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GRANTS PROGRAMME



# GREENFINANCE



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## Background

This Green Finance Guide (GFG) was initiated as part of a European Union (EU) funded project to promote environmental accountability, responsibility and transparency among Small and Medium Enterprises (SMEs) in Myanmar. The banking sector was seen as a key enabler to achieve the goals of the project, particularly by increasing the availability of sustainable financing solutions for SMEs.

The GFG was developed by the Association of Development Financing Institutions in Asia and the Pacific (ADFIAP) pre-Covid. The GFG was reviewed, updated and published under the purview of Prevent Plastics, another EU funded project. The review and update was conducted by Yever, assisted by WWF Myanmar.

## Updates to GFG

The major part of the content developed by ADFIAP has been retained, with newer and relevant references added. For context, the Introduction prepared by ADFIAP is also presented. An annexure has been added at the end of the Guide, with select references and tools which could be helpful for users of the GFG.

Significant efforts were made to overhaul the presentation of information in different sections of the GFG, to make it visually appealing towards enhancing clarity, comprehension and ease of use by the readers of the GFG.

## Audience

The GFG was prepared mainly for use by the commercial banking sector in Myanmar, with a focus on green project financing. The general principles and the information presented, including on Environmental and Social Impact Assessments, will be useful for other categories of investors and lenders, including the microfinance sector in Myanmar.

While the GFG could serve as a comprehensive primer to Credit, Risk and other departments within a commercial bank and can be read sequentially, separate sections on specific topics in the GFG can be referenced on a stand-alone basis too.

### Acknowledgements

We would like to acknowledge and thank the Prevent Plastics project team for their initiative and efforts in facilitating the opportunity to carry out this important work, thereby ensuring that the efforts of ADFIAP and others are brought to fruition.

We also thank WWF Myanmar's Sustainable Finance Programme, for their support and assistance all along the way – spanning from the initial mooting of the idea to readying the GFG for publication.

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# INTRODUCTION

The **SMEs for Environmental Accountability, Responsibility and Transparency (SMART) Myanmar 2.0** is a 4-year project that aims to improve production and increase consumption of sustainably produced garments and other products from Myanmar through up-scaling and improving on best practice mechanisms developed and implemented during SMART Myanmar 1.0. One of the major challenges which are essential to the achievement of this objective is to improve SMEs' access to finance for green investments.

To address this challenge, the EU-Funded SMART Myanmar Project conducted the Green Project Finance Training Program for the members of the Myanmar Banks Association (MBA) to create a pool of new breed of bankers who could provide a holistic approach to sustainable economic growth through the promotion and active mainstreaming of sustainable green financing in the banking sector.

The Green Project Finance Training Program 1.0 (GPF 1.0) was developed and conducted by ADFIAP for members of the Myanmar Banks Association (MBA), wherein the principles of sustainable development and green finance were established while the Green Project Finance 2.0 (GPF 2.0) was the application phase wherein the principles learned during the GPF 1.0 were simulated and applied. To integrate the whole process, training on the development of green products and services was conducted to enable the bankers to address their customers' needs and climate investment requirements.

The Boston Consulting Group recently came out with an article entitled "How to Cultivate a Corporate Strategy to Serve All Stakeholders",<sup>1</sup> which found out in their research that "sustainability and sustainable competitive advantage are mutually reinforcing." This means that "companies that outperform in environmental, social and governance areas can achieve higher profitability, valuations and margins and those that run counter to environmental, social and governance (ESG) goals risks the threat of significant financial consequences – or losses or decline."

In this context, we would like to situate and define the objective of this guidebook which is to engage the key stakeholders, particularly those from the banking industry in Myanmar, such as the commercial banks, development finance institutions, microfinance institutions, the regulators in Central Bank of Myanmar and the private sector/entrepreneurs in a constructive dialogue towards achieving a low carbon, climate-resilient Myanmar economy. This can be achieved through improving SMEs' access to finance for green investments and through a robust and dynamic climate finance economic environment. In particular, the guidebook aims to provide a clear roadmap on how to harness the power of financial markets to deliver environmental and societal goals. In particular, we are interested in showing how private project investors and financial institutions in Myanmar could navigate the green financing pathways by understanding the landscape and contours of a fast-growing green financing ecosystem by mobilizing public and private capital flows to emerging, frontier markets in support of and scaling up of financing towards sustainable

<sup>1</sup> <https://www.bcg.com/featured-insights/how-to/corporate-citizenship-strategy.aspx>



development goals (SDG) investments, specifically for green investments.

We at the Association of Development Financing Institutions in Asia and the Pacific (ADFIAP) would like to believe that with this Green Finance Guidebook, we would begin our “journey of a thousand miles”, and with this initial offering, we can move forward towards our journey to a sustainable and green future.

We would like to thank the SMART Myanmar Project Management Office for the support provided in the development and finalization of this guidebook. And we also wish to acknowledge the members of the ADFIAP Consulting Team for their writing contributions in developing/preparing, and finalizing the various chapters of the guidebook.

# I. EXECUTIVE SUMMARY

The Green Finance Guidebook is a product of the 4-year involvement of ADFIAP in the SMART Myanmar 2.0 Project. The guidebook was borne out of the desire of both ADFIAP and the SMART Myanmar Project Management Office to be counted as major contributors to Myanmar’s Nationally Determined Contributions (NDCs) to the Paris Agreement of 2015. This major output will certainly lead to laying out the foundation for a low carbon, climate resilient economy in Myanmar. This would hopefully also encourage Myanmar’s private sector and more MSMEs to be major players in the country’s economic development by pursuing sustainable green investments in the next 10-15 years.

In a national scoping study conducted by ADFIAP for the International Finance Corporation (IFC) on the “Risk Management Practices of Commercial Banks in Myanmar”<sup>2</sup> in September 2018, among the study’s major findings were the absence of a conducive regulatory environment, the internal lack of capacity and the need for senior management or board-level commitment to environmental and social (E&S) performance. It is towards this end that this Green Finance Guidebook will hopefully close the gaps between its operating environment and its internal requirements through capacity building public awareness activities and other knowledge sharing and skills upgrading interventions for both commercial banks and the regulators on sustainable banking and practices in Myanmar. Similarly, MSMEs were capacitated to make them more bankable and facilitate their access to finance. In the end, greening the entire banking sector in Myanmar would lead to capacitating the banking sectors in its investing and lending activities to deliver more sustainable, short-term and long-term developmental and financially viable results.

Financial institutions such as banks play a critical role in the national economy in terms of resource allocation such as capital and risk. In the present context of Myanmar’s economic development, there are unprecedented levels of carbon in the atmosphere which led to an increase in global warming and greenhouse gas emissions. In this chaotic and toxic environment, climate change creates physical risks (e.g. floods in Myanmar are prevalent), and the move to a low-carbon economy will create transition risks in terms of policy and technological changes. Myanmar faces severe risks of weather-related impacts and was ranked the 2nd most vulnerable country to climate change from 2000 – to 2019 according to the Global Climate Risk Index, with significant human impacts and economic losses. These physical and transition risks, in turn, create financial risks manifesting as credit, market and technical risks. The financial risks from climate change present unique challenges for financial institutions. They require a strategic approach that should consider how our decisions today can or will impact future financial risks. An orderly transition would minimize the financial risks associated with climate change. It is in this context that the Guidebook would advocate the concept of sustainable finance and green finance in the transition towards a low-carbon, climate-

<sup>2</sup> ADFIAP. “Risk Management Practices of Commercial Banks in Myanmar.” A national research study report conducted by ADFIAP (Norman A. Tilos, Corazon D. Conde and Victor C. Abainza) for the International Finance Corporation (Vietnam). September 2018.

resilient economy for Myanmar, a country highly susceptible to climate change-related impacts and environmental degradation.<sup>3</sup>

In the same context, sustainable finance can be described in terms of several stages of development. The first is climate finance which will be the financing for climate change mitigation and adaptation projects. The second stage is when we transition to green finance, which would encompass the key factors in climate finance plus analyzing other environmental factors. The third stage is when green finance moves to cover social and environmental factors, then it becomes socio-environmental financing. Finally, when it covers environmental, social, plus governance, it becomes sustainable development finance.<sup>4</sup>

The Guidebook is divided into two (2) main sections:

- In the the first section, we discuss and describe the concept of sustainable consumption and production (SCP) and how this holistic conceptual framework has evolved into advocacy for sustainable finance. SCP as a concept is the “aspiration for a higher quality of life for society” through responsible consumption and sustainable production practices. It further discusses how financial institutions can play a proactive role in the promotion of sustainable development not only through their financing function but also by engaging actively in their social role in the community by encouraging and supporting environmental, social and governance programs and activities. Finally, this section ends with a discussion of the what and why’s of Green Finance and a discussion on the typical green investments.
- The second section of the guidebook is focused on a thorough review of the core business operation in the context of the Green Finance framework – that presupposes that the Loan Evaluation Process is the heart and soul of the ESG and risk management assessment. The readers are then introduced to how to conduct a credit risk assessment of a green project by reviewing the key factors to consider in evaluating/analyzing a loan proposal from its market, technical, management and financial aspects. Since the guidebook focuses on the evaluation of green projects, a key in the credit risk evaluation process is the conduct of environmental and social due diligence. This is an extension of the credit risk assessment to ensure that potential environmental and social risks of a particular project are analyzed and looked into and that appropriate mitigants are put in place by the Bank and thus ensure that the project and both the bank and the borrower are not vulnerable to risk. The loan evaluation process is rounded off by a discussion on green credit scoring with its step by step procedure, loan pricing and provisioning and loan covenants and documentation.

An integral part of the core business operations is Project Supervision and Monitoring, which normally involves the assessment of actual project performance compared to what has been projected during

project evaluation. This would give the loan officer an indication of whether or not the credit quality has remained the same, improved or deteriorated. There are also early warning signals that a loan officer can consider in the conduct of project supervision and monitoring. Remedial Management was thereafter discussed, which completes the three components in the core business operations of the Green Finance Framework.

Finally, the guidebook ends with a discussion on how to undertake a sustainable management action that would support the bank in expanding its product offerings for Green Financing. The Business Model Canvas was introduced as a framework for a holistic approach in developing and implementing sustainable project proposals.

<sup>3</sup> PRA Bank of England. “How Climate Change Can Present Financial Risks to the Banking Sector.” 2018.

<sup>4</sup> Adapted from the definition of sustainable finance from the presentation of Dr. Colin Legarda Hubo, Executive Director of UA&P Center for Social Responsibility during the 2nd Sustainable Finance Forum last October 8, 2019, at the Manila Peninsula Hotel.

## II. SUSTAINABLE CONSUMPTION AND PRODUCTION (SCP)

### A. What Is Sustainable Consumption and Production (SCP)?

The working definition of SCP was crafted at the Oslo Symposium on Sustainable Consumption and Production of 1994 after analyzing the role of stakeholders. The Norwegian Ministry of Environment provided the following definition, which has been adopted universally:

“The use of services and related products, which respond to basic needs and bring a better quality of life while minimizing the use of natural resources and toxic materials as well as the emissions of waste and pollutants over the life cycle of the service or product so as not to jeopardize the needs of future generations”.

Another widely used and more recent definition is provided by the United Nations Environment Program (UNEP): “SCP is a holistic approach to minimizing the negative environmental impacts from consumption and production systems while promoting quality of life for all” (UNEP 2011).

SCP is an inherent responsibility of various stakeholders such as government, businesses, civil society, consumers and financial institutions.

### B. Why is SCP relevant for Financial Institutions?

#### *Phase 1 – greening internal operations*

In the early 1990s, financial institutions, specifically banks, started to address sustainability issues, mainly by focusing on the “greening” of their internal operations. Banks were mostly driven by reducing their costs by saving energy, water and materials, such as paper, and to be a role model for clients to do the same or “to walk the talk”, as the saying goes. The aim of influencing clients is to enable them to reduce their environmentally induced costs and, therefore, decrease their credit and investment risk.

However, some standards started to emerge: in 1992, the UNEP FI Initiative was established, with 13 financial institutions originally. Today, 270 banks, representing over 45% of banking assets worldwide, endorse the Principles for Responsible Banking.

#### Phase 1 – greening internal operations

 <p><b>PRINCIPLE 1: ALIGNMENT</b></p> <p>We will align our business strategy to be consistent with and contribute to individuals’ needs and society’s goals, as expressed in the Sustainable Development Goals, the Paris Climate Agreement and relevant national and regional frameworks.</p>	 <p><b>PRINCIPLE 2: IMPACT &amp; TARGET SETTING</b></p> <p>We will continuously increase our positive impacts while reducing the negative impacts on, and managing the risks to, people and environment resulting from our activities, products and services. To this end, we will set and publish targets where we can have the most significant impacts.</p>	 <p><b>PRINCIPLE 3: CLIENTS &amp; CUSTOMERS</b></p> <p>We will work responsibly with our clients and our customers to encourage sustainable practices and enable economic activities that create shared prosperity for current and future generations.</p>
 <p><b>PRINCIPLE 4: STAKEHOLDERS</b></p> <p>We will proactively and responsibly consult, engage and partner with relevant stakeholders to achieve society’s goals.</p>	 <p><b>PRINCIPLE 5: GOVERNANCE &amp; CULTURE</b></p> <p>We will implement our commitment to these Principles through effective governance and a culture of responsible banking.</p>	 <p><b>PRINCIPLE 6: TRANSPARENCY &amp; ACCOUNTABILITY</b></p> <p>We will periodically review our individual and collective implementation of these Principles and be transparent about and accountable for our positive and negative impacts and our contribution to society’s goals.</p>

### Phase 2 – considering environmental and social risks

The next phase of sustainable banking centred on environmental risks. Because of newly implemented environmental regulations, environmental risks became material mainly in commercial lending and motivated banks to integrate environmental and social risk criteria into their credit risk assessment. As a result, lenders were able to decrease the credit risks caused by sustainability risks and retain their reputation as a non-polluting industry. In many cases, the use of sustainability criteria prevented lending to environmentally risky clients and consequently reduced credit defaults. The introduction of environmental and social credit risk assessment criteria has been material for the banking sector.

Meanwhile, in 2003, the Equator Principles<sup>5</sup> were launched and aimed to “serve as a common baseline and risk management framework for financial institutions to identify, assess and manage environmental and social risks when financing projects”. Today, 129 financial institutions in 38 countries have officially adopted the Equator Principles. In 2006, the United Nations Principles for Responsible Investment<sup>6</sup> (UN PRI) was launched by the UNEP FI and the UN Global Compact in collaboration with investors, where signatories have to embrace 6 principles. In 2006, the IFC published the first version of its Performance Standards.<sup>7</sup>

#### UN PRI's 6 principles<sup>8</sup>

- **Principle 1:** We will incorporate ESG issues into investment analysis and decision-making processes.
- **Principle 2:** We will be active owners and incorporate ESG issues into our ownership policies and practices.
- **Principle 3:** We will seek appropriate disclosure on ESG issues by the entities in which we invest.
- **Principle 4:** We will promote acceptance and implementation of the Principles within the investment industry.
- **Principle 5:** We will work together to enhance our effectiveness in implementing the Principles.
- **Principle 6:** We will each report on our activities and progress towards implementing the Principles.

5 <https://equator-principles.com/>

6 <https://www.unpri.org/>

7 [https://www.ifc.org/wps/wcm/connect/topics\\_ext\\_content/ifc\\_external\\_corporate\\_site/sustainability-at-ifc/policies-standards/performance-standards](https://www.ifc.org/wps/wcm/connect/topics_ext_content/ifc_external_corporate_site/sustainability-at-ifc/policies-standards/performance-standards)

8 <https://www.unpri.org/about-us/what-are-the-principles-for-responsible-investment>

### Phase 3 – the rise of sustainable finance

In 2004, the United Nations Global Compact and the Swiss Federal Department of Foreign Affairs published a report Who Cares Wins, in which the term ‘ESG’ was coined.<sup>9</sup> In this document, analysts were urged to “better incorporate environmental, social and governance (ESG) factors in their research”. ESG factors cover a broad range of topics and issues. Many of them, such as climate change, can affect not only specific firms, sectors or countries but also impair the stability of the economy.

As a consequence, in the late 1990s early 2000s, various indexes were established by selecting companies based on a list of non-financial criteria such as the Dow Jones Sustainability Indices in 1999 or the FTSE4Good Index in 2001. Investors were looking at data reflecting how companies were performing not only financially but also on environmental, social and governance topics.




Sustainable finance can be defined as the incorporation of ESG principles into a company's business decisions, strategy, and economic development, has been significant gaining global attention in recent years. Sustainable finance has been shown to generate positive societal externalities and directly impact a company's operations and finances. Firms that engage in ESG projects could experience improved profit margins, lower capital costs, reputational boost, a more motivated workforce, and overall mitigation of their institutional risks which include risks such as the physical and transitional risks from climate change, material risks, and financial sustainability risks. In the long run, early adopters of ESG principles in their core business operations will have a competitive advantage in the market, reflected by the evolving consumer and investor preferences for more environmentally friendly goods and services. George Serafeim, a Professor at Harvard Business School, explains how sustainability can create real value for companies.<sup>10</sup> By framing a strategic ESG approach, companies can unlock their potential, and build a competitive advantage that will support their value creation.

9 The United Nations Global Compact and Swiss Federal Department of Foreign Affairs, Who cares wins: Connecting financial markets to a changing world, 2004

10 <https://hbr.org/2020/09/social-impact-efforts-that-create-real-value>



				
Following the spread of Covid-19, most ESG funds outperformed their benchmarks, a positive signal for investors	Customers are more loyal, which sustain sales and income	Employees are more engaged, which leads to a higher productivity	Access to capital is easier and its cost lower	Transparency can help companies protect their valuations

What are ESG factors?		
		
Environmental	Social	Governance
Businesses rely on natural resources and physical assets to perform their operations, which can also impact the environment.	To conduct their operations, companies depend on their workforce which skills are crucial for delivering value. They also need to interact with the society, suppliers and act with their external stakeholders responsibly.	When making a decision and allocating their natural, human and financial capitals, corporate should consider how they will create long-term value that will benefit shareholders and stakeholders alike.
<ul style="list-style-type: none"> <li>■ Climate change</li> <li>■ Carbon management</li> <li>■ Resource depletion</li> <li>■ Pollution</li> <li>■ Energy consumption</li> <li>■ Land use</li> <li>■ Pollution</li> <li>■ Loss of biodiversity</li> <li>■ Water consumption</li> <li>■ Waste management</li> <li>■ Etc.</li> </ul>	<ul style="list-style-type: none"> <li>■ Working conditions</li> <li>■ Equal-opportunity</li> <li>■ Diversity</li> <li>■ Training</li> <li>■ Social dialogue</li> <li>■ Succession planning</li> <li>■ Health and safety</li> <li>■ Child and forced labour across supply chains</li> <li>■ Grievance mechanism</li> <li>■ Human rights</li> </ul>	<ul style="list-style-type: none"> <li>■ Purpose and values</li> <li>■ Board diversity and structure</li> <li>■ Executive pay</li> <li>■ Ethics and compliance</li> <li>■ Corporate policies</li> <li>■ Stakeholders management</li> <li>■ Tax strategy</li> <li>■ Lobbying</li> <li>■ Donations</li> </ul>

### The Equator Principles<sup>11</sup>

The Equator Principles, which applies globally and to all industry sectors, should be seen as a tool to standardize a common baseline for financial institutions to identify, assess, and manage E&S risks during the financing phase. Large industrial and infrastructure projects are prone to have adverse impacts on the ecosystem, climate, and surrounding communities. The Equator Principles strives to provide a framework to manage and mitigate these risks and to ensure that projects are developed in a socially and environmentally responsible manner. Projects that do not align with the Equator Principles requirements should be restricted from receiving Project-Related Corporate loans or from project refinancing. In addition, the Equator Principles contributes to the delivery on the objective and outcomes described in the United Nations Sustainable Development Goals (SDGs).

There are four initial approaches for the Equator Principles:

- Project Finance and Project-Related Corporate loans
- Project-Related Refinance and Project-Related Acquisition Finance
- Project Finance Advisory Services and Bridge Loans
- Information Sharing

Following the four initial approaches, there are ten principles outlining the Equator Principles that prospective clients must abide by.

Principles	Details
<b>Principle 1:</b> Review and Categorisation	When a project is proposed for financing, the magnitude of potential E&S impact will be categorized: Project A, Project B, and Project C based on declining severity of impact.
<b>Principle 2:</b> Environmental and Social Assessment	The client is required to conduct an appropriate and accurate assessment on the project's potential E&S risks and impacts. The assessment should include measures to minimize and mitigate risks as well as to compensate for risks and impacts on its stakeholders.
<b>Principle 3:</b> Applicable Environmental and Social Standards	The prior assessment must comply with relevant country laws and regulations relating to E&S issues.

<b>Principle 4:</b> Environmental and Social Management System and Equator Principles Action Plan	For projects in the categories A and B will be required to develop and maintain an Environmental and Social Management System (ESMS) which addresses the risks and impacts raised in the assessment process.
<b>Principle 5:</b> Stakeholder Engagement	Clients projects under Category A and B are required to demonstrate effective stakeholder engagement with all relevant stakeholders including affected communities along with a consultation and participation process if necessary.
<b>Principle 6:</b> Grievance Mechanism	For Category A and B projects, the clients are required to establish an effective grievance mechanism designed to be used by the affected communities and workers, and should be scaled to the assessed risks and impacts.
<b>Principle 7:</b> Independent Review	Appropriate Category A and B projects are required to carry out an independent review of the project assessment and stakeholder engagement processes from an independent environmental and social consultant.
<b>Principle 8:</b> Covenants	During the case of non-compliance to the relevant laws and regulations, the clients can work on remedial actions to transform the project back into compliance.
<b>Principle 9:</b> Independent Monitoring and Reporting	During the lifetime of Category A and B projects, clients are required to conduct independent monitoring and reporting with an independent consultant, which aims to assess project compliance with the Equator Principles.
<b>Principle 10:</b> Reporting and Transparency	The client must provide an accessible summary of the Environmental and Social Impact Assessment online with a summary of human rights and climate change risks and impacts. The client must report GHG emissions on an annual basis and are encouraged to share non-sensitive project-specific biodiversity data.

<sup>11</sup> <https://www.unpri.org/about-us/what-are-the-principles-for-responsible-investment>

## C. What roles for Banks In Sustainable Development?

The banking sector can play a crucial role in raising SCP awareness and financing sustainable development due to their intermediary role in the economy. Financial institutions can help to close the financing gap and sustain their business at the same time. In addition to enhancing current strategies, products and services that already address sustainable development, the banking industry can start to develop additional innovative financial products to promote SCP. Governments and regulators can support the industry through establishing risk-mitigating mechanisms and through the integration of sustainability aspects into supervisory activities.

