, Benin and Cape Verde.

3. Mauritius resources

The 10-year Master Plan for the SME sector in Mauritius

The Master Plan is driven by the government's vision of making SMEs competitive and the sector an engine for growth. It makes propositions and targets for the SME sector in Mauritius.

Statistics Mauritius

Statistics Mauritius is responsible for the collection, compilation, analysis and dissemination of official statistics relating to all aspects of the economic, demographic and social activities with a few exceptions like fisheries and health statistics which fall under the responsibility of the respective Ministry, and banking and Balance of Payment statistics for which the Bank of Mauritius is responsible. Samples of census and surveys carried out by Statistics Mauritius include:

- Housing and Population Census
- Census of Economic Activity
- Survey of Employment & Earnings

SME Mauritius

SME Mauritius Ltd seeks to promote a conducive SME eco-system and develop entrepreneurship at national level. It empowers SMEs to emerge and grow by implementing support programs that enhance their competitiveness.

Business Mauritius

Business Mauritius is an independent association that represents over 1200 local businesses and has, through them, a national, regional and international reach. Business Mauritius is the coordinating body and the voice of local business, and delivers services that sustain the progress of both business and community.

Government Directory

Has publications by the government on the Republic of Mauritius including the past annual national budgets of Mauritius.

N. Bibliography

Africa Global Funds. (2020). Green Outcomes Fund launches with R488m. Retrieved August 27, 2020, from africaglobalfunds.com/news/funds/launches/green-outcomes-fund-launches-with-r488m/

African Guarantee Fund. (2017). Retrieved August 27, 2020, from africanguaranteefund.com/african-guarantee-fund-commends-nordic-development-fund-on-30th-anniversary/

African Guarantee Fund. (2017). Green Guarantee. Retrieved August 27, 2020, from africanguaranteefund.com/product/loan-guarantees/green-guarantee/

African Guarantee Fund. (2017). Green Guarantee Facility. Retrieved August 27, 2020, from ndf.int/media/project-files/green_guarantee_facility_english_october_2017.pdf

Agence Française de Développement. (2019). Mauritius: From Green Finance To Gender Equality. Retrieved August 17, 2020, from afd.fr/en/actualites/mauritius-green-finance-gender-equality

Ağirman, E., & Osman, A. B. (2019). Green Finance for Sustainable Development: A Theoretical Study.

Amin, A.-L., Dimsdale, T., & Jaramillo, M. (2014). Designing smart green finance incentive schemes.

Canales, N., Atteridge, A., & Sturesson, A. (2017). Climate finance for the Indian Ocean and African Small Island Developing States. Stockholm Environment Institute. Retrieved from sei.org/publications/climate-finance-indian-ocean-african-sids/

Chamroo, D. (2012). Developing Green Industry in Mauritius. (4), pp. 22–23. Retrieved August 14, 2020, from proquest.com/docview/1328332323?fromopenview=true&pq-origsite=gscholar

Charalambous, L. (2019). Mauritius Overhauls Tax Regime in 2019–20. Tax-news. Retrieved August 14, 2020, from tax-news.com/news/Mauritius_Overhauls_Tax_Regime_In_201920_Budget____97170.html

Cochu, A., & Hausotter, T. (2019). Working Together For Climate Resilience. Retrieved from adelphi.de/de/system/files/mediathek/bilder/adelphi-2019_Working-Paper_Working-Together-for-Climate-Resilience.pdf

DAI. (2020). Morocco—Sustainable Energy Financing Facility (MorSEFF). Retrieved August 27, 2020, from dai.com/our-work/projects/morocco-sustainable-energy-financing-facility-morseff

Development Bank of Mauritius. (n.d.). SME Financing Scheme. Retrieved August 17, 2020, from dbm.mu/sme-financing-scheme/

East African Development Bank. (2019). Financial Opportunities And Challenges Faced By SMEs In Advancing Green Business Development In Africa. Retrieved August 31, 2020, from eadb.org/news-events/financial-opportunities-and-challenges-faced-by-smes-in-advancing-green-business-development-in-africa

Economic Development Board. (2020). Handbook on Schemes and Incentives for MSMEs and Entrepreneurs. Retrieved from September 1, 2020 mof.govmu.org/Documents/Handbook_Website_Final%20(1).pdf

European Bank for Reconstruction and Development. (2014). Morocco Sustainable Energy Financing Facility (MorSEFF) Framework. Retrieved August 27, 2020, from ebrd.com/work-with-us/projects/psd/morocco-seff-morseff.html

German Development Institute. (2016). Green Finance: Actors, Challenges and Policy Recommendations. Retrieved from die-gdi.de/en/briefing-paper/article/green-finance-actors-challenges-and-policy-recommendations/

Green Cape. (2020). The Green Outcomes Fund. Retrieved August 27, 2020, from greencape.co.za/assets/GOF-Pitch-Deck_Updated-Version-17-04-2020.pdf

