Overview of Green Growth Approaches for Private Sector Development
Green PSD Navigator – Overview of Green Growth Approaches for Private Sector Development

A publication by the Green Growth Working Group of the Donor Committee for Enterprise Development.

Authors: GlobalCAD, Barcelona, Spain
Design: Atelier Löwentor GmbH, Darmstadt, Germany

URL Links: Responsibility for the content of external websites linked in this publication always lies with their respective publishers.


This publication was commissioned and funded by the Deutsche Gesellschaft für Internationale Zusammenarbeit GmbH (GIZ), on behalf of the German Federal Ministry for Economic Cooperation and Development.

The Green PSD Navigator was researched and written by Johanna Klein, Frank Müller and Pablo Tiernö Streich (GlobalCAD) with support from Yan Chen, Florian Güldner and Jana Schulte Hürmann (GIZ) as well as Annegret Brauss (ITC), Anastasia de Santos (USAID), Guy Halpern (OECD) and Jan Wimaladharma (FCDO) from the DCED Green Growth Working Group.

This material has been prepared for discussion purposes only. As such, the material should not be regarded as incorporating legal or investment advice, or providing any recommendation regarding its suitability for your purposes. Conclusions expressed in this report do not necessarily reflect the views of the DCED or its members.

Cambridge, May 2022
We would like to thank everyone who supported the development of the Green PSD Navigator. The completion of this project could not have been accomplished without the support of the following colleagues, who supported the collection of approaches and tools, shared their experience and knowledge during brief interviews with the authors and supported the review process:

- Annica Cochu; Daria Gettueva (adelphi)
- Pawel Zylka (CSCP)
- Ella Duffy, Nabanita Sen Bekkers, Jim Tanburn (DCED)
- Alexander Charalambous (EU SWITCH to Green Facility)
- Thibaut Portevin (European Commission)
- Hannes Mac Nulty; Benjamin Simmons (GGKP)
- Steffen Felix; Kira de Groot; Asel Isagulova; Nadine Stoecker, Jens Windel (GIZ)
- Philipp Tepper (ICLEI)
- Muamer Niksic; Zenebe Uraguchi (Helvetas)
- Alec Crawford; Christian Ledwell (IISD)
- Isaac Cowan-Gore; Marlen de la Chaux; Mette Grangaard Lund; Marek Harsdorff; Merten Sievers (ILO)
- Ana Batalhone; Angela Giannini (ITC)
- Andrew Blazey; Enrico Botta (OECD)
- Bettina Heller; Minori Lee; Farid Yaker (UNEP)
- Ezy Safri (UN Global Compact)
- Ozunimi Lilian Iti; Vanessa Voelkel (UNIDO)

The final product is the result of knowledge sharing among DCED members. A special thanks to all of you for your valuable contributions.

HELP US IMPROVE THE GREEN PSD NAVIGATOR!

To continuously improve the content and resources compiled within this navigator as well as the overall user experience, we highly encourage you to provide feedback on the user-friendliness, benefits and areas for improvement to DCED and the organisations that have developed the respective tools. Feel free to reach out to us at admin@enterprise-development.org.
# TABLE OF CONTENTS

## 1 | About the Green PSD Navigator
- Background and Purpose
- Objectives and Target Group
- Definition of Main Concepts
- How to Use the Green PSD Navigator

## 2 | Green PSD Approaches, Tools and Case Studies
- Policy and Regulation
- Supporting Functions
- Company

## 3 | Results Measurement

## 4 | Conclusions and Main Lessons

## 5 | Appendices
- References
- Abbreviations

---

*Green PSD Navigator* Overview of Green Growth Approaches for Private Sector Development
1 ABOUT THE GREEN PSD NAVIGATOR
ABOUT THE GREEN PSD NAVIGATOR

1.1 | Background and Purpose  p. 7
1.2 | Objectives and Target Group  p. 8
1.3 | Definition of Main Concepts  p. 9
1.4 | How to Use the Green PSD Navigator  p. 10
Background and Purpose

In recent years, it’s been increasingly recognised that current economic growth is environmentally unsustainable. Green Growth, which means promoting economic development that ensures preservation of natural capital and maintenance of ecosystem services, has therefore emerged as a topic of growing interest and support in PSD programmes.

A multitude of initiatives, networks and organisations have adopted the concept of Green Growth in recent years, in particular following the 2012 Rio+20 Conference on Sustainable Development. Different approaches and tools have been designed and tested in the field by implementation agencies worldwide. However, the large diversity of approaches, partly explained by the variety in aspirations of donors and interventions, calls for a mapping and classification that makes it easier to share and compare lessons learnt, select suitable approaches and tools for Green PSD programmes, and to prevent duplication of efforts.

The Green PSD Navigator seeks to fill this current knowledge gap with regard to existing resources. It’s based on the DCED Green Growth Working Group’s initiative of creating an overview of green growth approaches and tools, and builds on the extensive collection of previous DCED publications, including the report Green Growth and Private Sector Development: Stocktaking of DCED Experiences (2014).

DCED GREEN GROWTH WORKING GROUP

The Green Growth Working Group (GGWG) of the Donor Committee for Enterprise Development (DCED) was established in 2011 as a response to the increasing interest in linking Green Growth concepts and Private Sector Development (PSD) strategies. Its goal is to support donors in their efforts to enable the private sector to generate environmentally sound, resource efficient and climate friendly growth whilst contributing to poverty reduction and employment creation.

The GGWG offers knowledge and guidance to its members, focusing on the collection as well as dissemination of successful experiences and lessons learnt on green growth activities.
Objectives and Target Group

The Green PSD Navigator presents approaches and tools used in PSD programmes that contribute to Green Growth, in the following referred to as ‘Green PSD approaches’. Designed as a hands-on, user-friendly knowledge product, it defines green growth in the context of PSD, outlines selected Green PSD approaches including related tools or other resources, highlights linkages between approaches at different intervention levels and provides evidence-based good practices, brief case studies and potential impacts achieved, where possible. This navigator seeks to contribute to the growing body of knowledge on how to advance economic development that is low-carbon, resource efficient and socially inclusive. Providing a systematic synthesis of relevant areas for action in the field of Green PSD, it intends to serve as a concise and illustrative reference document for programme and project developers in donor organisations and implementation agencies as well as interested development practitioners in the field. The key objectives are to share available resources, encourage mutual learning and facilitate policy coherence and complementarity of approaches taken among DCED members.

WHO IS THE GREEN PSD NAVIGATOR FOR?

Donors seeking an overview of Green PSD approaches and how these can be included in the design of new or existing programmes and/or how these can contribute to their development objectives and outcomes.

Development Practitioners— in particular those working in the field— looking for inspiration and trying to get an overview of Green PSD approaches that they can immediately put into practice during implementation, including the set of different types of instruments that have been developed and tested already.
Green Growth programmes and approaches are aimed at achieving economic growth that is environmentally sustainable.

Key green growth outcomes are:
- mitigation of and adaptation to climate change,
- protection of natural resources,
- decreased resource and carbon intensity,
- pollution reduction.

What is Green Private Sector Development?

Green Growth Approaches for Private Sector Development promote access to higher incomes, employment, products or services for the poor through private actors, while:
- maintaining healthy and productive ecosystems,
- using natural resources efficiently,
- promoting low-carbon and climate resilient development,
- preventing or remediating pollution,
- providing green jobs,
- enhancing social inclusion.

Private Sector Development is the range of strategies aiming to establish markets that function vibrantly and fairly, providing economic opportunities of quality to poor people at scale. Typical approaches include reform of the business enabling environment, market and value chain development, or partnering with individual companies to meet the sustainable development goals (private sector engagement).
HOW TO USE THE GREEN PSD NAVIGATOR

How to Make Best Use of this Navigator?

• This document is not intended to be read from beginning to end, but shall provide guidance on finding approaches, tools and case studies relevant for those working on Green PSD on the policy, supporting functions or company level.

• The different approaches, tools and case studies are intended to work as “stand-alone” entities and are understandable without the need to have read other parts of the Green PSD Navigator.

• The Green PSD Navigator provides an overview of the different available approaches and helps you to quickly find those relevant to your own work.

• The document is structured along three different intervention levels. Each intervention level comprises a variety of approaches. Under each approach, selected tools are detailed, and case studies as well as links to further tools and resources are provided.

• To make navigation easier, all approaches, tools and case studies follow the same outline and structure, using the same icons and design elements.

This overview of Green PSD approaches is by no means exhaustive. It instead lists those approaches that have been most commonly applied by the international development community and tools that are publicly available at the time of publication.
To successfully promote green private sector development (PSD), all levels of intervention should be considered. For easier navigation, the Green PSD Navigator considers approaches on the levels of policy and regulation, supporting functions and individual companies.

Approaches and tools in this category refer to interventions that primarily address governments and public sector organisations at the national or sub-national levels, including policy makers, legislators and agencies, to provide an overall framework of plans, rules and norms that give guidance and direction to the relevant stakeholders of green private sector development.

Approaches and tools in this category refer to interventions that are directed at intermediary organisations and business development service providers, including associations, chambers and other advocacy groups of the private sector, and that lead to or promote/facilitate green market or value chain development.

Approaches and tools in this category refer to interventions that directly target businesses, and that lead to or promote/facilitate the greening of their products and services, strategies, operations, processes and activities. Target businesses range from micro- to large scale but oftentimes, there is an explicit focus on micro-, small and medium-sized enterprises (MSME).
In this navigator, each intervention level encompasses a number of approaches that are further supported by tools and case studies to provide basic knowledge and practical guidance on how to design and implement green private sector development programmes.

**Addressing Different Levels of Intervention**

Categories that reflect different intervention angles for Green PSD, providing a theory of change as well as guidelines and good practices for implementation.

Practical instruments developed to equip development practitioners with an overview of concepts, methodologies and other resources, and to support them in achieving the objectives of Green PSD approaches at different stages of the project cycle, often with a specific target group and geographic/sector focus.

Examples of successfully implemented projects in specific focus regions, presenting the results achieved by the tool/approach and its impacts.
Linking Different Approaches

Advancing the transition to a Green Inclusive Economy through Green Private Sector Development requires changes on the policy, the supporting functions and the company level.

**Approaches are generally not stand-alone** but should be part of a broader intervention logic leading to the necessary changes on all levels.
Cross Cutting Aspects: Gender and Inclusiveness

The Green PSD Navigator reflects the relevance of systematically including gender and inclusiveness by integrating information on the two topics in each approach and tool.

- Climate change and environmental degradation undermine livelihoods, impacting the poorest and most vulnerable, disproportionately women and children, and drive 26 million people into poverty each year. Inclusive Growth as well as Gender Equality and Women's Economic Empowerment (WEE) thus have to form an intrinsic part of the concept of Green PSD and related programming efforts by donor organisations and implementation agencies.

- Transformation processes and Green PSD approaches impact on, and are impacted by, gender norms in society. Green Growth is not automatically inclusive and may contribute to increasing gender inequality and poverty. Gender roles and biological differences mean women and men face different vulnerabilities, risks, and impacts of environmental changes resulting from current economic patterns.

- Inclusive Green Growth is not possible without considering the diverse economic needs, lifecycle risks, and behaviours within different population segments of women and men.

- Interventions and policies must be developed to ensure maximised benefits and minimised costs to the poor and most vulnerable while policies and actions with negative irreversible impacts must be avoided following a Do-No-Harm approach.

> RECOMMENDED FURTHER READING

DCED has developed a series of guidance sheets that provide an introduction to the nexus between Green Growth and Gender.

> GENDER/INCLUSIVENESS

Linkages and/or integration of gender equality/women empowerment and inclusivity of vulnerable groups.

> APPROACHES

Relevance of gender equality and women empowerment, as well as inclusivity of vulnerable groups.
HOW TO USE THE GREEN PSD NAVIGATOR

Navigation Hints

The Navigator is designed as an easy-to-browse interactive tool, which allows to navigate through the different chapters and sections throughout the document by using a set of tabs, links, and panels.

- You can always go back and forth between the different intervention levels by using the icons on the right of the upper menu bar.
- At any point in the Navigator, you can go back to the table of contents as well as to an overview of the approaches and the tools by using the icons on the left of the upper menu bar.
- Internal links can be accessed to navigate through the document, while external links lead to supporting material and external sources.
- Clicking on the reference numbers leads you to the full list of references.
2 GREEN PSD APPROACHES, TOOLS AND CASE STUDIES
GREEN PSD APPROACHES

POLICY & REGULATION

Green Economic and Employment Strategies and Policies p. 21
Eco-Industrial Parks p. 56

Supporting Functions

Macroeconomic Modelling for Green Growth p. 29
Business Support Organisations as Promoters of Green Growth p. 64
Multi-Stakeholder Platforms for Market Transformation p. 71
Green and Climate Resilient Value Chains p. 76
Green Finance for SMEs p. 83

Resource Efficiency & Circular Production p. 97
Climate Change Adaptation p. 104
Eco-Labeling, Sustainability Reporting and Voluntary Standards p. 111
Green Business Models & Eco-Innovation p. 117

Company

Macroeconomic Modelling for Green Growth p. 29
Green Fiscal Policies p. 34
Green Public Procurement p. 39
Green Investment Climate p. 46
Eco-Industrial Parks p. 56
Business Support Organisations as Promoters of Green Growth p. 64
Multi-Stakeholder Platforms for Market Transformation p. 71
Green and Climate Resilient Value Chains p. 76
Green Finance for SMEs p. 83
Resource Efficiency & Circular Production p. 97
Climate Change Adaptation p. 104
Eco-Labeling, Sustainability Reporting and Voluntary Standards p. 111
Green Business Models & Eco-Innovation p. 117
## GREEN PSD TOOLS

<table>
<thead>
<tr>
<th>POLICY &amp; REGULATION</th>
<th>SUPPORTING FUNCTIONS</th>
<th>COMPANY</th>
</tr>
</thead>
<tbody>
<tr>
<td>A Toolkit of Policy Options to Support Inclusive Green Growth (AfDB, OECD, UN &amp; WB)</td>
<td>Sustainable Industrial Area Toolbox (GIZ)</td>
<td>RECP Navigator (GIZ)</td>
</tr>
<tr>
<td>Greening with Jobs – GAIN Training Guidebook (ILO)</td>
<td>International Framework for</td>
<td>SCORE Training (ILO)</td>
</tr>
<tr>
<td>Green Budget Tagging (OECD)</td>
<td>GreenToCompete Hubs (ITC)</td>
<td>The Climate Expert (GIZ)</td>
</tr>
<tr>
<td>Procura+ Manual (ICLEI)</td>
<td>Investment and Technology Promotion Offices (UNIDO)</td>
<td>Standards Map and Self-Assessment Tool (ITC)</td>
</tr>
<tr>
<td>Sustainable Public Procurement</td>
<td>Partnerships 2030 (GIZ)</td>
<td>GRI Standards</td>
</tr>
<tr>
<td>Green Investment Strategy Diagnostic (GIZ)</td>
<td>Climate Expert: Supporting Climate Adaptation Finance for SMEs (GIZ)</td>
<td></td>
</tr>
</tbody>
</table>
POLICY AND REGULATION
# POLICY AND REGULATION

## APPROACHES

<table>
<thead>
<tr>
<th>Topic</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Green Economic and Employment Strategies and Policies</td>
<td>21</td>
</tr>
<tr>
<td>Macroeconomic Modelling for Green Growth</td>
<td>29</td>
</tr>
<tr>
<td>Green Fiscal Policies</td>
<td>34</td>
</tr>
<tr>
<td>Green Public Procurement</td>
<td>39</td>
</tr>
<tr>
<td>Green Investment Climate</td>
<td>46</td>
</tr>
</tbody>
</table>

## TOOLS

<table>
<thead>
<tr>
<th>Tool</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>A Toolkit of Policy Options to Support Inclusive Green Growth</td>
<td>24</td>
</tr>
<tr>
<td>(AfDB, OECD, UN &amp; WB)</td>
<td></td>
</tr>
<tr>
<td>Greening with Jobs – GAIN Training Guidebook (ILO)</td>
<td>26</td>
</tr>
<tr>
<td>The Integrated Green Economy Modelling Framework (UN PAGE)</td>
<td>32</td>
</tr>
<tr>
<td>Green Budget Tagging (OECD)</td>
<td>37</td>
</tr>
<tr>
<td>Procura+ Manual (ICLEI)</td>
<td>42</td>
</tr>
<tr>
<td>Sustainable Public Procurement Implementation Guidelines (UNEP)</td>
<td>44</td>
</tr>
<tr>
<td>The Business Guide for Sustainability in Foreign Investments (ITC &amp; FCDO)</td>
<td>50</td>
</tr>
<tr>
<td>Green Investment Strategy Diagnostic (GIZ)</td>
<td>52</td>
</tr>
</tbody>
</table>
DESCRIPTION

Green economic and employment strategies and policies integrate green and inclusive principles into national and sub-national policy planning, guiding the management of private sector development and associated employment trends. They set the overarching framework conditions for mid- and long-term decisions determining the direction of economic development, including drivers of and barriers to Inclusive Green Growth. Legislative and regulatory measures initiate, steer and accelerate the desired structural change towards green and healthy economies.¹

UNDESA proposes a typology that covers the breadth of complementary policy instruments based around the “6 Is”:²

1) Internalising environmental externalities (e.g. taxes, charges, fees, levies and cap-and-trade permit or certificate systems),
2) Incentivising desired private sector behaviour (e.g. investment incentives, tax exemptions, subsidies, feed-in tariffs),
3) Strengthening institutions and regulatory frameworks (e.g. norms, standards, labelling, mandatory targets, property right laws and governance),
4) Investment (e.g. green public procurement, natural capital, human capital, infrastructure, innovation),
5) Information (e.g. voluntary approaches such as labels, green indicators and progress monitoring),
6) Inclusion (e.g. labour market policies and social protection).