Through their intermediary role and with risk-mitigating mechanisms in place, banks may be able to support progress towards sustainability by adopting a “carrot-and-stick” approach where environmental front-runners will pay less interest than the market price for borrowing capital, while environmental laggards will pay a much higher interest rate. Due to their efficient credit approval systems, banks are well-equipped to weigh risks and attach a price to these risks. Through price differentiation, banks can foster sustainability.

Recently, two taxonomies were launched to encourage capital providers and market players to channel funds towards sustainable activities:

- **The EU taxonomy for sustainable activities<sup>12</sup>** is a tool to help investors understand the transition to a low-carbon economy for their investments, and how environmentally sustainable economic activities are. The taxonomy is precious as it helps all the market players speaking a common language and assessing how their investment decisions are consistent with the Paris Agreement on Climate Change.

The EU Commission framed an action plan on financing sustainable growth in march 2018. One of the first action was related to the establishment of a classification system to define sustainable activities.

A Technical Expert Group (TEG) on sustainable finance was created: it advised on criteria to facilitate the screening of economic activities that can substantially mitigate climate change while avoiding significant harm to other environmental objectives. Since January 2022, investors that offer funds in Europe described as “environmentally sustainable” must explain how, and to what extent, they have used the taxonomy for their investments.

- **The ASEAN taxonomy for Sustainable Finance<sup>13</sup>** represents the collective commitment of ASEAN Member States in transitioning towards a sustainable region. Published in November 2021, it is designed to be an inclusive and credible classification system for sustainable

<sup>12</sup> [https://ec.europa.eu/info/business-economy-euro/banking-and-finance/sustainable-finance/eu-taxonomy-sustainable-activities\\_en](https://ec.europa.eu/info/business-economy-euro/banking-and-finance/sustainable-finance/eu-taxonomy-sustainable-activities_en)

<sup>13</sup> <https://www.theacmf.org/initiatives/sustainable-finance/asean-taxonomy>

activities and will be one of the key building blocks in attracting investments and financial flows into sustainable projects in the region.

### Box 1 - Focus on Sustainable Finance Working Group of the ASEAN Capital Market Forum (ACMF)<sup>14</sup>

The ACMF comprises capital market regulators from all 10 ASEAN nations. To accompany the rise of the demand for sustainable development policy, the ACMF created a Working Group dedicated to sustainable finance. Co-chaired by the Securities Commission of Malaysia and the Securities and Exchange Commission of Philippines, the Working Group has produced various standards, aligned with the International Capital Market Association (ICMA) 's Green Bond Principles, Social Bond Principles and Sustainability Bond Guidelines.



As of February 2022, 250+ projects were funded using these Standards across the region.

<sup>14</sup> <https://www.theacmf.org/initiatives/sustainable-finance>

## III. GREEN FINANCE

### D. What challenges for Banks?

The Banking Sector has taken steps to stimulate sustainable development, but because of the critical role that finance plays, much more needs to be done. Key challenges identified are:

Financing	Capacity Building	Technology	Technical Assistance	Regulations
<ul style="list-style-type: none"> <li>■ Limited local funds</li> <li>■ Difficulty in accessing International funds</li> <li>■ High cost of funds</li> <li>■ Difficulty of clients to submit environmental requirements</li> <li>■ Difficulty of clients in preparing viable project proposals</li> </ul>	<ul style="list-style-type: none"> <li>■ Limited local training on climate change</li> <li>■ Limited readiness assistance to access international funds</li> <li>■ Inadequate knowledge in preparing green project proposals</li> </ul>	<ul style="list-style-type: none"> <li>■ Few proven and tested green technologies</li> <li>■ Inadequate knowledge of the latest successful green technologies</li> <li>■ High cost of green technologies</li> </ul>	<ul style="list-style-type: none"> <li>■ Limited technical assistance grants for developing green project proposals</li> <li>■ Difficulty in accessing grant funds</li> </ul>	<ul style="list-style-type: none"> <li>■ Absence of a regulatory policy mandating banks to embed environmental and social safeguards in credit evaluation</li> <li>■ Low climate portfolio since there is no law requiring banks to finance green projects</li> </ul>

### A. What Is Green Finance?

Green Finance is defined as financial products and services that consider environmental factors throughout the lending decision-making, ex-post monitoring and risk management processes to promote environmentally responsible investments and encourage low carbon technologies, projects, industries and businesses.

As an example of encouraging the development of green finance in Myanmar, Shwe Taung Group secured a \$44 million loan from two Singaporean lenders, OCBC and UOB, making them the first in the country to receive an international green loan. The loan is to be used by Shwe Taung Group's subsidiary City Square Commercial Company Limited for the financing of their Junction City mixed-use project and to develop green features such as energy-efficient electricity and low-energy consumption mechanical systems, which aims to reduce total energy consumption by 15 to 20 percent.

### B. What Is A Green Banker?

A Green Banker is a new breed of bankers who includes environmental aspects in credit appraisal, risk assessment and management, and financing. A Green Banker identifies opportunities for green investment finance and designs the needed green products and services for the clients. Moreover, a Green Banker stimulates demand for green products and services through advocacy and educational marketing campaigns and provides a holistic approach to sustainable economic growth through the promotion and active mainstreaming of environmental finance in the banking sector.



# IV. CORE BUSINESS OPERATIONS IN GREEN FINANCE

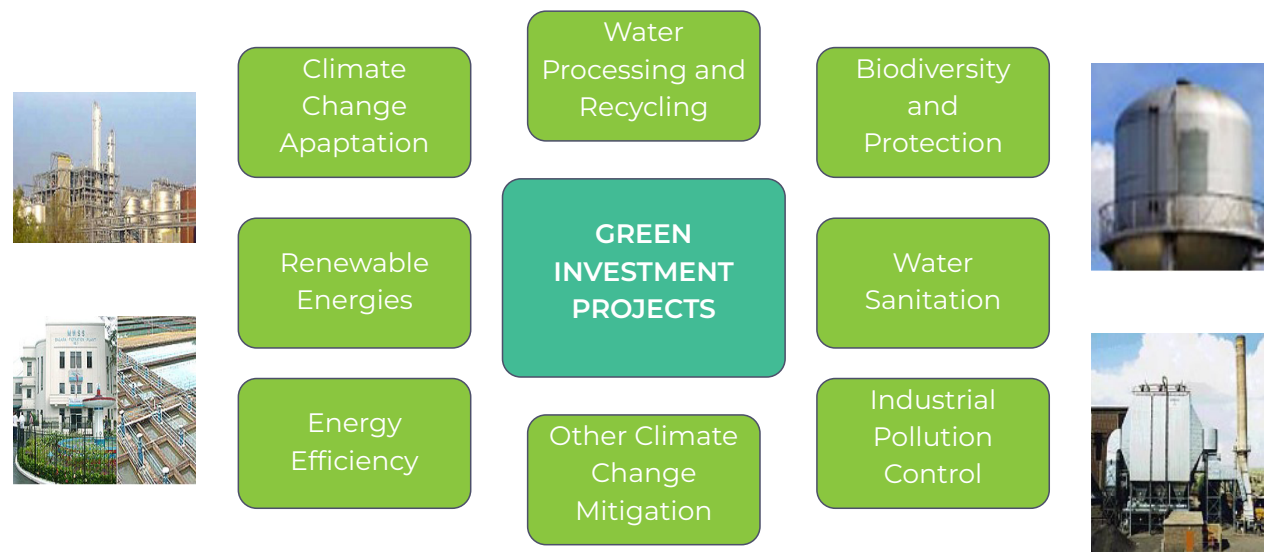
Green Finance is premised on three (3) main activities as presented in the Green Finance Framework in Box 3 below.

## C. What Are The Types Of Green Investment Projects?

Illustrated in Box 2 are the different types of green investment projects

Box 2

Green Investments Include Investments In...

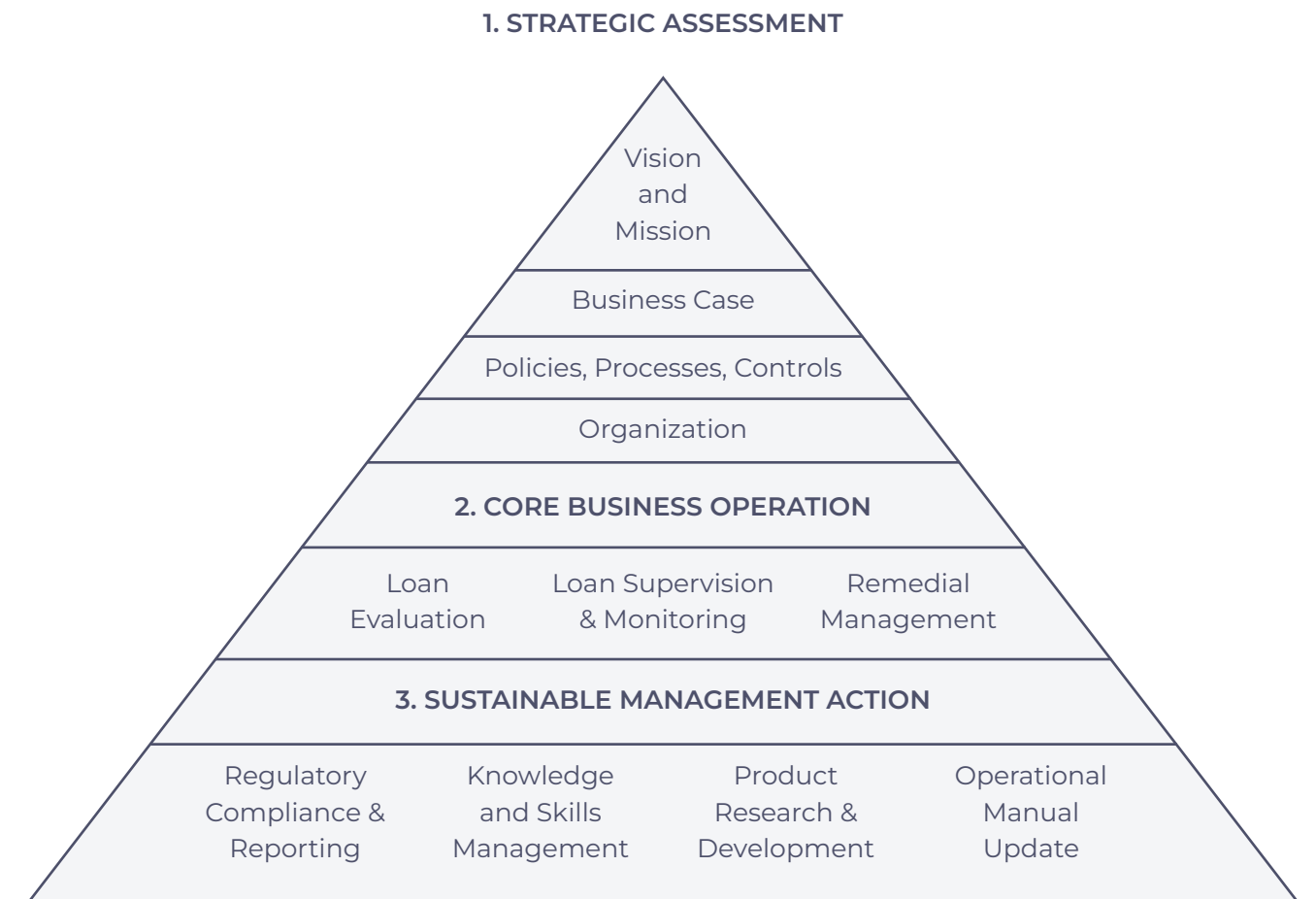


Source : Definition of Green Finance, Nanette Lindenberg, April 2014

Regionally, there have also been major advancements in green investment projects. Singapore for example has been a pioneer in green project developments. Some of their most recent endeavors include their revolutionary floating solar panel construction which will quadruple its renewable energy capacity by 2030, and the construction of their sustainability designed green buildings, which were acclaimed for their attention to biophilia and helped their projects earn Singapore's highest environmental certification: "The Building and Construction Authority's Green Mark Platinum rating".

Box 3

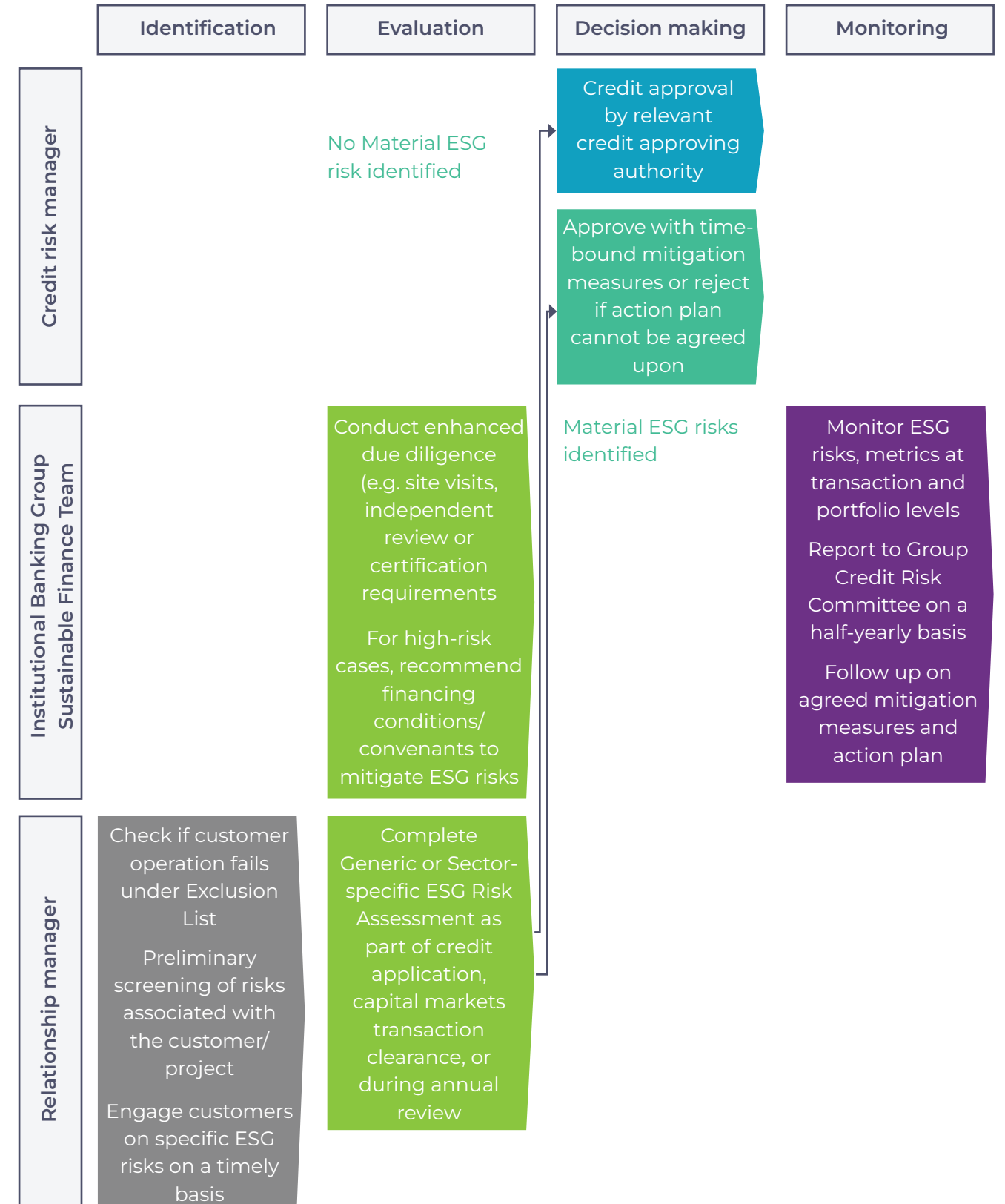
Green Finance Framework



The guidebook deals on the Core Business Operation of the Green Finance Framework, specifically on Loan Evaluation which is considered the heart and soul of Green Finance. Comprehensive loan evaluation determines the potential project impact or outcome within the community where the project is located. This requires a more in-depth process of data collection and analysis, often through interviews with project proponents. The main document for doing the evaluation is normally the business plan that the borrower provides the bank to support the loan application. As an additional loan marketing service, the bank can provide its clients with the guidelines for business plan preparation, as shown in Annex A. A well-prepared business plan can hasten loan evaluation and improve the quality of its credit decisions.

For many banks, Green Finance is a relatively new product wherein banks need guidance in the development of Green Finance products and services. Accordingly, this guidebook also includes a discussion on Product Research and Development, an essential component under the Sustainable Management Action portion of the Green Finance Framework.

The overall process and the internal and external stakeholders to involve can be summarized as below:



## A. Loan Evaluation

Credit risk is the possibility of the bank incurring a loss resulting from a borrower's failure to repay a loan in accordance with the original terms of repayment or the borrower fails to meet contractual obligations. There is an equal need to do a credit risk rating for green projects not only to ensure that the bank will be able to get paid off the loan but also to ensure that the green project remains viable and continues to do its part in the overall effort to protect the environment.

Essential to project evaluation is the identification and assessment of credit risks that are inherent in loan financing. There are various types of risks in banking that need a thorough and in-depth assessment to be able to mitigate the occurrence of the risk. Among the factors affecting credit risk are the market, management, technical and financial, which are discussed below.

### A1 Market Assessment

Market risk is the possibility of a specific business incurring losses due to factors affecting the market or the industry that which the business belongs to.

Before a bank lends to its borrowers, it has to analyze the business whether that business will be sustainable. And one way to check it out is to assess the different market risks that the business might be exposed to.

There are basic market risks that are associated with credit as follows:

- a. **Political risk.** It is one of the most critical factors facing businesses owners and investors, and it arises from the changes in the country's government, policies, business laws, and investment regulations. The most apparent political risk is the current uncertainties which can impact the profitability and sustainability of businesses operating in Myanmar. Political risks can lead to potential social issues such as inequality, corruption, and wage gaps and reduce foreign direct investment, increasing the country's economic growth. In their article published in the Harvard Business Review, Managing 21st-Century Political Risk, the authors refers to 10 political risks as summarized below:

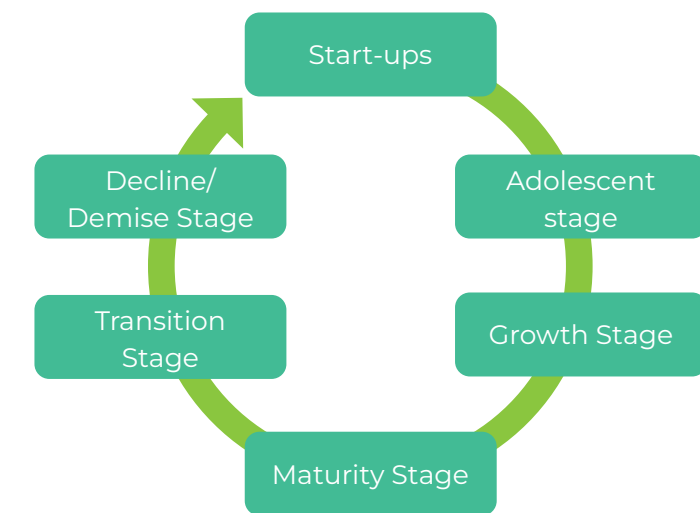
<b>Geopolitics</b>	Interstate wars, great power shifts, multilateral economic sanctions, and interventions
<b>Internal conflict</b>	Social unrest, ethnic violence, migration, nationalism, separatism, federalism, civil wars, coups, and revolutions
<b>Laws, regulations, policies</b>	Changes in foreign ownership rules, taxation, environmental regulations, and national laws
<b>Breaches of contract</b>	Government renegeing on contracts, including expropriations and politically motivated credit defaults
<b>Corruption</b>	Discriminatory taxation and systemic bribery
<b>Extraterritorial reach</b>	Unilateral sanctions and criminal investigations and prosecutions
<b>Natural resource manipulation</b>	Politically motivated changes to the supplies of energy and rare earth minerals
<b>Social activism</b>	Events or opinions that go viral, facilitating collective action
<b>Terrorism</b>	Politically motivated threats or violence against persons and property
<b>Cyberthreats</b>	Theft or destruction of intellectual property; espionage; extortion; and massive disruption of companies, industries, governments, and societies

- b. **Competition risk.** It is the chance that competitive factors will prevent the business from achieving a goal. There is a potential loss due to competitive pressures. For example, competitors that have a fundamentally cheaper cost base or a better product resulting from the use of high-efficiency motors or energy-saving equipment or devices such as solar PV or resulting from an increase in productivity due to the installation of exhaust fans that improves factory environment.

There are many ways how to manage competitive risk:

- i. Form a competitive-risk assessment team that will help the company to comprehend the extent of competitive factors it faces;
  - ii. Identify your competitors and evaluate whether these competitors pose a threat to your market position;
  - iii. Invest in R & D and develop newer products with significant value addition over the competition;
  - iv. Focus on customers' needs, and
  - v. Monitor market dynamics and be on the lookout for risks that can translate into business opportunities.
- c. **Economic Risk** It is the possibility that conditions in the economy will increase the business cost or reduce sales. These are risks that affect the business during different economic conditions, such as Expansion or Contraction in the business cycle. During Expansion, the demand for products and services are picking up, and businesses are accelerating their activities and production so as to meet this demand. The ability of companies to meet their obligations will improve as their overall financial health improves. On the other hand, during a Contraction where demand is low, the company that is highly in debt will experience low or declining profitability or weak cash flow, which will lead to non-payment of its obligations with suppliers and the banks. The banks as lenders must be abreast with the key development in the economy and marketplaces so that they would know when and how the economic cycle will begin to swing back and what implications that shift will have on its borrowers in meeting their financial obligations.
- d. **Business Cycle Risk** is a major issue in examining the company, and industry risk deal with the stage of the entity's life cycle. Both individual companies and industries have five, and sometimes six, stages of life. Below are the major stages of the company life cycle, and each stage has separate risk parameters as follows:
- i. Start-ups – inexperience of management; sales are the lowest; business risk is highest
  - ii. Adolescent stage – new and untried products and services may impact liquidity as well as increasing levels of inventory and receivables; it is in constant conflict and confusion when leaders can't agree on a direction and what risks to take, but once they resolve their conflict, the company reaches its prime.
  - iii. Growth stage – the risk in lending to a growth company is lesser than in the prior two life cycle phases because cash flow becomes positive, representing an excess cash inflow.
  - iv. Maturity stage – due to the elimination of business risk, mature and stable businesses have the easiest access to debt capital.

- v. Transition stage – The risks in lending to a transition company, among others, are uncertain growth rate, length of the transition is uncertain, and the cost of transition usually not fully known.
- vi. Decline/Demise stage – Risks at this phase is inordinate. Liquidity is no longer an issue. The critical risk element becomes solvency.



**Business Cycle Risk**

- e. **Social Environmental Risk** are identified among the top risks in the Global Risks Report published every year by the World Economic Forum since 2005. In the 2022 edition, the report explored which risks would be the most severe over the next 10 years. The results are consistent with the previous editions: environmental and societal risks account for 8 of the 10 most critical risks.

