Gap Analysis and Planning
Green Activities

Green Microfinance Workshop Series

Davide Forcella (YAPU Solutions, CERMi, Head of GICSF-AG) 16 November, Online event
Natalia Realpe Carrillo (HEDERA, IASS Potsdam, Head of GICSF-AG)
Training Description

This training provides an introduction to the concept of assessing gaps in environmental performance:

- Introduction to how to read the result of an environmental performance assessment: Green Index 3.0. Use of dummy examples
- The audience will engage in discussing the result of the assessments, define existing gaps, and prioritize actions.
- Explicit example of green activities will be provided
Training Objectives

At the end of the training the participants will have first understanding of:

- How to read a Green Index 3.0 assessment.
- How assess gaps and opportunities to improve.
- Possible actions to engage in to improve environmental performance
The Agenda

0. Intro
1. Concepts: Green Inclusive Finance
2. Assessing Environmental performance and way forward
3. Examples of actions
4. What’s next?
0. Intro
The Green Inclusive & Climate Smart Finance AG

The Green Inclusive and Climate Smart Finance Action Group (GICSF-AG) is a Unique multi-stakeholder think-tank for environmentally responsible inclusive finance, hosted by the European Microfinance Platform [https://www.e-mfp.eu/gicsf-ag](https://www.e-mfp.eu/gicsf-ag)

**OBJECTIVES**

- Discuss current **challenges and strategies** in green inclusive finance
- **Improve knowledge and action** of inclusive finance actors in environmental issue
- **Enhance cooperation** among green inclusive finance actors
- **Increase international attention** for green inclusive finance
- **Develop dedicated tools**, recognized as “standard” by the inclusive finance sector, to support green inclusive finance
- Publicise and disseminate its findings
- Enhance the interest and concrete commitment of all actors (MFIs, investors, among others) in green inclusive finance
Members

Launched in Feb. 2013 in Berlin and hosted by the European Microfinance Platform (e-MFP) it has 135+ members with different level of engagement, affiliated to 75+ institutions and organized into activity sub-group, among which:


Coordinated by the GICSF-AG Heads:

- Natalia Realpe Carrillo, HEDERA & IASS Potsdam
- Davide Forcella, YAPU Solutions & CERMi
In 2021 Joining forces for Green in Europe

Join forces to foster knowledge and actions for Green Inclusive Finance in Europe and Central Asia

At short term:
• Series of trainings
• Study on Green Inclusive finance in Europe (2013-2021):
  • Website review (2021 and 2013): 400+
  • Surveys to MFIs: 6+ surveys, 500+ respondents
  • Case study/interview with MFIs

At medium term:
• Developing a joint strategy and activities for the European Inclusive finance sector
Join forces to foster knowledge and actions for green inclusive finance in Europe and Central Asia

• Coordination by Davide Forcella, Head of the GICSF-AG, CERMi,

• The analysis and visualization of data done using the tools provided by Natalia Realpe, Head of the GICSF-AG

• GICSF-AG internship work of Mathieu François, GICSF-AG intern and EMP student.

• Data shared by the following parties: And all MFIs that kindly shared their data.

Until Oct 2021:
• Website review (2021 and 2013): 400+
• Surveys to MFIs: 6+ surveys, 500+ respondents (2011-2020)
• Case study/interview with MFIs (2021)
Joining forces for Green in Europe

In the forthcoming publication “Green Inclusive Finance in Europe“:
• You will find details on the actual environmental performance of MFIs in Europe
• Examples of green practices and technology financed as well as green products
• Case studies of actual experiences in green inclusive finance of MFIs in Europe

Stay tuned!

In the meantime we will provide here some examples of practices, tools products from outside Europe
1. Concepts:
Green Inclusive Finance
3 key concepts for Green Inclusive Finance

- Vulnerability
- Adverse Impacts
- Economic Opportunities
3 key concepts for Green Inclusive Finance

How clients and institutions are affected by the environment

How clients and institutions affect the environment

How green can satisfy demand and increase revenues
Vulnerability & Adverse Environmental Impacts

Of the client & the institution

- Climate change
- Env degradation, biodiversity loss
- Energy poverty
- Lack of clean water

On the environment due to clients & institution

- Green house gas
- Air, water, soil pollution
- Deforestation & land degradation
- Storage and use of chemicals
Indirect & Direct

Indirect

**Activities of clients:**
their adverse env. impacts and vulnerability

Direct

**Institution and human resources:**
their adverse env. impacts and vulnerability
The Green Index makes the Green Inclusive Finance operational. It operationalizes the concepts and translates them into actionable and material items that stakeholders of the inclusive finance sector can relate to and act upon.
The Green Index is developed by the European Microfinance Platform's Green Inclusive and Climate-Smart Finance Action Group (GICSF-AG) in 2014, and regularly updated by the GICSF-AG
Measure, Plan & Improve

The Green Index is the main indicator for assessing a FSP's current performance in inclusive green finance and for defining an action plan to improve it.