GENDER/INCLUSIVENESS

- Making green economic and employment strategies and policies inclusive ensures access of disadvantaged people to basic services and resources, improving their livelihoods and securing their rights, improves citizen-government communication, and drives investments.³

AREA OF APPLICATION AND RELEVANCE

- Relevant to the economy as a whole, addressing all types of industries and sub-sectors, products and services, entrepreneurs and businesses (from producers and MSME to large scale enterprises), consumers as well as investors and lenders.
- Potential to establish new and to transform existing markets, enabling a transition to a green economy with positive economic and employment effects.
- Tools comprise methodologies and guides to help policy makers develop sound strategies for green and inclusive growth, from the analysis of potentials to sector specific policy instruments.
LIMITATIONS AND CHALLENGES

• Green economic and employment strategies and policies can only be as good as the data and information they are based on.

• Limited capacities and resources, as well as perceived low prioritisation in comparison to other topics, will therefore affect the quality and in consequence the effectiveness of green economic and employment strategies and policies.

DO’S AND DON’TS

There is no one-size-fits all approach. Green economic and employment strategies and policies need to be developed in consideration of the specific country context, taking into account for instance the level of economic development, existing policies and regulations, the overall institutional set-up, as well as available resources and capacities.

Key principles to take into account include: (i) policy integration (economic, social and environmental objectives), (ii) ensuring an intergenerational timeframe, (iii) anchoring it in a sound analysis and assessment, (iv) make it measurable by basing it on indicators and targets as well as ensuring monitoring and evaluation, (v) coordination with and involvement of all relevant stakeholders, and assurance of cross-institutional involvement from different sectors, and (vi) linking national, regional and global levels.

Effective green economic and employment strategies and policies furthermore require:

• High-level political leadership, clear roles and policy mandates,
• Consideration of synergies and trade-offs and the identification of funding sources,
• Defining a broad, complementary mix of policy and economic instruments.

Note: Strategies and policies provide the overarching frame for Green PSD. In light of this steering function, there are valuable links to any other approach on the supporting functions and company level, dependent on the specific context and direction of the strategies and policies.

WORKS WELL WITH:

Macroeconomic Modelling for Green Growth
Green Fiscal Policies
Green Public Procurement
Green Investment Climate
TOOLS DETAILED IN THIS NAVIGATOR

- A Toolkit of Policy Options to Support Inclusive Green Growth (AfDB, OECD, UN and WB)
- The Green Jobs Assessment Institutions Network (GAIN) Training Guidebook (ILO)

OTHER TOOLS AND RESOURCES

- Enhancing the Quality of Industrial Strategies EQuIP (GIZ & UNIDO): Integrated methodology and capacity-building package for industrial diagnosis.
- Greening a SME Strategy (GIZ): Identification of suitable green growth measures and how they can be integrated into existing private sector (MSME) development strategies.
- Practitioners Guide to Strategic Green Industrial Policy (UN PAGE): Overview of all aspects of green industrial policy, including different policy instruments that can be used as well as a step-by-step explanation on how strategic industrial policy can be developed.
- Environmental Policy Toolkit for SME Greening (OECD): Recommendations and measurement tools, including indicators, to support countries’ efforts to achieve greening of SME.

RECOMMENDED FURTHER READING

- Exploring Green Economy Strategies and Policies in Developing Countries: Insights into green economy initiatives, national strategies and policies, and their effectiveness in developing contexts.
A Toolkit of Policy Options to Support Inclusive Green Growth (AfDB, OECD, UN and WB)

DESCRIPTION

Jointly developed by AfDB, OECD, UN and WB, this toolkit provides an overview of various tools that can facilitate the development of green growth strategies. Directed towards policy makers, it

• introduces a seven-step guide to developing an Inclusive Green Growth strategy anchored in a national development framework and development goals,
• provides a list and typology of green policy tools and instruments that foster green growth along with their main functions,
• discusses the role of knowledge sharing and capacity building, related challenges and how to tackle them.

In the annex, the toolkit features fact sheet-style summaries for 17 selected tools and instruments, covering for each a brief description, examples of application, potential benefits and impacts, good practice and additional resources. It’s described as a living document to be updated periodically.

ADVANTAGES

• A valuable compilation of common tools for the development of Inclusive Green Growth strategies that provides orientation and covers different thematic areas such as energy, water, and climate change resilience.

LIMITATIONS

• While considered a living document, the toolkit has been last updated in 2013.
• The tools, instruments, methodologies and approaches introduced represent a selection only and not a comprehensive list.

TARGET GROUP

• The toolkit primarily addresses policy makers who seek to drive the development of green growth strategies on country, regional, and/or city level.

GENDER/INCLUSIVENESS

• The toolkit includes selected tools that take gender aspects into account.
• Inclusiveness is part of a number of the described tools.

FOCUS (GEOGRAPHIC/SECTOR)

• With no specific geographic focus, the toolkit contains well known tools that can support any developing country with the ambition to design and implement Inclusive Green Growth policies.
• The toolkit contains non-sector specific tools with different functions, including incentivisation such as pricing pollution and resource use, tackling uncertainties when designing strategies, financing and investment, and monitoring.

EXTERNAL LINKS TO THE TOOL

• Toolkit Document
Lessons learnt from developing a framework and policies for Inclusive Green Growth include:

- A sound planning and coordination process driven by high-level leadership, ideally set in a context of political stability and following clear visions, objectives, targets and baselines are critical success factors.
- Solid analysis and communication of green growth benefits are important to prioritise actions and increase buy-in from political partners.
- It is key to initiate and implement organisational and institutional changes slowly, i.e. step by step, to drive green technology and innovation.
- Removing certain regulatory barriers, focusing on performance, and spurring competition through appropriate policy designs is more important than a specific technology focus.
- Private investors need predictable and long-term policy signals.
- Policies should come in a portfolio (not in silos) and respond to specific market failures and challenges.

Impacts

- Improving resource management and boosting productivity.
- Facilitating economic activity in sectors benefitting society as a whole in the long term.
- Lowering emissions of air pollutants.
- Reduce pressures on natural resources and protected areas.
- Relative decoupling of carbon emissions from economic growth.
- Driving green innovation and markets, including green infrastructure.
The Green Jobs Assessment Institutions Network (GAIN) initiated by ILO developed this guidebook on how to develop green jobs assessments. It seeks to enhance the capacity of different public and private stakeholders by using employment projections for national development planning for green growth and in response to climate change related challenges.

The guidebook consists of the following four modules:

- Module 1 – creates an understanding of green economy, country strategies, green employment assessment and projection models,
- Module 2 – introduces statistical tools that help understanding the structure and employment patterns of green industries,
- Module 3 – shows how to build input-output based employment projection models featuring green industries,
- Module 4 – explains the assessment of income distribution effects.

**Target Group**
- Policy makers, statisticians, analysts, and researchers in ministries and government agencies, employer & worker organisations, research institutions and universities, and international organisations.

**Gender/Inclusiveness**
- The guidebook makes references to taking gender and specific vulnerable groups into account.

**Focus (Geographic/sector)**
- The focus is on employment effects of green industries to facilitate development planning at local, regional and national levels with no specific geographical or sectoral focus.

**Advantages**
- Introduces statistical methods and approaches for employment assessment, including data collection and processing, thereby highlighting their respective requirements, strengths and limitations.
- Provides insightful case studies.
- Can serve as basis for training courses.

**Limitations**
- The guidebook provides a closed economic model as opposed to a full macroeconomic model with long-term perspective.

**External Links to the Tool**
- Greening with Jobs – GAIN Training Guidebook: How to Measure and Model Social and Employment Outcomes of Climate and Sustainable Development Policies
LESSONS LEARNT

• Establishing an employment model as an evidence-based policy tool is a rather long process for long-term planning and strategy, which may be difficult to convince policy makers to make use of when their focus is on comparatively quick results and actions.

• The process and achieving meaningful results rely heavily on quality of data, political will and the capacities of the respective government institutions.

IMPACTS

The modelling approach in the GAIN Training Guidebook can

• show to which extent selected economic sectors/industries would benefit employment and the economy at large in pursuit of green growth,

• provide a basis to further develop a strategy that drives green growth, especially along the identified sectors,

• assist in strengthening the capacities of relevant actors of green (employment) policy development and help coordinating their related activities.
Based on the GAIN approach, UNDP and ILO assisted Nigeria in analysing the socio-economic impacts and structural changes resulting from the country's intended mitigation measures reflected in its NDCs. Taking into account economic data (supply and use table), the analysis projected and evaluated the medium-term and long-term effects on job creation, growth potential, and GHGs. Key findings include:

- Policies incentivising climate-smart agriculture production facilitate the creation of new jobs (up to 3 million) even without the need for major investments.

- Next to the investment size, it is the type of investment that determines the job creation, GDP, and GHG-emissions reduction potential (e.g., biofuel and cement policies each can create up to 800,000 new jobs, but while in the cement sector $11.3 bn of investment are required, it would only be $3.6 bn in the biofuel sector).

- Because of the importance of firewood and charcoal in Nigeria, biomass-related policies create higher impacts in terms of jobs and GHG emissions reduction than policies targeting the power industry.

- It is necessary that climate policies are accompanied by just transition policies in order to be effective and simultaneously make a positive contribution to development (e.g., work and income lost in one sector due to climate policies requires to have alternative employment opportunities and social protections in place as to ensure the transformation to a low-carbon, environmentally-friendly economy is socially just).
Macroeconomic Modelling for Green Growth

DESCRIPTION

Green Macroeconomic modelling can be used to (1) understand the past and present, (2) predict (forecast) the future and (3) test alternative futures. In all three cases, the models aim to replicate a process of testing similar to that in a laboratory, in which a single input stimulus is changed at a time and the response to that input is tested. Macroeconomic modelling for green growth contributes to establishing a factual basis for the development and evaluation of green economic and employment strategies, policies and regulations. Modelling can be applied as part of a policy analysis.

• before the actual implementation of the interventions and policies (ex ante) to draft desirable or alternative futures, generate different scenarios and alternatives for action, identify issues, impacts, risks, resource availability and allocation, and support agenda setting, prioritising of different policy options and formulating respective policies.

• after interventions and policies have been implemented (ex post) to evaluate the impact of policies against a baseline scenario, contrast initial assumptions, conditions and historical data with the projected and effectively achieved performance, and understand how key variables relate to each other. This will improve the underlying modelling by updating projections, and adjusting or refining set policy targets, objectives, and measures.

GENDER/INCLUSIVENESS

• Especially with respect to employment it is important to take into account distributional impacts related to gender, age groups, regional differences and worker categories in order to develop appropriate and inclusive policies and measures.

AREA OF APPLICATION AND RELEVANCE

• Relevant to policy makers, policy analysts, statisticians, researchers in governmental departments, research institutions and international organisations.

• Can be used to support climate change mitigation and adaptation strategies, to evaluate policy options for structural change, to assess employment effects or overall national development linked to Green PSD.

• Tools comprise guides on different modelling approaches and related methodologies, data sources, institutional capacity building etc.
LIMITATIONS AND CHALLENGES

• Each modelling approach comes with its very own advantages and disadvantages—including limitations—in comparison to other modelling approaches.

• Macroeconomic modelling is technically demanding, requires specialised qualifications and is a complex undertaking.

• The validity of the model or experiment depends on how well the model can provide a representation of reality. Models are simplifications of reality. Macroeconomic modelling for green growth can be very helpful but may also be misleading, dependent on whether relevant elements are adequately taken into consideration within a model and whether assumptions run counter or with reality.

DO’S AND DON’TS

Consider involving specialists and research institutions in the field of macroeconomic modelling.

Selecting, creating and/or customising the appropriate model is key, taking into account the following criteria:

• Applicability to the context of the respective country,

• Potential and ease of customisation of the model,

• Need for and/or possibility of stakeholder consultations,

• Transparency of the model,

• Data needs and availability,

• Sectoral coverage,

• Time and resource intensity for customisation and implementation.

WORKS WELL WITH:

- Green Economic and Employment Strategies and Policies
- Green Fiscal Policies
TOOLS DETAILED IN THIS NAVIGATOR

• The Integrated Green Economy Modelling Framework (UN PAGE)

OTHER TOOLS AND RESOURCES

• Employment Assessment of Renewable Energy (GGGI): Employment assessments help to identify job creation potential in a specific sector as well as in associated sectors along the entire value chain and for different scenarios. It can assist in estimating direct, indirect and induced jobs that can be created by investing in a specific sector, here specifically renewable energy. Might be adapted to other contexts.

• Climate Economic Modelling (IISD): Practitioner’s guide to help integrate climate economic modelling results in sustainable economic development processes. Developed as part of the Policy Advice for Climate Resilient Economic Development (CRED) project implemented by GIZ.

RECOMMENDED FURTHER READING

• Using Models for Green Economy Policy Making (UNEP): This report offers a framework to review and select methodologies and models while providing additional information on tools that are currently used to support the analysis of green economy strategies at national and sectoral levels.
The Integrated Green Economy Modelling (IGEM) framework was developed by the Partnership for Action on Green Economy (PAGE) in collaboration with modelling experts. The IGEM aims to support countries in simulating and analysing the cross-sectoral impacts of inclusive green economy policies in quantitative terms and to provide practical guidance on setting green economy targets in line with selected SDGs. The framework

- provides a methodology for using green economy policy assessment and modelling techniques to analyse the impact of green policies and investments,
- reviews the linkages between three key models, namely (1) system dynamics, (2) computable general equilibrium, and (3) input-output and social accounting matrix,
- shows which policy questions can be addressed with IGEM,
- presents use cases and scenarios from a theoretical perspective as well as via practical examples.