■ Economic ■ Environmental ■ Geopolitical ■ Societal ■ Technological

1 <sup>st</sup>	Climate action failure	6 <sup>th</sup>	Infectious diseases
2 <sup>nd</sup>	Extreme weather	7 <sup>th</sup>	Human environmental damage
3 <sup>rd</sup>	Biodiversity loss	8 <sup>th</sup>	Natural resources crises
4 <sup>th</sup>	Social cohesion erosion	9 <sup>th</sup>	Debt crises
5 <sup>th</sup>	Livelihood crises	10 <sup>th</sup>	Geoeconomic confrontation


Source : World Economic Forum Global Risks Perception Survey 2021-2022






## A2 Management Assessment

Management risks are uncertain events or negative occurrences associated with inefficient, underperforming, incompetent people comprising the management team, such that operations are impaired, resulting in economic loss in the business. Simply stated, it is the risk of a loss due to incompetent management. It will be best to take an analyst's view of a client's management quality first before turning it into financial performance and the position of the business.

The major component in the assessment of managing risk is the quality of the management team. The bank may be exposed to certain risks that the client's management team will put their own interests over the interest of the company and its shareholders. Key risks related to the management team are summarized below:

	Description	Focus areas
 <p>Quality And Experience Of The Management Team</p>	<p>When we talk about the quality of management, this particularly refers to both senior management and middle management levels. A strong management is the backbone of any successful business. This is not to say that employees are not as important, but it is management that ultimately makes the strategic decisions.</p>	<p>Quality management focuses on:</p> <ol style="list-style-type: none"> <li>Integrity which refers to trustworthiness, reliability and adherence to strong work ethics and sense of responsibility;</li> <li>Skills which are certain attributes or abilities which includes the capacity to plan, organize, lead and control the operations of an organization, while avoiding crisis situations and promptly solving problems as they occur; and</li> <li>Experience of senior and middle management in handling similar companies in the same industry; in handling crisis situations; assessing risks accurately; and coming out with solutions to mitigate those risks.</li> </ol>
 <p>Business Corporate Strategy</p>	<p>Corporate strategy is the direction an organization takes with the objective of achieving business success in the long term.</p>	<p>Recent approaches have focused on the need for companies to adapt to and anticipate changes in the business environment. An effective management must be forward looking, aware not only of their competitors but also of the company's strengths, weaknesses, opportunities and threats. An assessment is made on the company's strategies, plans and procedures for reaching target market or groups.</p>

 <p>Management Structure and Succession Strategy</p>	<p>Management must have a well-defined organizational structure that is sensible and efficient with a good succession plan and staff recruitment program.</p>	<p>The company must have identified qualified successors for key senior managers and a good second level of management with the necessary professional and management skills to ensure operational and business sustainability.</p>
 <p>Management Control and Business Planning</p>	<p>The company should have a good monitoring system in place to compare actual operating results vs plan or budget projections. An important benchmark for assessing the company's accounting and planning is the extent to which its targets have actually been met in the past.</p>	<p>In assessing the planning quality, it is important that the company has up to date, relevant, timely and detailed quality planning information. There should be action plans available for new products, expansions, projects, new branches, etc. The company must have up-to-date, meaningful and truthful financial statements and liquidity budget which provides management with constant information on a day to day business.</p>
 <p>Management of Banking Relationships</p>	<p>This category assesses the behavior of the client, (whether the proprietor or any of the major stockholders) towards the bank and other financial institutions, internal or external.</p>	<p>Positive behavior means that the client provides information on his business promptly, services his account without delay, provides the necessary collateral and honors agreements as regards the conduct of his account.</p>

### A3 Technical Assessment

The assessment focuses on the technical resources available to the project. It helps project proponents determine whether the technical resources (such as machinery and equipment, a factory building and other project assets) are well-aligned to reasonably meet projected production capacity, project cash flows and its green objectives in reducing carbon footprints such as technologies on energy efficiency, renewable energy and water conservation which are considered critical to Myanmar's economic development. It is also critical that the technical management team has the technical capability to implement the project in order for it to operate profitably.

#### Energy Efficient Lighting Systems

As far as energy efficiency is concerned, Myanmar has significant potential in its industrial and commercial activities for substantial savings in energy consumption. The potential savings estimated are 45% for the iron and steel industry, 65% for pulp and paper and 35% for sugar mills due to their high electrical and thermal demands. In the commercial sector, office buildings and hotels continue using inefficient incandescent lighting and electric hot water systems. Significant energy savings could be achieved with the use of high-efficiency fluorescent and light-emitting diode lighting and solar hot water systems.

Another energy-efficient technology is the use of LED lighting, which is a highly energy-efficient lighting technology and has the potential to fundamentally change the future of lighting Myanmar's garment factories and other industries. The high efficiency and directional nature of LEDs make them ideal for industrial application as their use has the greatest potential impact on energy savings and is thus an environmentally friendly technology.

#### a. Use of High-Efficiency Motors (HEMs)

An energy-efficient technology that can be considered for the garment and other industries in Myanmar is the use of high-efficiency motors. Of the total electricity consumption of local industries in many ASEAN countries, about 65-70% are due to electric motors. Energy inefficiency stems from using outdated, improperly sized and poorly maintained electric motors. Switching to more efficient electric motors and drive systems translates to substantial energy savings and reduces companies' operating costs.

#### b. Use of Solar Energy

Solar power in Myanmar has the potential to generate 51,973.8 TWh/year, with an average of over five sun hours per day. Many industries in the country can benefit from switching to renewable energy in sourcing their power needs. The use of solar PV panels in factories of various industries is conducive to lower production costs as a result of

possible energy savings and a positive contribution to environmental protection with lesser dependence on fossil fuel to energize industrial factories, warehouses and office buildings.

#### c. Efficient Use of Water Resources

Water resources are impacted in two main ways: **over-extraction** and **pollution**. In general, average contract manufacturing sewing facilities in the garment industry does not use too much water. However, depending on the size of the facility, they can still use a substantial amount of water for evaporative cooling, ironing, and domestic purposes.

Washing and dyeing facilities, such as textile mills and denim washing facilities, can use immense quantities of water, and special attention must be given to their processes and technologies to fully gauge impact and any potential for improvements.

Suggestions on the efficient use of water resources for the factories
<ul style="list-style-type: none"> <li>Outline water reduction priorities in the company's environmental management policy</li> </ul>
<ul style="list-style-type: none"> <li>Meter and measure the water usage of the factories, eg. for overall usage, water-intensive processes, such as with washing and dyeing machines.</li> </ul>
<ul style="list-style-type: none"> <li>Set the key performance indicators and target the improvements overtime via new processes and technologies</li> </ul>
<ul style="list-style-type: none"> <li>Make regular facility checks and check for fix leaks</li> </ul>
<ul style="list-style-type: none"> <li>Place the flow aerators and restrictors in toilet areas to limit the water usage</li> </ul>
<ul style="list-style-type: none"> <li>Take care not to set up new wet processing facilities in dry zone areas. If production is set up in such areas, the factory should be ready to invest in expensive closed-loop technologies such as zero liquid discharge.</li> </ul>

The other pertinent aspects of technical assessment can be found in Annex A – Schedules H-Z.

#### A4 Financial Assessment

##### a. Analysis of Financial Statements

Financial analysis is a very important tool for bankers in the evaluation of the project's financial viability, including its ability to generate sufficient cash flows to pay its debt-service requirements. The advantages include:

- i. It gives the banker an indication of how to assess the repayment capacity of its borrower.
- ii. It also generates positive cash flows that will be the main source of loan repayment, and the repayment schedule is calculated on the basis of projected financial statements prepared over the term of the loan.
- iii. The key priority for the banker is the ability of the borrower to service its loan/credit efficiently.
- iv. It must be noted that a bank does not lend money to a prospective borrower on security/collateral only.

##### b. Financial Ratio Analysis

**Financial ratios** are very powerful tools that are useful to evaluate the past financial performance of a company. Using financial ratios helps enable the bank to:

- i. Determine if the company or the project has improved its financial status and performance compared to prior years of operations.
- ii. Assess the competitive position of the company or the project to be financed compared to similar companies/projects belonging to the same industry.
- iii. Be able to understand the industry's conditions and practices in relation to the project.
- iv. Be able to forecast the future performance of the company/project to be financed.

There are four main categories of Financial Ratios, namely: Profitability Ratios, Liquidity Ratios, Leverage or Long-Term Solvency Ratios and Turnover or Asset-Utilization Ratios.

##### 1. Profitability Ratios

Profitability ratios measure a company's ability to generate earnings relative to sales, assets and equity. These ratios assess the ability of a company to generate earnings and cash flows relative to investments made by the project proponents. The ratios also show a company's operating efficiency and overall returns on assets and capital. Some common profitability ratios used are Gross Profit Margin, Net Profit After Tax,

Return on Equity (ROE) and Return on Assets (ROA). The basic profitability ratios are shown in Box 4 below:

#### Box 4

Profitability Ratios		
Financial Ratio	How to calculate it	Significance
Gross Margin	Gross Profit / Net sales	Indicated the percentage of sales available for expenses and profit after the cost of merchandise is deducted from sales.
Net Profit Margin after Tax	Net income after Tax / Net Sales	Indicated the profit per sale after all expenses are deducted from sales.
Return on Equity (ROE)	Net Profit / Equity	Determine the rate of return of Owners' investment in the business.
Return on Assets (ROA)	Net Profit / Total Assets	A measure of how effectively assets are used to generate returns on business

##### 2. Liquidity Ratios

Liquidity ratios are a class of financial metrics that are used to determine a company's ability to pay off its short-term debt obligations. Liquidity ratios are used to determine how quickly a company can turn its assets into cash if it experiences financial difficulties or bankruptcy. Generally, the higher the value of the ratio, the larger the margin of safety that the company possesses to cover short-term debts. Liquidity ratios greater than 1 indicate that the company is in good financial health and it is less likely to fall into financial difficulties. They show the number of times the short-term debt obligations are covered by the cash and liquid assets. Applicable liquidity ratios are Current Ratio, Quick-Asset Ratio, and Cash Ratio as shown in Box 5 below:



## Box 5

Liquidity Ratios		
Financial Ratio	How to calculate it	Significance
Current Ratio	Current Assets / Current Liabilities	Measures a business' capacity to pay its current debts as they come due.
Quick Ratio	(Cash+Accounts Receivable) / Current Liabilities	Indicates the extent to which the business could pay current liabilities without relying on the sale of inventory- how quickly the business can pay its bills.
Cash Ratio	Cash / Total Current Liabilities	A measure of the amount of cash available to meet current debt.

## 3. Leverage (Long-Term Solvency) Ratios

Solvency ratios measure the ability of a company to meet its long term debts. They provide an assessment of the likelihood of a company to continue meeting its debt service obligations which consist of the scheduled annual interest and debt repayments. Some of the more relevant solvency ratios are the Debt-to-Equity Ratio (D/E R) and Debt-Service Cover (DSCR). DSCR is ideally set at more than 1 for a project proposal to be bankable. Creditors usually demand borrowers to set up a debt-service reserve account (DSRA) containing at least a 6-months debt service requirement. Applicable liquidity ratios are shown in Box 6 below.

## Box 6

Leverage or Long-term Solvency Ratios		
Financial Ratio	How to calculate it	Significance
Debt to Equity Ratio (D/E Ratio)	Total Liabilities / Total Stockholders' Equity	The proportion of a company's assets supplied by the company's creditors versus the amount supplied by the owner or stockholders.
Debt Service Cover (DSC)	(Net Profit + Depreciation + Annual amount of interest on LTLs) / Interest + principal	Indicated how well the cash flow covers debt and the capacity of the business to take on additional debt. Indicative of funds available for servicing long-term debt.

## c. Resource Efficiency (Asset Turnover/Utilization) Ratios

Resource efficiency ratios show a company's operating efficiency and overall returns on assets and capital. The ratios are typically used to analyze how well a company uses its assets and liabilities internally and also indicates the capacity of the assets to generate sales. These ratios are meaningful when compared to peers in the same industry and can identify the business that is better managed relative to the others. Efficiency ratios are important because an improvement in the ratios usually translates to improved profitability. These ratios include Receivable Turnover Ratio and Inventory Turnover Ratio as shown in Box 7.

## Box 7

Turnover or Asset-utilization Ratios		
Financial Ratio	How to calculate it	Significance
Accounts Receivable Turnover	Net Credit Sales for the Year/ Average Accounts Receivable for the Year	The number of times per year that the accounts receivables turn over.
Days' sales in Accounts Receivable	365 days in Year/ Accounts Receivable Turnover in Year	The average number of days it took to collect the average amount of accounts receivable during the year. This statistic is only as good as the Accounts Receivable Turnover Figure.
Inventory Turnover	Cost of Goods Sold for the Year/ Average inventory for the Year	The number of times per year that the inventory turns over.
Days' Sales in Inventory	365 days in Year/ Inventory Turnover in Year	The average number of days it took to sell the average inventory during the year. This statistic is only as good as the inventory Turnover Figure.

## A5 Environmental Assessment

a. *Environmental and Social Due Diligence*

The conduct of environmental and social (E&S) due diligence on transactions is a critical component of a bank's Environmental and Social Management System (ESMS), and results therefrom should be factored into the decision-making process before proceeding with a transaction. The purpose of the environmental and social due diligence is to review any potential environmental and social risks associated with the business activities of a prospective client and to ensure that the transaction adheres

to the bank's E&S policies and does not carry environmental and social risks, which could present a potential liability/risk to the bank. Relevant standards such as the IFC Performance Standards or Equator Principles should be considered.

Furthermore, environmental and social due diligence involves the systematic identification, quantification and assessment of environmental and social risks associated with a proposed transaction. This process also helps identify the mitigation measures that are necessary to reduce any identified environmental and social risks. On the other hand, while due diligence focuses on the onboarding and checklist renewal of the identified risks, the mitigations of these risks are addressed in the ERM process.

b. *The importance of the Environmental and Social Impact Assessment (ESIA)*

An ESIA should be seen as a process that starts at the conceptual design stage of a project and continues throughout project construction, operation and decommissioning. During the process, several deliverables are prepared to guide the activities of the specific stage. The purpose of an ESIA is to identify the positive and negative impacts caused by project implementation. This is assessed through an analysis of the effects resulting from the interaction between environmental and social components and the various activities of a project and its development, including temporary (for example, during construction) and associated facilities.

ESIAs vary in scope and type of analysis, depending on the characteristics of the proposed project. In doing so, each element of a project should be analyzed for its potential to affect the environment and/or society during each phase of the project (including construction, operation and decommissioning). ESIAs address a project's environmental and social costs and benefits, including an appraisal of the economic implications of the proposed project. The ESIA should consider the project as designed, in addition to potential alternative options (including that of no action). In addition to the direct effects outlined above, the possible interactions between different environmental components (indirect effects) should also be considered, together with the impacts that could occur in conjunction with other activities taking place in the near vicinity at the same time (cumulative effects).

Jurisdictions in most countries around the world require an ESIA to be undertaken before authorization (for example, permitting, licensing, planning consent) for certain types of projects is granted. National legislation often varies between countries, so it is vital to establish the local requirements prior to embarking upon the ESIA process:

- i. The core principles that underline the ESIA process remain fundamentally the same throughout the world.
- ii. Establishment of a robust understanding of the existing environment and social setting;

- iii. Identification of the potential impacts upon the environment and local communities (both positive and negative) as a result of the proposed changes; and
- iv. Ensuring that the design, implementation, operation and subsequent decommissioning of the development are carried out in such a way as to minimize adverse impacts on and maximize potential benefits to the environment and affected communities.

In Myanmar, the environmental impact assessment procedure was issued by the Ministry of Environmental Conservation and Forestry in December 2015.<sup>15</sup>

**c. The ESIA Process**

An ESIA is a legal requirement in most, if not all, countries of the world. Compliance with national legislation and local planning regulations are mandatory in all circumstances. In certain situations, the proponent may also be required to comply with certain international standards. However, to receive the highest international finance attraction and for the best practices, an incorporation of both local requirements and international standards may be best fitting.

While national legislation varies from country to country, the core approach to an ESIA remains the same. Public consultation will also influence the development of the project and is undertaken throughout the ESIA process. The public will focus upon the scoping and impact assessment stages, during which information is shared, and feedback is sought.

An ESIA process must consider all stages of the development process, including the construction of the facility, site operations, the dismantling and decommissioning of potentially adverse impacts that the development may have on the site, and site restoration. An ESIA should consider not only the potentially adverse impacts that the development may have and how these will be mitigated but should also highlight any positive changes that the development may introduce for the natural environment and local communities. It is noted that the timeframes outlined within the flow chart are indicative of a typical ESIA that is carried out in accordance with international standards.

The initial step of the ESIA involves the assessment of the proposed project to be financed. As shown in the ESIA Process Flow in Annex B and as discussed in Box 8 below, the initial step of the process involves:

<sup>15</sup> <https://www.myanmar-responsiblebusiness.org/resources/environmental-impact-assessment-procedures.html>

**Box 8**



Activity	Objectives and Purpose
Project Screening	<p>The process is used to determine whether a proposed project or activity requires an ESIA as some projects may not pose an environmental threat. If the project has an environmental and social impact, it should be determined as to what level of environmental review is necessary. Screening of projects for EIS System Coverage and ESIA Requirement involves the consideration of the project type and thresholds as well as its location in Environmentally Critical Areas (ECAs). The project categorizations are discussed in detail in Item VII.</p> <p>Identifies projects that typically contain potential significant issues.</p>

	<p>Screening criteria typically consider:</p> <ul style="list-style-type: none"> <li>■ Project type, location, size (e.g., capital investment, number of people affected, project capacity, areal extent)</li> <li>■ Receiving environment characteristics</li> <li>■ Strength of community opinion</li> <li>■ Confidence in the prediction of impacts</li> </ul>
Initial Environmental Examination (IEE)	<p>Projects that have few/limited or no environmental and social impacts proceed without any further environmental assessment studies. This will typically occur for low-impact projects situated in locations that are not sensitive to environmental change. Thus only an IEE is prepared. The IEE is:</p> <ol style="list-style-type: none"> <li>1. Intended as a low-cost environmental evaluation that makes use of information already available</li> <li>2. Describes the proposed project or activity and examines alternatives</li> <li>3. Identifies and addresses community concerns to the extent possible</li> <li>4. Identifies potential significant environmental issues associated with a project</li> <li>5. Grade's effects &amp; identifies actual Significant Environmental Issues (SEIs)</li> <li>6. Resolves simple SEIs</li> <li>7. Recommends further action for resolving outstanding SEIs</li> <li>8. Possible outcome/conclusion in the IEE: <ul style="list-style-type: none"> <li>■ No requirement for further environmental study; proposal not anticipated to have a significant impact</li> <li>■ Limited environmental study needed; environmental impacts are known and can be easily mitigated</li> <li>■ Full-scale ESIA required; impacts unknown or likely to be significant</li> </ul> </li> </ol>

Project Scoping	<p>Scoping is the process of identifying potential environmental and social impacts associated with the development of and focusing the ESIA process on the pertinent issues.</p> <p>An initial scoping of potential impacts will identify:</p> <ul style="list-style-type: none"> <li>■ Those impacts that are thought to be important;</li> <li>■ Those thought to be negligible or of such a low level of effect that they can be eliminated from the further investigation; and</li> <li>■ Those for which the importance is uncertain.</li> </ul> <p>The scoping phase should be documented in the form of a scoping report that is submitted to the authority for review and approval. The scoping report should basically be a concise presentation of the major issues and opportunities identified and the public participation process.</p> <p>As a minimum, the report should include:</p> <ul style="list-style-type: none"> <li>■ A brief description of the project;</li> <li>■ All the alternatives identified during the scoping process;</li> <li>■ All the issues raised by interested and affected parties and how these will be addressed; and</li> <li>■ A description of the public consultation process, including a list of interested and affected parties, and minutes of meetings.</li> </ul>
Terms of Reference (ToR)	<p>The scoping report should also contain detailed ToR for the ESIA. The ToR is also referred to as a plan of study in some jurisdictions. The ToR will set out:</p> <ul style="list-style-type: none"> <li>■ A description of the environmental impacts and opportunities identified during scoping that may require further investigation and assessment;</li> <li>■ A description of the feasible alternatives identified during scoping that may be investigated further;</li> </ul>

	<ul style="list-style-type: none"> <li>■ A description of the baseline field programs that are to be carried out;</li> <li>■ A description of ongoing consultation proposed for the ESIA process;</li> <li>■ A description of the proposed method of identifying the environmental and social impacts;</li> <li>■ A description of the proposed method of assessing the significance of these impacts; and</li> <li>■ A proposed schedule for the ESIA studies.</li> </ul>
Baseline Study	<p>The primary objective of the ESIA process is to appraise the potential changes that the proposed project may have upon the existing environment and society and how this can be ideally avoided or mitigated. To inform the appraisal of any possible changes that may occur, it is necessary to first establish an understanding of the existing environment before any clearing of the site to make way for development.</p> <p>The baseline appraisal should consider all aspects of the environment that may be altered by the proposed project. These can be categorized as physical, biological or socioeconomic attributes. The baseline should be based on the findings of the screening and scoping studies.</p> <p>The scope, including attributes that will be appraised and the geographical extent of the analysis, will typically have been agreed upon with the relevant decision-makers as an outcome of the scoping phase. It is important to re-emphasize that the scope (and detail) of the baseline study should be commensurate with the size and scale of the project and hence the potential changes that the project may have upon the environment and society.</p>

	<p>The baseline study will typically be developed in three stages:</p> <ol style="list-style-type: none"> <li>a. <b>Desktop study:</b> Office-based exercise during which readily available existing information (i.e. that can be used to describe the existing environment) is collected and reviewed to ensure its appropriateness for use within the ESIA;</li> <li>b. <b>Field study:</b> The stage within which additional data is captured in the field, with the intent of addressing any gaps that have been identified in the existing knowledge base; and</li> <li>c. <b>Reporting stage:</b> Collation of the captured information into the baseline report.</li> </ol> <p>In many jurisdictions, there is a requirement to submit the baseline report to the relevant planning authorities for approval as an integral step in the ESIA process. It is recommended that interested stakeholders (including the general public) also be given the opportunity to comment on the baseline report, providing an opening for input as the ESIA develops.</p> <p>The findings of the baseline assessment are to be included in the final ESIA report. The baseline report should provide a concise summary of the findings of the baseline studies that have been completed. Each of the technical studies should be presented as a separate chapter. It is recommended that the length, language and the structure of each chapter be presented consistently to provide a coherent description of the existing environment prior to any development taking place. It should also summarize the field investigations that have been carried out, including where and when samples were taken.</p>
Full-Scale ESIA or Other Additional Study	<ol style="list-style-type: none"> <li>1. Resolves any remaining significant environmental issues</li> <li>2. ESIA is an ongoing process of review, negotiation and incremental decision making</li> <li>3. The function of the ESIA report is to provide an objective assessment of issues to inform and facilitate the decision-making process</li> </ol>



	<p>4. Ultimately, an administrative or political decision is made whether to proceed or not to proceed with a proposed project or activity</p> <p>5. Possible Decision Outcomes</p> <ul style="list-style-type: none"> <li>■ Approval</li> <li>■ Approval with conditions</li> <li>■ Approval is subject to the ongoing investigation</li> <li>■ Further investigation required</li> <li>■ Request for a supplementary, or new, EIA report</li> <li>■ Rejection</li> </ul>
Issuance of Environmental Compliance Certificate (ECC)	<p>A document issued by an Environmental Regulatory Agency after a positive review of an ECC application certifying that based on the representations of the proponent, the proposed project or undertaking will not cause significant negative environmental impact. It is NOT A BUSINESS PERMIT to operate, the issuance of which rests with the local government that has jurisdiction over the project site.</p> <p>ECC also certifies that the proponent has complied with all the requirements of the EIS System and has committed to implement its approved Environmental Management Plan.</p> <p>The ECC contains specific measures and conditions that the project proponent has to undertake before and during the operation of a project, and in some cases, during the project's abandonment phase to mitigate identified environmental impacts.</p> <p>The bank must require the borrower to submit an ECC prior to loan release and thereafter monitor continuing compliance with the ECC conditions in coordination with the regulatory.</p>
	Examples of Projects that Require IEE or Full Scale ESIA are shown in Annex C.