GREEN INDEX

A tool for evaluating the green inclusive finance performance of FSPs (It is used with FSPs and not with its clients)

- Awareness raising
- Evaluation
- Commitment
- Planning
- Prioritise
- Monitoring progress
The most accepted tool to assess MFIs' environmental performance

Publication available online on e-MFP AG webpage

Green Index available in SPI4 (optional Dim 7)

Incorporates lessons learnt from MFI's use, ability, and willingness to track environmental management

Quantitative components for green products

Integrated into SPI4 (only qualitative)

Inclusion of (climate) vulnerability

Lessons learnt from 1000+ assessments & 6 years of use, 300+ stakeholders inputs

Alignment to international initiatives

Aligned with Universal Standards Env. Performance “Dim 7” developed with SPTF & CERISE, new mandatory dimension of USSEPM
6+ years of environmental assessments by the e-MFP GICSF AG + SPI4 + partners of the AG, among others:
- SIDI, Foundation Grameen Credit Agricole, CERISE, BNPP, HEDERA, YAPU Solutions, Enclude/Palladium, CERMI, MIX, ADA, MicroEnergy International, EMN, IDB-Lab, etc.

with 1000+ environmental assessments

2 “Green” e-MFP Microfinance Awards (Environment (2014) & Climate Change Adaptation (2019))

10+ years of green inclusive finance projects implementation and Key Projects:
- EcoMicro (IDB since 2012, 30+ FSPs)
- MEbA (since 2012, 40+ FSPs)
- P CAMBio (2008-2013, 28 FSPs)
- GPA (HIVOS, 2005)
- C&ESG (IFAD, 2019)
- FMO e-tool (2009)
- MEPI (2012)
- Energy & MF – CleanStart
- Green Energy – ADA
- …

• Mapping and alignment to international initiatives
• In-depth interviews with MF stakeholders including MFIIs and Investors
• Surveys to Investors and MFIIs
• Establishment of steering committee with STFP and CERISE and alignment with USSEPM
• Assessment of needs for environmental performance from 250+ stakeholders
• Two rounds of reviews, 1st rev: 40+ reviewers, 300+ feedbacks; 2nd rev: 100+ participants
2021 Env. dim. part of Universal Standards

Development and implementation of the ‘green’ dimension of the USSEPM. A joint project GICSF-AG, SPTF and CERISE.
Aligning standards and enhancing value

In a joint project, the GICSF-AG, the SPTF and CERISE has developed the ‘green’ dimension of the USSEPM, in alignment with the Green Index 3.0. The two tools are aligned for the benefit of the sector.
Standards

GI.0  Environmental strategy  
Definition and put in place

GI.1  Identification of Environmental risks and opportunities

GI.2  Management of Environmental risks and opportunities

GI.3  Green products and services  
Financial and non-financial
Standards, Details

GI.0 Environmental strategy
definition and put in place

GI.1 Identification of Environmental risks and opportunities

GI.2 Management of Environmental risks and opportunities

GI.3 Green products and services
Financial and non-financial

It is about how the environmental strategy is defined, and how it is put in place, including roles and responsibilities, alignment with local or international standards, and how the institution monitors and reports on the implementation of its environmental strategy.
Standards, Details

GI.1 Identification of Environmental risks and opportunities

It is about the institution's ability to identify the vulnerability of clients/portfolio and the institution itself, the negative environmental impacts generated on ecosystems by clients and the institution itself, and the clients' needs and demand for green practices and technologies.

GI.2 Management of Environmental risks and opportunities

GI.3 Green products and services
Financial and non-financial
It is about the processes and tools in place to analyse and respond to the vulnerability, negative environmental impacts, client demand and needs identified in GI.1. It is about how the institutions translates vulnerability, negative environmental impacts, demands & needs into actual risks and opportunities.
It is about the supply and delivery of "green" products and services to customers. Both financial or non-financial services are assessed. Financial products include "green" credits, but also as insurance, savings or money transfer. Non-financial services include awareness raising, training, technical assistance, partnerships.
GI.0 Environmental strategy definition and put in place

GI.0.1 Definition of the Strategy
- Detailed goals, mission, documented strategy.
- Compliance with applicable standards and regulation.

GI.1 Identification of Environmental risks and opportunities

GI.1.1 Identification of Indirect risks & opportunities
Identification of clients
- Vulnerability
- Negative Env impacts
- Demand and needs.

GI.2 Management of Environmental risks and opportunities

GI.2.1 Management of Indirect risks & opportunities
Inclusion of vulnerability, negative env Impacts and demand/needs in:
- (financial) risks management processes, tools indicators
- Credit processes & product.