### TARGET GROUP
- Policy makers, academic researchers, development planners.

### GENDER/INCLUSIVENESS
- The IGEM framework allows taking gender and inclusiveness into account.

### FOCUS (GEOGRAPHIC/SECTOR)
- The IGEM takes a cross-sectoral perspective and can be applied in any country context, as it does not have a specific geographical focus.

### ADVANTAGES
- Methodologically advances economic modelling approaches towards inclusive green economy modelling.
- Provides governments and development planners with a quantitative tool for green economy policy development.
- Provides practical examples.

### LIMITATIONS
- An understanding of the fundamentals of economic modelling and related statistics is necessary.
- The framework is limited to three modelling approaches. It is still in an early stage and will be further developed in the future.

### EXTERNAL LINKS TO THE TOOL
- The Integrated Green Economy Modelling Framework – Overview
LESSONS LEARNT

• Ownership of the model is critical—ensure active involvement of local experts and representatives of line ministries, state bodies and academia in the validation of the model structure and modelling results.

• Creation of demand for evidence-based policy design is critical. This includes interest of private sector actors for the process and awareness raising of high-level policy makers about a new approach, e.g. through the submission of relevant policy briefs on a constant base.

• Ensure institutionalisation of the model which includes: (i) capacity building for model users and model developers, (ii) creation of an inter-ministerial working group for continuous exchange about modelling approaches and their support to policymaking, (iii) requests to generate new analysis on a monthly or bi-monthly basis for informing ongoing sectoral and national planning exercises.

IMPACTS

• The approach allows various national stakeholders to evaluate, assess and prioritise various intervention options. It creates capacity for policy analysis and evidence-based decision making for sustainable development. It ensures private sector participation on identification of policy measures and further implementation.

• While the focus of policy interventions is Green Economy, the model can also be used to support a variety of additional policy assessments both at the national and sectoral level. Additional international streams of work related to the model include monitoring performance for the SDGs, communications to the UNFCCC and the development of Environmental and Economic Accounts (e.g. SEEA Central Framework and SEEA EEA).
Green Fiscal Policies

DESCRIPTION

Green fiscal policies refer to direct taxation and government spending that provide stimuli to markets to develop into a greener and more inclusive direction, shaping and incentivising businesses to go down a more sustainable path. Governments typically make use of fiscal and budgetary tools to address environmental challenges such as climate change, pollution, waste, or biodiversity loss. Measures can include but are not limited to:

- Sending price signals that facilitate a shift towards more sustainable consumer and business behaviour through environmental taxes and charges,
- Aligning public expenditures with environmental goals—making public spending more effective—through reformation of public budget,
- Leveraging private financing for green investment by providing fiscal measures towards green finance mechanisms,
- Raising public revenues which can be used for green investment or investments into health and education.

GENDER/INCLUSIVENESS

- Fiscal policies in general can have significant influence on mitigating inequalities and should therefore use the potential to promote equity while driving green private sector development.

AREA OF APPLICATION AND RELEVANCE

- Relevant to policy makers at national and sub-national level, policy analysts and advisors in governmental bodies, research institutions and international organisations.
- Support the use of public financial levers for the development of Green PSD, including markets for greener and more climate resilient products and services.
- Tools comprise methodologies, guides and training modules to support policy makers in understanding how to optimise a country’s public expenditures, on green fiscal reforms, subsidies and other fiscal instruments.
LIMITATIONS AND CHALLENGES

• To date, the different options to finance green investments in macroeconomic models of climate change are insufficiently explored and models that explicitly present the treatment of money and the financial sector are scarce.¹³

• No one-size-fits-all solution for the design and combination of fiscal policy instruments but national context is a key point to take into consideration.

DO’S AND DON’TS

• As there is no stand-alone green fiscal policy instrument that can serve as a silver-bullet, effective measures need to be combined in a complementary, synergetic and well-coordinated manner.¹⁴

• Design and choice of policy instruments need to take into account the goal of the policy measure, the size and characteristics of the market failures that inhibit the break-through of green solutions as well as the political, economic, and cultural context on national or sub-national level. More specifically, the following aspects should be taken into account: (1) country history, (2) cost effectiveness and budgetary impact of measures, (3) environmental goals, (4) adoptability and compliance incentives, (5) uncertainty and price signals to investors, (6) effects on equity, (7) institutional and policy capacity, (8) the specific fiscal environment, and (9) the integration of relevant governance processes.¹⁵

• With respect to mitigating inequalities, public spending, especially transfers, proves to be more effective than public revenue instruments.¹⁶

WORKS WELL WITH:

POLICY & REGULATION:

→ Green Economic and Employment Strategies and Policies
→ Macroeconomic Modelling for Green Growth

Note: Green fiscal policies can influence Green PSD in various ways. For this reason, there are valuable links to any other approach on the supporting functions and company level, dependent on the specific context and direction of the green fiscal policies.
## OTHER TOOLS AND RESOURCES

- **Training for Environmental Fiscal Reform** (GIZ & FÖS): Interactive training methodology for policy makers that shows the benefits and different ways on how and why to work on environmental fiscal reform. For further information on the training and access to trainers, please contact FÖS [here](#).

- **Online Training on Green Fiscal Policy** (UN CC:Learn): Introduction to fiscal policy instruments and reform strategies available to policymakers to advance the green economy transition.

- **Climate Change – Knowing What You Spend. A Guidance Note for Governments to Track Climate Finance in their Budgets** (UNDP): Guidance note on climate budget tagging.

## RECOMMENDED FURTHER READING

- **Green Fiscal Policies: An Armoury of Instruments to Recover Growth Sustainably**: Explores how fiscal policies can be employed to deliver both socio-economic and environmental dividends with a focus on Brazil as a case study.

- **Fiscal Policy and Inclusive Growth in Advanced Countries: Their Experience and Implications for Asia**: Stocktaking of the inclusive fiscal policy experience of OECD member countries.

- **Climate Change Budget Tagging: A Review of International Experience** (World Bank 2021): Targeted towards development practitioners and governments, reviewing different climate budgeting tagging methodologies and climate budget tagging initiatives.

- **Green Fiscal Policy Network**: Provides tools, resources and other information to facilitate knowledge sharing and dialogue on fiscal policies for an inclusive green economy.
Green budget tagging is a useful tool in an overall approach to green budgeting. This introductory guidance was developed by the OECD under the Paris Collaborative on Green Budgeting in collaboration with institutional partners of the Coalition of Finance Ministers for Climate Action (IADB, IMF, UNDP, World Bank). It draws lessons from existing country practices and was informed by a series of round-table events with countries implementing this tool. The document aims to provide high-level guidance on how to pursue and integrate a coherent approach to green budget tagging as an effective tool to steer green public expenditure. This guidebook

- seeks to raise awareness of links between budget decisions and national sustainability objectives,
- introduces key questions and issues in designing and implementing green budget tagging effectively,
- helps governments in taking budget decisions towards national and international climate and environmental objectives,
- highlights effective support elements to and key challenges of green budget tagging,
- carves out key principles to effective green budget tagging,
- provides examples in the form of country snapshots.

**TARGET GROUP**

- Development practitioners, ministries of finance, and private consultancies.

**GENDER/INCLUSIVENESS**

- Gender and inclusiveness are not specifically addressed.

**FOCUS (GEOGRAPHIC/SECTOR)**

- There is no sector focus but it is pointed out that ideally all sectors and at least priority sectors such as agriculture, transport, energy, industry and the environment should be addressed.

**EXTERNAL LINKS TO THE TOOL**

- Green Budget Tagging—Introductory Guidance and Principles

**ADVANTAGES**

- Provides governments and development planners with a concise overview of the relevance, principles, challenges and examples of green budget tagging, serving as a good entry point into the world of green budget tagging.

**LIMITATIONS**

- Valuable introduction to green budget tagging but no step-by-step guidance. No international standards and consistency between countries using the tool.
- Available as free version only via web-based reading. However, full document can be downloaded or printed against a fee.
LESSONS LEARNT

• Finding the right level of aggregation (high-level overview vs. high granularity budget tagging) can be a significant challenge.

• To minimise adverse effects of green budget tagging, e.g. in social or economic terms, it should be used as a framework to identify critical issues and facilitate policy discussions on how to avoid conflicting impacts and/or deal with inevitable trade-offs.

• Audits for and involving external stakeholders in ex post quality checks can help to ensure consistency and quality of green budget tagging.

• Green budget tagging is not a stand-alone tool but needs to be an integral part of and coherent with a strong strategic framework to achieving green growth, and of course, be based on a country’s specific context such as the existing public financial management framework.

IMPACTS

• Allows policy and decision makers to get a clear picture and better understanding of the impact of budgeting choices on climate and environment.

• Provides a systematic basis for more informed decision making in budget allocation and revenue optimisation in the light of national as well as international environmental and climate objectives and related commitments.

GREEN BUDGET TAGGING IN FRANCE

France published its first comprehensive green budget report for its 2021 budget in October 2020, highlighting its green budget related policies in the light of its national green objectives. It entails a review of policy strategies, private and public spending budget information and a national strategy for the ecological transition. The application of green budget tagging in France:

• covers six different environmental aspects: climate change mitigation and adaptation, biodiversity, circular economy, water, and air quality,

• assesses both positive and negative spill-over effects across these six aspects,

• was implemented by a cross-governmental working group and validated by line ministries,

• included the establishment of dedicated institutional arrangements (e.g. High Council for Climate) to serve the following functions: oversight, engagement and provision of independent expertise,

• tags positive, neutral and negative impacts of expenditures on climate and environment.
Green Public Procurement (GPP) can be defined as “a process whereby public authorities seek to procure goods, services and works with a reduced environmental impact throughout their life cycle when compared to goods, services and works with the same primary function that would otherwise be procured”. In addition to reducing the environmental footprint of public authorities, GPP serves other policy objectives:

- Fostering Green PSD by providing incentives to invest in and support the development of markets for green and inclusive products and services,
- Generating financial savings for public authorities, especially considering full life-cycle costs of contracts.
- Preparing authorities in meeting and solving emerging environmental challenges.

Similar to environmental aspects, also gender and inclusiveness can be taken into account within public procurement and be integrated as additional criteria into GPP processes.

Relevant to policy makers and government agencies at national and sub-national level, who seek to advance Green PSD by designing green public procurement standards, and policy analysts and advisors, who help governments design and implement green economy strategies.

- Development of environmental standards and criteria, and use of public procurement as a lever for developing and strengthening of markets for greener and more climate resilient products and services.
- Tools comprise methodologies, guides and training modules on how to implement sustainable procurement, including best practice examples and lessons learnt.
LIMITATIONS AND CHALLENGES

Effective GPP procedures can be hampered by a lack of:

- organisational resources,
- information on the real environmental performance of products and services,
- suppliers able to offer the requested qualities of green products and services,
- cooperation between relevant authorities.

DO’S AND DON’TS

Best practice studies by the OECD\textsuperscript{20} suggest the following six dimensions should be taken into account when designing and implementing effective GPP procedures:

2) Planning: Stakeholder consultations, cost-benefit analyses and market capacity analyses.
3) Standards and Procurement Criteria: Credibility of standards, performance-based incentives and well defined award criteria.
4) Know-How and Skills: Specialised knowledge, highly skilled multidisciplinary teams and the use of manuals, trainings and guidance.
5) Awareness Raising: Creation of understanding and trust among government officials, the general public and businesses.
6) Monitoring: Measuring and monitoring of GPP results and translation of feedback into policy and regulation.

WORKS WELL WITH:

- POLICY & REGULATION:
  - Green Economic and Employment Strategies and Policies
- SUPPORTING FUNCTIONS:
  - Green and Climate Resilient Value Chains
- COMPANY:
  - Green Business Models and Eco-Innovation
Tools Detailed in This Navigator

- Procura+ Manual (ICLEI)
- Sustainable Public Procurement Implementation Guidelines (UNEP)

Other Tools and Resources


Recommended Further Reading

- The European Commission's DG Environment provides a web-based information portal on Green Public Procurement in the European Union, including GPP criteria, legal and policy framework, a toolkit, news and events, etc.
- Drawbacks and Opportunities of Green Public Procurement: An Effective Tool for Sustainable Production: Study identifying factors influencing green public procurement at local, municipality level in Italy.
- Going Green: Best Practices for Sustainable Procurement (OECD): Provides an overview of cases and best practices from different countries, focusing on a number of aspects, including legal and policy frameworks, environmental standards, awareness raising and green public procurement monitoring.
This GPP Manual is the main knowledge product of Procura+, which is a network of European Public authorities initiated and managed by ICLEI. It provides a starting point for public authorities to implement Green Procurement and includes:

- Practical advice as well as a model to systematically integrate sustainability into procurement,
- The Procura+ Management Cycle, a step by step approach, ranging from building the case for sustainable procurement to monitoring and reporting,
- An analysis of the entire procurement process and the respective entry points for sustainable procurement at all stages from pre-procurement to award criteria and contract clauses,
- Information on the real cost of procurement,
- Information on key sectors for sustainable procurement.

**TARGET GROUP**

- Local public authorities, specifically procurers and staff dealing with sustainability and innovation.

**GENDER/INCLUSIVENESS**

- Social aspects are embedded as the Procura+ Manual considers environmental as well as social aspects of sustainability.

**FOCUS (GEOGRAPHIC/SECTOR)**

- Mostly focused on European countries.
- Covers all procurement categories but with specific information on construction, ICT, cleaning, food and catering services, vehicles and electricity.

**EXTERNAL LINKS TO THE TOOL**

- Procura+ Manual
- Additional information and other case studies can be found on the Procura+ website.
LESSONS LEARNT

The application of the guidelines and the implementation of more sustainable procurement processes throughout the Procura+ Network led to a wide range of lessons learnt. The key takeaways that are relevant to all contexts include:

- When adding sustainability aspects to a procurement process, it is necessary to build a strong knowledge of the existing markets while at the same time working on market engagement. If not done properly, the inclusion of more innovative aspects might need to be abandoned due to a lack of suitable competitors.
- If the goal is to increase SME engagement, it might be necessary to break contracts into smaller lots and to simplify the procurement procedures, as entry barriers are most likely too high for SMEs otherwise.

IMPACTS

- Members of the Procura+ Network were able to increase the quantity and effectiveness of their sustainable procurement and reached GPP rates of up to 100%. For example, the City of Rotterdam made 100% sustainable purchases in 2015, the City of Rome now uses GPP criteria in all their tenders for furniture, paper and cleaning services, and in the City of Copenhagen 53% of the municipal vehicles use alternatives to gasoline and diesel.

“I would recommend this manual as a starting point for any organisation, both public and private, that wants to be more sustainable and innovative in their procurement approaches.” – Katja Kardikova (City of Oslo)

PROCUREMENT OF 100% ORGANIC AND SEASONAL FOOD IN COPENHAGEN

As out of season fruits and vegetables have a considerable environmental footprint, the Municipality of Copenhagen decided to tackle this by procuring more seasonal food in 2013. Additionally, Copenhagen set the objective that 90% of all food in its 900 municipal canteens has to be organic. The municipality thus worked intensively on market engagement to enable suppliers to react to their ambitious €3 million tender. In August 2014, Copenhagen finally completed the award process. Innovation in the supply and delivery of products, greater sustainability of the sourced food and improved relationships with suppliers were all positive results of the extensive market dialogue. GPP has contributed to the professionalisation of organic supply chains and the organic food service market in Denmark has grown significantly in recent years, with organic food service sales increases of 33% between 2013 and 2014. Copenhagen’s large market share and the political signal via the 90% organic target has arguably played an important role in this growth.
DESCRIPTION

The Sustainable Public Procurement Implementation Guidelines have been developed by the UN Environment Programme (UNEP) and aim to provide guidance to governments and organisations interested in the implementation or the improvement of their sustainable public procurement (SPP) processes. The guidelines outline the following main steps:

1) Creation of a leadership structure to drive and guide the SPP programme,
2) Implementation of a status assessment,
3) Development of a SPP Policy Statement in consultation with key stakeholders and funding mobilisation,
4) Development of SPP Action Plan with targets, key actions, roles and responsibilities,
5) Implementation and continuous improvement of SPP Action Plan throughout the procurement life cycle.