#### d. Environmental and Social Risk Screening Categories

Environmental and Social Projects can be classified into different screening categories as follows:

#### Box 9

<p><b>Category A</b></p> <p>Projects that typically require an EIA study</p> <p><b>Examples:</b> Forest Industries, Water Impoundment, Industries</p>	<p><b>Category B</b></p> <p>Projects that typically require only an IEE</p> <p><b>Examples:</b> Renewable Energy, Aquaculture, Tourism Development, Infrastructure, Rehabilitation</p>
<p><b>Category C</b></p> <p>Projects intended to directly enhance environmental quality or address existing environmental problems not falling under Category A or B</p> <p><b>Examples:</b> Forestry Research and Extension, Rural Health Services, Marine Sciences Education</p>	<p><b>Category D</b></p> <p>Projects unlikely to cause adverse environmental impact</p> <p><b>Examples:</b> Solar panels</p>

#### Category A. Environmentally Critical Projects (ECPs)

ECPs are projects with significant potential to cause negative environmental impacts because they include activities that have significant environmental consequences that may be sensitive, irreversible and diverse. An ESIA is required to be submitted.

Typical ECPs requiring Full-Scale ESIA:

- a. Infrastructure projects
- b. Large-scale industrial activities and heavy industries
- c. Resource extractive industries and activities
- d. Waste management and disposal
- e. Substantial changes in farming or fishing practices
- f. Forestry projects

### Category B. Environmentally Critical Areas (ECA's)

Projects that are not categorized as ECPs, but may cause negative environmental impacts because they are located in areas where the environment may be critically affected by the projects.

Location of ECA Projects:

- a. National Parks
- b. Areas occupied by indigenous people
- c. Tourist areas
- d. Ecologically sensitive area and habitat for endangered or threatened species of Philippine wildlife
- e. Areas frequently visited by natural calamities
- f. Areas traditionally occupied by native tribes
- g. Prime agricultural areas
- h. Mangrove areas
- i. Water bodies and coral reefs

**Category C.** Projects intended to directly enhance environmental quality or address existing environmental problems not falling under Category A or B. Examples are (1) Forestry Research and Extension (2) Rural Health Services (3) Marine Sciences Education.

**Category D.** Projects unlikely to cause adverse environmental impact, e.g. solar panels:



The Environmental and Social Risk Screening Checklist is shown in Annex D.

### A6 Risk Assessment: loan Application Assessment

#### a. Importance of Loan Application Assessment

The systemic assessment of loan applications against relevant ESG criterias and requirements is crucial as financial institutions provide financing to numerous projects all operating in different sectors with different characteristics. The importance of a rigorous credit checking process can not be overstated, as it helps the financing companies avoid potential risks and negative impacts to their stakeholders. These procedures and criteria serve as a safeguard for the impacts of harmful projects which can have severe implications towards the local communities, climate change, and biodiversity.

Credit risk scoring is a tool in risk-based lending wherein the bank or financial institution has a systematic manner of identifying, assessing, measuring, controlling and managing the business risk involved in the business enterprise/borrower. The credit score is derived from assessing the company's financial ratios, found in their balance and income statements. Financial institutions like banks look at the credit scores to make a decision to lend money to the borrower and to evaluate potential risks.

The credit risk scoring system ensures the consistent method for identifying, assessing, measuring and managing default risk and serves as the main guide for subsequent account monitoring and management activities of the loan officer.

#### b. Characteristics of a Good Credit Risk Scoring System

The credit assessment procedure used for sustainable lending should be based on a comprehensive sustainability checklist, sector-specific principles, and a rejection criteria for lending. The sustainable lending process protects the financial institution from any harmful lending arrangements that could impact the company's reputation.

1. Sustainability checklist: the sustainability checklist should be based for example on the Equator Principles, the IFC Performance Standards, the EU or ASEAN taxonomies or the ten principles of the United Nations Global Compact. This checklist should serve as a benchmark to assess all the potential ESG impacts that may arise from the project, and the assessment should be conducted by independent experts.
2. Sectoral rules for sensitive industries: Specific rules can be implemented for the assessment of loan applications from sensitive industries, which will provide a loan approval frame of reference.
3. Rejection criteria for lending: the sustainability checklist and lending guidelines can be translated into criteria for rejecting loan applications. These criteria for loan rejections can be for industries such as weaponry, gambling, human rights abuse, and projects with significant environmental impacts.

4. Predictive value – The credit risk score is a forecast of a borrower's future loan repayment performance. It predicts the likelihood of default and the expected loss from a particular account in case of default.
5. The rating system is incorporated into the bank's overall portfolio risk management and approved by the Board of Directors.
6. All credit exposures should be rated.
7. The rating system should have a structure designed to differentiate among the degrees of risk in a bank's portfolio. Each risk grade should be well-defined distinguishable from one another. Each grade represents a level of risk, and there's no overlapping.
8. Each risk factor must have a clear impact on the borrower's capacity to pay (e.g. payment history, amount of debt relative to credit, length of credit history, amount of new credit and types of credit, management, market, production capacity, cash flow, net income, net worth, equity, financial ratios.)
9. Major risk factors are clearly and precisely defined using quantitative and qualitative factors. Each risk factor in each risk area must be rated and scored and has standards of low, average, high with corresponding points.
10. The risk rating system is dynamic. It must be reviewed regularly to test its predictive value and enable the bank to introduce revisions to fine-tune the system in terms of its ability to forecast the borrower's repayment performance.
11. The risk rating system is independently validated aside from regulatory examination or audit by the Central Bank of Myanmar.
12. Back-testing to determine the validity of assumptions used in the rating definitions to determine their predictive value.
13. Rating is properly documented and supported by details about the borrower in the credit file or portfolio database.
14. The rating system is 2-dimensional and incorporates both a "borrower" and "facility" dimensions.
15. The risk rating is accurate and timely. The bank must prepare a credit risk rating of a borrower every time the bank increases its loan exposure on the borrower. The risk rating must also be reviewed and updated at least once a year to check any deterioration in the rating and enable the bank to adopt measures to arrest the deterioration.

#### c. *Example of a Borrower's Credit Risk Rating Scoresheet*

An example of a borrower's credit risk rating scoresheet and the step by step procedure are shown in Annex E.1 to E.9. It is best to use it in Excel format for faster and more accurate processing. It uses as risk factors the conventional 5 Cs of credit (Character, Capacity, Capital Condition and Collateral )<sup>16</sup>, although the bank can have some other risk factors based on its experience. The scoresheet is composed of 8 worksheets, namely:

1. Data entry sheet (Annex E.1) – for inputting only validated financial information about the borrower and the business. Without validation of financial information, the credit rating has no value for the purposes of making a well-informed credit decision.
2. Character Score Sheet (Annex E.2)
3. Capacity Score Sheet (Annex E.3)
4. Capital Score Sheet (Annex E.4)
5. Condition Score Sheet (Annex E.5.1 – E.5.5)
6. Collateral Score Sheet (Annex E.6)
7. Credit Rating Score Sheet (Annex E.7.1- E.7.2)
8. Borrower's Credit Risk Rating Table (Annex E.8)
9. Step by Step procedure (Annex E.9)

#### A7 Loan Pricing and Provisioning

Under a risk-based lending environment, loan pricing and provisioning are determined using the borrower's credit risk rating table and facility risk rating table. The borrower's credit risk rating is the basis for approving or not approving the loan application. The facility risk rating is used for fixing the interest rate for the loan and the required loan loss provision for each loan account. An example of the Facility Risk Rating Table is shown in **Annex F**.

Using the BCRR and FRR tables as a reference, the loan price and provision are calculated as shown in Box 10 and 11, respectively:

<sup>16</sup> Collateral is considered as a second way out and has not much bearing on the capacity to pay the loan based on the original loan repayment terms.

## Box 10

## Pricing of Loans

Loan Price <b>P</b>	Loan Interest Rate
Mark-up Margin	Desired Return on Assets <b>S</b>
Equity Cost <b>CE</b>	Cost of Equity (CAR) x Market Interest Rate
Risk Cost <b>CR</b>	Probability of Default (BRR) x Loss Given Default (FRR)
Admin Cost	Overhead Expenses
Cost of Funds <b>CF</b>	Cost of Loan Funds

The probability of default (PD) comes from the BCRR table, while the loss given default (LGD) comes from the facility risk rating table.

## Box 11

## Provisioning

Provisioning:  $EL \text{ (Expected Loss)} = PD \text{ (\%)} \times EAD \text{ (\$)} \times LGD \text{ (\%)}$

- $EL \text{ (\$)} = \text{cost of credit risk that requires provisioning}$
- $EL \text{ (\%)} = \%PD \times LGD$
- EAD (Exposure At Default) - latest outstanding balance based on books

## A8 Loan Covenants And Documentation

Loan covenants and documentation are tools for risk management and must be in place prior to loan release. The bank must avoid post-release documentation or submission by the borrowers of documentary requirements. Faulty loan documentation is by itself a risk as the bank may not be able to enforce its rights in the event of a loan default situation. The bank must ensure that there are no legal obstacles to its rights as a creditor.

Loan documents must specify in terms clearly understood by the borrower and the bank, the expectations from the borrower and the bank in terms of risk mitigation and management (e.g. rights and obligations of borrower and bank).

The loan agreement must clearly state the events of default and contain conditions that will mitigate different risks identified in the conduct of loan evaluation. The loan covenants are of two types:

- Positive covenant – a covenant that requires the borrower to take certain actions during the term of the loan. For example, the borrower can be required as loan condition any of the following:
  - To install a water filtration system in the factory within 60 days from loan release for the use of the workers, thereby promoting a clean water supply in the workplace.
  - To use a commercial gas steamer for cooking rice for workers in lieu of firewood.
  - To install industrial coolers/exhaust fans in the factory within 6 months from loan release to improve the temperature in the work area.
  - To install solar PV in the factory to reduce electricity consumption.
  - To train a successor within 8 months from loan release.
  - To maintain at all time in good working condition factory equipment and machinery.
  - To provide medicine/clothing allowance to workers.
  - To regularly submit audited financial statements to the bank.
  - To maintain a current ratio of at least 1:1.

- b. Negative covenant – a covenant that prevents the borrower from undertaking certain activities. Examples are the following:
- Not to incur additional indebtedness without prior clearance from the bank.
  - Not to invest in non-business assets.
  - Not to withdraw from the business for the personal use of more than a specified amount.
  - Not to engage in any activity that pollutes the environment.
  - Not to buy raw materials produced with a high level of pollution to the environment or hazardous to the health of the workers.

## B. Loan Supervision and Monitoring

Project supervision and monitoring is an integral part of credit risk management that need even more attention than project evaluation for the simple reason that it is done when the bank has already real financial exposure to the project. From the standpoint of credit risk management, the main objective of supervision and monitoring is to determine whether or not the existing risks in the project are the same as those identified and classified in the preparation of the credit risk rating of the borrower. The credit risk rating refers to the future repayment performance of the borrower. Any development in the project and in the condition of the borrower that impacts the availability of cash for debt service must be carefully assessed in order that loan repayment is not unduly affected. The frequency and nature of supervision and monitoring depend largely on the credit risk rating of the borrower. A low credit risk rating would mean more frequent and probably more comprehensive supervision and monitoring of the project and borrower. The extent and nature of supervision and monitoring work on a particular project should be part of the loan recommendation in the discussion of risk mitigants.

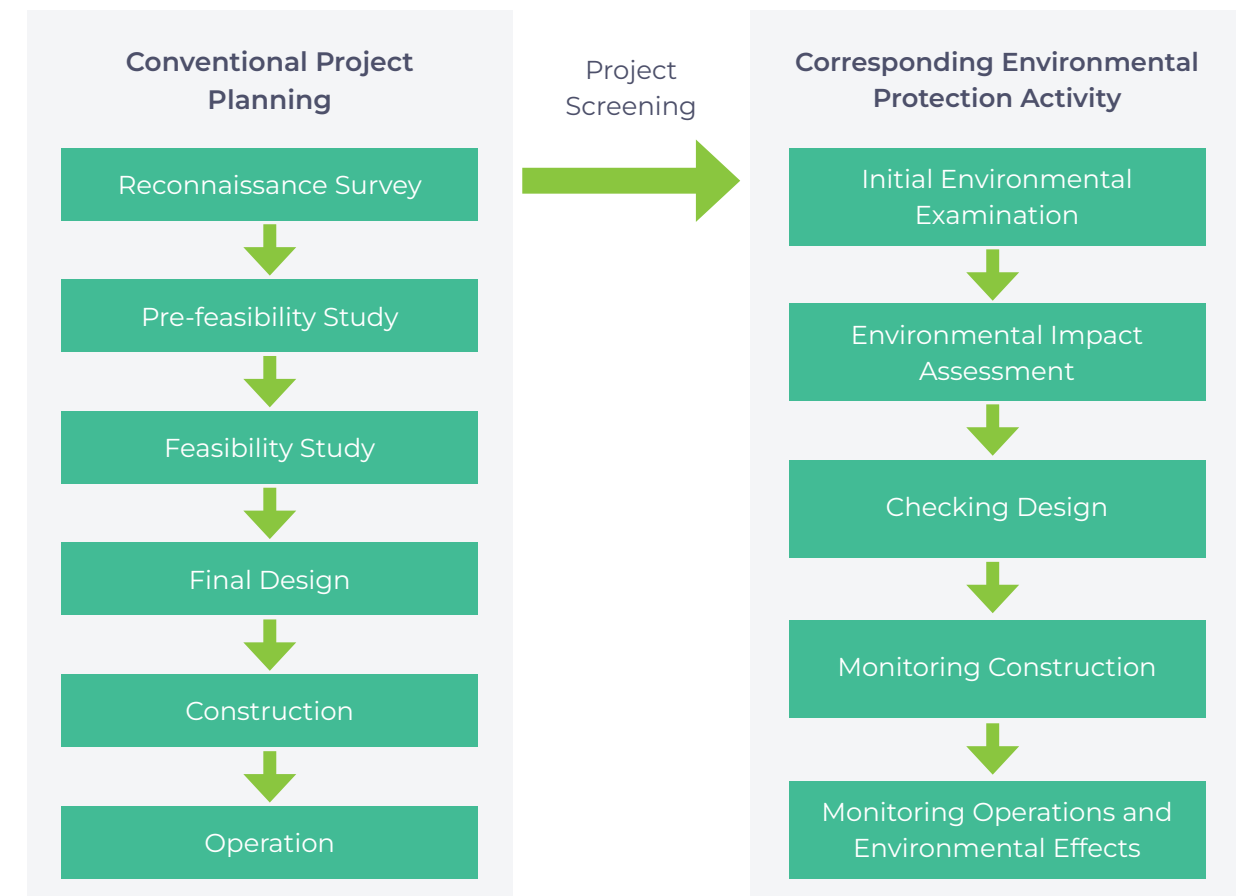
Project supervision and monitoring normally involve the evaluation of actual project performance compared to what has been projected during project evaluation. It also involves the determination of whether or not the project is attaining its financial, environmental and operational objectives. There are also early warning signals that a loan officer can consider in the conduct of project supervision and monitoring.

### B1 Project Performance Monitoring Including Environmental Concerns

Compared to the conventional project planning process, a project that carefully manages environmental risks, especially large ones, requires a different manner of planning and evaluation to ensure that the project will attain its objectives in relation to environmental concerns and objectives. Such project requires the conduct of an Initial Environmental Examination (IEE) and/or Environmental and Social Impact Assessment (ESIA).

Shown in Box 12 below is a comparison between the major steps in planning/evaluating a conventional project and a green project. Box 13, on the other hand, shows examples of Risk Monitoring and Corrective Action Plan focusing on ESG Concerns.

Box 12





## Box 13

Example of a Risk Monitoring and Corrective Action Plan Focusing on ESG Concerns

Identified Area of ESG concern	Corrective Actions required	Timeframe Action	Action completion indicator	Responsibility (Client staff, management or board)	Cost involved
1. Air emissions and Air Quality	Installation of: <ul style="list-style-type: none"> <li>■ cyclones, scrubbers, electrostatic precipitators, and baghouse filters.</li> </ul>				
2. Water use and conservation					
3. Wastewater and water quality					
4. Wastes					
5. Land contamination a. Evidence of land pollution due to the discharge of untreated effluent	The action plan may include: <ul style="list-style-type: none"> <li>■ Removal and treatment of contaminated ground soil</li> <li>■ Construction of sewage system for industrial wastewater</li> <li>■ Construction of waste water treatment facility and discharge system for treated water</li> </ul>	6 months	<ul style="list-style-type: none"> <li>■ Installation of Effluent Treatment Plant (ETP). The ETP should be operational, and the qualitative parameters of treated effluent should be within limits</li> <li>■ The discharge of treated effluent should be through the constructed discharge system, and no other modes of discharge and leakages</li> <li>■ Qualitative parameters of treated contaminated ground soil should be within limits</li> </ul>	Board	

6. Labour and Working Conditions a. Absence of grievance redress mechanism	<ul style="list-style-type: none"> <li>Establish a grievance redress mechanism</li> </ul>	3 months	<ul style="list-style-type: none"> <li>Well established grievance redress mechanism which is appropriately communicated to the external stakeholders</li> </ul>	Board	
7. Community Health, Safety and Security					
8. Land Acquisition and Resettlement a. Loss of trees, crops, perennials	<ul style="list-style-type: none"> <li>Compensating for standing crops and trees</li> </ul>	1 year	Plantation of trees	Management	
9. Indigenous Peoples					
10. Cultural Heritage a. Displacement of community structure	<ul style="list-style-type: none"> <li>Restoration of community structure for common benefits</li> </ul>	3 months		Management	

### B2 Credit Risk Rating Review

One important output of project supervision and monitoring is the updating of the borrower's credit risk rating, which would give an indication of whether or not the credit quality has remained the same, improved or deteriorated. The credit risk rating is also updated/reviewed when the bank increases its credit exposure in a particular borrower.

If the rating has improved, it can be an opportunity for the bank to re-price the loan downward thus, generating goodwill, but if the rating has deteriorated, it can be an opportunity for an upward adjustment in the loan price to take care of the increased credit risk. Since the credit risk rating speaks of the future repayment performance, it is also an opportunity during the review of the credit risk rating to determine which particular credit risk parameter did not perform the way it was rated. This also serves as a feedback mechanism to the loan officer.

### B3 Problem Recognition/Early Warning Signals (EWS)

Early Warning Signal Management (EWSM) is the process of gathering, sharing and analyzing information to identify a threat or hazard sufficiently in advance for preventive action to be initiated.

Early Warning System (EWS) is a network of actors, practices, resources and technologies that has their common goal of detecting and warning about an imminent threat so preventive measures can be taken to control the threat or mitigate its harmful effects.

The 5 objectives of Early Warning Signal Management are:

1. To define the EWS function within the context of the bank's Credit Risk Mgt. System.
2. To identify EWS and respond properly to mitigate adverse effects of threat.
3. To identify the various components of the EWSM system and their working relationships.
4. To identify responsible units or persons in the organization to carry out the EWS function.
5. To recommend a course of action to manage the risk of threats as identified by the EWSMS.