GI.3 Green products and services

GI.3.1 Financial products & services
- Green Loans
  o Clean energy / energy efficiency
  o Sustainable agriculture
  o Clean water - sanitation
  o Circular economy / others
- Savings, remittances, emergency loans
- Climate / production insurance

GI.3.2 Non-financial products & services
- Awareness raising
- Training
- Technical assistance
- Partnerships

GI.0.2 Put in place the Strategy
- Responsibilities & processes
- Management & governance
- Monitoring:
  - Economic
  - Vulnerability
  - Negative Env impacts.

GI.1.2 Identification of Direct risks
Identification of building and staff
- Vulnerability
- Negative impacts Env.
Visualising Green Inclusive Finance performance

GI.0
Environmental Strategy

GI.1
Identification of Environmental risks and opportunities

GI.2
Management of Environmental risks and opportunities

GI.3
Green products & services
Visualising Green Inclusive Finance performance II

The Risk management View
- Indirect risks
  - Identification & mgt of vulnerabilities
- Direct risks
  - Identification & mgt of neg env. impacts

The Green opportunities View
- Green financial products
  - Monitoring
- Green non-financial products
  - Identifying opportunities

GREEN INDEX 3.0
2. Assessing Environmental performance and way forward
Measure, Plan & Improve

With the Green Index 3.0 you can assess the current performance in inclusive green finance of FSPs and define an action plan to improve:

- Assess the environmental performance
- Define gaps
- Prioritise actions
- Planning actions and implement them
- Monitoring progresses
GREEN INDEX 3.0 & Model of Improvement
Case 1
Case 1, II

The Risk Management View

Indirect risks

Identification & mgt of vulnerabilities

Identification & mgt of neg env. impacts

Direct risks

Institution A
Case 1, III

The Green Opportunities View

Green financial products

Identifying opportunities

Monitoring

Green non-financial products

Institution A
Case 2
Case 2, II

The Risk Management View

- Indirect risks
- Identification & mgt of vulnerabilities
- Identification & mgt of neg env impacts
- Direct risks

Institution B
Case 2, III

The Green Opportunities View

Green financial products

Identifying opportunities

Monitoring

Green non-financial products
Case 3
Case 4

Green Inclusive Finance performance

GI.0
Environmental Strategy

GI.1
Identification of Environmental risks and opportunities

GI.2
Management of Environmental risks and opportunities

GI.3
Green products & services

Institution F
Case 5
Case 6
3. Examples of actions
3.1 Green strategy
Environmental strategy

Define
- objectives
- documented strategy
- compliance

Implement
- roles and responsibilities
- management and governance

Monitor
Example: strategy implementation

Implementation of the green strategy

- Environmental policy
- Non-financial services
- Environmental risk management
- Ecological footprint
- Green credit

https://www.contactarcolombia.org
3.2 Identification of Indirect risks and opportunities
Example: vulnerability assessment

Client vulnerability and portfolio vulnerability can be assessed and integrated into risk management through the use of appropriate indicators: Adaptive Capacities

Example: Indicators of EbA adaptive capacities

1. PRODUCTIVE CHAIN
2. ASSOCIATIVITY
3. SOIL QUALITY
4. NUTRIENT MANAGEMENT
5. PEST AND DISEASE MANAGEMENT
6. WATER ADMINISTRATION
7. ECOSYSTEM MANAGEMENT
8. WASTE MANAGEMENT
9. CULTURE MANAGEMENT
10. ANIMAL MANAGEMENT

Source: https://unepmeba.org/es/medios-y-publicaciones/
Example: measuring energy poverty of clients

Case: vulnerability assessment of energy access in remote rural areas.
Goal: determine the market for clean energy products.
Conclusion: access to electricity and electricity services acceptable with potential for improvement. Low demand for energy technologies.

The majority of the population has a higher level of access to energy.
Example: Assessing impacts on biodiversity

The negative impacts of customer activities on biodiversity can be assessed and managed with specific indicators, for example developed in the project: MEbA biodiversity platform.

Example: Biodiversity risk level indicators: MEbA biodiversity platform.

Source: https://unepmeba.org/FR/biodiversity-platform/

1. CHANGES IN LAND USE
2. OVEREXPLOITATION
3. CLIMATE CHANGE
4. POLLUTION
5. INVASIVE ALIEN SPECIES

Source:
3.3 Identification of Direct risks
Example: CO2 calculation

Welcome to the web's leading carbon footprint calculator

First, please tell us where you live: [why?]

Country: United States
State: (average for country)

Carbon footprint calculations are typically based on annual emissions from the previous 12 months
Enter the period this calculation covers (optional):

from [ ] to [ ]

Next, select the appropriate tab above to calculate the part of your lifestyle you are most interested in, e.g. your flights.
Or, visit each of the tabs above to calculate your full carbon footprint.