Green Climate Fund. (2020). Retrieved September 14, 2020, from greenclimate.fund/document/ecosystem-based-adaptation-indian-ocean-eba-io

Green Climate Fund. (2021). Retrieved September 14, 2020, from greenclimate.fund/countries/mauritius

HSBC. (n.d.). Green Loan. Retrieved August 16, 2020, from hsbc.com.mt/loans/products/green/

International Finance Corporation. (2020). China Utility-Based Energy Efficiency Finance Program (CHUEE). Retrieved August 28, 2020, from ifc.org/wps/wcm/connect/43fc31b8-9085-48c1-b92d-496ae60b19a3/Chuee+brochure-English-A4.pdf?MOD=AJPERES&CVID=jZVzScX

Jean-Mermoz Konandi. (2018). Green Finance Conference: Financing SMEs at the heart of green growth in Africa. Kapital Afrik. Retrieved August 31, 2020, from kapitalafrik.com/2018/06/21/green-finance-conference-financing-smes-at-the-heart-of-green-growth-in-africa/

Magoum, I. (2020). Mauritius: Bonds to finance sustainable development projects. Afrik21. Retrieved September 1, 2020, from afrik21.africa/en/mauritius-bonds-to-finance-sustainable-development-projects/

Marie J. (2020). South Africa: Green Cape launches investment fund for green SMEs. Afrik 21. Retrieved August 27, 2020, from afrik21.africa/en/south-africa-greencape-launches-investment-fund-for-green-smes/

Mauritius Chamber of Commerce and Industry. (2017). Budgetary Measures 2017–2018. Retrieved August 16, 2020, from mcci.org/en/our-services/business-resources/mcci-sme-marketplace/budgetary-measures/

Mauritius Chamber of Commerce and Industry. (2019). An Analysis of the Budget 2019/2020. Retrieved August 16, 2020, from mcci.org/media/225224/mcci-budget-analysis-2019-2020.pdf

Mauritius Chamber of Commerce and Industry. (2019). Budgetary Measures. Retrieved August 13, 2020, from mcci.org/en/our-services/business-resources/mcci-sme-market-place/budgetary-measures/#tab-1

Mauritius Commercial Bank. (2018). Success Beyond Numbers. Retrieved September 1, 2020, from mcbgroup.com/en/#

Mauritius Commercial Bank. (2019). Sustainability Report. Retrieved July, 28, 2021 from mcbgroup.com/en/media/mcb_sbn_2019_tcm67-44351.pdf

Mauritius Commercial Bank. (2019). Green loan. Retrieved August 12, 2020, from mcb.mu/en/personal/loans/green-loans/

Mauritius Revenue Authority. (1995). Income Tax Act 1995. Retrieved from mra.mu/download/ITAConsolidated.pdf

Mauritius. Beach Authority. (2015–2016). Progress Reports

Mauritius. Ministry of Business, Enterprise and Cooperatives (2017). 10-Year Master Plan for the SME Sector in Mauritius

Mauritius. Ministry of Environment and National Development Unit. (2009). Mauritius National Reporting to CSD18. Retrieved from sustainabledevelopment.un.org/content/documents/dsd/dsd_aofw_ni/ni_pdfs/NationalReports/mauritius/Full_Report.pdf

Mauritius. Ministry of Finance. (2020). Budget Speech 2020–21. Retrieved August 13, 2020, from mof.govmu.org/Documents/Documents/Budget%202020-2021/Budget%20Speech%202020-2021%20%28English%29.pdf

Mauritius. Minister of Home Affairs. (2019). Budget Speech 2019–2020. Retrieved August 20,2020, from mof.govmu.org/Documents/Documents/2019/2019_20budget-speech.pdf

Mauritius. Ministry of Social Security. (2018/2019). Environment And Sustainable Development Division Annual Report. Retrieved from eeas.europa.eu/delegations/un-new-york/55628/european-union-and-republic-mauritius-step-their-partnership-climate-change_uk

Nordic Development Fund. (2016). African Guarantee Fund Green Guarantee Facility. Retrieved August 27, 2020, from ndf.fi/project/african-guarantee-fund-green-guarantee-facility-ndf-c88

ODI. (2020). The economic impact of coronavirus: five lessons and challenges.

OECD. (2013). Enabling Green Growth in Africa.

OECD. (2017). Enhancing the Contributions of SMEs in a Global and Digitalised Economy. Retrieved from oecd.org/industry/C-MIN-2017-8-EN.pdf

PAGE. (2018). Mauritius To Embark on Ambitious Green Bond Strategy. Retrieved August 16, 2020, from un-page.org/mauritius-embark-ambitious-green-bond-strategy

PSEE. (2015). Guide to Energy Efficiency Finance in South Africa. Retrieved August 27, 2020, from psee.org.za/downloads/publications/FPP9315_NBI_PSEE_Finance_Publication.pdf

PwC Mauritius. (2020). Budget 2020. Testing times ahead.