### Early Warning Signal Management Monitoring Schedule

Monitoring Report	Comment	Schedule/ Frequency
Project Monitoring Visits New accounts Renewals		Before loan recommendation & during monitoring
Conduct of collateral verification & appraisal		For new accounts, monitoring visit 6 mos. after loan release
FS verification		For new accounts, monitoring visit 6 mos. after loan release
Residence inspection & ownership verification	Renewals	Every 6 months
Leasehold status verification for business & residential sites	Collateral status assessment	Every 2 years from loan release
	Residence inspection and ownership verification	Every 3 years
Loan Utilization Assessment (for fixed asset financing)		Within 3 months from date of loan release
Submission & analysis of FS (for demand loan)	Part of full BCRR review	Quarterly

Monitoring Report	Comment	Schedule/ Frequency
BCRR Review	Part of full BCRR review	Quarterly
	BCRR 1 - 2	annual project visit with full BCRR review
	BCRR 3 - 4	annual project visit with BRR review & semi-annual CI
	BCRR 5	For-Semi-annual project visit with full BCRR review
Credit Investigation	Can be done alone	Part of full BCRR review

Monitoring Report	Comment	Schedule/ Frequency
BCRR Review	BCRR 1 - 2	annual project visit with full BCRR review
Conduct of collateral verification & appraisal	BCRR 3 - 4	annual project visit with BRR review & semi-annual CI
FS Verification	BCRR 5	semi-annual project visit with full BCRR review

The following are the early warning signals of the borrower:

Cash	Administration	Market	Production	Others
<ul style="list-style-type: none"> <li>■ Unadvised or unexpected excess borrowings</li> <li>■ Delay in receipt of principal or interest payments</li> <li>■ Increased % or expenses relative to sales</li> <li>■ Deterioration in average collection of receivables</li> <li>■ Overtrading in terms of working capital or equity</li> <li>■ Working capital deficiencies</li> <li>■ Request to “term out” a portion of inventory or operating loan over an extended period</li> <li>■ Evidence of partial payment or negotiated terms with suppliers account</li> <li>■ Withdrawal of capital to support outside venture or personal indulgence</li> <li>■ Increased credit requirement without any commensurate increase in business volume</li> <li>■ Qualified opinion, notes by borrower’s auditor or accountant</li> <li>■ Account deposit activity inconsistent with business volumes</li> <li>■ Diversion or misappropriation of company funds</li> <li>■ Little or no fluctuation in operation line of credit, increasing hard core or locked in portion of facility</li> </ul>	<ul style="list-style-type: none"> <li>■ Key management personnel depart immediately</li> <li>■ High turnover in senior management particularly in the accounting area</li> <li>■ Appointment of senior management without appropriate qualifications and/or industry experience</li> <li>■ Excessive dividends, salaries or shareholder’s loan repayments</li> <li>■ Excessive loans to management or owners of company</li> <li>■ Financial problems involving partners/ shareholders/borrower</li> <li>■ Repeated misunderstanding between customer and bank</li> <li>■ Broken promises</li> <li>■ Illness, death or incapacity of key personnel/management</li> <li>■ Increasing level of shareholder or partner personal obligation</li> <li>■ Customer evasive, unavailable, uncooperative or fails to return telephone calls</li> <li>■ Losses from other businesses or speculative investments</li> <li>■ Labor strikes or expiry of union contracts</li> <li>■ Misrepresentation of facts, collateral or terms by customer</li> <li>■ Dissension among shareholders or partners</li> </ul>	<ul style="list-style-type: none"> <li>■ Government legislation/intervention that may impact negatively the financial and / or market viability of the borrower</li> <li>■ The loss of a major client or contract</li> <li>■ Technological changes that affect the viability of the borrower</li> <li>■ Withdrawal of grants/subsidies upon which the borrower may have depended</li> <li>■ Economic recession</li> <li>■ Increased competition giving rise to reduced profit margins</li> <li>■ Changing trends, fashions or preferences which may result in reduced demand for borrower’s products</li> <li>■ Evidence of industry-wide problems which have impacted negatively on businesses similar in nature to that of the borrower</li> <li>■ Over reliance on one contract or customer</li> <li>■ Social influence which may impact market acceptance or stability of demand</li> </ul>	<ul style="list-style-type: none"> <li>■ Significant write-downs in the value of inventory</li> <li>■ Inadequate levels of depreciation charged</li> <li>■ Excessive or increasing credit inquiries from suppliers</li> <li>■ Evidence of obsolescence in inventories</li> <li>■ Little or n variance in the dollar amount of inventory reported on a periodic comparative basis.</li> <li>■ Over investment in fixed assets</li> <li>■ Significant increases in inventory other than in proportion to sales volume</li> <li>■ Evidence of over insurance</li> <li>■ Fire involving insurance claim relative to loss of premises, equipment and/or inventories</li> <li>■ Signs of deferred maintenance at borrower’s business premises</li> </ul>	<ul style="list-style-type: none"> <li>■ Telephone disconnected or mails returned by Post Office</li> <li>■ Disposition of borrower to use several financial institutions</li> <li>■ Insufficient accounting control</li> <li>■ Unexpected changes in external service providers i.e. accountants/lawyers</li> <li>■ Receipt of garnishing order on borrower’s deposit, receipt of unresolved tax issues or 3rd party claims</li> <li>■ Inability or hesitancy to provide financial statements or information on a regular or timely basis</li> <li>■ Unusual or complicated transactions explained as “for tax purposes” or propensity to obscure inter-company transaction thru multiple financial year ends</li> <li>■ Notice of environmental irresponsibility</li> <li>■ Provision of consistently optimistic forecasts</li> <li>■ Significant or increasing contingent liabilities</li> </ul>



<ul style="list-style-type: none"> <li>■ Downward trend of sales and deposits</li> <li>■ Key financial ratios are deteriorating</li> <li>■ Increased use of cash or certified check for payment of bills or accounts</li> <li>■ Collection action has been initiated by another creditor</li> <li>■ Unadvised or unexpected margin deficiency</li> <li>■ Gradual reduction of or deterioration of margin surplus</li> </ul>	<ul style="list-style-type: none"> <li>■ Unfavorable experience reported by creditors</li> <li>■ Notice of criminal, unlawful or immoral activity on the part of the borrower</li> <li>■ Notice of customer's propensity to gamble or speculate</li> <li>■ Notice of previous poor track record, business failure or bankruptcy</li> </ul>			
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## C. REMEDIAL MANAGEMENT PROCESS

Within the context of the core business operations is remedial management with the ultimate goal of collection and recovery.



This section will provide (1) various insights on handling remedial management, (2) the available strategies in handling problem accounts, (3) Familiarization with the basic legal provisions relative to the remedial management and (4) avoidance of common legal pitfalls in account handling.

### C1 Overview of Remedial Management Process

In the core banking operations, delinquency occurs when an individual or corporation with a contractual obligation to make payments against a debt, such as loan payments, income taxes, mortgage, business loan or credit card or the interest thereon, does not make those payments on time or in a regular, timely manner.

There are consequences for being delinquent, depending on the type, duration and cause of the delinquency. People who are late with a credit card payment may be forced to pay a late fee or suspension of card use. In the case of a business loan, creditors also impose interests and penalties.

Depending on the outcome of the evaluation of the delinquency, however, amendment of the terms and conditions may be agreed upon by the creditor and the debtor such as refinancing, restructuring of the loan repayment or sale of certain idle assets, the proceeds of which shall be applied to the loan account. In extreme cases of default, the lender may initialize foreclosure proceedings if the mortgage payments are not brought up to date within a certain amount of time.

## DELINQUENT vs DEFAULT

Delinquent	Default
<ul style="list-style-type: none"> <li>Delinquent describes something or someone who fails to accomplish that which is required by law, duty, or contractual agreement.</li> </ul>	<ul style="list-style-type: none"> <li>Most default occurs when a borrower fails to repay the loan as specified in the original contract.</li> </ul>
<ul style="list-style-type: none"> <li>Delinquency occurs as soon as a borrower misses a payment on a loan.</li> </ul>	<ul style="list-style-type: none"> <li>Some creditors allow a loan to remain delinquent for some time before considering it in default Decision takes into account the policy of the creditor and type of loan.</li> </ul>

### C2 Why Go Into Remedial Management

The primary goal of remedial management is collection and recovery. Early detection of problem accounts is important. Implementing preventive measures towards delinquency is necessary to minimize losses and maximize recovery. Environmental regulations and standards should be diligently complied with as non-compliance may result in suspension or stoppage of operations. It is best that a dedicated Remedial Management Unit should be set up in the bank to maximize collection and recovery efforts in as much as the particular skill required at this stage is different from the regular competency required in loan evaluation. Moreover, remedial management guidelines should be established for managing non-performing assets, to include: (1) Portfolio analysis process (2) Remedial strategies/action plans (3) Monitoring for technical, financial and environmental standards (4) Collateral handling processes (5) Restructuring/rescheduling guidelines (6) Condonation/ Write-offs and (7) Foreclosures.

A Remedial Management Unit will be able to focus on the remedial process instead of having to shift between marketing and evaluation of new loans and making intensive collection efforts.

### C3 Remedial Management Strategies

Remedial management strategies are alternative action plans to more time consuming and expensive legal fees in the process of loan recovery. Among the strategies are (1) Evaluation of the viability of the project, i.e., market, raw materials (2) Maintain and improve the relationship with the client (3) Require more collateral to secure a loan (4) Require a short-term repayment schedule from the borrower, thru restructuring, refinancing, extension loan term and (5) Management takeover; (6) Foreclosure of the business.

Illustrated in Box 14 are the steps to be taken by the bank in case of early warning signs of deterioration become evident:

#### Box 14

##### Preliminary Steps



There are non-adversarial methods whose objective is to come up with a win-win solution by (1) Insisting that the company engage professional help; and (2) Discuss plan of payment to be adopted, i.e. restructuring, sale of idle assets, proceeds of which to be applied to the loan account, etc.,

### C4 Important Factors to Consider When in Remedial Management Stage:

**All amendments of the loan contract shall be approved in accordance with the Manual of Approving Authorities:**

- a. Restructuring
  - i. Restructuring of loan repayment may be considered if it is the best means of protecting the Bank's interests, out of the alternative courses of action, i.e. principal repayment may be extended, and interest and penalties may be capitalized as "Notes Taken for Interest" or NTFI.
  - ii. The restructuring of loan repayment is part of an overall scheme to turn around the financial viability of the company as projected in the cash flows.
  - iii. Restructuring should not be used only for the purpose of avoiding a default.
- b. Condonation of interest and/or penalties
 

In meritorious cases, the Bank may decide to condone penalties and interests subject to appropriate approving authorities.
- c. Sale of assets thru Dacion en Pago
 

Dacion en Pago is a Spanish term that means the giving back of the property mortgaged to the lender in exchange for the discharge of mortgage debt. This procedure is usually resorted to by borrowers who cannot anymore meet their mounting obligations on the mortgage.
- d. Write-offs
  - i. Policy on Write-offs should be in place.
  - ii. The decision to write-off an account is made; after exhausting all internally approved rules and procedures to workout non-performing assets.
  - iii. Offset against loan loss provision only after it is determined that there are no credible chances of recovery over a period of time from the client (e.g. liquidated) to repay any remaining obligation.
  - iv. Written off accounts shall continue to be monitored and collection efforts pursued.
  - v. Any revenue to the Bank from a written-off exposure irrespective of its origin (call of guarantee, use of collateral, the exercise of security, payment by owner/sponsor, etc.) shall be recognized at the time of receipt as exceptional income.

## V. KEY PRINCIPLES AND SUCCESS FACTORS OF EFFECTIVE RISK MANAGEMENT

### C5 Liquidation Process

**If the financial condition of the borrower deteriorates beyond the point of sustainability, then liquidation or settlement should be pursued.**

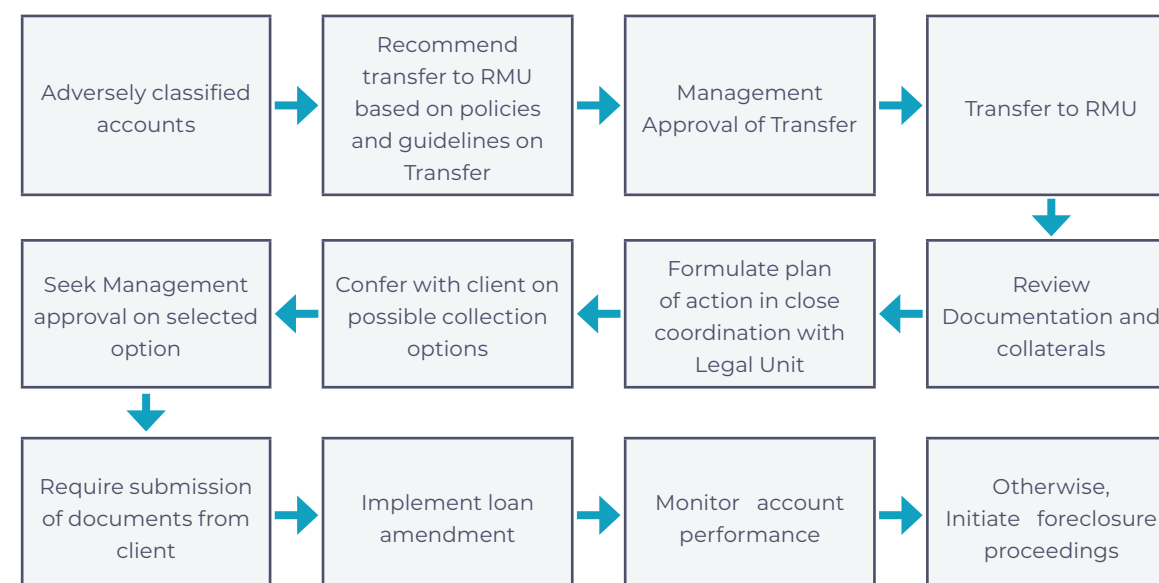
Adversarial proceedings- to settle unpaid loans thru the Courts

- i. Collection case- Collection case filed in court for resolution.
- ii. Foreclosure proceedings.
- iii. Attention should be given to rules on redemption on foreclosed accounts.
- iv. Also, the rights of the purchaser during auction sale to enter upon and take possession of the property immediately after the date of the confirmation of the auction sale and administer the same in accordance with the law.
- v. Auction sale, the proceeds of which shall be applied to the loan account.
- vi. Filing of criminal charges.

Shown in Box 15 is the Remedial Management Process flow.

#### Box 15

Remedial Management Process Flow



The effective management of credit risk is a critical component of a comprehensive approach to risk management and is essential to the long-term success of any bank. For most banks, loans are the largest and most common source of credit risk. The goal of credit risk management is to maximize the bank's rate of return by maintaining credit risk exposure within acceptable parameters.

The Board of Directors sets the strategy and overall tone for risk management in the entire organization while Senior Management implements the BOD approved policies and procedures across the organization. All material deviations from policies and procedures must be reported as soon as possible to senior management and the BOD for corrective action. The commitment and support from top management and the Board are essential in order to achieve effective credit risk management.

The Risk Management Framework of the bank must be in place with clearly defined risk management policies and procedures on risk identification, acceptance, measurement, monitoring, reporting and control. It must have a well-constituted organizational structure defining clearly the roles & responsibilities of individuals involved in risk-taking and managing risks. The Framework must be flexible enough to capture all risks and accommodate any change in business activities.

Risk management is not the sole responsibility of the risk management unit. All bank units, particularly the business units, are equally accountable. As such, the bank must have a reliable system to efficiently communicate all credit policies to officers and personnel involved for uniform interpretation and consistent implementation. The identified risks must be properly assessed and measured (exposure/sectoral loan limits.); otherwise, they cannot be controlled and managed. There should be an independent review such that those who take or accept risk are not the same people who measure, monitor and evaluate the risks. Banks must do stress testing for all risks and devise plans to deal with such extreme situations in a timely and effective manner.

In view of the large amount of information needed to be able to identify, assess, measure, control and manage the risks in a timely manner, the bank must have access to information technology (IT). IT enables credit personnel to have quick access to important information needed to make a well-informed credit evaluation and decision.

The bank must ensure that an adequate supply of staff is equipped with the appropriate skills. This can be addressed thru well-crafted training. Training in credit risk management helps credit personnel in sharpening their skills in identifying and managing credit-related risks resulting in a better quality loan portfolio of the bank. Likewise, the bank must be able to create and actively foster a strong sense of trust between employees and supervisors, bank personnel and customers, internal staff in the workplace and internal and external stakeholders.

Detailed in **Annex G** and **Annex H** are the Principles of Effective Risk Management and the Key Success Factors of Credit Risk Management, respectively.

## VI. PRODUCT RESEARCH AND DEVELOPMENT

Sustainable environmental lending or Green Finance in most parts of Asia is still in its early stages of development as there is still a lack of understanding and appreciation on the benefits of a project in going green. On the other hand, there is as well a need to further strengthen the capacity of banks to develop green lending programs to entice their clients to go green.

### A. Introduction to the Business Model Canvas

A Business Model Canvas (BMC) is a framework for a holistic approach in developing and implementing sustainable project proposals and sustainability roadmap, which can be adopted in launching a new product, service or any new initiative. As a strategic one-page management tool, the user can quickly and easily define and communicate a green business idea or concept that would include all the fundamental elements of a business or product and structure said idea/concept in a coherent way.



Shown in Box 16 is an illustration of the Business Model Canvas Template

Box 16



1. Understanding Your Customers

A critical element in creating a winning product or service to sell to customers is to know what the customer needs and wants. Information can come from bank employees with customer contact, salespeople or from clients themselves who are looking for solutions to specific situations or pain points from flawed products/service features in current offerings. Depending on the scalability of the product and what is believed is, the potential market makes the difference between choosing a one-off modification or a new product offering.

In coming up with a new product or service, one has to go thru the analysis of three (3) important factors:

- Market/Customer segmentation – Process of profiling your market by groups of buyers as to their different needs, wants, characteristics and behaviors.
- Target market identification – Evaluating the attractiveness of each segment to choose the desired target market to allow the bank to identify who to focus on and who to ignore.
- Market positioning – Identify/Develop/Communicate positioning concepts like value proposition that would persuade your target market to buy your product.

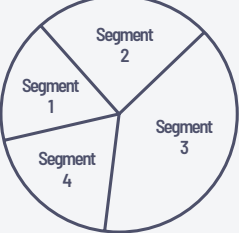
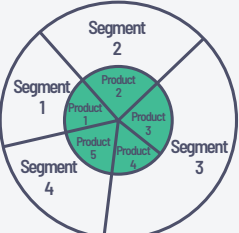
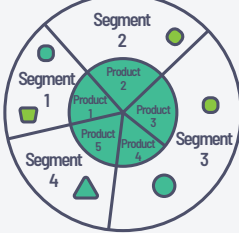
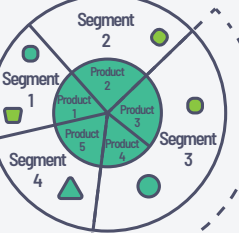
Market or customer segmentation: Segmentation can be differentiated in many ways. After doing this process, one has to be able to develop different possible customer profiles. Box 17 is a sample of the main bases for segmentation and some examples.

Box 17

Main Bases of Segmentation			
Geographic	Demographic	Behavioural	Psychographic
E.g. "Customers within 10 miles of the M25"	E.g. "A Level & University Students"	E.g. "Customers wanting a value for money impulse buy"	E.g. "Customers who prefer to buy organic food"
Customer location Region Urban/ Rural ACORN classification	Age Gender Occupation Socio-economic group	Rate of usage Benefits sought Loyalty status Readiness to purchase	Personality Lifestyles Attitudes Class

Profiling may be a tedious process, but its importance to a successful product development depends to a large extent on this activity. **Steps 1-4** in targeting a green market is presented in Box 18. There are guide questions to assist the reader in coming up with enough guides to come up with a good conclusion.

**Box 18**

<p><b>Step 1</b> Identify served customer segments</p>	<ol style="list-style-type: none"> <li>Who are you currently offering your products and services to? (-&gt; Make a list)</li> <li>Group them into customer clusters (SMEs, state companies, large companies, etc.)</li> <li>What is their contribution to total revenue? (or market share) (-&gt; Draw the size of segments in the pie-chart corresponding to the respective contribution to total revenue)</li> </ol>	 <p>100 % Revenue</p>
<p><b>Step 2</b> Define product offer</p>	<ol style="list-style-type: none"> <li>Which products do you currently offer to each of the identified customer segments? (-&gt; Make a list)</li> <li>Assign the products to each of the identified customer segments.</li> <li>In what proportion do you offer each service to the customer segment? (-&gt; Draw the proportional product offer in each customer segment)</li> </ol>	 <p>100 % Revenue</p>
<p><b>Step 3</b> Determine internal success drivers</p>	<ol style="list-style-type: none"> <li>Which are the unique resources and capabilities that your organisations builds on to deliver the products to each of the customer segments? (-&gt; place the symbols corresponding to the success drivers in the customer segments)</li> <li>In what measure can these success drivers be extended/upgraded? (-&gt; Colour the success drivers)</li> </ol>	 <p>100 % Revenue</p>
<p><b>Step 4</b> Evaluate green target market</p>	<p>Approximate the size of the unserved green SME market? (-&gt; Draw your expansion opportunities in the extension to the pie chart)</p>	

## B. Creating and Building Value Propositions

Often, there is confusion in the definition of Value Proposition. It is not a slogan or a catchphrase, nor is it a positioning statement. Rather, it is a clear statement that is specific and promises a value to be delivered and is acknowledged by its customer or customer segment. In order to be considered as a good value proposition, it should be:

- relevant or expresses how it solves or improves the customer's situation
- have quantified value or delivers specific benefits and
- possess a unique differentiation which should clearly impart to the customer why they should bank with you and not from the competition.

### 2. Value Propositions

For Banks, differentiating their value propositions is challenging since loans, and deposit products are almost the same by and large. Value propositions should be the main reason why customers would want to do business with your bank and not elsewhere. Normally it could be turnaround time or the value it places to customer needs, such as increasing working capital loan offerings during the Christmas holidays. For green projects, it can be made a special arrangement with, say, a solar company to give special discounts to housing loan borrowers.

It is important, though, for value propositions to be clearly thought out and easy to understand even by ordinary customers. Furthermore, documented key performance indicators that are quantifiable should be in place and aligned to the value proposition to make sure it is followed.

### 3. Distribution Channels

The best channels of banks in selling their new products, such as green loans, are through their branch network. Electronic channels are also one cost prudent way of letting people know about your products and services, particularly if you are targeting the younger generation, such as millennials. Channels to take your message across thus depend on the market you want to sell it to.

A recent informal study conducted by a bank, it showed that in order to be effective "green product marketers", the bank should also embark on certain activities to be more credible. Some examples are sponsoring environmental projects, offering training courses or conferences that will make customers and employees more conscious of the environment, designing special eco-branches, paying special attention to their internal processes and aiming at continuous improvement and eco-friendly system solutions.

#### 4. Customer Relationships

Customer relationships, a key building block in BMC, is defined as how a business interacts with its customers. These are the types of relationships that a company establishes with specific customer segments. The type of customer relationship that a business would want to establish with each customer segment should be clearly defined. Traditional banking is normally meeting with your customers in person or at the very least by phone. The younger generation they are more inclined to fast, and immediate results, so online banking is preferred, but the semblance of personal touch can also be done on this platform.

The choice may be driven by motivations such as customer acquisition or persuading a potential customer to select your organization's product over choices available in the market, retention or maintaining the Bank's long term relationship with its customers and consolidation such as up-selling to higher value existing products and cross-selling of other bank products.

Some Categories of Customer Relationships To Consider:

- Personal assistance – This relationship is concerned with human communication. This could be via phone, email, face-to-face or any other means of communication.
- Dedicated personal assistance – This relationship is more personal as it is individually tailored, particularly for high-value customers. This provides familiarity, builds trust and allows the customer representative to really get to know client preferences.
- Self-service – In contrast, it is meant for those who prefer quick service delivery even during off-hours or low-value clients.
- Automated services – This relationship combines self-service with automated processes that can provide information regarding orders or transactions.

Whatever type of customer relationships the Bank would like to adopt, consider the costs incurred for each type of relationship and how these can be integrated with the rest of your business model.

#### 5. Revenue Streams

Setting the right price for a new product or service is crucial as this determines whether the bank can cover its costs on the one hand and whether customers will choose to buy the product over similar alternatives. Value Proposition is a key component in convincing customers.

In pricing a product, start by assessing existing value propositions of the bank's competitors and the prices which they demand and then assess what customers would be willing to pay for the product or service. A combination of findings on value and price enables the Bank to eventually decide on an adequate pricing strategy. If the interest rate, for example, of your housing loan product, is higher, the bank can differentiate the value in terms of faster approval turnaround time, automatic provision of a premium credit card or having advocacy like available consultancy on the design of a green home, i.e. can tie up with an architectural firm who can eventually get the business of building the home.

In computing a product's profitability, it should not be solely dependent on interest and fees generated but also income derived from up-selling and cross-selling activities. Did the loan borrower open a current/savings account or secure insurance from the Bank or its sister company? Apart from the company's working cash account, did the bank get the payroll service or retirement fund management of its employees? A product profitability review should be done from time to time. Once it is determined that a product, whether new or existing, is not earning, the Bank should revisit the inputs of the business strategy and revise the business strategy, if necessary.