Following your calculation, you can offset / neutralise your emissions through one of our climate-friendly projects.
3.4 Management of Indirect risks
Client and portfolio climate vulnerability: how to manage it

- **Identify**
  client and portfolio vulnerabilities (the risk)

- **Analyze and respond to**
  risk

- **Monitor the**
  risk
Negative environmental impacts of the client and the portfolio: how to manage it

**Identify**
Customer and portfolio negative environmental impacts (the risk)

**Analyze and respond to risk**

**Monitor the risk**
Example: Risk management

- Inclusion of Climate Risks in risks processes and policy
- Inclusion of environmental impacts in risks processes and policy

Example MFI in:

EcoMicro

https://ecomicroecuador.org.ec/en/
3.5. Green loans for clean energy / efficiency
Ex. of Green Practices and Technologies: Clean energy /energy efficiency

RE technologies
- Solar dehydrators
- Solar hydroponics
- Large-scale clean energy mini-grids
- Large-scale hybrid energy mini-grids
- Small-scale clean energy mini-grids
- Small-scale hybrid energy mini-grids
- Solar home systems
- Solar water heaters
- Solar water pumps
- Pico PV
- Solar lamps
- Solar crop dryers
- Solar cookstoves

Energy efficient technologies:
- Biodigesters
- Efficient biomass stoves / Improved cooking stove
- Efficient air conditioners
- Housing thermal insulation
- Improved cooking oven
- Rice husk gasifier stove
- Energy efficient refrigerators
- Led lighting
- Clean or hybrid energy grid connections
Example: RE – EE products

a catalog developed by the Green Inclusive and Climate Smart Finance Action Group: it contains the description of 14 renewable energy or energy efficiency technologies financed or able to be financed by MFIs:

- the *technical characteristics*,
- installation and maintenance,
- benefit to IMF clients and the environment
- price and type of financing,
- impacts economic and social for end users

Source: https://www.e-mfp.eu/actions-groups/microfinance-environment
Green credits: Clean energy / energy efficiency
Definition

"Credit to low-income households or microenterprises excluded from the traditional formal financial sector to support the use or investment in RE or EE technologies."
## Green credits: Renewable energy / energy efficiency - Benefits

<table>
<thead>
<tr>
<th>Advantages</th>
<th>Solar powered lamps</th>
<th>Solar PV Systems</th>
<th>Improved stoves</th>
<th>Biogas plants</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Economic</strong></td>
<td>Savings of 5 liters per month <em>(repayment in ~ 15 months)</em></td>
<td>An average saving of 12 liters of kerosene per month.</td>
<td>A wood saving of $ 1.5 / month. <strong>Return on investment ~ 6 months</strong></td>
<td>A wood saving of $ 3 per month. <strong>Revenues of $ 180 / year from the sale of biogas and fertilizers.</strong></td>
</tr>
<tr>
<td><strong>Environmental</strong></td>
<td>~ 145 kg of CO2 emissions reduced per lantern</td>
<td>~ 375 kg / year of CO2 emissions reduced by SHS installed (45Watt system)</td>
<td>25% reduction in wood consumption.</td>
<td>~ 4.6 tonnes / year of CO2 emissions reduced per biogas installation (3m3)</td>
</tr>
<tr>
<td><strong>Social</strong></td>
<td>Increased time for workplace education</td>
<td>More time for work and education</td>
<td>Improved indoor air quality</td>
<td>Improves agro-productivity by reusing animal waste.</td>
</tr>
<tr>
<td><strong>Financial</strong></td>
<td>€ 5 / month more to repay the loan</td>
<td>€ 12 / month more to repay the loan</td>
<td>$ 1.5 / month more to repay the credit</td>
<td>$ 3 / month more to repay the credit</td>
</tr>
</tbody>
</table>

*The good health, consequence of clean energy, indirectly makes it possible to pay better credit.*
Green credits: Renewable energy / energy efficiency Business models implemented by financial institutions

the “End-user financing” for the acquisition of clean energy technologies takes many forms which fall under the following basic models:

- Sales **cash** dealers
- **Consumer credit** through MFIs or commercial banks
- The **fee-for-service**, in which the equipment remains the property of the service provider
Green credits: Renewable energy / energy efficiency
Business models implemented by financial institutions

**Dealer Cash Sales**

Clean energy technology suppliers or dealers sell directly to customers in cash.

Some sales are made on credit, generally to be reimbursed over a period of **3 to 12 months**.

*For this type of financing, international financial institutions make loans available through MFIs or commercial banks.*
Green credits: Renewable energy / energy efficiency
Business models implemented by financial institutions

**Consumer credit**

Local financial institutions provide loans to end users to purchase clean energy systems.