TARGET GROUP

• Policy makers as well as civil servants of government and administrative bodies designing and implementing sustainable public procurement policies and actions.

GENDER/INCLUSIVENESS

• Social aspects and gender are embedded, as the guide includes all areas of sustainable procurement, including the social dimension.

FOCUS (GEOGRAPHIC/SECTOR)

• The guidelines focus on SPP at the national level and are applicable to any sector.

ADVANTAGES

• Good entry point when starting the sustainable procurement process, as it also features the institutional set up and other necessary preconditions.
• Available in a number of different languages, including English, Spanish, Russian and French.

LIMITATIONS

• Accompanying training and other capacity building measures is recommended for all steps of the process, which might be a hindering factor for some actors.

EXTERNAL LINKS TO THE TOOL

• Sustainable Public Procurement Implementation Guidelines (2nd edition)
LESSONS LEARNT

- Investing resources in developing a sound governance system as well as conducting a prior assessment and a prioritisation exercise for product groups will help to yield better results in implementation while also increasing the buy-in of key stakeholders.
- Procurement processes differ widely from country to country and so will sustainable procurement. There is no one-size-fits-all and countries benefit greatly from exchanging experiences and lessons throughout the planning and implementation process.

IMPACTS

- A study commissioned by the European Commission on sustainable procurement found that on average countries were able to save around 1.2% of their purchasing costs while reducing environmental impacts at the same time. In the UK cost savings were as high as 5.7%.

PROCUREMENT OF SUSTAINABLE SCHOOL KITS IN SAO PAULO

In Brazil, the state of Sao Paolo produced and distributed school kits, purchased under sustainable public procurement rules. Providing all school kids with a note book made from recycled fibers led to a significant reduction in environmental impacts. The state of Sao Paolo saved more than 8 million liters of water, 1766 tons of waste and 241 kg of organo-halogen compounds. The success of the initiative was mainly due to undertaking a thorough market analysis and engaging all relevant stakeholders. This provided a good understanding of the supply chain and allowed to optimise resources as well as decrease costs. Through the bargaining power of the state of Sao Paolo it was possible to promote sustainability at all levels and to increase the role of vulnerable groups, such as waste pickers who were included to provide paper waste as an input to production.
DESCRIPTION

The facilitation of public and private, foreign and domestic green investments is a crucial prerequisite to enable green growth and the transition towards resource efficient, low-carbon economic development. As these investments are typically capital as well as knowledge-intensive and markets for green products and services are often still nascent in developing contexts, foreign companies and investors are key players to kick start investments in green infrastructure, priority sectors, companies and technologies but also financial products that invest in those. While there is no single commonly adopted or statistically operationalised definition of green investment, there have been informative attempts to define the concept.

Approaches to systematically promoting green investments address all intervention levels and include but are not limited to:

- Macro Level: designing government strategies on investment and industrial policy, creating conducive enabling policies and frameworks to improve overall investment climate, and advising on international investment agreements and contracts.
- Meso Level: establishing and supporting Green Investment Promotion Agencies (IPA), developing clusters (e.g. green industrial zones), and improving provision of and access to investment finance.
- Micro Level: identifying and developing bankable investment projects, collaborating with international and local companies, and providing start-up support.

GENDER/INCLUSIVENESS

• Focusing on green investments only may lead to possible trade-offs in terms of social aspects (e.g. human rights). It is therefore important that investors and other stakeholders use a more holistic view of green investment that includes the economic, ecological as well as social dimension of the concept of sustainability.

AREA OF APPLICATION AND RELEVANCE

• Relevant to policy makers and administrative bodies seeking to reform their investment policies as well as IPAs seeking to attract green investments to a specific country, region or strategic sector.
• Can be an important lever to kick start and promote green technologies and sectors in a country. Especially LDCs currently receive very limited FDI.
• Tools range from recommendations on how to set up greener investment policies to investment facilitation programmes and guidelines to enable investment in SDGs.
LIMITATIONS AND CHALLENGES

- The overall lack of a common understanding of what constitutes a “green investment” and the absence of a coordinated and uniform taxonomy still poses a major obstacle to achieving substantial progress and an improved data situation.

- A narrow focus on green technologies and purely environmental aspects might create a different set of challenges with regards to other SDGs and social sustainability criteria, such as human rights aspects.

- Willingness and motivation of partners in developing countries to regulate FDI inflows based on environmental criteria is key, but political buy-in may be low. Challenges arise from the means used to attract investment. Developing countries, already faced with significant challenges relating to the types of FDI they are seeking, go to great lengths to attract such investment. In some cases, governments have even promised to waive or reduce obligations on foreign investors to comply with environmental laws in order to attract much needed FDI projects.

GREEN FOREIGN DIRECT INVESTMENT (FDI)

The OECD proposes a two-part definition:

1) FDI in environmental goods and services (EGS) sectors, i.e. renewable energy, including wind, solar, hydropower, biomass, geothermal and ocean energy, water and wastewater treatment, waste management, air pollution control, soil and water remediation,

2) FDI in environmental-damage mitigation processes, i.e. use of cleaner and/or more energy-efficient and focus on sectors with significant spillovers (agriculture, manufacturing, mining, forestry, transport and construction).
Green Investment Climate

DO’S AND DON’TS

FDI is recognised as an important source of financing and transfer of technology as well as know-how between countries. The UN Conference on Trade and Development (UNCTAD) identifies the following lessons learnt on promoting Green FDI:

• A legal and regulatory framework dedicated specifically to green investments and making sure that there are clear rules for the sectors related to green technologies, such as renewable energies, energy efficiency, waste management etc., helps to create investment opportunities.

• The development of pilot projects can help with visibility, which is key to attract investors.

• IPAs need strong sector knowledge, including market studies that show the gaps and potentials for investment opportunities, and economic analyses on key intervention in the policy space will.

• The development of linkages with local value chains, including suppliers and technology providers, as well as matchmaking with investors helps to broker green investment deals.

WORKS WELL WITH:

POLICY & REGULATION:

→ Green Economic and Employment Strategies and Policies
→ Green Fiscal Policies

SUPPORTING FUNCTIONS:

→ Eco-Industrial Parks
TOOLS DETAILED IN THIS NAVIGATOR

- The Business Guide for Sustainability in Foreign Investments (ITC & FCO)
- Green Investment Strategy Diagnostic (GIZ)

OTHER TOOLS AND RESOURCES

- Towards a Green Investment Policy Framework: The Case of Low-Carbon, Climate-Resilient Infrastructure (OECD): This report aims to advise governments on how to create and improve domestic enabling conditions to shift and scale-up private sector investments in green infrastructure, to finance a transition to a low-carbon, climate-resilient economy and greener growth.

RECOMMENDED FURTHER READING

- Defining and Measuring Green Investments: Implications for Institutional Investors’ Asset Allocations (OECD): Analyses different definitions of green and investment (including Green FDI), discusses various approaches to green investment and provides a classification of green investment by asset class.
- Promoting Investment in the Sustainable Development Goals (UNCTAD): A guide that supports IPAs to better understand the role of the SDGs with regard to investment decisions.
- Green Foreign Direct Investment in Developing Countries (UNEP): Analyses and provides further background information on Green FDI, its role, definitions and challenges.
This tool was developed in the framework of the Partnership for Investment and Growth in Africa, a project implemented by the International Trade Center (ITC) and funded by the UK’s Foreign, Commonwealth & Development Office (FCDO). The business guide aims to support international business investors in understanding the relevant economic, environmental and social sustainability practices at the time of expanding into a foreign country. It’s structured in two main sections:

- Understanding the business value of sustainability in investment activities
- Overview of a set of measures and tools for a larger sustainable investment impact.

Specific companion guides have been developed for Ethiopia, Kenya, Mozambique and Zambia, providing an overview of mandatory environmental and labour requirements in each country.

**TARGET GROUP**

- International investors, IPAs, business support organisations (BSOs) and industry associations.

**GENDER/INCLUSIVENESS**

- A gender perspective is present across the guide.
- Inclusiveness aspects (race, women and youth, age, disability etc.) are considered in the guide.

**FOCUS (GEOGRAPHIC/SECTOR)**

- Even though the guide is a result of the Partnership for Investment and Growth in Africa’s research, and national guides are currently from African countries only, there is no specific geographic limitation or focus for implementation.
- The guide considers a wide range of sectors, yet it particularly addresses the manufacturing and agro-processing sector.

**ADVANTAGES**

- Offers relevant additional tools, e-learning courses, networks and platforms on sustainability.
- National cases have already been developed and are readily available.

**LIMITATIONS**

- Complementary case studies are only available for African countries.

**EXTERNAL LINKS TO THE TOOL**

- The Business Guide for Sustainability in Foreign Investments – Full Publication
- National Guides for Ethiopia, Kenya, Mozambique and Zambia
LESSONS LEARNT

• The business guide fills an information gap for investors and serves as a concise learning package for IPAs to utilise when dealing with potential investors. Uptake is optimised when combined with sensitisation trainings for investors and capacity building programmes with institutions working with investors (e.g. IPAs) in order to strengthen their capacities to assist investors in complying with sustainability requirements.

• Establishing strategic partnerships with institutions working with investors is key for building a conducive environment for sustainable investment and maximising the development impact of foreign investment projects at the local level.

• Developing the companion guides in partnership with local IPAs was fundamental to ensure local ownership and uptake of the guides by IPA staff and other stakeholders advising foreign investors.

• The identification of “champion” sustainable investors at the local level is beneficial, as it creates incentives for new and existing investors and/or firms to adopt sustainable business and investment practices.

IMPACTS

• Increased awareness among investors of the business case of sustainable investment, including compliance with mandatory and voluntary sustainability requirements.

• Handbook and companion guides integrated by each IPA as part of their advisory services, and available in their web-portals.
DESCRIPTION

The Green Investment Strategy Diagnostic was developed by GIZ and constitutes one tool within the entire Investment Climate Reform (ICR) Toolbox published by the ICR Facility in 2021. The tool provides a set of diagnostic questions and policy recommendations that can help policy makers design green ICR strategies. The questions, sub-questions and policy options are clustered around three action areas:

1) Stimulating more sustainable performance within existing businesses,
2) Facilitating the start-up and growth of new firms with greener operations, products and/or services,
3) Redirecting FDI to sustainable sectors and away from polluting, environmentally harmful sectors.

The tool further provides a step-by-step guide for its application, presents a case study and gives hints on the integration of cross-cutting themes and complementary activities such as public-private dialogue (PPD).

ADVANTAGES

- Concise, straight forward analytics tool.
- It is embedded in a toolbox around ICR more generally, allowing users to easily identify other resources that work well with or complement the Green Investment Strategy Diagnostic.

LIMITATIONS

- Gender and inclusiveness are not explicitly addressed.
- The tool is mainly designed to guide and facilitate dialogue processes among stakeholders, it does not provide in-depth descriptions and assessments of the policy options provided.

TARGET GROUP

- Policymakers and civil servants in line ministries, BSOs and IPAs.

GENDER/INCLUSIVENESS

- There is no specific lens on gender or inclusiveness but the importance of taking gender and inclusiveness into account is highlighted.

FOCUS (GEOGRAPHIC/SECTOR)

- No specific sector or regional focus.

EXTERNAL LINKS TO THE TOOL

- Investment Climate Reform Toolbox
LESSONS LEARNT

- Effective ICR requires strong environmental policies, standards and regulations.

- Strategies should contain both push and pull factors, providing incentives as well as obligations to comply with.

- Market incentives constitute a huge lever which businesses tend to respond to more quickly than other government interventions. Measures that drive consumer preferences towards more sustainable products and facilitate conscious choice and decision making should therefore be taken into account.

- Stability, reliability and commitment are key to create confidence in businesses to make investments as well as to secure financing.

- A governmental entity that is dedicated specifically to drive green investments and investment promotion, with the capacity to provide relevant policy advice, can have a significant impact in spurring Green PSD.

SHIP WASTE MANAGEMENT IN INDONESIA

The Indonesian Port Corporation (IPC) and government agencies (supported by the World Bank) improved the business environment for waste management and jointly worked on strengthening the port services sector. They developed a system that

1) requires online ship waste notification across 17 business ports, integrated into existing infrastructure,

2) improved business environment conditions for new green firms,

3) reduced port and sea water pollution,

4) created market linkages and web-based processes that may also find application in other areas of business environment reform.
# APPROACHES

<table>
<thead>
<tr>
<th>SUPPORTING FUNCTIONS</th>
<th>TOOLS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eco-Industrial Parks</td>
<td>Sustainable Industrial Area Toolbox (GIZ)</td>
</tr>
<tr>
<td>Multi-Stakeholder Platforms for Market Transformation</td>
<td>GreenToCompete Hubs (ITC)</td>
</tr>
<tr>
<td>Green and Climate Resilient Value Chains</td>
<td>Investment and Technology Promotion Offices (UNIDO)</td>
</tr>
<tr>
<td>Green Finance for SMEs</td>
<td>Partnerships 2030 (GIZ)</td>
</tr>
<tr>
<td></td>
<td>Guidelines for Value Chain Selection (ILO &amp; GIZ)</td>
</tr>
<tr>
<td></td>
<td>BioTrade Knowledge Sharing and Self-Assessment (UNCTAD &amp; ITC)</td>
</tr>
<tr>
<td></td>
<td>Climate Expert: Supporting Climate Adaption Finance for SMEs (GIZ)</td>
</tr>
</tbody>
</table>
The term industrial park refers to a cluster of manufacturing and service businesses located together on a common property for the purpose of industrialisation, serving as a motor of local economic development and technological leapfrogging. However, by design, these dedicated zones also concentrate heavy industrial activities and can therefore have detrimental effects on the environment. Moreover, this high concentration of infrastructure and businesses renders them particularly vulnerable to the effects of climate change.

Eco-Industrial Parks (EIP) aim to reduce these climate-related risks and negative environmental impacts by balancing economic, ecological and social aspects. Member businesses seek to enhance their collective environmental, economic, and social performance via collaboration in managing environmental and resource issues.¹ The focus is on management structures that emphasise resource efficiency, environmental protection and social compatibility, providing residing companies with the necessary framework conditions to be more sustainable. EIPs also provide the possibility of reaching economies of scale by pooling resources or using concepts such as industrial symbiosis. For example, the waste by-products produced by one member company would be a primary resource for another.

- Includes aspects of social performance, including labour, gender, community dialogue, and appropriate social infrastructure, by addressing the needs of the local community and the employees of member companies.

- Relevant for policymakers, investors and managers of all types of industrial parks, covering all industrial sectors.

- Facilitation of industrial symbiosis and cluster approaches that lead to improved environmental performance and climate resilience of EIP member companies.

- Tools comprise methodologies and guides from industrial park development (greenfields) to the transformation of existing industrial parks (brownfields).
LIMITATIONS AND CHALLENGES

• In countries with less developed infrastructure, there might be other priorities than an advanced set-up of industrial zones. Access to reliable infrastructure is in many cases perceived as a higher priority than environmental concerns and performance.

• A lack of proper management and related human as well as financial resources lead to reduced options for implementing industrial symbiosis and other EIP concepts.

• Even if the national government supports the creation of EIPs, there might be problems of awareness among local government officials, company managers and park operators, which pose a challenge to the implementation of the EIP concept and enforcement of environmental standards. Especially when margins are tight, managers might be more sensitive to price fluctuations of energy and input materials rather than focusing more strongly on ecological principles.²

DO’S AND DON’TS

• Inherent trade-offs between the need for industrial development and environmental concerns exist in many countries. Identify possible trade-offs at an early stage of development to find strategies to properly address these when developing industrial parks.