#### 6. Cost Structure

On the cost component, banks should already veer away from the traditional way of costing, which uses resources like a number of people implementing the product, volume related. In such a situation, the measurement of the actual cost is not very accurate as some costs may be unaccounted for or are charged, which should not be. More often than not, in the traditional process, expenses incurred by other units of the bank that contributes to the cost, such as cash management expenses, are not included.

A better process is the Activity Based Cost (ABC), a costing method that identifies the activities performed within the organization as it delivers its goods and services, using drivers at various levels. It is thus process-oriented, which can allow you to cut unnecessary steps or add processes to contain the risk.

## 7. Key Resources

Every business model requires Key Resources. These are the important assets needed to make a business model work. Different Key Resources are needed depending on the type of business model. Key resources can be physical, financial, intellectual, or human. These resources allow an account to create and offer a Value Proposition, reach markets, maintain relationships with Customer Segments, and earn revenues, as illustrated in Box 19.

### Box 19

#### FINIANCIAL, PHYSICAL AND HUMAN RESOURCES ARE REQUIRED

To create and offer a	To be able to reach markets	To maintain relationships	To earn desired profits
VALUE PROPOSITION	DISTRIBUTION CHANNELS	CUSTOMER RELATIONS	REVENUE STREAMS

## 8. Partnerships to be Forged

Partners can either be organizations that allow you to optimize the allocation of resources such as outsourced activities, i.e. payroll or advertising companies. For banks, the most important relationships are your customers and funders.

Funds for the financing of green projects involves engaging traditional capital markets in creating and distributing a range of financial products and services that deliver both investable returns and environmentally positive outcomes. Promoting green finance on a large and economically viable scale helps ensure that green investments are prioritized over business-as-usual investments that perpetuate unsustainable growth patterns. For smaller-scale green projects, funds can be sourced internally through the bank's deposits, capital and profit.

Funds for green projects may be externally sourced through Multilateral / Bilateral / International funders such as World Bank, Asian Development Bank, European Union and through the Green Climate Fund, which was set up by the 194 countries who are parties to the United Nations Framework Convention on Climate Change (UNFCCC) in 2010, as part of the Convention's financial mechanism. It aims to deliver equal amounts of funding to mitigation and adaptation while being guided by the Convention's principles and provisions.

## 9. Key Activities In Strengthening Customer Relationships

Bank Officer as a Financial Consultant must be able to practice combining upselling and cross-selling to maximize profit. In doing so, the Bank must ensure that its relationship with the client is not disrupted.

### Upselling

Up-selling is the practice in which a Bank Officer tries to persuade customers to invest or purchase a higher-end product, an upgrade, or an additional financial product in order to make more rewarding sale profits.

### Cross-Selling

Cross-selling is the action or practice of selling an additional Bank product or service to an existing customer. The objectives of cross-selling can be either to increase the income derived from the client or to protect the relationship with the client or clients.

### Tips for effective Cross-selling and Up-selling

- Make sure your customers know what other products and services you provide.
- Suggest only relevant products or services that your customer might actually need or appreciate.
- Up-sells and cross-sells should be recommendations.
- Make sure all employees know the different products and services well.

### Benefits of Cross-Selling and Up-Selling for banks:

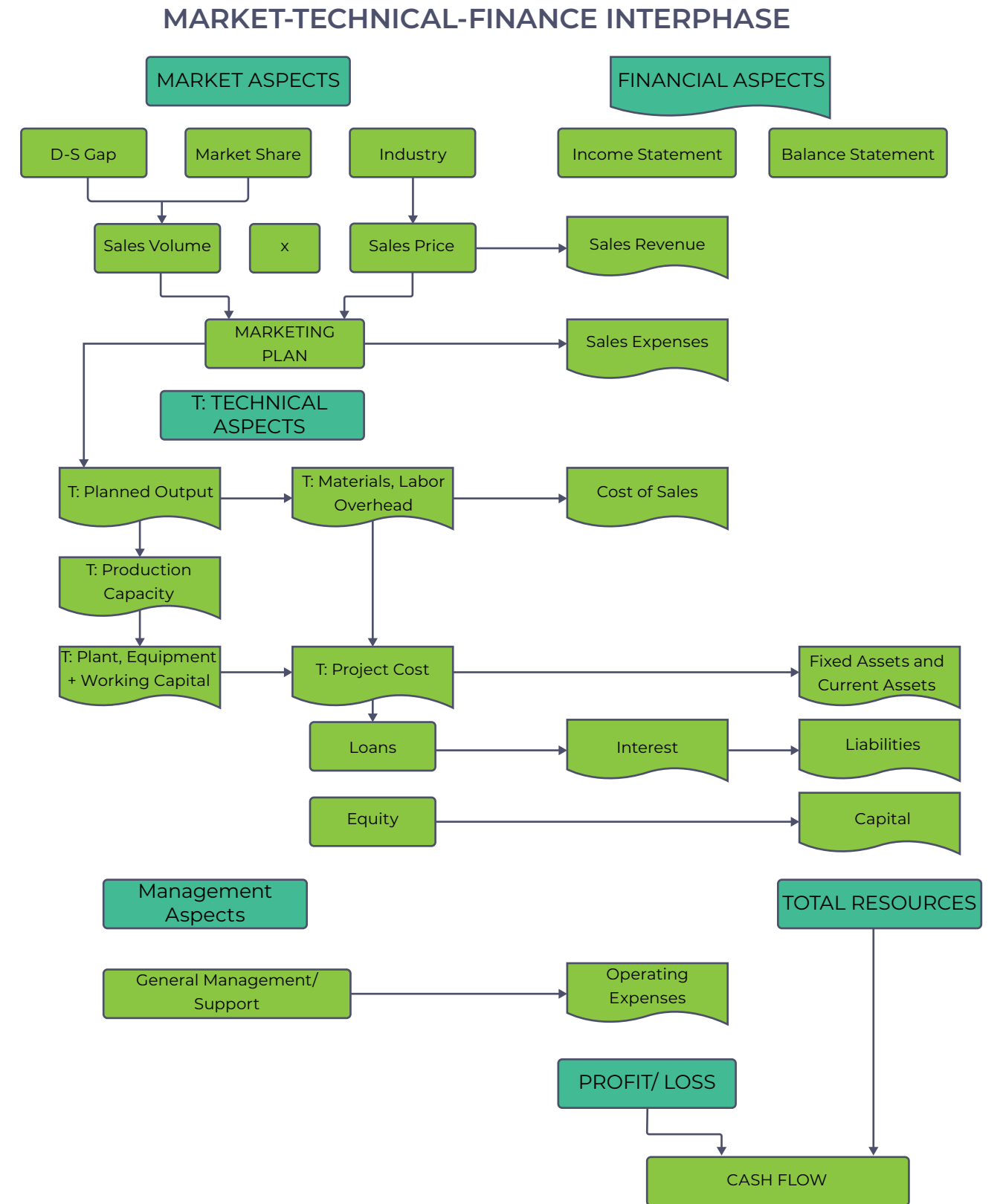
- Enhances customer experience with the bank.
- Enables acquiring of new customers and retaining of existing customers.
- Enables clients to introduce new clients to the bank.
- Improves your customer base and help meet goals and objectives.
- Encourages clients to use multiple products and services and prevent switching to competitor banks.
- Assist in developing new products and value propositions through constant engagement.
- Enjoy customer lifetime value (customer longevity) reduce acquiring cost.

# ANNEX A

## A. GUIDE IN THE PREPARATION OF A BUSINESS PLAN

### A. What is a business plan?

A business plan and its projection are equivalent to an architect's plan, which provides all the information about the proposed building (project) to be constructed (undertaken). Show below is a holistic snapshot of a business plan covering the project's market, financial, technical and management aspects and the correlation among these to determine and ensure the project's viability and sustainability.



## B. Questions a Business Plan Should Answer

The business plan is meant to be read by potential finance providers like banks or business owners/shareholders. So, it should provide convincing and realistic answers to questions such as:

- What is the business idea or opportunity?
- What is the product, and how is it different or unique?
- What is the target market segment, and who are the potential competitors?
- How large is the target market, and is it growing?
- Who are the customers, how much will they buy and at what price?
- What will it cost to produce and sell the product?
- Can the product be made and/or sold profitably?
- At what stage will the business break-even, and what are the likely profits?
- What investment is required to launch and establish the business?
- Where will the money come from?
- What are the main risks facing the business, and how to handle them?

## ■ Industry Analysis

This section describes the industry the business is into or will enter into in terms of its size, growth rate and sales projections. Items to be included in this section are: industry size, growth rate, sales projection, industry structure, key success factors and long-term prospects.

## ■ Market Analysis

The market analysis breaks the industry into segments and zeros in on the specific segment or target market to which the company will try to attract or sell its products/services. Items included in this section are market segmentation and target market selection, buyer behaviour and competitor analysis.

## ■ The Marketing Plan

The marketing plan briefly describes the product or service the company intends to offer to its target market. It details the product specifications, e.g. size, weight, dimension, ingredients, brand name, etc. and the uses of the product or service. It describes the existing market situation. What similar products or services exist in the market? How many others are making the same product or offering the same service? Are they able to meet the demands of the market? If not, how big is the unmet demand of the market? In terms of quality, how does the product or service compare to that of competitors? In general, what type of people or businesses would be interested in the offered product or service? Describe the target market, specifically, what segment is being targeted, where is the target market located, and how big is the target market? Please refer to Schedules A-G for Marketing Plan templates.

## ■ Production/Operations

Production/operations map out the day-to-day tasks required to run a business. It covers the what, the who, the when and how much. It will ensure that the business is able to produce or provide the services that the business had planned in the marketing plan. Production/operations are guided by a technical plan that describes the technical aspects of the business and includes product design, production process, plant location and layout, materials, machinery and equipment, manpower requirements and production schedule. Please refer to Schedules H-Z for the Technical Plan templates.

## ■ The Organization and Manpower Complement

The legal form of the business should be clearly articulated (sole proprietorship, partnership, corporation, limited liability company), and personnel requirements and skills and qualifications of employees should be determined. Please refer to Schedules A1-F1 for the Organization Plan templates.

## B. What Should A Business Plan Contain?

- Title Page
- Table of Contents
- Executive Summary and Fact Sheet

The Executive Summary is a short overview of the entire business plan. It provides a busy reader with everything that needs to be known about the project's distinctive nature. Normally, an executive summary should not exceed two single-spaced pages.

### ■ Body of the Plan

#### ■ The Company Description

The main body of the business plan begins with a general description of the company. Items to be included in this section are: company description, company history, mission statement, products and services, current status, legal status and ownership and key partnership, if any.



- The Financial Plan

Financial planning is the task of determining how a business will afford to achieve its strategic goals and objectives. The financial plan describes each of the activities, resources, equipment and materials that are needed to achieve these objectives, as well as the timeframe involved. How much capital is needed for the business, and what is the profitability picture over the years, with projections corresponding to the term of the proposed loan. Projected income statements, cash flow statements, and balance sheets are included in the financial plan. Please refer to Schedules G1-O1 for the Financial Plan templates.

## BUSINESS PLAN SCHEDULE/ TEMPLATES

### Schedule A



### MARKETING PLAN

Do your market research as follows:

Product or Service you intend to offer	Your target customers	How often and when do your target customers buy or avail of such product or service	Price	Target Customers' Comments	Competitors	Competitors' Price



## Schedule D



## MARKETING PLAN

**Think Ahead** - Do you think the size of your market will increase in the next 3 years? If so, how much will this affect the demand for your product or service? By how much do you project demand for your product or service to increase in your 2<sup>nd</sup> and 3<sup>rd</sup> year of operations? What factors will bring about an increase in demand for your product or service?

**How much will you charge for your product or service?** How did you arrive at your price? If you are a manufacturer or trader will you adopt a wholesale price and a retail price? What is the minimum quantity for wholesale? Will you change your price in the long run? By how much? How does your price compare to that of your competitors? How much higher or lower?

## Planned Sales Volume

	Year 1	Year 2	Year 3
Planned sales volume (in units)			
X planned selling price/ unit			
Total Sales			

## Schedule E



## MARKETING PLAN

**Will all your sales be in cash?** If not, what percentage will be on cash basis? What will your credit terms be?

**Receivables** - If portion of your sales is on credit terms, it is important that you come up with a schedule of your receivables on a monthly basis as this is critical in determining how much receivables you have at the end of the year. For example, 20% of your monthly sales is on credit, your account receivables will vary depending on the level of sales for the month. Assuming that you are able to collect your receivables after 30 days, your accounts receivable schedule would look like this one below:

## Simple Accounts Receivable Schedule

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Total Sales	250	245	265	270	278	350	455	568	320	246	235	225
Less : Cash Sales	200	196	212	216	222	280	364	454	256	196	188	180
Sales on Credit	50	49	53	54	56	70	91	114	64	50	47	45
A/R Collection	0	50	49	53	54	56	70	91	114	64	50	47
A/R Balance	0	49	53	54	56	70	91	114	64	50	47	45

## Schedule F



## MARKETING PLAN

**Place of business** - Where are you going to locate your business? Why did you choose the place in particular?

**Draw a location map** of where you intend to put up your business. It will be good to show landmarks and access routes.

**Will you sell directly to end-users?** If so how will you bring your product or service to them?

**Are you going to use middlemen or distributors?** If yes, are you giving commissions or discounts? How much?

**How will you get customers to buy?** How will you promote your product or service? Will you advertise in newspapers, radio or TV? Will you use posters, flyers, signboards, etc. Are there promotional gimmicks you intend to use?

## Schedule G



## MARKETING PLAN

Plan your marketing activities and figure out how much you will have to spend to sell your product or service. Complete your marketing plan by filling in the table below.

	Year 1	Year 2	Year 3
Sales Commissions			
Advertising			
Signboards			
Posters, flyers, etc.			
Packaging			
Transport expenses			
Sales promotions			
Total Selling Expenses			

Schedule H



TECHNICAL PLAN

THINK OF THE DIFFERENT ACTIVITIES IN YOUR BUSINESS:

- If you are into **manufacturing**, list down and describe the step by step manufacturing process, from procurement of raw materials up to the point of delivery.
- If you are into **trading**, list down and describe the different activities, from procurement of merchandise up to the point of sale of your business.
- If you are a **service provider**, list down and describe the different activities involved in servicing a client.

Step	Description
1	
2	
3	

Schedule I



TECHNICAL PLAN

Based on your description of the different activities, **draw your process flow diagram** using the symbols at the bottom of the page.




## Schedule J



## TECHNICAL PLAN

**Property, plant and equipment** - What assets do you need for your business? How much does each one cost? How many units do you need for each type of machine/ equipment/ furniture/ fixture/ vehicle? Compute for your annual depreciation charges. These may not be the same every year if some fixed assets are fully depreciated by year 2.

## Fixed Investment and Depreciation Schedule

	Acquisition Cost	Quantity	Total Cost	Life Span (in years)	Annual Depreciation Charges		
					Year 1	Year 2	Year 3
Land							
Building							
Improvements							
M&E/ Tools							
Furnitures/ Fixtures							
Office Equipment							
Vehicle							
Grand Total							

## Schedule K



## TECHNICAL PLAN

## Design your layout:

- For **manufacturers**: How will you arrange your machines and work areas in relation to one another? How much space will you need, including storage areas? Draw your plant layout.
- For **traders**: Draw the layout of your selling area. Where will you locate your different merchandise? How much space, inclusive of your storage area, will you need?
- For **service providers**: Draw the layout of your work area. How much space, inclusive of your reception and storage areas, will you need?

**Waste management** - How will you dispose of your business' waste? Can you sell them? Can you recycle them? Will you need to spend for their disposal? How much?



## Schedule L



## TECHNICAL PLAN

**Production Schedule** - Aside from your projected sales volume, you may want to keep a few units in your finished goods (FG) inventory to meet unexpected demand. How many units would you like to keep in your ending FG inventory at the end of the period? Your beginning inventory account for subsequent periods is your previous year's ending inventory figure.

## Production Schedule for a Single Product Line Business

	Year 1	Year 2	Year 3
Planned sales volume, in units			
Add: Desired Ending FG inventory, in units			
Less: Beginning FG inventory, in units	0		
Units to be Produced			

## Schedule M



## TECHNICAL PLAN

**Direct raw material requirements** - What direct raw materials do you need in the manufacture of your product? Are you assured of a continuous supply of all your direct material requirements? Fill in the schedule below. For each type of direct material. How much do you need per unit of product you intend produce?

## Direct Raw Material Requirements

Product:

Direct Material (A)	Purchase Cost/ Unit of Material (B)	Quantity Needed/ Unit to be Produced (C)	Cost/ Unit to be Produced (D) B x C = D
e.g. milk	\$55.00/ liter	50 ml	\$2.75
		Direct Material	Cost/ Unit

## Schedule N



## TECHNICAL PLAN

Do you expect prices of direct materials to increase in the next 3 years? By how much?

## Direct Material Cost for a Single Product Line Business

	Year 1	Year 2	Year 3
Units to be produced			
Direct material cost/ unit			
Total Direct Material Cost			

## Schedule O



## TECHNICAL PLAN

Go over your direct material schedule. Pick out the materials that you think you should keep in stock and fill in the schedule below.

## Direct Material Ending Inventory Schedule

Direct Material	Purchase cost/ unit of direct material	Quantity to be kept in stock	Cost of material in stock
e.g. Short Bond Paper	\$10.00/ ream	10 reams	\$100.00
<b>Desired Ending Inventory of Direct Materials (for Year 1)</b>			

**Schedule P**



**TECHNICAL PLAN**

Do you expect prices of your direct materials to rise? By how much? Come up with a similar schedule as the Direct Material Ending Inventory Schedule for your Year 2 and 3 of operations. Then come up with your direct material purchases for the next 3 years. Be sure to include price increases if you expect cost of materials to go up.

**Direct Material Purchases**

	Year 1	Year 2	Year 3
Total direct material cost			
Add: Desired direct materials ending inventory			
Less: Direct materials beginning inventory	0		
Total direct material purchases			

**Schedule Q**



**TECHNICAL PLAN**

**Indirect raw material requirements** - Where will you obtain them? Are you assured of a continuous supply of all your indirect material requirements? For each type, how much do you need for the year? Fill in the following schedule.

**Indirect Material Requirement**

Indirect Material	Purchase cost/ unit	Quantity needed/ year	Cost/ year
<b>Indirect material cost (For Year 1)</b>			

**Schedule R**



**TECHNICAL PLAN**

Go over your indirect raw material schedule. Pick out the materials that you think you should keep in stock and fill in the schedule below. Do a separate schedule for Year 2 and Year 3. Be sure to impute price increases in your indirect material inventory costs for the succeeding years if you expect cost of materials to go up.

**Indirect Material Ending Inventory Schedule**

Indirect Material	Purchase cost/ unit of indirect material	Quantity to be kept in stock	Cost of material in stock
<b>Desired Ending Inventory of Indirect Materials (For Year 1)</b>			

**Schedule S**



**TECHNICAL PLAN**

Do you expect prices of indirect materials to increase in the succeeding years? By how much? Come up with a similar schedule as the Indirect Material Requirement for year 2 and 3 of operation. Then complete the table below to come up with the indirect material cost for the next 3 years.

**Indirect Material Cost**

	Year 1	Year 2	Year 3
Indirect materials cost			

**Schedule T**



**TECHNICAL PLAN**

Do you expect prices of your indirect materials to increase in the next 3 years? By how much? Come up with a similar schedule as the Indirect Material Ending Inventory Schedule for your 2<sup>nd</sup> and 3<sup>rd</sup> years of operation. Then complete the table below to come up with your indirect material purchases for the next 3 years. Be sure to impute price increases in your indirect material inventory costs for the succeeding years if you expect cost of materials to go up.

**Direct Material Purchases**

	Year 1	Year 2	Year 3
Total direct material cost			
Add: Desired indirect materials ending inventory			
Less: Indirect materials beginning inventory	0		
Total indirect material purchases			

**Schedule U**



**TECHNICAL PLAN**

**Direct labor requirements** - How long does it take to complete the different activities in your business? How many people will you need to employ to complete each stage?

Activity	Time to Complete (in minutes)	Number of workers needed

## Schedule V



## TECHNICAL PLAN

**Manpower requirements** - Refer to your answer on the different activities in your business and the direct labor requirements. Are you going to give any salary increases in the next 3 years? How much? Fill in the table below.

## Manpower Requirement

	No. of employees	Salary/ month	Annual Salary
Direct labor			
Indirect labor			
Sales staff			
Administrative staff			
Total			

## Schedule W



## TECHNICAL PLAN

**Compute your production cost** - Determine your overhead expenses. Be sure that your figures are realistic. Include increases in the 2<sup>nd</sup> and 3<sup>rd</sup> years as required.

## Cost of Production

	Year 1	Year 2	Year 3
Direct materials			
Direct labor			
Production overhead:			
Indirect labor			
Indirect materials			
Repair and maintenance			
Depreciation of production equipment			
Transportation expense			
Light and power			
Water			
<b>TOTAL COST OF PRODUCTION</b>			



**Schedule X**



**TECHNICAL PLAN**

Complete the table below to arrive at your production cost per unit.

**Product Cost Per Unit for a Single Product Line Business**

	Year 1	Year 2	Year 3
Total cost of production			
Divided by Units to be produced			
Product Cost per unit			

**Schedule Y**



**TECHNICAL PLAN**

If you manufacture a single product line, complete the table below to arrive at the value of your FG ending inventory.

**Finished Goods Ending Inventory for a Single Product Line Business**

	Year 1	Year 2	Year 3
Production cost per unit			
X Desired FG ending inventory, in units			
Value of finished goods ending inventory			

**Schedule Z**



**TECHNICAL PLAN**

Complete the table below to arrive at your **Cost of Goods Sold**. Reminder: Your beginning inventory account for subsequent periods is your previous year's ending inventory figure.

**Cost of Goods Sold for a Manufacturing Business**

	Year 1	Year 2	Year 3
Total cost of production			
Add: FG beginning inventory	0		
Total cost of goods available for sale			
Less: FG ending inventory			
Total cost of goods sold			

**Schedule A1**



**ORGANIZATION PLAN**

What **legal form of business** will your business take?

List down all the **necessary licenses, fees and permits** you need to secure and pay for in the course of registering your business in the schedule below. Add any transportation or incidental expenses.

**Licenses, Permits and Registration Expenses**

Type of business License/ permit/ registration	Fees	Transportation Expenses	Incidental Expenses	Total
<b>Total licenses, permits and registration expenses</b>				

## Schedule B1



## ORGANIZATION PLAN

**Other pre-operating expenses** - May seem small and negligible but if summed up can add to a considerable amount. Pre-operating expenses are amortized during the course of the business.