**In order to guarantee success, certain strategies should be adopted:**

- International financial institutions are providing support.
- Credit to end users is linked to certified suppliers.
- A prior guarantee or service agreement exists between financial institutions and suppliers.

Whatever the partnership scheme, the MFI does not take on technical responsibility of the product (the functional guarantee).
Green credits: Renewable energy / energy efficiency
Business models implemented by financial institutions

**Consumer credit**

Local financial institutions provide loans to end users to purchase clean energy systems.

**Commercial banks can either:**

- lend directly to consumers
  - See: *Equity Bank of Kenya*
- provide credit lines to MFIs
  - See: *Sarvodaya Economic Enterprise Development Services in Sri Lanka*
Equity Bank and solar energy company, Orb Energy, have teamed up to provide tailored loans for homes, institutions and industries to purchase solar water heating systems.

With the Equity Bank loan product, Kenyans will be able to purchase solar water heaters that will save them up to 60% of the money spent on their electricity bill.

Watch the video: https://ke.orbenergy.com/
Fee-for-service / **PAY-AS-YOU-GO**

Customers pay an energy service company, which makes clean energy affordable for very low-income customers and minimizes long-term risk to customers as the ownership and maintenance of the energy system is the responsibility of the company.

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Service charges are generally quite low so that customers can pay in cash. Sometimes MFIs help clients pay costs with very short-term loans or overdrafts.

**This service is generally part of a much larger energy investment made by commercial financiers and very often supported by funds from government or multilateral sources.**
Two-hand Business Model

The client deals with two parties.
Green credits: Renewable energy / energy efficiency
Business models

One-hand business model

MFI

- Microfinancing
- Installation
- After sale
- Maintenance of the service guarantee
- System upgrade / recycling

- Marketing
- Marketing
- Customer training

- Advance payment
- Collection
- Recovery in case of failure

Consumers / Microentrepreneurs
Green credits: Renewable energy / energy efficiency
Business models

Two-handed business model

MFI
- Microfinancing
- Marketing
- Advance payment
- Collection
- Recovery in case of failure

Energy company
- Installation
- Marketing
- Customer training

- After sale
- Maintenance of the service guarantee
- System upgrade / recycling

Consumers / Microentrepreneurs
Green credits: Renewable energy / energy efficiency
Training and capacity building for clients

Training

- Technological knowledge
- Energy experience their clients' needs
- Quality experience

Baobab + agents who distribute solar kits, they sensitize the population to solar energy and present the products in villages in rural areas, in San Pedro in Côte d'Ivoire. © Baobab +
One-hand Business Model

Zara Solar Ltd, the leading solar company in northern Tanzania, provides the population with high quality yet affordable photovoltaic systems.

By 2007, Zara Solar and its sister company, Mona-Mwanza Electrical & Electronics, had sold more than 3,600 systems, directly benefiting more than 18,000 people. Over 50,000 sales from 2005 to 2017.

Tanzania has one of the lowest electrification rates in the world. Only 10% of the population has access to the electricity grid, and in rural areas only 2% have it, making people dependent on increasingly expensive kerosene for lighting.
One-hand Business Model

Baobab + was launched in late 2015 by Microcred Group, a digital finance company focused on financial inclusion in Africa and China.

Baobab + develops access to energy in West Africa (Senegal, Ivory Coast, Mali) and Madagascar

- energy
- pure water
- digital educational tablets

**classic loans** for Microcred customers

Where

**model Pay-As-You-Go**

Baobab + works with various partners wishing to improve social and environmental impacts in countries.

The ambition of Baobab + is to provide clean, affordable and reliable energy to people living off-grid by offering them quality products with appropriate financial solutions.
One-hand Business Model

**BrightLife**, a social enterprise of FINCA International in Uganda.

**Products:**
- solar home systems
- improved stoves
- assets for productive use

BrightLife provides last mile distribution and end user financing for basic service products.

https://brightlifeuganda.com/products/
Two-hand Business Model

End user credit model

Example: Solar Today Uganda Ltd.

What can we notice in this relationship?

The provider communicates and promotes the partnership with microfinance institutions and commercial banks.
Examples of green products

Consumer Credit

Dedicated or non-dedicated loan

FONDE ENERGÍA

SIMULADOR DE CRÉDITOS  LEER MÁS

PERU - Cooperativa Fondesurco
Examples of green products

Distribution System

Usage of branches for delivering products
Examples of green products

Loan to microentrepreneur

Microfranchises

Crediverde Energía

Convierte tu unidad productiva en un aliado de las tecnologías ecoeficientes. Conoce más