• Address and promote concepts such as industrial symbiosis at the policy level and design guidelines on e-waste management, energy saving and emission reduction regulation, green infrastructure development etc. to foster EIP development.

• Work with experienced developers that are familiar with EIPs and include sectors that offer a competitive advantage with regard to the geographic location of the prospective industrial zone.

• A stringent monitoring and evaluation system can lead to improved performance of EIPs. Well chosen benchmarks and strategic indicators that clearly define the objectives of the EIP are key for successfully managing an EIP.³
Eco-Industrial Parks

TOOLS DETAILED IN THIS NAVIGATOR

- Sustainable Industrial Areas Toolbox (GIZ)
- International Framework for Eco-Industrial Parks (UNIDO, WB & GIZ)

OTHER TOOLS AND RESOURCES

- PREMA for Sustainable Industrial Areas (PREMA-net): PREMA–Profitable Resource Efficient Management—in industrial estates is a programme that looks at the operation of an industrial park and identifies measures that could be offered as services for enterprises on the estate to improve their economic, environmental, social and organisational performance. The complete set of guidelines and checklist are currently not publicly available, but PREMAnet will help to identify suitable trainers to adapt and conduct this 4-day training programme.

- Climate Expert: Climate Change Adaptation Guide for Industrial Zones (GIZ): A handbook providing practical guidelines to help managers of industrial zones and their partners assess their vulnerability to climate change, develop adaptation strategies and support companies in their adaptation efforts.

RECOMMENDED FURTHER READING

- Assessment of Eco-Industrial Parks in Developing and Emerging Countries (UNIDO): The report assesses examples of EIPs in a number of countries and provides relevant lessons learnt as well as policy recommendations for EIP development.
### Sustainable Industrial Areas Toolbox (GIZ)

#### DESCRIPTION

The Sustainable Industrial Areas (SIA) Toolbox developed by GIZ compiles a wide range of tools and expertise on the development and sustainable management of industrial areas. Depending on its stage of development, each industrial area requires a specific mix of tools and methodologies to make it more sustainable. The toolbox is structured along the ten thematic topics and three major phases:

1. **Introducing SIA** includes tools for analysis and baseline studies to define the status quo as well as tools to do awareness raising with relevant stakeholders,
2. **Designing SIA** includes tools to properly plan and design a SIA, including master planning, site selection and infrastructure development,
3. **Operating SIA** includes tools to build suitable and functional management structures, to manage the stakeholder process with local communities surrounding the SIA and to ensure ongoing environmental monitoring as well as climate risk management.

#### TARGET GROUP

- Tools are directed at companies, community representatives, municipalities, policy makers, private investors and industrial area managers.

#### GENDER/INCLUSIVENESS

- Gender aspects are not considered specifically.
- Inclusiveness is part of a number of tools, specifically those related to community engagement.

#### FOCUS (GEOGRAPHIC/SECTOR)

- The SIA Toolbox was developed for and by actors from various regions, including Europe, Asia, Africa and Latin America.
- Tools address different levels of intervention and stakeholders, ranging from the industrial park management to the policy level.
- Tools are not sector specific and can be applied in different types of industrial areas.

#### ADVANTAGES

- Addresses the specific situation in industrial zones and provides a range of tools for different levels of interventions and target groups.
- Comprehensive resource for anyone working on sustainable industrial area development.

#### LIMITATIONS

- The website is currently managed by the GIZ SIA Working Group. Should this group cease to exist, ownership of the website and responsibility for further updates of content might be unclear.

#### EXTERNAL LINKS TO THE TOOL

- SIA Toolbox Website

---

*Green PSD Navigator* Overview of Green Growth Approaches for Private Sector Development
LESSONS LEARNT

• Each industrial zone needs a specific mix of tools to address the most pressing sustainability challenges.

• Experience shows that in order to make full use of the tools provided in the SIA Toolbox, users and other stakeholders that are part of the process require a solid understanding of SIA. It is therefore recommended to work with external experts who can support and guide the implementation process.

IMPACTS

• Following the application of the Climate Change Adaptation Guide for Industrial Zones at Ait Melloul in Morocco, ADIZIA had, together with its partners and the local community, defined its first climate adaptation strategy.

• A Climate Adaptation Task Force was set up to prioritise the measures outlined in the strategy.

• ADIZIA further decided to establish an Environment Committee, which was responsible for the coordination and implementation of climate adaptation-related activities.

IMPROVING THE CLIMATE RESILIENCE OF THE AIT MELLOUL INDUSTRIAL ZONE

The industrial zone of Ait Melloul in Morocco was facing a number of climate change risks while struggling with additional challenges, such as old infrastructure. The industrial zone management therefore decided to undertake a vulnerability assessment aimed at identifying climate risks while simultaneously building climate adaptation capacities using the Climate Change Adaptation Guide for Industrial Zones, which is part of the SIA Toolbox. The main climate risks for the site were flooding, which could lead to water contamination due to a weak waste management, and employees not being able to access the site. Adaptation strategies and potential solutions were identified that included:

• an awareness campaign for the residents of the industrial zone explaining existing flood risks,

• the strengthening of public private dialogue on sustainable water management, and

• the establishment of a monitoring and information system for environment as well as climate-related regulations and public support programmes.
DESCRIPTION

The International Framework for Eco-Industrial Parks was developed in 2017 (and updated in 2021) by UNIDO, World Bank and GIZ. The framework addresses the drivers and challenges of implementing EIP, and defines performance requirements at the management, social, economic and environmental level. These standards help in identifying opportunities for actions to be taken in line with international good practices. The publication further provides a list of EIP case studies from different geographic locations.

A Practitioner’s Handbook on how to implement the EIP framework was developed in 2018. It aims to support target groups, including industrial park operators and development agencies, in applying and developing the International Framework for EIP at the national or local levels. A toolbox linked to the Practitioner’s Handbook was launched in 2019.

ADVANTAGES

• The framework is complemented with a practical step-by-step Practitioner’s Handbook.

• Toolbox contains 13 tools to support the implementation of the different sections covered in the Practitioner’s Handbook.

EXTERNAL LINKS TO THE TOOL

• International Framework for Eco-Industrial Parks
• International Framework for Eco-Industrial Parks Version 2.0
• Practitioner’s Handbook for Eco-Industrial Parks
• Toolbox for Practitioner’s Handbook

TARGET GROUP

• Government authorities, industrial park managers and development agencies.

GENDER/INCLUSIVENESS

• Gender aspects are considered in the social performance dimension.

• Inclusiveness is partly considered in the framework.

FOCUS (GEOGRAPHIC/SECTOR)

• The framework’s scope includes all industrial sectors.

• There is no specific geographic focus. The framework applies to developed, transition, and developing countries, as shown in the case studies provided.
LESSONS LEARNT

Based on an analysis conducted by the Global Eco-Industrial Parks Programme, two major lessons for EIP development and management can be drawn:

1) Parks managed by private sector or private public partnerships generally perform better than publicly managed ones, which indicates that EIPs work better if they are managed like a business. Therefore, business-oriented approaches should be promoted and embedded in industrial parks managed by the public sector.

2) There is a positive correlation between the EIP concept and selected indicators of SDG 9 on building resilient infrastructure, promoting sustainable industrialisation and fostering innovation. EIP is thus a practical and sound approach to improve performance with regards to promoting sustainable industrial development.

IMPACTS

UNIDO, WB and GIZ implement the framework in ongoing projects, with impacts located at the level of the individual industrial parks. The Global EIP Programme (GEIPP) assessed 50 industrial parks in Vietnam, Colombia, Egypt, Indonesia, Nigeria, Peru, South Africa and Ukraine against the EIP framework with a focus on their contribution towards SDG 9. The analysis shows that the industrial parks assessed to date have an overall compliance/adherence score of 57% against all prerequisites and performance indicators of the International EIP Framework. Moreover, findings suggest a clear positive correlation between high-performing EIPs and selected key indicators of SDG 9.
APPLYING THE INTERNATIONAL FRAMEWORK FOR EIP IN HOA KHANH INDUSTRIAL ZONE IN VIETNAM

The EIP framework was applied within the context of the project Implementation of Eco-Industrial Park Initiative for Sustainable Industrial Zones in Vietnam, which was developed by UNIDO and the Ministry of Planning and Investment (MPI) in Vietnam. The Hoa Khanh Industrial Zone, comprising 168 companies from various sectors, including mechanics, assembly, food and seafood processing, forest products processing, construction materials and electronics, was in the process of becoming an Eco-Industrial Park. Using the EIP framework, the environmental performance and impacts of the Hoa Khanh Industrial Zone was assessed, along with park management, economic, and social performances. Key environmental performance areas included:

- Transportation activities as the main source of noise, vibration and dust,
- Air pollution coming from the production of steel, paper and forest products,
- Efficiency level of the centralised wastewater treatment plant,
- Waste management.

This case study demonstrates that the framework is a useful and practical approach to assessing the sustainability of industrial parks and identifying areas of improvement on management, social, economic and environmental aspects.
Business support organisations (BSOs), including national and provincial chambers of commerce and industry, sector-based business associations, trade and investment support institutions, etc. are important partners in supporting green growth, as they bring together a wide range of private sector actors sharing a set of common goals. These organisations function as multipliers, supporting green business development by

1) developing, storing and disseminating formal and informal knowledge about green growth to private enterprises,
2) promoting green best practices in the specific sectors they represent or the geographic scope where its members operate.

Business associations are well equipped to offer sector-specific guidance on key sustainability issues, encouraging its members to set up short- and long-term sustainability goals and to use innovative sustainable products and services. They can also help with jointly communicating the sector’s actions on how to become more sustainable to consumers, other non-profits, and the government.

Aspects on gender and social performance should be included in capacity building efforts targeted at companies or BSOs. This should be done by addressing the needs of the local community and company employees and by including cross-cutting topics such as labour, gender and community dialogue in the programme design.

Relevant to chambers of commerce, industry associations, public-private platforms and other private sector stakeholders promoting sustainable business practices.

Associations can develop sector-specific tools and best practices, using their business network to reach the whole value chain of the sector they represent.

Tools comprise methodologies and guides on how to train and coach business members, to develop and implement sustainability programmes and to provide institutional capacity building to BSOs.
LIMITATIONS AND CHALLENGES

- There is no one-size-fits-all approach, as BSOs promoting and developing local green practices and tools are very diverse in their organisational structure, strategic objectives and member basis, which might revolve around a specific industry, sub-sector or single geographic area.

- Practices and tools should only be promoted after careful consideration of the sector potential to use innovative sustainable products and services, the specific country context, the existing policies and regulations for a specific sector or region, and the overall legal frameworks and institutional set-up.

DO’S AND DON’TS

- Collaborate with other business associations and government departments representing the same sector and/or geographic area to exchange knowledge, promote synergies and pool limited resources, and jointly promote best practices and disseminate existing tools.

- Develop tools that can be easily replicated and scaled-up along selected value chains, to similar sectors or to similar geographic context areas.

- Collaborate with a network of local public and private partners to develop practical standards and certification programmes to guide members in effectively implementing sustainable business practices.

- Work on developing a common understanding between members of the business case of the green transformation and advocate private sector needs towards relevant stakeholder such as policy makers and international development agencies.

WORKS WELL WITH:

- Eco-Industrial Parks
- Multi-Stakeholder Platforms for Market Transformation
- Green and Climate Resilient Value Chains

COMPANY:

- Green Business Development
TOOLS DETAILED IN THIS NAVIGATOR

• GreenToCompete Hubs (ITC)
• Investment and Technology Promotion Offices (ITPO)

OTHER TOOLS AND RESOURCES

• ECO4CLIM: This association constitutes an example of how BSOs can bring together and support businesses that tackle climate change. It offers consulting and support services for businesses and green entrepreneurs, supports the set up of networks of sustainable businesses and promotes exchange of experiences on climate innovations.
• BSO Benchmarking Tool (ITC): Tool for trade and investment support institutions to assess their level of performance, efficiency and effectiveness. It helps BSOs to identify strengths, weaknesses and areas of action.

RECOMMENDED FURTHER READING

• Business and Industry Associations (UN Global Compact): Understanding BSOs and their contribution to greening the private sector.
• Roadmap to Sustainability: Developing an Industry Association Sustainability Program (Strandberg Consulting): Step-by-step guide to developing a sustainability programme for industry association members, including introduction to why sustainability matters, challenges and opportunities as well as critical success factors.
GreenToCompete Hubs (ITC)

DESCRIPTION
ITC promotes the transitioning of MSMEs to the green economy through its global network of GreenToCompete Hubs, which provide solutions and tools in the implementation of green business practices. Integrated in local BSOs, the GreenToCompete Hubs act as one-stop shops for MSMEs to build green business strategies to access green finance as well as international markets for sustainable products. Each GreenToCompete Hub pilots an offer of green business development services to MSMEs over a period of two years. The focus is on the following action areas, with the aim to integrate these services into the local BSO's service offer in the long-term:

- Implementation of resource efficient and circular production practices,
- Improvement of climate resilience,
- Compliance with voluntary sustainability standards (i.e. Organic and Fairtrade),
- Positioning of sustainable products in the international market,
- Access to green finance and investment.

TARGET GROUP
- MSMEs, BSOs, industry associations, government departments responsible for MSME development.

GENDER/INCLUSIVENESS
- While gender is not a direct focus, >50% of client MSMEs are owned or managed by women.
- Inclusiveness aspects are considered in the Hub’s goals.

FOCUS (GEOGRAPHIC/SECTOR)
- First GreenToCompete Hubs located in Ghana, Kenya, Laos, Nepal, Peru, Vietnam as well as a regional Hub in the Caribbean.
- Most common sectors: agri-food (primary production processing), textiles and apparel, natural ingredients and eco-tourism.

ADVANTAGES
- Demand driven approach—BSOs can express interest to become a GreenToCompete Hub.
- Builds technical and managerial capacity, structure and business model of BSOs to integrate a green offering into their services.
- Offers a combination of face-to-face and tailored coaching programmes, virtual workshops and e-learning courses to individual MSMEs.

LIMITATIONS
- Supporting BSOs is a long-term process and the establishment of a GreenToCompete Hub takes 18 to 24 months.

EXTERNAL LINKS TO THE TOOL
- GreenToCompete Hubs
LESSONS LEARNT

• Each BSO is very different in its underlying business model, structures, human and financial capacity and networks, among other characteristics. As a result, the integration of a green offering for MSMEs needs to be fully customised approach to be accommodated under each BSO.

• Setting the right incentives for MSMEs to go green and BSOs to integrate a green offering is essential for ensuring long-term sustainability, actual implementation of green business practices and the roll out of a green service offering. Making environmental sustainability a commercial argument and business case is key.

• Fostering strategic partnerships with support function stakeholders is essential for the establishment of a conducive business environment for MSMEs to go green. These stakeholders include policy-makers at both Ministries of Trade and Environment, banks and investors, standard setting organisations, expert centers and international buyers.

IMPACTS

The GreenToCompete Hubs seek to generate green trade and investment by building the competitiveness of MSMEs. Expected impacts include:

• Long-term integration of green offering for MSMEs into services of local BSOs,

• Establishment of a global network of like-minded BSOs with a common voice to do policy advocacy and engage with other relevant institutions,

• As of the end of 2022, up to 4,000 MSMEs will better understand the benefits of sustainable business practices and more than 500 MSMEs will obtain the capacity to implement climate resilience, resource efficiency and inclusive business strategies.
# Investment and Technology Promotion Offices (UNIDO)

## Description
UNIDO’s network of Investment and Technology Promotion Offices (ITPOs) assists developing countries in their efforts to achieve sustainable economic development by facilitating technology transfer and investment between investors and companies (with special focus on SMEs) in host and recipient countries. For this purpose, ITPOs offer a wide range of services, including establishment of partnerships and networks, capacity building activities, advisory services, promotional events, and investment and technology project assessments.