Ramjeawon, T. (2004). A Case Study of Cleaner Production Opportunities in Small and medium Enterprises on the Island of Mauritius. Electronic Green Journal, 1(20). doi:10.5070/G312010554

Sambaje, P., & Dhomun, M. (2015). Government and SMEs in The Maldives and Mauritius. International Journal of Entrepreneurial Behaviour and Research, 21.

Small and Medium Enterprises Development Authority Act. (2009). The Small and Medium Enterprises Development Authority Act. Mauritius.

SME South Africa. (2015). Focus on the IDC's green energy fund. Retrieved August 27, 2020, from smesouthafrica.co.za/Focus-on-the-IDCs-green-energy-fund/

State Bank of Mauritius. (n.d.). SME Banking. Retrieved August 15, 2020, from banking.sbmgroup.mu/sme

Statistics Mauritius. (2018). Census of economic activities. Retrieved August 16, 2020, from statsmauritius.govmu.org/English/Publications/Documents/2019/EI1483/CEAS_Yr18.pdf

Stock Exchange of Mauritius. (2019). Retrieved August 20, 2020, from sseinitiative.org/stock-exchange/mauritius/

Sultan, R., & Harsdorff, M. (2014). Green Jobs Assessment Mauritius. Geneva: International Labour Office.

SUNREF. (n.d.). Projects. Retrieved September 1, 2020, from sunref.org/en/projet/

Swan Wealth Managers Ltd. (2020). SWAN-COVID-19: Its Aftermath on the Mauritian Economy. Port Louis.

UN. (2019). Sustainable Development Goals Knowledge Platform. Retrieved August 14, 2020, from sustainabledevelopment.un.org/memberstates/mauritius

UN. (2020). Comprehensive Response to COVID-19.

UN. (2020). Mauritius COVID-19 Socioeconomic Recovery Plan.

UN. (2020). United Nations in Mauritius COVID-19 Socioeconomic Recovery Plan.

UNCTAD. (2020). World Investment Report.

UNDP and UNDESA. (2020). National Report of the Republic of Mauritius. Retrieved August 14, 2020, from sustainabledevelopment.un.org/content/documents/1109215Mauritius%20National%20Report.pdf

UNEP. (2012). Sustainable Consumption and Production in Africa.

UNEP. (2016). Green Finance for Developing Countries. Retrieved from greenfinanceplatform.org/sites/default/files/downloads/resource/Green_Finance_for_Developing_Countries-1.pdf

UNEP. (2016). Green Financing for Developing Countries. Retrieved from greenfinanceplatform.org/sites/default/files/downloads/resource/Green_Finance_for_Developing_Countries-1.pdf

UNEP FI. (2018). Workshop On Green Bonds In Mauritius. Retrieved August 20, 2020, from unepfi.org/events/training-events/green-bonds-workshops/

Wignaraja, G., & Neil, S. O. (1999). SME Exports and Public policies in Mauritius. Retrieved From books.google.co.ke/books?hl=en&lr=&id=V_S3NVsqGdIC&oi=fnd&pg=PR1&dq=government+sme+policies+for+mauritius&ots=SJ1G4RAaHK&sig=W3DNDwJWzlgqQkSIaCuAUf0F_c&redir_esc=y#v=onepage&q=government%20sme%20policies%20for%20mauritius&f=false

World Bank. (2020). Retrieved from worldbank.org/en/news/press-release/2019/10/24/doing-business-2020-two-sub-saharan-african-countries-among-most-improved-in-ease-of-doing-business

Annex 1: SME Survey

Enabling Green SMEs: Improving SME Access to Green Finance in Mauritius

i. Total number of SMEs Interviewed	**40**
ii. Number of SMEs Interviewed that engage in any green activities/ projects	**35**
iii. Sectoral Distribution of SMEs Interviewed	
Manufacturing and Construction	21%
Education and Training	18%
Recycling	16%
Sustainable Agriculture	11%
Energy	8%
Artistry	8%
Environmental Service	5%
Hospitality and Tourism	5%
Automotive	3%
ICT	3%
Transport	3%
iv. Gender Distribution	
Men:	40%
Women:	60%

v. Green Projects/Activities Undertaken by SMEs Interviewed	
Activity	**No. of SMEs**
None	5
Renewable energy projects	11
Clean transport projects	3
Waste management projects	10
Industrial pollution control projects	1
Green building and construction projects	5
Land use and forestry projects	7
Water preservation projects	4
Biodiversity protection projects	5
Equipment leasing for green activities	4
Sustainable production of goods and services	9
Recycle of waste and raw materials	1
Agriculture projects	1
Recycling projects	10

PAGE PARTNERSHIP FOR ACTION ON GREEN ECONOMY

UN environment programme | finance initiative

UN environment programme

ILO

UNDP

UNIDO

unitar United Nations Institute for Training and Research