» Más Información

COLOMBIA - Bancamía
Examples of green products

Monitoring and evaluation of impact of energy access

Monitoring for carbon credits

Gold Standard visit to client of improved cookstove
Examples of green products

**Loan for a Solar Powered LED Lantern**

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<tr>
<th>S. No</th>
<th>Particulars</th>
<th>Detail</th>
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<tr>
<td>0</td>
<td>Total Loan Amount</td>
<td>1,250</td>
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<tr>
<td>1</td>
<td>Interest Rate - Flat</td>
<td>6.25%</td>
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<tr>
<td>2</td>
<td>Interest Rate - IRR</td>
<td>26.14%</td>
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<td>3</td>
<td>Interest Amount</td>
<td>78.00</td>
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<td>4</td>
<td>Installment Amount</td>
<td>50.00</td>
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<td>5</td>
<td>Period (Weeks)</td>
<td>25</td>
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<td>6</td>
<td>Loan Processing Fees</td>
<td>1%</td>
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<td>7</td>
<td>Loan Cover Fees</td>
<td>0%</td>
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<tr>
<td>8</td>
<td>Downpayment</td>
<td>78.00</td>
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<td>9</td>
<td>Up front payment (LCF+DP)</td>
<td>91.00</td>
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<th>Opening Balance</th>
<th>Installment</th>
<th>Principal</th>
<th>Interest</th>
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</table>

* All values in Indian Rupees (INR)

** 1 USD = 50 INR

ANOJ VISWANATHAN, Singapour University
3.6. Green loans for clean water – sanitation “WASH”
Ex. of Green Practices and Technologies:
Clean water – sanitation

Clean water-sanitation
• Clean water filters
• Water tanks
• Water connection
• New private toilet
• Low-flow fixtures
Green credits: Water, sanitation and hygiene (WASH)

Microcredit for Water Supply and Sanitation is the application of microcredit to provide loans to small businesses and households to increase access to an improved water source and sanitation.

Microcredits are a complementary or alternative approach to enable the poor to access water supply and sanitation.

Source: Microsave
The funds are allocated either to:

- **small independent water suppliers that generate an income stream by selling water,**

- either to households in order to finance:
  - domestic connections,
  - plumbing installations or
  - on-site sanitation facilities such as latrines
Many microfinance institutions have limited experience in financing investments in water supply and sanitation.

Green credits: Water, sanitation and hygiene (WASH)

A water connection can significantly reduce a family's water expenses if they previously had to rely on water vendors, saving money on loan repayments.

Although there have been many pilot projects in both urban and rural areas, only a small number of them have been scaled up.
Example of WASH product

SME loans for community-managed or small private service providers

Loans for community-based organization that manages piped water supply system

Kenya - KREP Loan
3.7. Green loans for Sustainable agriculture and adaptation to climate change
### Ex. of Green Practices and Technologies: Sustainable agriculture, livestock, fishery

<table>
<thead>
<tr>
<th>Technologies</th>
</tr>
</thead>
<tbody>
<tr>
<td>- organic fertilizers</td>
</tr>
<tr>
<td>- soil conditioning</td>
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<td>- conservation agriculture</td>
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<tr>
<td>- agroecology</td>
</tr>
<tr>
<td>- crop diversification</td>
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<td>- drainage systems</td>
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<td>- ecotourism</td>
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<td>- firewall</td>
</tr>
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<td>- organic farming</td>
</tr>
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<td>- beekeeping</td>
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<td>- seed banks</td>
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<td>- windbreak</td>
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<tr>
<td>- live fences</td>
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<td>- family orchards</td>
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<td>- filter dams</td>
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<td>- greenhouses</td>
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<td>- vermicompost</td>
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<td>- fog trap</td>
</tr>
<tr>
<td>- sustainable forest management</td>
</tr>
<tr>
<td>- infiltration pits</td>
</tr>
<tr>
<td>- integrated nutrient management</td>
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<td>- agro-sylvo-pastoral systems</td>
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<td>- integrated pest control</td>
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<td>- agroforestry systems</td>
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<td>- natural retaining walls</td>
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<td>- permaculture</td>
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<td>- sylvo-pastoral systems</td>
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<td>- aquaculture</td>
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<tr>
<td>- agricultural terraces</td>
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<td>- soil restoration</td>
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<td>- mixed nurseries</td>
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<td>- crop rotation</td>
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<td>- no-till systems</td>
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<tr>
<td>- association of cultures</td>
</tr>
<tr>
<td>- managed grazing</td>
</tr>
<tr>
<td>- improved pasture (GMO free)</td>
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<td>- forage plants</td>
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<tr>
<td>- filter for dirty water from agricultural production</td>
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<tr>
<td>- resilient seeds (GMO-free)</td>
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<tr>
<td>- direct drilling</td>
</tr>
<tr>
<td>- intelligent storage of agricultural production</td>
</tr>
<tr>
<td>- precision fertilization</td>
</tr>
<tr>
<td>- protection of coastal wetlands (with associated fishing)</td>
</tr>
<tr>
<td>- restoration of coastal wetlands (with associated fishing)</td>
</tr>
</tbody>
</table>