There are currently nine offices belonging to UNIDO’s ITPO network. They collaborate with other UNIDO networks, including the International Technology Centers and the Global Network for Resource Efficient and Cleaner Production (RECPnet) (UNIDO/UNEP) as well as other UNIDO projects and networks to increase their scope of services.

## Advantages
- 40 years of experience since the first UNIDO ITPO in Tokyo was established in 1981.
- Multiple services offered and linkages with other networks.

## Limitations
- Not a tool for replication and upscaling per se, but a helpful BSO to mainstream and increase the outreach of tools related to Green PSD at the company level.

## Target Group
- Investors, BSOs, IPAs and SMEs.

## Gender/Inclusiveness
- In compliance with UNIDO’s Gender Policy and Strategy, ITPOs apply a gender lens to their activities. ITPO Germany also developed the online Impact Gender Lens Investing Training Programme.
- Inclusiveness is not specifically addressed.

## Focus (Geographic/Sector)
- The nine ITPO offices are located in Bahrain, China (Shanghai and Beijing), Germany, Italy, Japan, Nigeria, South Korea and Russia.
- Each ITPO has its own sectoral focus, yet manufacturing and sustainable business sectors (e.g. renewable energies) are commonly targeted.

## External Links to the Tool
- Investment and Technology Promotion Offices Website

---

[Green PSD Navigator](Overview of Green Growth Approaches for Private Sector Development)
LESSONS LEARNT

Managing a diverse group of offices financed by 9 different donors with different geographical and sectoral focus requires appropriate resources, as well as a strong institutional and programmatic approach.

IMPACTS

ITPO Bahrain

Since 2000, ITPO Bahrain’s Enterprise Development and Investment Promotion Programme has contributed to the creation of 2,000 enterprises and 16,000 jobs, generating an investment of around $1.5 billion in the Kingdom of Bahrain and has since been expanded to 52 countries.

ITPO Tokyo

Sharing information of Japanese technologies fostering inclusive industrial development in emerging countries, the Sustainable Technology Promotion Platform showcases 130 technologies in different sectors. 12 of these technologies, for example, have contributed to mitigate the effects of COVID-19 in 10 African and Asian countries.

ITPO GLOBAL CALLS TO SOLVE GLOBAL AND PSD CHALLENGES

Since 2020, the ITPO network has been organising a yearly "Global Call", which seeks to identify private sector solutions that have the potential to be scaled and have a significant impact for the benefit of developing countries. In 2020, the Global Call sought to identify solutions against the COVID-19 crisis. In 2021, the award strengthened the international fight against climate change through the promotion of innovative technologies. Together with the UNIDO field offices and other partners, the competition was widely promoted worldwide. In total, UNIDO received 294 applications from 71 countries. Winners were given the opportunity to present their innovative solutions to a large audience during the Global Call Award Ceremony and benefit from ad hoc promotional and networking support provided by the organisation. Winners also showcased their solutions at the Global Innovation Hub Pavilion during COP26 in Glasgow.
Multi-Stakeholder Platforms (MSP) are structured processes between public, private and non-profit stakeholders that are used to ensure inclusive participation that have proven to be an effective governance approach to align business, government, NGOs and other key actors in dealing with complex sustainability challenges. The aim is to develop partnerships and networks between different stakeholders to advance market transformations with regard to a specific sector, value chain or topic on a voluntary basis. MSPs serve the following main functions:

- Facilitating international exchange and mutual learning at regional or global level,
- Enhance private sector finance and engagement,
- Increasing understanding and commitment at the policy level.

However, MSP’s collaborative action goes beyond information exchange and consultation, as it may include elements of cooperation leading to joint exploration and creation of new opportunities and innovation that generate inclusive environmental benefits while also addressing economic challenges.7

### GENDER/INCLUSIVENESS

- Ensuring inclusiveness and equity within the dialogue process is key to effective MSPs and may require skilled facilitation and a solid evidence basis in order to create trust and ensure involvement of marginalised groups.

### AREA OF APPLICATION AND RELEVANCE

- Private sector actors (e.g. businesses, especially large scale and multi-national corporations (MNCs), private FIs, and BSOs), but also the public sector and civil society actors.
- Influencing (sub)national strategies and policies, transforming markets through promotion and scaling up of green, climate friendly and inclusive innovation, promoting collective action and generate private financing and investments.8
- Tools include guides and best practice examples to set up effective MSPs for different sectors and on different outreach levels.
LIMITATIONS AND CHALLENGES

• Overrepresentation of a certain group of stakeholders can cause power imbalances and render the MSP less effective.

• Setting up and running a MSP can be a costly, time intensive and complex endeavor with the need of a highly skilled facilitator.

• Effectiveness of MSPs can be hampered by insufficient preparation and follow-up actions by the participants.

DO’S AND DON’TS

The Global Environment Facility (GEF) identified 6 core principles of good practice for setting up and implementing MSP processes:

1) Critical assessment of the context within which the transformation should take place, ensuring that conditions for a sustained dialogue are conducive to the desired green transformation,

2) Use existing processes, links and/or coalitions to the extent possible and suitable (in some case starting from scratch may be preferred),

3) Identify, assess and address power dynamics (access to resources, sphere and level of influence, relationships between stakeholders) among the different stakeholders involved,

4) Allow and facilitate flexibility during programme implementation to support all stages along the transformation related investment cycle,

5) Make sure to have a solid monitoring and evaluation of the MSP to understand the impact created and learn from the challenges faced,

6) Go beyond the initial transformative programme the MSP was set up for, investing into the involved stakeholders’ capacities to carry the process forward.
**TOOLS DETAILED IN THIS NAVIGATOR**

- **Partnerships 2030—Platform to Strengthen Existing Multi-Stakeholder Partnerships**

**MSP EXAMPLES**

- **Green Industry Platform (GGKP):** Part of the Green Growth Knowledge Partnership (GGKP), the platform supports a green industrial transformation by providing and sharing relevant technical and practical knowledge on various sectors and countries to public and private stakeholders.

- **SDG Partnership Platform in Kenya (UN):** Convenes actors from government, UN, development partners, private sector, civil society, philanthropy, academia, and faith-based organisations to support the work of various thematic SDG clusters.

- **Multi-Stakeholder Platform for Sustainable Fisheries in Indonesia (UNDP):** Neutral space for public and private sector stakeholders to encourage cooperation and jointly work to address the challenges faced by the fisheries sector.

- **Aqueduct Alliance (WRI):** Provides space for companies, governments and foundations to advance water stewardship, to gain industry insights and to provide strategic guidance.

**RECOMMENDED FURTHER READING**

- **The Role of Multi-Stakeholder platforms for Creating an Enabling Climate Change Policy Environment in East Africa (CGIAR):** Examines the role of MSPs in facilitating climate change policymaking in East Africa through a case study of eight national and subnational MSPs in Uganda and Tanzania.

- **Multi-Stakeholder Dialogue for Transformational Change—A STAP Guidance Note (GEF):** Provides guidance on multi-stakeholder dialogue principles and practices.

- **Partnership Platforms for the Sustainable Development Goals—Learning from Practice (UN):** Presents a typology of partnership platforms, reviews partnership platform experiences, and presents characteristics of transformative partnership platforms.
DESCRIPTION

The platform Partnerships 2030 informs on, strengthens existing, and launches new MSPs to support the implementation of the Agenda 2030 and the pursuit of the SDGs. While Partnerships 2030 is a German national level initiative, the range of tools it provides in the form of manuals can be of interest to anyone seeking to use MSPs as a vehicle to drive Green PSD. Manuals and guidelines published online cover a wide range of topics that help building, implementing and evaluating MSPs, including:

- Design, facilitation, management and institutionalisation of MSPs,
- Impact and impact assessment of MSPs,
- Gender in MSPs,
- Effective decision making in MSPs.

TARGET GROUP

- All types of interested stakeholders from the public, private sector as well as civil society sectors.

GENDER/INCLUSIVENESS

- While one of the tools is specifically dedicated to gender, other tools also touch upon both gender and inclusiveness.

FOCUS (GEOGRAPHIC/SECTOR)

- While the platform is established in the context of Germany, the generic guidance and tools provided on MSPs are not focused on a particular geographic region or specific economic sector.

EXTERNAL LINKS TO THE TOOL

- Partnerships 2030

ADVANTAGES

- Provides a set of tools which, despite a lack of Green PSD focus, give helpful guidance on setting up and managing effective MSPs.

LIMITATIONS

- Maintains a generic perspective, i.e. not geared towards Green PSD and related topics.
- Some elements do specifically refer to the German context (e.g. type of legal entities in the context of MSP institutionalisation).
LESSONS LEARNT

Important success factors for MSPs include but are not limited to:

• High level of readiness to compromise, especially in the light of lengthy negotiation processes,
• Leadership maintaining an inclusive, fair, trust-generating and transparent process,
• Genuine commitment of all partners to the objectives of the partnership, common visions and goals,
• Sufficient time and sustained availability of human resources and finances to reach the partnership goals,
• Regular, independent and transparent monitoring, reporting and evaluation,
• Taking into account the specific social, political, and economic contexts relevant to the partnership.

IMPACTS

Albeit a fairly young platform, PREVENT has so far managed to

• get more than 200 organisations to work together as members of the platform call for innovative and sustainable solutions to a circular economy in low- and middle-income countries, resulting in 8 pilot projects with expected impacts in waste prevention, reuse, and recycling, capacity building and awareness raising, and in improving regulatory frameworks,
• develop and publish a toolbox on extended producer responsibility (EPR),
• provide a constant news flow on relevant events, publications, projects and achievements worldwide that contribute to waste reduction.
Green value chains seek to promote sustainable business activities across different stages of the chain, making production more climate resilient and environmentally friendly throughout the entire local, regional or global supply chain. The key objectives of a green approach to value chain development are:

- Ensuring the sustainable use of natural resources and increasing the share of renewable and recycled resources used across the value chain,
- Optimising productivity while maximising the overall efficiency of the materials and energy used at each stage of the process,
- Reducing and controlling outputs negatively impacting the natural environment across the whole chain and making them more resilient to the changing climate.

Strengthening and developing green and climate resilient value chains also includes the promotion of green market opportunities, where economic benefits from the use of renewable resources and climate change adaptation are maximised while environmental harm is minimised.

• Synergies between green and social value chains can be explored, including gender-sensitive approaches and other aspects aimed at local suppliers/local communities.

• Relevant to MNCs, SMEs, policy makers, BSOs, and other private sector stakeholders.

• Potential to develop and/or strengthen markets for greener and climate resilient products and services, using a top-down or bottom-up approach impacting the whole value chain.

• Tools comprise methodologies, guidelines, and self-assessment exercises to develop value chains in consideration of sustainable and environmental criteria.
LIMITATIONS AND CHALLENGES

• Some initiatives linked with global value chains need to be encouraged by national policies and international agreements, revealing disclosure programmes (such as the carbon disclosure project), and a vigilant civil society.

• There is no one-size-fits-all approach, as approaches targeting value chains will differ depending on the geographic coverage (global, national, subnational, etc.) and on the economic sector.

DO’S AND DON’TS

Effective greening of value chains requires the following steps:⁷²

1) Mapping the value chain to get a better understanding of the actors, input-output and financial flows in the overall framework,

2) Understanding the main risks and opportunities that may affect value chain components and the overall environmental impact,

3) Developing and implementing an action plan based on key risks and opportunities, integrated into suppliers’ contracts if applicable.

Coordination of business interests and public policies is key, as the greening of a global value chain will work best if stakeholders keep the communication open and move in the same direction.

WORKS WELL WITH:

POLICY & REGULATION:
• Green Economic and Employment Strategies and Policies
• Green Public Procurement
• Macroeconomic Modelling for Green Growth
• Green Investment Climate
• Green Fiscal Policies

SUPPORTING FUNCTIONS:
• Multi-Stakeholder Platforms for Market Transformation

COMPANY:
• Green Business Development
Green and Climate Resilient Value Chains

Tools Detailed in This Navigator

- Guidelines for Value Chain Selection (ILO & GIZ)
- BioTrade Knowledge Sharing and Self-Assessment Tool (UNCTAD & ITC)

Other Tools and Resources

- Carbon Footprints in the Supply Chain (Carbon Trust): The instrument helps in identifying hotspots and intervention areas along the supply chain to focus on when aiming to reduce the product carbon footprint.
- Mainstreaming Sustainable and Inclusive Development Guidelines (ITC): Guidelines to help project managers to integrate all dimensions of sustainability, including environmental aspects, into their existing and new projects.
- Carbon Footprint Calculator (UNFCCC): Helps businesses in identifying their product carbon footprint and to create transparency that will help consumers make informed consumption choices.

Recommended Further Reading

- Green Global Value Chains: Some Implementation Challenges (World Bank): Highlights some of the most important implementation issues associated with the greening of global value chains with special attention given to how public policies and business strategies can support each other in meeting the challenge, particularly in developing countries.
- Partnership for Growth: Linking Large Firms and Agro-Processing SMEs (World Bank): While not specifically aimed at green business linkages, it provides valuable insights and extensive information on do's and don'ts of promoting business linkages as well as recommendations and a step-by-step approach on how to set up linkage programmes.
Guidelines for Value Chain Selection (ILO and GIZ)

DESCRIPTION
Jointly commissioned by German Federal Ministry of Economic Cooperation and Development (BMZ) and the ILO, and developed by GIZ, these guidelines provide practitioners with a 4-dimension analysis to select value chains for Green PSD interventions. The tool integrates the economic, environmental, social and institutional dimensions into a comprehensive 8-step methodology that facilitates the decision process of value chain assessment and selection. A specific set of value chain selection criteria is included, and case studies, practical considerations and additional tools are provided. The tool is complementary to GIZ’s ValueLinks 2.0 and ILO’s Value Chain Development for Decent Work Guide 3.

TARGET GROUP
• Development organisations, consultants and service providers, private sector companies, BSOs and government institutions.

GENDER/INCLUSIVENESS
• Gender aspects are considered in the guidelines’ social dimension.
• Inclusiveness is explicitly addressed in the guidelines’ social dimension.

FOCUS (GEOGRAPHIC/SECTOR)
• No specific geographic or sector focus but ideally, the tool should be adapted for each geographic context and economic sector.
• Already tested in various regional contexts (e.g. Africa, Middle East, etc.) and sectors (e.g. waste recycling, furniture, etc.).

ADVANTAGES
• Fills the gap of a tool integrating the 4 dimensions.
• Concise yet detailed guide, which includes a user-friendly scoring matrix with sustainability criteria.
• Provides solid background information and selection of complementary tools possible.

LIMITATIONS
• No detailed guidance on the implementation side.
• Potential trade-offs between value chain development and green growth ambitions.

EXTERNAL LINKS TO THE TOOL
• Guidelines for Value Chain Selection
• ValueLinks 2.0: Volume 1 and Volume 2
Guidelines for Value Chain Selection (ILO and GIZ)

LESSONS LEARNT

- The guidelines require a high degree of adaptation to the local context in which they are implemented, as well as to the specific objectives of the assignment.
- In order to avoid large disparities in scoring results, it’s necessary to ensure evaluators are well-informed of the selection criteria and their significance before application.

IMPACTS

- As this is a selection tool used during the project or intervention planning stage, there are no impact assessments or other direct feedback available on the tool’s performance.