## Pre-Operating Expenses

Total licenses, permits and registration expenses	
Training undertaken during the pre-operating phase	
Transportation expenses	
Initial marketing efforts	
Trial production runs	
Preparation of feasibility study/ business plan	
Installation of utilities	
Total pre-operating expenses	

## Schedule C1



## ORGANIZATION PLAN

**Hiring of Employees** - Be guided by the following Table

	Functional Area/ Job Title	No. of People Needed	Monthly Salary/ Rate	Job Description	Qualifications
<b>MARKETING</b>					
Who will sell your products?					
Who will take care of promotion and advertising?					
Who will deliver products to consumers or distributors?					

Schedule D1



ORGANIZATION PLAN

Hiring of Employees - Be guided by the following Table

	Functional Area/ Job Title	No. of People Needed	Monthly Salary/ Rate	Job Description	Qualifications
PRODUCTION					
FINANCE					
Who will keep records? Who will do the accounts?					
Who will prepare the payroll? Who will collect receivables/ settle payables?					

Schedule E1



ORGANIZATION PLAN

Hiring of Employees - Be guided by the following Table

	Functional Area/ Job Title	No. of People Needed	Monthly Salary/ Rate	Job Description	Qualifications
ADMINISTRATION					
Who will take care of purchasing, preparing contracts, renewing permits?					
Who will take care of personnel matters?					
Who will handle business communications, filing, etc.?					

## Schedule F1



## ORGANIZATION PLAN

Compute for your administrative expenses

## Administrative Expenses

	Year 1	Year 2	Year 3
Salaries and wages			
Office supplies			
Rent			
Utilities			
Depreciation of non-production equipment			
Amortization of pre-operating expenses			
Repair and maintenance			
Professional Fees			
Total Administrative Expenses			

## Schedule G1



## FINANCIAL PLAN

**Total Project Cost** - How much money is needed to finance your planned activities? Breakdown each line item into either debt or equity. Are you within the debt: equity limit set by the bank you intend to borrow from?

## Total Project Cost

	DEBT	EQUITY	TOTAL
Total pre-operating expenses			
Fixed investment (building, equipment, etc.)			
Working capital (minimum cash balance you need for one cycle to pay raw materials, direct labor, manufacturing overhead, operating expenses)			
<b>TOTAL PROJECT COST</b> (Total pre-operating expenses + fixed investment + working capital requirement)			
Proportion of debt : equity			

## Schedule H1



## FINANCIAL PLAN

Where are you going to get the funds to finance your total project cost?

For borrowed money, you will need to pay interest. Compute your annual financial charges.

## Financing Charges

Principal \_\_\_\_\_

Mode of payment : \_\_\_\_\_

Interest rate per annum \_\_\_\_\_

Term of loan : \_\_\_\_\_

Year	Interest	Principal	Total Payment	Outstanding Balance
1				
2				
3				
4				
5				

## Schedule I1



## FINANCIAL PLAN

Prepare **Projected Income Statement** for the next 3 years.

## Projected Income Statement for Manufacturers and Traders

	Year 1	Year 2	Year 3
Total Sales			
Less: Cost of Goods Sold			
Gross Profit from Sales			
Less : Selling Expenses			
Less : Administrative Expenses			
Net Operating Profit			
Less : Interest Charges			
Net Income Before Taxes			



## Schedule J1



## FINANCIAL PLAN

Prepare **Cash Flow Statement** so you will know when you will need additional cash.

## Projected Cash Flow Statement

	Pre-Operating	Year 1	Year 2	Year 3
<b>Cash Inflows</b>				
Loan proceeds				
Owners' Equity				
Cash Sales				
Add: Collection of receivables				
<b>TOTAL CASH INFLOWS</b>				

## Schedule K1



## FINANCIAL PLAN

Prepare **Cash Flow Statement** so you will know when you will need additional cash.

## Projected Cash Flow Statement

	Pre-Operating	Year 1	Year 2	Year 3
<b>Cash Outflows</b>				
Pre-operating expenses				
Fixed investment				
Materials purchases				
Direct labor				
Production overhead minus depreciation and indirect materials				
Selling & administrative expenses minus depreciation and amortization of pre-operating expenses				
<b>TOTAL CASH OUTFLOWS</b>				

## Schedule L1



## FINANCIAL PLAN

Prepare **Cash Flow Statement** so you will know when you will need additional cash.

## Projected Cash Flow Statement

	Pre-Operating	Year 1	Year 2	Year 3
<b>NET CASH FLOW</b>				
Add: Beginning cash balance	0			
Less : Principal repayments/ interest payments				
<b>ENDING CASH BALANCE</b>				

## Schedule M1



## FINANCIAL PLAN

Prepare **Balance Sheet**

## Projected Balance Sheet

	Pre-Operating	Year 1	Year 2	Year 3
<b>ASSETS</b>				
Cash				
Accounts receivables				
Raw materials inventory				
Finished goods inventory				
Merchandise inventory				
Supplies/ spare parts inventory				
<b>TOTAL CURRENT ASSETS</b>				

## Schedule N1

ADFIAP  
financing sustainable development

## FINANCIAL PLAN

Prepare **Balance Sheet**

## Projected Balance Sheet

	Pre-Operating	Year 1	Year 2	Year 3
<b>ASSETS</b>				
Property, plant & equipment				
Less: Accumulated depreciation				
<b>NET PROPERTY, PLANT AND EQUIPMENT</b>				
Pre-operating expenses				
Less: Amortization of pre-operating expenses				
<b>NET PRE-OPERATING EXPENSES</b>				
<b>TOTAL ASSETS</b>				

## Schedule O1

ADFIAP  
financing sustainable development

## FINANCIAL PLAN

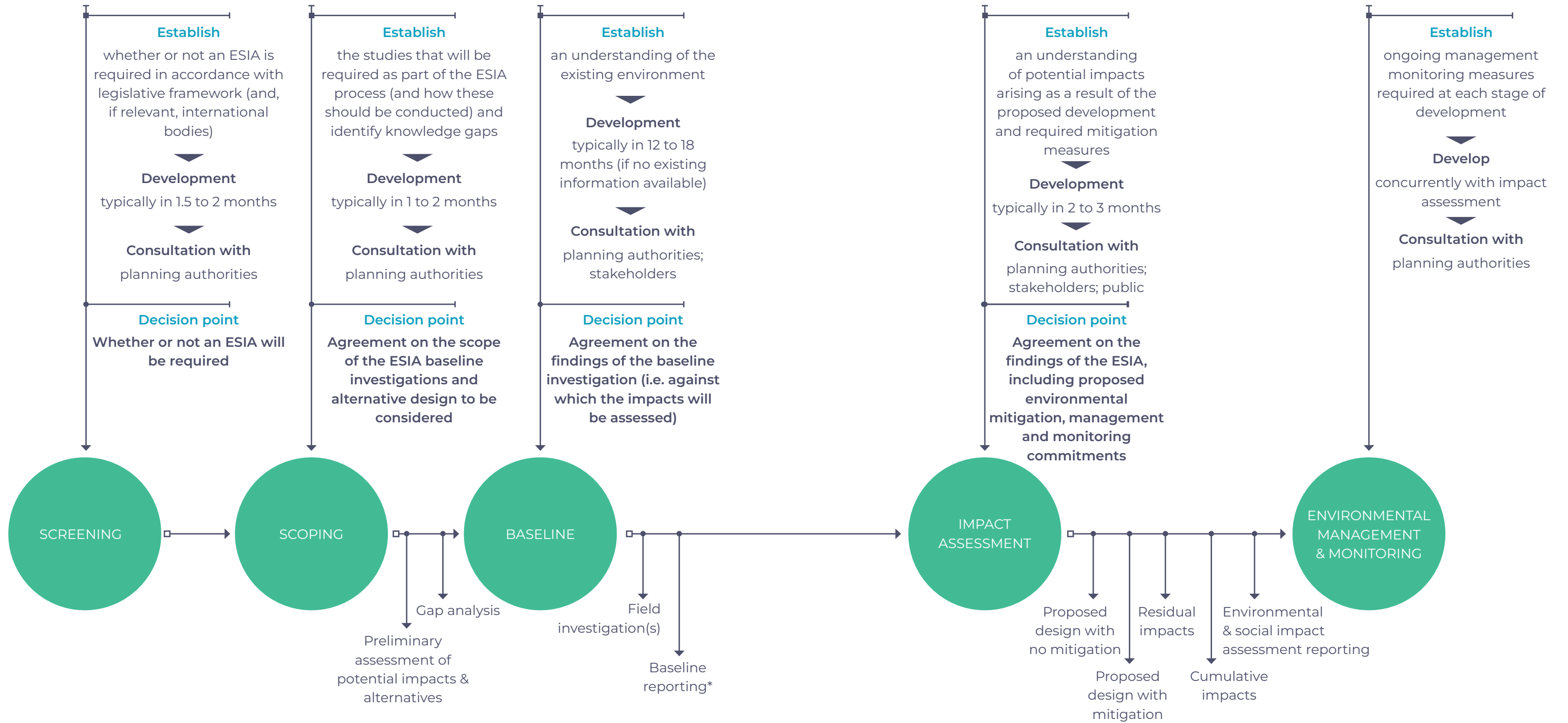
Prepare **Balance Sheet**

## Projected Balance Sheet

	Pre-Operating	Year 1	Year 2	Year 3
<b>LIABILITIES AND OWNERS' EQUITY</b>				
Accounts payable				
Current portion of loans payable				
<b>TOTAL CURRENT LIABILITIES</b>				
Long-term loans				
<b>TOTAL LIABILITIES</b>				
Owners' Equity				
Retained Earnings				
<b>TOTAL OWNERS' EQUITY</b>				
<b>TOTAL LIABILITIES &amp; OWNERS' EQUITY</b>				

# ANNEX B

## ESIA Process Flow



\*The submission of a baseline report to the planning authorities is not always a mandatory requirement and should be confirmed at the early stage.

## ANNEX C

### Examples of Projects that Require IEE or Full Scale ESIA

IEE	ESIA
<ul style="list-style-type: none"> <li>■ Projects in Environmentally Critical Areas (ECA) that may have adverse environmental impacts but are less significant than ECP's impacts</li> <li>■ Impacts are not as sensitive, numerous, major or diverse as ECPs impacts</li> <li>■ Remedial measures can be more easily designed</li> </ul>	<ul style="list-style-type: none"> <li>■ Environmentally Critical Projects (ECP) are projects or industries that have critical environmental impacts and therefore need to undergo environmental impact assessments and need to acquire Environmental Compliance Certificates (ECC)</li> </ul>
<ul style="list-style-type: none"> <li>■ Location of ECAs:               <ul style="list-style-type: none"> <li>▶ National Parks</li> <li>▶ Indigenous people area</li> <li>▶ Tourist area</li> <li>▶ Ecologically sensitive area, habitat for endangered or threatened species of Philippine wildlife</li> <li>▶ Unique historical, archaeological or scientific interest</li> <li>▶ Areas frequently visited by natural calamities</li> <li>▶ Prime agricultural areas</li> <li>▶ Mangrove areas</li> <li>▶ Water bodies and coral reefs</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>■ Projects located in ECAs that involve activities that have significant environmental consequences</li> <li>■ Projects that are likely to have a significant adverse impact that may be sensitive, irreversible and diverse</li> <li>■ Infrastructure projects</li> <li>■ Large-scale industrial activities/heavy industries</li> <li>■ Resource extractive industrial activities</li> <li>■ Waste management and disposal</li> <li>■ Substantial changes in farming or fishing practices</li> <li>■ Forestry Projects</li> <li>■ Water impoundment industries</li> </ul>
<ul style="list-style-type: none"> <li>■ Renewable energy</li> <li>■ Aquaculture</li> <li>■ Tourism Development</li> <li>■ Infrastructure rehabilitation</li> </ul>	

## ANNEX D

### Environmental and Social Risk Screening Checklist

<b>1. Compliance with applicable requirements</b>	<ul style="list-style-type: none"> <li>■ Exclusion list</li> <li>■ National regulatory requirements</li> <li>■ Environmental, health and safety permits granted</li> <li>■ Injuries and fatalities have occurred (how and when)</li> <li>■ Labour-related fines (when and why)</li> <li>■ Environmental incidents and fines (when and why)</li> </ul>
<b>2. Management Systems</b>	<ul style="list-style-type: none"> <li>■ Environmental and social policy</li> <li>■ Human resources policy (e.g., employee rights/non-discrimination)</li> <li>■ Code of Conduct</li> <li>■ Anti-corruption policy</li> <li>■ Fire/safety plan or emergency prevention/preparedness/response plan</li> <li>■ Environmental, health and safety training for employees</li> <li>■ Procedures for managing environmental and social risks</li> <li>■ Designated person in charge of environmental and social issues</li> <li>■ Internal process for sharing information</li> <li>■ Non-financial reporting protocol</li> </ul>
<b>3. Project Site</b>	<ul style="list-style-type: none"> <li>■ Non-urban/undeveloped land</li> <li>■ Proximity to river/stream/pond/lake/sea</li> <li>■ Proximity to protected area (e.g., forest/endangered species)/ecologically sensitive area (e.g., wetland/breeding grounds)</li> <li>■ Proximity to culturally sensitive/indigenous area</li> </ul>

<b>4. Air Emissions</b>	<ul style="list-style-type: none"> <li>■ Boilers</li> <li>■ Generators</li> <li>■ Vehicles and equipment</li> <li>■ Furnaces and incinerators</li> <li>■ Welding and soldering</li> <li>■ On-site burning</li> <li>■ Use of solvents</li> <li>■ Use of fumigation</li> <li>■ Evaporation of chemicals</li> <li>■ Refrigeration plant</li> <li>■ Use of exhaust ventilation</li> </ul>
<b>5. Wastewater</b>	<ul style="list-style-type: none"> <li>■ Wastewater discharged to _____</li> <li>■ Drains and grates</li> <li>■ Oil separators</li> <li>■ Separation tanks or filters</li> <li>■ Reed beds</li> <li>■ Cut-off valves</li> <li>■ Foul sewers and septic tanks</li> <li>■ Water treatment units</li> <li>■ Cleaning operations</li> <li>■ Spraying operations</li> <li>■ De-watering/water pump-out</li> </ul>
<b>6. Solid and hazardous wastes</b>	<ul style="list-style-type: none"> <li>■ Waste generated</li> <li>■ Types of waste: _____</li> <li>■ Hazardous waste (e.g., waste oils, pesticide washings, solvents, clinical waste, asbestos)</li> <li>■ Waste disposed to _____</li> </ul>

<b>7. Hazardous chemicals, fuels, and pesticides</b>	<ul style="list-style-type: none"> <li>■ On-site chemicals or fuels storage</li> <li>■ Protective measures against leaks/spills</li> <li>■ Signs of leaks/spills</li> <li>■ On-site spill clean-up equipment</li> <li>■ Protective measures against rain</li> <li>■ Signs of corrosion on tanks/containers</li> <li>■ Secured storage areas against theft</li> <li>■ Training on proper handling of chemicals and fuels</li> <li>■ Pesticide use and management</li> </ul>
<b>8. Resource consumption</b>	<ul style="list-style-type: none"> <li>■ Materials used: _____</li> <li>■ Use of renewable natural resources</li> <li>■ Use of tools and equipment</li> <li>■ Water source: _____</li> <li>■ Energy source: _____</li> </ul>
<b>9. Nuisance</b>	<ul style="list-style-type: none"> <li>■ Dust</li> <li>■ Noise</li> <li>■ Odors</li> <li>■ Fumes</li> <li>■ Vibrations</li> <li>■ Traffic congestion and obstructions</li> </ul>
<b>10. Community Interaction</b>	<ul style="list-style-type: none"> <li>■ No designated person in charge of responding to questions from the community</li> <li>■ No procedures for managing community complaints</li> <li>■ Use of security personnel</li> </ul>

## ANNEX E.1

<b>11. Social Issues</b>	<ul style="list-style-type: none"> <li>■ Land acquisition required</li> <li>■ Displacement/resettlement of local settlements</li> <li>■ Impact on local settlements/livelihood</li> <li>■ Impact on indigenous peoples</li> <li>■ Complaints from neighbours/communities</li> <li>■ On or adjacent to the site of cultural/archaeological importance</li> <li>■ Grievance mechanism</li> </ul>
<b>12. Labour Issues</b>	<ul style="list-style-type: none"> <li>■ Personal Protective Equipment provided (e.g., safety goggle/hard hat/protective glove)</li> <li>■ Employee health and safety measures (e.g., fall prevention/ventilation)</li> <li>■ Working conditions (e.g., air quality/lighting/confined spaces/on-site hygiene)</li> <li>■ Terms of employment (e.g., working hours/rest breaks/time off/overtime pay)</li> <li>■ Equal employment opportunities (e.g., discrimination against gender/ethnic group/age)</li> <li>■ Wages and remuneration practices</li> <li>■ Child or forced labour</li> <li>■ Employee satisfaction</li> <li>■ Training practices</li> <li>■ Social dialogue</li> </ul>

## 1. Data Entry Sheet

<b>Name of Borrower:</b>			
1. Personal Networth of Principal Owner: <sup>17</sup>	MMK 000,000.00		
<b>Balance Sheet Figures</b>			
Financial Position and Performance of the Business			
Total Capital/Equity (Business & personal)			
2. Year 1(Latest/Current) <sup>18</sup>	MMK 000,000.00		
3. Year 2(2 years ago)	MMK 000,000.00		
4. Year 3(3 years ago)	MMK 000,000.00		
Average Increase [(4+3)/4+(3-2)/3]/2 <sup>19</sup> x100	____%		
5. Total Liabilities (Business & personal)	MMK 000,000.00		
6. Total Assets (2 + 5)	MMK 000,000.00		
6a. Total Business Assets	MMK 000,000.00		
7. Current Assets	MMK 000,000.00		
8. Current Liabilities	MMK 000,000.00		
9. Accounts Receivable	MMK 000,000.00		
10. Inventory	MMK 000,000.00		
11. Dividends/Drawings (annualized)	MMK 000,000.00		

<sup>17</sup> Latest Networth based on audited and validated FS of borrower/company

<sup>18</sup> Normally identical with Item 1- Personal Networth of Principal Owner

<sup>19</sup> To get the average increase for the past 3 years, divide the sum of the annual percentage increases by 2



Income Statement Figures (annualized)			
Sales:			
12. Year 1 (prior years)	MMK 000,000.00		
13. Year 2 (prior years)	MMK 000,000.00		
14. Year 3 (as of latest FS)	MMK 000,000.00		
15. Cost of Sales(Operating Expense)	MMK 000,000.00		
16. Reduction in Operating Expense Resulting from Green Project	MMK 000,000.00		
17. Depreciation Expense	MMK 000,000.00		
18. Interest Expense	MMK 000,000.00		
19. Net Income Before Tax	MMK 000,000.00		
Loan Amortization (for the following year after granting of this loan)			
	This Loan	Other Loans	Total
This Loan			
20. Principal <sup>20</sup>	MMK 000,000.00	MMK 000,000.00	MMK 000,000.00
21. Interest	MMK 000,000.00	MMK 000,000.00	MMK 000,000.00
Credit Line			
22. Interest			
23. Total Amortization (20+21+22)			MMK 000,000.00
<b>Outstanding Balance of Loans</b>			
24. Proposed Loan	MMK 000,000.00		
25. Other existing loans of the borrower	MMK 000,000.00		

<sup>20</sup> Consider annual amortization after the grace period.

26. Total	MMK 000,000.00		
<b>COMPUTATIONS:</b>			
27. Financial Capacity of Owners (1/26)		Personal net worth of borrower/Total Loans Payable	
Average Sales Increase			
28. Year 1 vs Year 2 (13-12)/12x100	___%		
29. Year 2 vs Year 3 (14-13)/13x100	___%		
30. Average Sales Increase/Decrease (28+29)/2	___%		
31. Current Ratio (7/8)	___%	Current Assets/Current Liabilities	
32. Debt to Equity Ratio (5/6)	___%	Total Liabilities/Total Assets	
	(2/6)	___%	Total Capital/Equity/Total Assets
33. Debt Servicing Capacity	___%	Net Income-Drawings or Dividends + Interest Expense + Depreciation / (Principal+ Interest) (t+1) LTD <sup>21</sup> + Interest (t+1) STD <sup>22</sup>	
34. Accounts Receivable Level (9/14x360)	___ days	Accounts Receivable/Sales X 360	
35. Inventory Level (10/15) X 360	___ days	(Inventory/Cost of Sales) x 360	
36. Savings as a % of Operating Cost due to green projects (16/15)	___%		
37. Retention of Earnings (1-(11/19)	___%	One minus (Drawings/Net Income before tax)	
38. Non-Business Assets (6a/24)	___%	Non-business assets/Proposed Loan	

<sup>21</sup> Long term debt (e.g. 5 year term loan for machineries and equipment or construction of factory building) wherein loan amortization includes principal and interest portion.