Source: Not specified
Example: EbA solution

A catalog developed by MEbA ONU Environnement: it contains the description of 40 EbA solutions financed or able to be financed by MFIs:

- Description
- Place of application
- Dangers and impacts addressed
- Method of implementation
- Inputs and costs
- Ecosystem benefits and economical
- Limiting factors
- Lessons learned

Some concepts and definitions

Microfinance institutions can finance practices and technologies dedicated to agricultural production or livestock which can:

(a) improve customer productivity or the quality of production;
(b) reduce clients' vulnerability to climate change or environmental degradation;
(c) protect ecosystems and reduce greenhouse gas emissions

These practices and technologies include what are normally referred to as:
- Nature-based solutions;
- Ecosystem-based adaptation solutions;
- Climate smart agriculture solutions

Source: YAPU
## Example: EbA solutions (Ecosystem-based adaptation)

### Support to agriculture
- Organic fertilizers
- Soil conditioning
- Rainwater tanks
- Drainage systems

### Ecological support
- Sustainable forest management
- Seed Filtering barricades banks
- Mixed plant nurseries

### Agricultural practices
- Biological agriculture
- Crop diversification
- Crop rotation
- Sustainable management of parasites

### Biological agriculture
- Permaculture

### Technology
- Efficient irrigation
- Solar dryer
- Solar hydroponics
- Greenhouses
- Fish farming

Source: EbA solutions (Ecosystem-based adaptation)
The objectives of the MEbA project

- Increase the capacity of MFIs to finance EbA alternatives (ecosystem-based adaptation)
- Strengthen the client's capacity to implement adaptation options
- Influence national and international public policies to promote adaptation through microfinance
Evolution of the MEbA project

**Implementing Partners:**
- UN Environment
- YAPU
- Strategic Partners:
  - BNP Paribas
  - Fondation Grameen Credit Agricole
  - BBVA MicroFinanzas
  - Bancoldex

**Phase 1: (2012-2017)**
- 5 MFIs associated
- 2 countries
- 4 million EUR
- **Latin America**: Colombia, Peru, Bolivia, El Salvador, Dominican Republic and Costa Rica
- **Sub Saharan Africa**: Senegal, Ivory Coast, Benin, Burkina Faso, Rwanda

**Phase 2: (2018-2020)**
- 13 MFIs associated
- 9 countries
- 1 million EUR

**2021**
- 35 MFIs associated

**Source:** MEBA - Model for Ecosystem-Based Adaptation
Evolution of the MEbA II project
Benefits and results

Avantages de MEbA :

- De meilleurs écosystèmes
- Augmentation de la productivité et de la qualité
- Revenu diversifié
- Moins de risques de pertes dues aux événements climatiques

<table>
<thead>
<tr>
<th>Nombre de crédits EbA octroyés</th>
<th>Investissement privé vers EbA</th>
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<tr>
<td>17.870</td>
<td>$30,699,583</td>
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Source:
3.8. Green loans for Circular economy / others
Ex. of Green Practices and Technologies: Circular economy

**Circular Economy**
- recycling
- waste management
- collection of used material, appliances, second hand clothes, glasses, cans, etc. for re-use purposes
- production of products from used materials appliances, second hand clothes, glasses, cans, etc.
- re-sales of products generated by sustainable production or recycled production and/or locally produced
- electric vehicles,

- sustainable mobility or efficient vehicles
- hybrid vehicle
- clean tech (other than energy)
- reduced food waste
- green building products
Define the potential problems and benefits of the recycling product

Ex. Funding to MSMEs

<table>
<thead>
<tr>
<th>Product</th>
<th>Potential Problems</th>
<th>Advantages</th>
</tr>
</thead>
</table>
| Credits / Other funding to MSMEs | • Project management income from waste do not cover necessarily the investment initial (NPV <0)  
• Difficulty devaluation project risk (lack of data on the management of waste and their valuation) | • There is a clientele… Recycling business plan in Africa which are viable (we have seen for example Wecyclers in Lagos) |

Source: "Panel Discussion on African Clean Cities Platform as a Vehicle to Promote Investment in Waste Management in Africa  
→ 28th June 2018 1st ACCP Annual Meeting Rabat, Morocco adapted by Silvia Recupero"
Enda Tamweel's experience in Tunisia

2) Contact rag dealers and recycling collection centers

Eligibility criteria:
Having or wanting to create a recycling activity, and which are from:

- NOT Tunisian nationality or residence permit valid in Tunisia
  - Be between 18 and 65 years old
  - Be resident in the intervention areas of Enda agencies
3.9. Verification / Monitoring Green Practices and Technologies
Verification of funded EbA solutions

Example: EbA verification indicators

1. INTERNAL REPORT TO INVESTORS
2. DEMONSTRATION OF THE IMPACT
3. BENEFIT FROM GREEN FUNDING
4. ASSESS THE LEVEL OF PROMOTION OF BIODIVERSITY
Green credits: Clean energy / energy efficiency

Verification and Monitoring

Indicators form the backbone of monitoring progress towards achieving the SDGs at local, national, regional and global levels.