ILO TANZANIA: MARKET SYSTEMS DEVELOPMENT AND A JUST TRANSITION

This brief provides a demonstration case to help projects grappling to understand how to incorporate an environmental lens while conducting a market systems analysis for employment outcomes. It unpacks the lessons learned from a market systems analysis conducted by the ILO Green Jobs Programme on Tanzania’s horticulture sector and intends to provide inspiration for identifying the key constraints and opportunities to create better employment and improve the environment.

The findings highlight the entry points and strategic intervention areas to promote jobs within the horticulture sector while enhancing its sustainability and resilience. The case study includes a brief value chain overview of the horticulture sector, portraying some of its main climate change and environmental impacts. The value chain selection process is, however, not documented in the case, and there is no direct linkage to the tool’s assessment.
DESCRIPTION

The BioTrade Knowledge Sharing and Self-Assessment Tool assists businesses, cooperatives and other institutions in assessing the sustainability practices in their value chain, with the objective of identifying potential areas for improvement. The self-assessment is based on the BioTrade Principles and Criteria developed by UNCTAD, so that interested parties may use it as a benchmark framework and obtain a standardised diagnostic report. The tool offers training materials and publications tailored to sectors and enables interested actors to connect and exchange best practices.

The tool was developed by ITC and UNCTAD as part of the BioTrade Initiative under the framework of the Global BioTrade Facilitation Programme: Linking Trade, Biodiversity and Sustainable Development, financed by the Swiss State Secretariat for Economic Affairs (SECO).

TARGET GROUP

- Companies, including MSMEs and cooperatives, as well as BSOs.

GENDER/INCLUSIVENESS

- Gender is addressed in the self-assessment.
- Inclusiveness aspects are considered in the social requirements section of the tool.

FOCUS (GEOGRAPHIC/SECTOR)

No specific geographic focus, but the self-assessments are subdivided in the following four sectors:

1) Marine Food Sector,
2) Tourism in Marine Ecosystems,
3) Terrestrial Non-Food Sectors,
4) Terrestrial Food Sectors.

ADVANTAGES

- This tool brings together information related to biodiversity-based initiatives, allowing users to connect with different value chain actors and benchmark their sustainability practices against the UNCTAD BioTrade Principles and Criteria.
- The tool can be used for free by companies, producers and cooperatives from various biodiversity-based value chains.

EXTERNAL LINKS TO THE TOOL

- BioTrade Knowledge Sharing and Self-Assessment
- BioTrade Principles and Criteria

EXTERNAL LINKS TO THE TOOL

• BioTrade Knowledge Sharing and Self-Assessment
• BioTrade Principles and Criteria
LESSONS LEARNT

- The tool is particularly relevant for businesses and value chain actors interested in obtaining a preliminary diagnostic report to see where they stand against the BioTrade Principles and Criteria.

- Live-demos and virtual trainings for companies and interested institutions working on biodiversity-based value chains on the use of the tool are offered by ITC on a regular basis and upon request. This approach ensures greater usability of the tool and the establishment of a network of partners (e.g. ministries of environment and trade, development agencies, business associations etc.) trained on the tool and able to further disseminate it within their projects and networks of value chain actors.

IMPACTS

- Promotion of sustainable use and trade in biodiversity-based value chains through knowledge sharing and capacity building.

- Creation of a one-stop-shop for businesses and other stakeholders with curated resources and information related to biodiversity-based initiatives.
DIFFERENT DIMENSIONS OF SUSTAINABLE FINANCE

SUSTAINABLE FINANCE
Economic & Financial Stability

ESG INVESTING
Governance

GREEN FINANCE
Pollution Prevention & Control
Natural Resource Conservation
Biodiversity Conservation
Other Environmental Objectives

CLIMATE FINANCE
Climate Change Mitigation
Climate Change Adaptation

SOCIAL FINANCE
Social Issues & Outcomes

WORKS WELL WITH:

POLICY & REGULATION:
- Green Economic and Employment Strategies and Policies

SUPPORTING FUNCTIONS:
- Green and Climate Resilient Value Chains

COMPANY:
- Green Business Development
Sustainable Finance is an umbrella term that includes climate and environmental protection (green finance), but also economic and social aspects (ESG approach with environmental, social and governance aspects). Here, we are zooming into a narrower field of sustainable finance: Green Finance for SMEs.

Supporting businesses to access green finance is essential to enable the private sector to invest in green solutions and thus contribute to addressing environmental and climate change related challenges. SMEs, in particular, have limited access to green finance and need a supportive financing ecosystem to address green market transformation and innovation. Access to green finance can be hampered by various factors:

- Lack of awareness and reliable data on the side of banks and other financial institutions (FI) regarding the green financing needs of SMEs,
- Insufficient consideration of environmental performance criteria in the assessment of credit applications,
- Limited availability of green financial products for SMEs, both along the enterprise cycle (start-up to scale-up) and along specific environmental goals such as use of renewable energy,
- Limited availability of financial products offering long-term and affordable finance,
- Lack of awareness among SMEs of green financing options and the business potential of green investments.

Rendering green finance inclusive is key to ensure that the most vulnerable groups and minorities are not left behind in the transition to a green economy, whereby access to green finance also requires financial literacy, financial identity and the relevant infrastructure.

Relevant to the financial ecosystem, including public and private FIs, insurance companies, impact investors and BSOs. More indirectly, policy makers need to be involved to create the right framework conditions.

Access to green finance promotes the development and implementation of green business models, investments, projects and policies that are geared towards a green economy and help businesses mitigate shocks and risks.

Tools and methodologies range from innovative green financial products and services, such as green lending and de-risking, to smart technologies (Fin-Tech) that help reducing lending businesses’ transaction costs.
Green Finance for SMEs

**AREAS OF INTERVENTION**

To unlock the potential of Green Finance for SMEs, it is necessary to simultaneously support actors on the supply and on the demand side.

**Examples for supply side interventions:**
- Capacity building for financial institutions (FIs) to understand new green business models,
- Assist FIs in responding to new green finance regulations/taxonomy,
- Support FIs in green finance product development and adapting their risk management systems,
- Offer FIs credit portfolio analysis methodology to detect green cluster risks,
- Assist FIs in further digitising their processes to lower transactional costs (in green finance),
- Foster match making with SMEs.

**Examples for demand side interventions:**
- Market analysis of the financing barriers and needs of the new SME green business models/green technology,
- Supporting SMEs in understanding and using new green business models/green technology,
- Capacity building for business management skills,
- Providing awareness raising and promoting financial literacy for new SME green finance products.

**SPECIFIC EXAMPLES OF GREEN FINANCING OPTIONS FOR SMES**

In general, financing solutions for SMEs do exist but integrating environmental (as well as social and governance) aspects into the finance solution will be key. In many cases, such green finance solutions for SMEs need an initial support of donors, government, development banks and alike to become a mainstream product. Examples include:

- Green financial products via financial sector that are linked to environmental criteria,
- Supply chain finance solutions usually geared towards working capital needs of SMEs and often based on the strength of the larger buyer’s business (e.g. reverse factoring) with built-in financial incentives for green SMEs,
- Green credit lines or revolving funds, provided by development banks, a respective government as well as international climate funds such as Green Climate Fund (GCF) and Nationally Appropriate Mitigation Actions (NAMA) Facility, which offer targeted finance for specific SME sectors often at concessional rates,
- Impact investors that invest in green/social/sustainable SMEs.
TOOLS DETAILED IN THIS NAVIGATOR

• Climate Expert: Supporting Climate Adaptation, Finance for SMEs (GIZ)

OTHER TOOLS AND RESOURCES

• Using Credit Lines to Foster Green Lending Opportunities and Challenges (I4CE): This scoping report aims to improve the understanding of the role played by credit lines in enhancing the access to finance for green investment projects.

• Using Insurance in Adaptation to Climate Change (European Commission): The document provides an overview of the relevance and fields of application of insurance to help businesses become more climate resilient.

RECOMMENDED FURTHER READING

• Enabling SME Access to Finance for Sustainable Consumption and Production in Asia (adelphi): A series of country case studies, including Cambodia, China, India, Myanmar, and Vietnam, providing insights on green finance for Sustainable Consumption and Production (SCP) measures.

MOBILISATION OF INVESTMENTS IN RENEWABLE ENERGY WITH GET.INVEST

GET.invest is a joint project of different European donor agencies that mobilises investment in renewable energy in developing countries. It aims at bridging the missing link between the many developers and companies looking for funding, and the many financiers looking for investees. Hence, the project supports developers and companies towards investment readiness and links them with financiers. In collaboration with many stakeholders in the sector, the project also provides a range of other services to complement this effort. So far, GET.invest managed to successfully link 74 projects and companies with financiers which represents a projected investment volume of €1.2 billion and results in an energy access potential for 15 million people (mainly in Africa).
DESCRIPTION

Lack of access to finance is a key constraint for companies, especially SMEs, implementing climate adaptation measures. Current financial products do not nearly cover the demand by SMEs, and at the same time SMEs often lack financial literacy and know-how to tap into existing financial instruments.

The Climate Expert supports SMEs in developing sound adaptation strategies. It follows a five-step approach, from identification of climate impacts to selecting financial instruments. The financial component entails checklists that help SMEs identify suitable financial instruments and gather data to apply for external (adaptation) finance. Available training material helps consultants understand options and hurdles for SME finance and prepares them for identifying financing options together with their SME clients.

TARGET GROUP

• SMEs, consultants, multipliers and experts who want to support the private sector in addressing climate change adaptation.

GENDER/INCLUSIVENESS

• Gender and inclusiveness are not specifically addressed.

FOCUS (GEOGRAPHIC/SECTOR)

• The tool does not have a specific sector or geographic focus.

• This tool has been tested as part of a pilot programme in Central Asia, i.e. in the GIZ project "Towards Rural Inclusive Growth and Economic Resilience" in Tajikistan.

EXTERNAL LINKS TO THE TOOL

• Will be available through the Climate Expert website starting mid-2022.

ADVANTAGES

• Practical training of consultants package for building the capacities of international and local consultants as well as excel-based checklists for companies.

• Allows companies to identify and evaluate various financing options for planned adaptation measures.

LIMITATIONS

• External facilitator is recommended, which might be a barrier for some SMEs not participating in a local Climate Expert roll-out.

• The financial component of the Climate Expert tool is new, few applications have taken place to date.
LESSONS LEARNT

The tool has been developed to cover an important gap in addressing the demand side for adaptation finance and to help SMEs to increase their financial capacities, as well as to be able to tap into existing financing options. However, focusing on the demand side alone will not be sufficient, as there are similar challenges on the supply side as well as the local business and investment climate related to green investments.

Activities to promote adaptation finance for SMEs should be integrated into a wider set-up including:

1) Supply side, including capacity building for FIs,
2) Matchmaking between SMEs and FIs that are often not aware of mutual needs,
3) Public support programmes set up by policy makers and regulators to incentivise adaptation finance.

IMPACTS

SMEs that have used the tool reported better understanding of available financing options as well as mechanisms to access them. This enlarged the scope of initially accessible adaptation options for the SMEs, thereby increasing the number and extent of adaptation options to be applied.

TOWARDS RURAL INCLUSIVE GROWTH AND ECONOMIC RESILIENCE

The tool was implemented in the GIZ project “Towards Rural Inclusive Growth and Economic Resilience” (TRIGGER II) in Tajikistan with local SMEs in the agricultural sector. In the first round of applications, the tool was applied for cherry, apricot and apple gardens as well as mixed gardens, animal farms and fish farms. It will further be applied with agricultural processing enterprises throughout 2022. The results will be available in the second half of 2022. In the first round of application, it allowed to evaluate available financing mechanisms for the implementation of adaptation options. It also broadened the SMEs’ knowledge of the FI landscape in Tajikistan and therefore allowed to finance more adaptation options, including options that require larger investments.
APPROACHES

Resource Efficiency & Circular Production p. 97

Climate Change Adaptation p. 104

Eco-Labelling, Sustainability Reporting and Voluntary Standards p. 111

Green Business Models and Eco-Innovation p. 117

TOOLS

RECP Navigator (GIZ) p. 100

SCORE Training (ILO) p. 102

Engaging the Private Sector in National Adaptation Planning Processes (NAP Global Network) p. 107

The Climate Expert (GIZ) p. 109

Standards Map and Self-Assessment Tool (ITC) p. 114

GRI Standards p. 116

Green Business Model Navigator (GIZ) p. 120

Eco-Innovation Manual (UNEP) p. 122
What is Green Business Development?

Development interventions focusing on MSME development typically support the development and strengthening of markets for business development services (BDS).

This is primarily done through capacity building of private and public service deliverers and other intermediaries, including representatives of selected government departments, research institutions, consulting businesses or individual consultants, and private sector representative institutions such as chambers of commerce and industry, sector-specific associations and cooperatives.

Green BDS can be understood as all activities that help companies, especially MSME, in becoming more environmentally sustainable, more resource efficient or more resilient and better adapted to the risks and opportunities of climate change. Green BDS providers typically facilitate the greening of existing businesses, supporting them in making their products and services, strategies, operations and other relevant activities more sustainable.

Thematic focus areas of Green BDS programmes may include but are not limited to energy and resource efficiency, eco-innovation, sustainable finance, labelling and standards as well as access to sustainable markets.

DEFINING GREEN BUSINESS

Broadly speaking, a green business can be defined as any profit-oriented activity that supports sustainable growth “while sustainably harnessing opportunities that nature holds, and without harming the environment.”

There are two main categories of green business:

1) Companies that produce environmental or environmentally friendly goods and services, that reduce environmental risk and minimise pollution as well as resource degradation. **Example:** A company involved in the manufacturing, installation and servicing of solar panels to generate electricity instead of generating it from non-renewable sources.

2) Companies that change their products and/or processes to take the environmental sustainability agenda into account, thereby reducing negative environmental impacts. **Example:** A clothes manufacturing company that uses organic cotton and dyes as raw material, that filters its waste-water in a way that it can be partly re-used for irrigation, and that has installed LED-lights.
**What is Green Business Development?**

- Targeted towards greening of business, services offered range from designing a sustainability strategy to training staff in implementing specific measures and sustainable practices that improve overall productivity and competitiveness while reducing the MSME’s environmental footprint. All areas of operation, starting from human resources to production and marketing, need to be addressed.

- A business becomes greener when it changes part(s) of its business model, thereby capturing economic value and reducing the ecological footprint from a life-cycle perspective. Such innovation should be thought of as a continuous process of efficiency enhancement and productivity improvement.³

- Companies can integrate green principles into their business in different capacities and to differing degrees. Actions can be taken at each of the five steps in a business life cycle: inputs, process, outputs, environmental externalities and marketing. Some businesses are using greener inputs or selling more environmentally-sustainable products and services, while others are transforming production and consumption patterns across entire value chains.

Categories of Approaches

The Green PSD Navigator differentiates between four key approaches that cover both the process and the output perspective of Green BDS:

1) Green BDS leading to climate change mitigation, resource efficiency and circular production while at the same time improving their competitiveness, performance and reputation.

2) Green BDS leading to increased climate resilience, with a focus on supporting businesses in addressing issues of climate change adaptation (risk management and new market opportunities) while improving their competitiveness, performance and reputation.

3) Green BDS leading to better access to sustainable markets via the implementation of eco-labelling, reporting standards and other voluntary sustainability standards that increase transparency along the value chain and consumer awareness.

4) Green BDS leading to the development and advancement of green business models through the promotion of technological and non-technological eco-innovation.