<sup>22</sup> Short term debt (e.g. credit line where payment is normally on the interest portion)

## ANNEX E.2

### 2. Character Score Sheet

#### Anywhere Banking Corporation Credit Score Card: Character Factor

Name of Borrower:

Name of Loan Officer:

Date:

ATTRIBUTES	HOW TO MEASURE	PERFORMANCE MEASURE	MAXIMUM POINTS	CLIENT SCORE
Credit Record	History of Overdues on Credit Repayment	No overdue record	100	
		No borrowing experience	80	
	(Past 12 months)	1 - 120 days overdue	60	60
		Over 120 days overdue	30	
Business Experience	Experience of Owners/ Management (EOM)	>15 years or more	80	
		>5 years but <15 years	60	60
		5 years or less	30	
Health	Owner age, health and succession	Less than 50 years old, with a succession plan	60	
		Less than 50 years old, with no succession plan	50	
		More than 50 years old, with a succession plan	40	
		With health concerns, with a succession plan	30	
		More than 50 years old, with no succession plan	20	20
		With health concerns, with no succession plan	10	

	Manpower capability for green projects	With formal training and experience of at least 2 years	60	60
		With experience for < 2 years	40	
		With formal training but no experience	20	
		Training ongoing	10	
		<b>TOTAL</b>	<b>300</b>	<b>200</b>

## ANNEX E.3

### 3. Capacity Score Sheet

#### Anywhere Banking Corporation Credit Score Card: Capacity Factor

Name of Borrower:

Name of Loan Officer:

Date:

ATTRIBUTES		PERFORMANCE MEASURE	MAXIMUM POINTS	CLIENT RAW SCORE <sup>23</sup>	CLIENT FINAL SCORE
Debt servicing capacity		DSC > 2	65		
		1.5 < DSC < 2	40		
		1 < DSC < 1.5	20		
		DSC < 1	10		
Financial Capacity of Owners		Above 4x the total loans	60		
		Between 2.1 and 4.0	30		
		Between 1.0 and 2.0	20		
		Less than 1	10		
Current Ratio (excluding past due ARs and obsolete inventory)		CR > 3	40		
		2 < CR < 3	30		
		1 < CR < 2	20		
		CR < 1	10		
Debt to Equity Ratio		DER < 50:50	30		
		50:50 < DER < 67:33	25		
		67:33 < DER < 75:25	15		
		DER > 75:25	0		

AR Level	AR < 90 days	30		
	90 days < AR < 180 days	15		
	AR > 180 days	0		
Savings as a % of Operating Cost due to green projects	Savings of > 50%	25		
	Savings of > 40% but < 50%	10		
	Savings of > 30% but < 40%	15		
	Savings of >20% but <30%	10		
	Savings of 20% and below	5		
<b>TOTAL</b>		<b>245</b>		

<sup>23</sup> Financial ratios calculated in Annex E.1

## ANNEX E.4

## 4. Capital Score Sheet

Anywhere Banking Corporation  
Credit Score Card: Capital Factor

Name of Borrower:  
Name of Loan Officer:  
Date:

ATTRIBUTES	HOW TO MEASURE	PERFORMANCE MEASURE	MAXIMUM POINTS	CLIENT RAW SCORE	CLIENT FINAL SCORE
Capital Growth	Average Annual Capital Increase (Past 3 years)	Over 40% Increase	50		
		≥10% but ≤40% Increase	30		
		< 10% Increase	10		
		No borrowing experience	10		
Retention of Earnings	% of Business Retained in Business	Over 75% Retained	50		
		50% - 75% Retained	30		
		Less than 50% Retained	20		
Non-Business Assets	Total Non-Business Assets as % of Proposed Loan Amount	Over 100%	50		
		50% to 100%	30		
		< 50%	20		
<b>TOTAL</b>			<b>150</b>		

## ANNEX E.5.1

## 5. Condition Score Sheet

Anywhere Banking Corporation  
Credit Score Card: Condition Factor

Name of Borrower:  
Name of Loan Officer:  
Date:

HOW TO MEASURE	PERFORMANCE MEASURE	SCORE	CLIENT RAW SCORE	CLIENT FINAL SCORE
Number of Days Suppliers are Paid	1 - 45 days	15	45	15
	46 - 90 days	10		
	Over 90 days	5		
Number of Competitors (How many competitors do you have? Who is your strongest competitor?)	Less than 5 competitors	15		
	Over 5 competitors	5	X	
Number of Years Borrower has been maintaining Accurate Financial Statements	3 years or more	17	X	17
	Less than 3 years	12		
	No accurate record	0		
Raw Materials Availability	Mostly available from reliable local sources	15	X	15
	Limited suppliers but reliable sources	10		
	Supply limited to a single source	5		
Feedback from Borrower's Employees (3 respondents: How do you like your job? The people you work with? What good things can you say about your boss/manager?)	Positive Response	8	X	8
	Negative response	2		
	No Response	2		

## ANNEX E.5.2

## Condition Score Sheet (continuation)

Anywhere Banking Corporation  
Credit Score Card: Condition Factor

Frequency of Power Outage (No. Days/Week)	No outage experienced	7		2
	1 - 3 days per week	4		
	Over 3 days per week	2	X	

HOW TO MEASURE	PERFORMANCE MEASURE	SCORE	CLIENT RAW SCORE	CLIENT FINAL SCORE
Environmental and Social Risks Practices				
Compliance with Environmental Regulations	Full compliance (no penalty/sanction or restriction on business operation)	25		
	With at least 1 for compliance within 1 year but no sanction/penalty or restriction on business operation.	20		
	With at least 1 for compliance	10		
	Less than 50% compliance	5		
Air emissions and Air Quality (e.g. Point sources, Fugitive sources, Mobile sources, VOCs, PM, Ozone Depleting Substances (ODS), GHGs, Sulfur dioxide (SO <sub>2</sub> ), Toxics(mercury))	Air emission within allowable limits due to nature of business or measures adopted by business	20		
	Emission controls targeted to be in place within 1 year	15		
	No immediate plans to control emissions.	0		

## ANNEX E.5.3

## Condition Score Sheet (continuation)

Anywhere Banking Corporation  
Credit Score Card: Condition Factor

Water use and conservation (e.g. Process water, Building facility operations, Cooling systems, Heating systems)	Working water conservation and recycling/reusing measures in place.	15		
	Water conservation and recycling/reusing measures targeted to be in place within 1 year.	10		
	No immediate plans to adopt water conservation and recycling/reusing measures.	0		

HOW TO MEASURE	PERFORMANCE MEASURE	SCORE	CLIENT RAW SCORE	CLIENT FINAL SCORE
Wastewater and water quality (e.g. Process wastewater, Wastewater from utility operations, Stormwater, Sanitary wastewater)	A system for preventing or reducing wastewater generation through water conservation and recycling/reusing is in place in the workplace.	15		
	Water conservation and recycling/reusing measures targeted to be in place within 1 year.	10		
	No immediate plans to adopt water conservation and recycling/reusing measures.	0		

## ANNEX E.5.4

## Condition Score Sheet (continuation)

Anywhere Banking Corporation  
Credit Score Card: Condition Factor

Wastes - (e.g. Hazardous and Non-hazardous)	Policies and processes consistently observed in the workplace on waste management planning, waste prevention, recycling and reuse, treatment and disposal, hazardous waste storage, hazardous waste transportation, hazardous treatment and disposal, small quantities of hazardous waste.	15		
	Aware of the business opportunity but not clear on how to implement processes on waste management planning, waste prevention, recycling and reuse, treatment and disposal, hazardous waste storage, hazardous waste transportation, hazardous treatment and disposal, small quantities of hazardous waste in the workplace.	7		
	Not implementing practices on waste management planning, waste prevention, recycling and reuse, treatment and disposal, hazardous waste storage, hazardous waste transportation, hazardous treatment and disposal, small quantities of hazardous waste.	0		

HOW TO MEASURE	PERFORMANCE MEASURE	SCORE	CLIENT RAW SCORE	CLIENT FINAL SCORE
Land contamination	No land contamination or land contamination is controlled in accordance with government regulations.	7		
	Land contamination is minimal.	5		
	No measure in place to control land contamination, if any.	0		
Labour and Working Conditions - (e.g. Human resources policy, Working conditions and terms of employment. Workers' organizations, Non-discrimination and equal opportunity. Retrenchment, Grievance mechanism, Child labour and forced labour, Supply chain)	Business observing all aspects in accordance with international standards.	20		
	Business observing most of them in accordance with local standards.	15		
	Business not observing most of the aspects.	5		



## ANNEX E.5.5

### Condition Score Sheet (continuation)

#### Anywhere Banking Corporation Credit Score Card: Condition Factor

Community Health, Safety and Security (e.g. Consultation and grievance channels, Infrastructure and equipment safety, Hazardous materials safety, Environmental and natural resource issues, Community exposure to disease, Increase in traffic, Emergency preparedness and response, Use of security personnel).	Business observing all aspects in accordance with international standards.	8		
	Business observing most of them in accordance with local standards.	6		
	Business not observing most of the aspects.	5		
Land Acquisition and Resettlement (e.g. Compensation and benefits for displaced persons, Grievance mechanism, Social impact assessment, resettlement planning and implementation, Physical displacement, Economic displacement, Government-managed resettlement.)	Will observe these based on generally accepted practices if and when the business requires land acquisition and resettlement.	6		
	Not knowledgeable on how to address these.	2		

HOW TO MEASURE	PERFORMANCE MEASURE	SCORE	CLIENT RAW SCORE	CLIENT FINAL SCORE
Indigenous Peoples - (Avoid or minimize adverse impacts, Consultation, Impacts on traditional or customary lands. Relocation of Indigenous Peoples)	Will observe these based on generally accepted practices if and when the conduct of the business affects the identity, culture and natural resource-based livelihoods of Indigenous People.	6		
	Not knowledgeable on how to address these.	2		
Cultural Heritage - (Chance finds, Removal of cultural heritage. Legally protected cultural heritage areas. Use of cultural heritage.)	Business not in a cultural heritage area and will observe these in case of need.	6		
	Not aware of these.	2		
	<b>TOTAL</b>	<b>220</b>		

## ANNEX E.6

### 6. Collateral Score Sheet

#### Anywhere Banking Corporation Credit Score Card: Collateral Factor

Name of Borrower:

Name of Loan Officer:

Date:

HOW TO MEASURE	PERFORMANCE MEASURE	DATA	CLIENT RAW SCORE	CLIENT FINAL SCORE
Market Value of Collateral as % of Loan	Over 150% of the proposed loan	30		
	80% - 150% of proposed loan	15		
	< 80% of proposed loan	10		
Marketability/Quality of collaterals (Loan officer classifies bulk of offered collaterals)	Prime Titled Real Estate	20		
	(Loan officer classifies bulk of offered collaterals)	15		
	Chattels (transport, appliances, personal effects)	5		
Impact of Loss of Collateral on Borrower's Personal Comforts	Residential House and Lot	10		
	Cultivated Agricultural Land/ Fishing Boat	7		
	Commercial Property	7		
	Idle Agricultural Land	0		

The proximity of Collateral to Business Center and Availability of Roads and Utilities	With available utilities and road system, close to the business centre	10		
	Utilities and Road system available	6		
	Road system available	3		
Present Use of Collateral	Titled Commercial/ Residential Land	10		
	Titled Agricultural Land	7		
	Untitiled Land	3		
	<b>TOTAL</b>	<b>80</b>		

# ANNEX E.7.1

## Credit Rating Score Sheet (continuation)

### Anywhere Banking Corporation Credit Score Card: Credit Rating Sheet

Name of Borrower:

Name of Loan Officer:

Date:

CREDIT FACTOR	ATTRIBUTES	MAXIMUM SCORE	CLIENT RAW SCORE	CLIENT FINAL SCORE
<b>CHARACTER (30%)</b>	Credit Record	100		
	Experience of Owners/Management (EOM)	80		
	Owner age, health, succession	60		
	Manpower capabilities for ESG projects	60		
	<b>TOTAL</b>	<b>300</b>		
<b>CAPACITY (25%)</b>	Debt Servicing Capacity	65		
	Financial Capacity of Owners	60		
	Current Ratio	40		
	Debt to Equity Ratio	30		
	AR Level	30		
	Savings as a % of Operating Cost due to Green Projects	25		
	<b>TOTAL</b>	<b>250</b>		
<b>CAPITAL (15%)</b>	Capital Growth	50		
	Retention of Earnings	50		
	Non-Business Assets	50		
	<b>TOTAL</b>	<b>150</b>		

<b>COLLATERAL (8%)</b>	Value of Collateral	30		
	Quality of Collateral	20		
	Emotional Attachment of Borrower	10		
	Location of Collateral	10		
	Type of Real Estate Collateral	10		
	<b>TOTAL</b>	<b>80</b>		

## ANNEX E.7.2

### 7. Credit Rating Score Sheet (continuation)

#### Anywhere Banking Corporation Credit Score Card: Credit Rating Sheet

Name of Borrower:

Name of Loan Officer:

Date:

CREDIT FACTOR	ATTRIBUTES	MAXIMUM POINTS	CLIENT RAW SCORE	CLIENT FINAL SCORE
CONDITION (22%)	Number of Days Suppliers are Paid	15		
	Number of Competitors (How many competitors do you have? Who is your strongest competitor?)	15		
	Number of Years Borrower has been maintaining Accurate Financial Statements	17		
	Raw Materials Availability	15		
	Feedback from Borrower's Employees (3 respondents: How do you like your job? The people you work with? What good things can you say about your boss/ manager?)	8		
	Frequency of Power Outage (No. Days/ Week)	7		
	<b>Environmental and Social Risks Practices</b>			
	Compliance with Environmental Regulations	25		
	Air emissions and Air Quality	20		
	Water use and conservation	15		
	Wastewater and water quality	15		
	Wastes	15		

	Land contamination	7		
	Labour and Working Conditions	20		
	Community Health, Safety and Security	8		
	Land Acquisition and Resettlement	6		
	Indigenous Peoples	6		
	Cultural Heritage	6		
	<b>TOTAL</b>	<b>220</b>		
		<b>1,000</b>		

## ANNEX E.8

### Borrower's Credit Risk Rating

RISK	DESCRIPTION	PROBABILITY OF DEFAULT	SCORE	RISK QUALITY
1	Excellent	2%	>890	Very low risk
2	Strong	3%	800-890	Low risk
3	Good	4%	700-799	Moderate risk
4	Fair	6%	600-699	
5	Acceptable	8%	550-599	High risk
6	Marginal	15%	500-549	
7	Unsatisfactory	30%	450-499	Very high risk
8	Substandard	50%	400-449	
9	Doubtful	80%	350-399	
10	Expected Loss	100%	<350	

## ANNEX E.9

### Step by step Procedure in Credit Scoring:

1. Validate the numbers in the submitted FS (balance sheet and income statement) to check their accuracy and integrity. The borrower's credit risk rating is only meaningful if it is prepared using validated financial information. In the absence of submitted FS, the loan officer/financial analyst should endeavour to prepare them using validated information obtained from the borrower and other sources.
2. Input required balance sheet and income statement data in "Data Entry Sheet". In the Excel spreadsheet, the cells in the computations part of the Data Entry Sheet should be formatted to include the corresponding formula of the indicated financial ratio/information (e.g. current ratio, debt-equity ratio, net worth, debt service capacity).
3. Fill out the "Character Score Sheet"
  - Even if the past due account was eventually updated or paid, it is still an incident of a past due account.
  - The successor is one who can immediately take over the operation of the project once the borrower cannot do it due to death, illness, etc. The successor is not necessarily a blood relative.
  - Using the "Maximum Points" column as a reference, indicate the client's score in the "Client Score" column. The actual score can be lower but should not exceed the maximum point. For example, a borrower 49 years of age with a successor can be given a client score of 54 or 45 depending on the sound judgment of the loan officer.
4. Fill out the "Capacity Score Sheet"
  - This score sheet uses the information generated in the computations part of "Data Entry Sheet".
  - The "Client Raw Score" column contains the numerical scores as computed in the "Data Entry Sheet".
  - The "Client Final Score" column contains the maximum points corresponding to the raw client score in relation to the "Performance Measures" column. For example, if the client raw score for DSC is 1.5, the client can be given a final score ranging from 21 to 40 points.
5. Following the same procedure above, fill out the other score sheets (Capital, Collateral, Condition).
6. Copy the client final scores in the 5 previous score sheets to the appropriate lines in the "Client Raw Score" column in the "Rate Sheet" and add the scores for each risk factor (Character, Capacity, Capital, Collateral and Condition) and input the sum of each risk factor into the "Client Final Score" column.
7. Add all the scores in the "Client Final Score" to get the Final Score of the borrower.

## ANNEX F

## Example of a Facility Risk Rating Table

8. To get the borrower's credit risk rating, refer to the Risk Rating Table Sheet below. For example, if the borrower's final score is 645, based on the risk rating table, the borrower credit risk rating is "4" with the following details:

- Description – Fair
- PD - 6% (This means that based on experience, a loan account with a risk rating of 4 has a 6% probability of going on default)
- Risk Quality – Moderate risk

FRR Table				
Collateral	FRR	Max % financing	LGD	Comments
Cash 1 (with the lender's FI)	0	100 (FV)	0%	
Cash 2 (with other FIs)	1	100 (FV)	10%	
Shares (blue chips)	2	50 (MV)	20%	Market value should be followed on a monthly basis
Residential building	3	70 (MV)	30%	Market value has to be updated at least on a yearly basis
Commercial building	4	60 (MV)	40%	Market value has to be updated at least on a yearly basis
Large enterprise corporate guarantee	5	60 (TNW)	50%	Market value has to be updated at least on a yearly basis
				TNW = Total tangible assets minus total liabilities
Equipment	5	50 (MV)	50%	Market value has to be updated at least on a yearly basis
Other tangible assets	5	50 (MV)	50%	Market value has to be updated at least on a yearly basis
Receivables	6	70 (Total AR less 60 days past due and from interrelated companies)	50%	Receivables have to be monitored at least on a monthly basis
Inventory	7	40 (finished product and raw material)	70%	Inventory has to be monitored at least on a monthly basis
Corporate Guarantee	8	60 (TNW)	80%	The value has to be verified on a yearly basis
Personal guarantee	9	60 (TNW)	90%	The value has to be verified on a yearly basis
Other intangible assets	9		90%	
No collateral	10		100%	

# ANNEX G

## Principles of Effective Credit Risk Management

The effective management of credit risk is a critical component of a comprehensive approach to risk management and is essential to the long-term success of any bank. For most banks, loans are the largest and most common source of credit risk. The goal of credit risk management is to maximize the bank's rate of return by maintaining credit risk exposure within acceptable parameters.

The following are some principles of effective credit risk management.

1. It takes place simultaneously in all hierarchy levels of the bank organization
  - Strategic level – performed by senior management and the Board of Directors.
    - Strategic level – those performed by senior management and the Board of Directors.
    - Identification and definition of risks to be managed.
    - Quantification of the risk the bank is willing to absorb.
    - Formulation of strategy and policies for managing the risks.
    - Establishment of adequate systems and controls to ensure that overall risk remains within acceptable levels and the bank derives sufficient income for taking the risk.
  - Macro-Level – performed by middle management or units that conduct reviews.
  - Micro-Level – performed by those where the risks are actually created.
2. Board and Senior Management Oversight
  - BOD – sets the strategy and overall tone for risk management in the entire organization.
  - Senior management – translates risk strategy into policies and procedures for BOD approval. Once approved, senior management implements the policies and procedures across the organization.
  - Senior management must communicate clearly all risk management policies and procedures to the entire organization. They must be treated as part of the corporate culture of the bank.
  - All material deviations from policies and procedures must be reported as soon as possible to senior management and the BOD for corrective action.
  - Annual BOD review of policies.
3. Risk Management Framework in place which defines:
  - The risks to be managed – Clearly defined risk management policies & procedures for risk identification, acceptance, measurement, monitoring, reporting and control.
  - Process, systems and procedures to manage the risks – Mechanism to ensure an ongoing review of systems, policies & procedures for risk management.
  - Roles and responsibilities of individuals – Well constituted organizational structure defining clearly roles & responsibilities of individuals involved in risk taking and managing risks.
  - Flexible enough to capture all risks and accommodate any change in business activities.
4. Business Line Accountability – Risk management is not the sole responsibility of the risk management unit. All bank units particularly the business units are equally accountable.
5. Risk Evaluation/Measurement – Risks must be properly assessed and measured (exposure/sectoral loan limits) otherwise, they cannot be controlled and managed.
6. Independent Review – Those who take or accept risk are not the same people who measure, monitor and evaluate the risks. Hence, the risk review should be done by those with expertise and with corporate stature in order that they can do their review function objectively and without hindrance.
7. Stress Situations/Contingency Planning – Banks must do stress testing for all risks and devise plans to deal with such extreme situations in a timely and effective manner.



# ANNEX H

## Credit Risk Management – Key Success Factors

In order to achieve an effective credit risk management system, the bank must observe the following key success factors:

1. **Commitment and support from top management and the Board**
  - Critical in influencing the success of any initiative within an organization.
  - Formulation of objectives and strategies for organization risk management activities, mission and objectives.
2. **The bank must have a reliable system to efficiently communicate all credit policies to officers and personnel in the credit process** to achieve the following:
  - Uniform and consistent interpretation and implementation of credit policies.
  - The setting of clear mutual expectations and objectives.
  - Provides opportunities to clarify and harmonize different views.
  - Provides opportunities for officers and employees to understand their roles and responsibilities to achieve effective credit risk management.
3. **Organizational culture** – To be effective, the risk management system must be able to create a risk-oriented organizational culture in the bank.
  - The organizational culture is a collective programming of the mind that distinguishes the members of one group or category of people from another.<sup>24</sup>
  - It is a pattern of ideas, thought and feelings that shape the risk behaviour of all loan/credit staff.
  - It is also a set of underlying beliefs that, while rarely exactly articulated, are always there to influence the perception of actions and communications of employees.<sup>25</sup>
  - Provides the moral standards for good performance in credit risk management.
  - Culture is the current embodiment of the values as the needs of the business dictate and can change over time.
4. **Information Technology** – In view of the large amount of information needed to be able to identify, assess, measure, control and manage the risks in a timely manner, the bank must have access to information technology (IT). IT enables credit personnel to have quick access to

important information needed to make a well-informed credit evaluation and decision. IT also provides efficient communication among the people in the credit process, the borrower and other people who may be able to help in credit evaluation. In other words, IT provides better information processing, sharing, fast responsiveness and better coordination between separate units of an organization and across organizations.

5. **Organizational Structuring and Design** – must be able to establish and define through formal issuances and policies the following:
  - The internal pattern of relationships, authority and communication among credit people.
  - The lines of authority and communication serve to allocate tasks and resources and provides means of coordination.
  - The structure that must match their environment and has a positive impact upon the bank's credit risk management strategies.
6. **Training** – The bank must ensure that an adequate supply of staff is equipped with the appropriate skills. This can be addressed thru well-crafted training. Training in credit risk management helps credit personnel in sharpening their skills in identifying and managing credit-related risks resulting in a better quality loan portfolio of the bank. Training can help credit personnel make precise and powerful credit evaluations and decisions. It promotes good performance in credit risk management, which in turn results in improved overall bank performance.
 

The training methods can be:

  - On-the-Job – provides one-on-one instruction, coaching, job rotation and apprenticeship/ internship.
  - Off-the Job – offsite, e.g. classroom lectures, films, demonstrations, case studies, simulation exercise and programmed instructions.
7. **Trust** – The bank must be able to create and actively foster a strong sense of trust between employees and supervisors, bank personnel and customers, internal staff in the workplace and internal and external stakeholders. People are able to turn in a good performance when there is trust in the workplace. Trust promotes increased productivity and improved morale among employees and staff. All credit officers and personnel can work more effectively as a team rather than individuals when trust pervades in the work environment. Lastly, trust enables the bank to reduce time to make and discuss key credit issues as each individual trusts in the judgment and expertise of their colleagues in the credit process.

To promote trust in the workplace, the bank must consider adopting a policy that:

- Empowers staff to “own” their day to day responsibilities. This means that the credit personnel are conscious of the quality and timeliness of their output in the credit process.

<sup>24</sup> Geert Hofstede, Dutch social psychologist, former IBM employee

<sup>25</sup> Hasanali, 2002

It also means that all personnel have the sense of obligation to act on any credit-related matter for the purpose of effectively managing the credit risk of the bank. This includes taking the initiative to bring to the attention of someone who has the time or resources to get something to be done at any stage of the credit process just so the bank can make well-informed credit decisions.

- Allows teams to make decisions and put together their own proposals that they believe enhance the credit process.
- Promotes openness and transparency on key credit decisions/changes to credit policies, procedures and strategies.
- Discourages treating anyone or any group more favourably than another. Call out success when it is warranted, but don't anyways focus attention on one particular person or group.



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