"A strong indicator framework will turn the SDGs and their targets into a management tool to help countries develop implementation strategies and allocate resources accordingly."

Likewise, a report card to measure progress towards sustainable development, helps to ensure the accountability of all stakeholders to achieve the SDGs.

Source: Adams & Judd (2019)
Where does the data come from?

Energy surveys are an essential data collection tool.

Monitoring of energy access indicators (electricity and cooking solutions (stoves and fuels)) at household level.

Example: Kenya (HEDERA 2019)
Green credits: Clean energy / energy efficiency
Verification and Monitoring

At household level

Energy surveys are an essential data collection tool.

At stakeholder level

Rapid Household Energy Assessment Tool (HEART) for situational assessment and stakeholder mapping

Household level energy access survey

Example
Green credits: Water, sanitation and hygiene (WASH) Verification and follow-up

Monitoring indicators make it possible to understand the contribution and commitment of the organization to the achievement of the SDGs.
This indicators for monitoring the drinking water, sanitation and hygiene related elements of the SDG targets and reflects in-depth discussions with over 100 experts from over 60 organizations around the world.
Green credits: Water, sanitation and hygiene (WASH) Verification and follow-up

Digital measurement tools:

- Social demand and social acceptability of sanitation
- Impact assessment
## Suivi intégré de l'ODD 6

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<thead>
<tr>
<th>INDICATEURS</th>
<th>DÉPOSITAIRES</th>
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<td>6.1.1 Proportion de la population utilisant des services d'eau potable gérés en toute sécurité</td>
<td>OMS, UNICEF</td>
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<tr>
<td>6.2.1 Proportion de la population utilisant des services d'assainissement gérés en toute sécurité, notamment des équipements pour se laver les mains avec de l'eau et du savon</td>
<td>OMS, UNICEF</td>
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<tr>
<td>6.3.1 Proportion des eaux usées traitées en toute sécurité</td>
<td>OMS, ONU-Habitat, DSNU</td>
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<tr>
<td>6.3.2 Proportion des plans d'eau dont la qualité de l'eau ambiante est bonne</td>
<td>PNUMA</td>
</tr>
<tr>
<td>6.4.1 Variation de l'efficacité de l'utilisation des ressources en eau</td>
<td>FAO</td>
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<td>6.4.2 Niveau de stress hydrique : prélèvements d'eau douce en proportion des ressources en eau douce disponibles</td>
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<td>6.5.1 Degré de mise en œuvre de la gestion intégrée des ressources en eau (0-100)</td>
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<td>6.5.2 Proportion de bassins hydriques transfrontaliers où est en place un dispositif opérationnel de coopération en matière d'eau</td>
<td>UNESCO, CENUE</td>
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<td>6.6.1 Variation de l'étendue des écosystèmes tributaires de l'eau</td>
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<td>6.6.2.1 Montant de l'aide publique au développement consacrée à l'eau et à l'assainissement dans un plan de dépenses coordonné par les pouvoirs publics</td>
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<td>6.6.2.1 Proportion d'administrations locales ayant mis en place des politiques et procédures opérationnelles encourageant la participation de la population locale à la gestion de l'eau et de l'assainissement</td>
<td>OMS, PNUE, OCDE</td>
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</table>
Green credits: Water, sanitation and hygiene (WASH) - Verification and follow-up

Monitoring indicators make it possible to understand the contribution and commitment of the organization to the achievement of the SDGs.
3.10 Non financial services
Non-financial service I

To support customer engagement, generate capacity, and the positive results of green practices and technologies, training and technical assistance should be provided to customers:

a) how **reduce vulnerability** (climate or climate change, environmental degradation or pollution, fuel poverty, lack of drinking water or sanitation)

b) how **reduce negative environmental impacts**;

c) and how **promote positive environmental impacts** and create resilience
Non-financial service II

Non-financial services offered to clients should be focused on:

- Awareness raising

- Training for capacity building of clients to enable them to implement green practices and technologies on their own;

- Technical assistance: that is, specialized (and ongoing) support to help customers install, implement and maintain green practices and technologies.

This training and technical support should be provided up-front and on-going, and may include frequent events, online or offline, to engage customers.
6. What’s next?
...way forward for Green Inclusive Finance

The set of 4 workshops is finished, but we now look to listening to you on what are your needs, and opportunities, to work together on our way forward in:

“Green Inclusive Finance”
Thanks a lot for your presence and attention!

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