There is significant overlap between these categories. Most companies with a green business model also follow strategies in the areas of resource efficiency, climate adaptation and sustainability standards. There are few exceptions though, such as those companies that produce green technologies that, from a life-cycle perspective, are actually resource intensive and polluting (e.g. solar cells, which can be quite resource intensive and environmentally harmful during the extraction and production phases).
Drivers of Green Business Development

A number of drivers are accelerating green business development:

- **Market**: Companies can go for product differentiation and subsequently gain access to new markets.
- **Business**: Companies increasingly see opportunities to invest in process, efficiency improvements, cost reduction, and product quality improvements.
- **Financial Sector**: Instead of serving as a barrier to green business, which was the case in the past, finance is now becoming a key driver of green business, with green financing becoming more common.
- **Government**: Companies are improving their environmental performance in response to effective policies and regulations.

Advancements in the government and financial sectors in particular reflect progress on the global stage. International agreements for protecting and managing the global environmental commons, such as the Conventions on Transboundary Air Pollution (1979) and Biological Diversity (1992) or the Paris Agreement under the UN Framework Convention on Climate Change (2015), drive changes in national-level policies.

**MARKET**

"Buyer-led motivations"

- Reputation risk
- Product differentiation (eco-labelling and certification)
- Consciousness-driven

**BUSINESS**

"Business rationale"

- Input security (water, raw materials)
- Cost reduction/quality and productivity improvements
- Corporate social and environmental responsibility

**FINANCE**

"Investor-driven"

- Responsible finance, social and environmental performance management
- Financing risks (stranded assets)
- Impact investors, special credit lines, donor funds

**GOVERNMENT**

"Government- and regulation-driven"

- Regulations, policies, subsidies, and tax regimes
- Green procurement
- Public-private partnerships

GREEN BUSINESS DEVELOPMENT

Entry Points from a Policy Perspective

To pursue green business innovation, governments can implement a mix of measures over the long-term to enable structural and behavioural change among producers and consumers.

This section briefly explores three entry points that governments, along with development finance institutions (DFIs), can consider in helping advance green business development.

1) Implement a mix of policies in support of green business development.

To pursue green business innovation, governments must design policies and regulations that are stringent enough to incentivise compliance and innovation, predictable enough to engender long-term investments, and flexible enough to adjust to changing circumstances, especially new technologies. Policies and regulatory instruments can be broken down into three major categories:

- “Command-and-control” approaches, such as technology and pollution standards.
- Market-based instruments (MBIs), such as green taxes, tradable permits, and payment for ecosystem services.
- Information-disclosure and voluntary policy tools, which devolve some of the responsibility for environmental protection to consumers, investors and the public.

Furthermore, interventions must also address systemic failures, like unclear goals, lack of accountability, and poor communication and coordination between the public and private sectors. These can also hinder the flow of technology and knowledge, thereby reducing the efficiency of green business innovation efforts.

2) Support innovation and technology development to accelerate green business opportunities.

Green innovation policies and investments play a key role in supporting green business development. There are a range of options available to governments, and these are linked closely with the stage of market development. The early-stages of research and development (R&D) pose a particular challenge for many emerging economies because the risks are high and the transaction times are long. Consequently, there is a lack of money flowing into new green technology development.

In response, developing countries can look for opportunities to support incremental innovation by focusing on areas of comparative advantage. For instance, many developing countries are cost competitive in manufacturing. They also have a large base of consumers, many of whom do not have a lot of resources to pay for costly solutions.
3) Secure access to private finance to support long-term green investments.

While governments can deploy public funds to support green innovation, governments and development finance institutions can also support various green finance initiatives to provide the necessary long-term financial support to green businesses—especially considering the fiscal restraints in many countries.

In simple terms, green finance involves efforts to internalise environmental externalities and adjust risk perceptions in order to boost environmental friendly investments and reduce environmentally harmful ones. There are three main categories of green finance—green banking, green bonds, and green investing. Across these different asset classes, DFIs and governments can team up with central banks and institutional investors to implement measures to increase capital flows and develop innovative financial approaches.

In green banking, efforts must focus on SMEs, as access to green finance is especially difficult for them. Over 90% of informal SMEs are proprietorships or partnerships and many are run by women who face additional challenges linked to gender discrimination, especially in rural areas.

To provide green start-ups the long-term support that they need to grow and thrive, there are also growing opportunities for governments to join private investors and international aid providers in providing “blended finance”, which refers to the deliberate use of public funds to attract private capital towards investments delivering development impact in emerging and frontier markets.
Resource Efficiency and Circular Production

**DESCRIPTION**

Green business development focusing on resource efficiency and circular economy intends to decrease the negative environmental impacts of companies through managerial and operational improvements, investments in new technologies and more sustainable processes.

While the concepts of resource efficiency and circular economy differ, the objective of both is to decouple economic growth from environmental degradation and to improve the wellbeing of humankind by maintaining the resource base it depends on. At the same time, measures aim to improve the competitiveness, cost structures and productivity of the companies implementing them. A reduced and more efficient use of natural resources, especially in the area of energy efficiency, will also lead to an increased mitigation of climate change impacts.

The focus is on materials, water, energy and other resource savings as well as a better management of chemicals and overall reduction of pollution.

- **Resource Efficiency** is defined as the efficiency with which energy and materials are used throughout the economy, i.e. the value added per unit of resource input.

- **Circular Production** entails keeping materials and products in circulation for as long as possible. To achieve this, practices such as re-use, repairing, re- and upcycling, re-manufacturing and sharing of underused assets are applied.

**GENDER/INCLUSIVENESS**

- Social and inclusive development are part of many existing green business development tools and make implementation more holistic.

- Acceptance of measures is generally higher if all staff members are involved and aspects such as health and safety are included.

**AREA OF APPLICATION AND RELEVANCE**

- Relevant to all types of sectors, from entrepreneurs and MSME to large scale companies. However, the focus of development projects is often on supporting MSME.

- Resource efficiency is a widely applied concept and critical measure in the pursuit of the Sustainable Development Goals and the global climate goals as defined in the Paris Agreement.

- There is a wide selection of established tools that address aspects from strategy to action, providing overall management guidance as well as specific tools for analysis and process improvement.
LIMITATIONS AND CHALLENGES

- Lack of awareness, technical knowledge and skills regarding resource efficiency and its economic benefits.
- Lack of awareness of available support schemes in the specific country context.
- Lack of access to finance as an important constraint to implement more ambitious measures that might require external financing.
- Cheap and subsidised water and/or energy reduce the incentives for implementing RE measures at the company level.
- General management capacities of MSME as a pre-requisite for the implementation of environmental management measures are often limited.

DO’S AND DON’TS

The following hints and recommendations should be taken into account for the setup of resource efficiency and circular production interventions:

- **Preparation phase:**
  No one-size-fits-all approach is possible as the existing industry structure, needs of the target group, relevant laws and regulations need to be integrated. A baseline and indicators need to be defined to collect comparable outcome data for SMEs. Local stakeholders have to be actively involved.

- **Implementation phase:**
  Be aware of the realities of the SMEs, they might need support in data collection and struggle to implement measures in their day to day operations due to outdated technologies and other priorities. Communicate success stories about increased profitability which can increase buy in from company management and other peers. Facilitate quick wins that are easy to implement.

WORKS WELL WITH:

- **POLICY & REGULATION:**
  - Green Economic and Employment Strategies and Policies
  - Green Public Procurement
  - Green Investment Climate
  - Green Fiscal Policies

- **SUPPORTING FUNCTIONS:**
  - Green and Climate Resilient Value Chains
  - Green Finance for SMEs
  - Eco-Industrial Parks
  - Business Support Organisations as Promoters of Green Growth

- **COMPANY:**
  - Green Business Models and Eco-Innovation
  - Eco-Labeling, Sustainability Reporting and Voluntary Standards
Resource Efficiency and Circular Production

TOOLS DETAILED IN THIS NAVIGATOR

- RECP Navigator: Instruments for Supporting Resource Efficiency and Cleaner Production in SMEs (GIZ)
- SCORE Training (ILO)

OTHER TOOLS AND RESOURCES

- There are a number of different tools directly focused on improving resource efficiency and circular production in companies. Some of them are listed here: ITC RECP Programme, ECOPROFIT, UNIDO RECP, PRE SME Toolkit, VDI ZRE, EREK RECP, PREMA, Energy Management Self Assessment Tools, EPA Tool for Resource Efficiency, Energy Management Assessment Tool, SME-SDG Toolkit, and Global Compact Assessment Tool.

- The Circular Toolbox: Step by step guide to launch a circular business model.

- National Cleaner Production Centres: Set up by a joint programme of UNIDO and UNEP, 47 NCPCs have been established to help businesses improve their environmental performance. Services include awareness raising on the benefits and advantages of RECP, in-plant assessments, demonstration projects, access to finance for resource efficiency measures, policy advice to national and local governments, and dissemination of technical information.

RECOMMENDED FURTHER READING

- Improving Resource Efficiency and the Circularity of Economies for a Greener World: Although with a slight policy focus, this publication gives an overview of past and future trends of material consumption, its impacts and actions to be taken to move forward.
**DESCRIPTION**

The RECP Navigator was developed by GIZ and aims to support development professionals who are interested in promoting resource efficiency in small and medium-sized enterprises. It provides valuable insights on how to design a RECP intervention and helps to decide which tools and programmes are most useful given the respective circumstances and conditions.

The RECP Navigator is divided into three parts:

1) RECP concept, benefits and challenges for SMEs, and evolution of RECP in international development,
2) In-depth overview of six selected RECP instruments (SCORE, Test, ITC RECP, Ecoprofit, PREMA, UNIDO RECP) and related case studies from GIZ project implementation in India, Armenia, Ethiopia and Jordan.
3) Recommendations for RECP project design and implementation.

**ADVANTAGES**

- Provides an overview of the most relevant RECP instruments as well as a detailed comparison of the ones selected based on key interventions, target group and industries, programme duration and costs.
- Provides overall guidance on what to take into account when setting up a RECP project.

**LIMITATIONS**

- The navigator provides an overview of different tools but does not contain the tools themselves.
- Not all of the tools featured in the navigator are publicly available in their entirety.

**TARGET GROUP**

- Development professionals working in the area of SME development.

**GENDER/INCLUSIVENESS**

- Gender is only addressed as a supplement in the SCORE tool.
- Inclusiveness aspects are considered as an integral part of PREMA.

**FOCUS (GEOGRAPHIC/SECTOR)**

- Covers all sectors and geographies. However, some tools featured have an additional sector specific focus.
- Specific focus on small and medium-sized enterprises (SME).

**EXTERNAL LINKS TO THE TOOL**

- RECP Navigator (full document)
LESSONS LEARNT

The RECP Navigator includes a number of lessons learnt by practitioners while setting up and managing RECP projects in a wide range of contexts and sectors. Lessons learnt include the following:

Preparation Phase:
• Know your market. Before setting up any RECP project, it is key to be very aware of the specific industry structure, as well as existing laws and regulations. Define a good baseline of what is already available.
• Closely analyse the needs of your target group and main stakeholders and adapt the focus of your RECP programme and the selection of the instrument to be used accordingly.
• Work with existing experts and consultants who know the market well.

Implementation Phase:
• Add access to finance support to your activities.
• Adapt the level of complexity to the knowledge of the respective SMEs and its staff members.
• Leverage networks and support SMEs in sharing information to reach a wider audience.
• Communicate success stories related to economic gains and facilitate quick wins for the company.

IMPACTS

Companies that have used tools presented in the RECP Navigator have achieved significant environmental and economic savings. In the case of the TEST methodology, 125 participating companies reported average annual savings of 20% in water consumption, 24% in energy savings and a reduction of 5% in material input.
DESCRIPTION

The Sustaining Competitive and Responsible Enterprises (SCORE) Programme improves productivity and working conditions in small and medium-sized enterprises (SMEs) through a combination of practical classroom training and in-factory consulting offered by industry experts. It was launched in 2009 by the ILO, with support from the Swiss State Secretariat for Economic Affairs (SECO) and the Norwegian Agency for Development Cooperation (NORAD).

SCORE Training promotes cooperative relations, management practices and lean manufacturing techniques to help SMEs participate in global supply chains. The training comprises a dedicated module on Resource Efficiency and Clean Production, which demonstrates strategies and best practices to improve productivity and environmental sustainability. Through promoting effective, resource, energy and waste management, the module seeks to foster green growth among SMEs and their integration into the circular economy. A module on Hospitality Coaching teaches environmentally sustainable management practices for the hospitality sector, jointly with strategies to achieve improved hygiene and better occupational safety and health.

TARGET GROUP

• Managers and workers in SMEs. Training of Trainers targets government agencies, industry associations and trade unions.

GENDER/INCLUSIVENESS

• Gender equality is mainstreamed in all modules. One module is dedicated specifically to promoting gender equality.
• Inclusiveness is partly considered in the training.

FOCUS (GEOGRAPHIC/SECTOR)

• SCORE is a global programme. The training has been implemented in 20+ countries across Africa, South America, and Asia.
• Covers a wide range of subsectors within the manufacturing and hospitality sectors.

LIMITATIONS

• M&E limitations, as the programme only collects KPIs during training implementation. Data is often not available, since many SMEs don’t monitor related KPIs.
• Indicators may be affected by seasonality, depending on the month in which the baseline assessment is conducted.

ADVANTAGES

• The selection of modules is tailored to specific training priorities, to be decided during the initial baseline assessment.
• Individual consulting is conducted by local experts previously trained and certified.

EXTERNAL LINKS TO THE TOOL

• The SCORE Programme
• SCORE Training Implementation Guide
LESSONS LEARNT

• A solid diagnostic approach and selection process is important. In order to attract SMEs who will genuinely benefit from SCORE Training, it is relevant to focus on the main needs of each company and assess ways to foster engagement and commitment of owners, managers and workers.

• The training programme needs to be closely linked to public policy objectives and government programmes to create synergies and ensure scalability and sustainability.

• Training is best offered in clusters and sectors with growth potential and a sufficient number of potential clients. This allows the implementation partners and training providers to gain cluster-specific knowledge, reduces the cost of services and encourages spill-over of good practices between enterprises.

• Results tracking is challenging but key. SMEs rarely track changes in productivity and working conditions. SCORE trainers play an important role in helping SMEs implement appropriate indicators so that change can be measured. This involves supporting SMEs in instituting data collection and reporting processes.

IMPACTS

• Since its launch, SCORE Training has been delivered to over 3,900 enterprises globally, with participation of over 45,000 managers and 639,000 workers. 40% of participants are women.

• The programme comprises a network of 1,500 trainers across 20+ countries.

• Roughly 50% of trained SMEs report improvements to productivity and 46% report reduced labour turnover and absenteeism. 93% report cost savings, 55% report waste reduction and 48% report energy savings.

SCORE TRAINING TO AVON SEALS

Avon Seals Private Limited is an Indian manufacturing company focused on distributing mechanical seals for water pumps. Prior to receiving SCORE training, the company wanted to address several challenges: inefficient waste management, lack of workplace cooperation, and occupational safety and health issues.

After the full module package was implemented, employees indicated positive changes in their daily work such as better communication and cooperation, and improved production processes which increased productivity. Better health and safety measures were also put in place with the goal of ensuring zero accidents. Furthermore, SCORE helped Avon to reduce its energy consumption, material usage and waste. For example, they invested in a guillotine and preforming machine which increased the yield from 78% to 95% and reduced rubber waste from 22% to 5%. The rubber waste is now sold to reclaimed rubber manufacturers and no waste ends up in a landfill. Overall, the different impacts contributed to the growth and productivity of the company over the following years.
Climate change adaptation and resilience helps companies to protect themselves from the negative impacts of climate change and seize the prospects that come with it. Steady increases in temperature as well as extreme weather events, such as heavy rains leading to floods or heat and droughts leading to crop loss, can have detrimental direct effects on businesses and their assets, as well as indirectly impact their customers, suppliers and surroundings. Yet, a changing climate does not only include risks that need to be anticipated and mitigated but may also lead to new business opportunities, as new products and services that help others to adapt to climate change will be needed. Taking into account the need for climate change adaptation, e.g. through risk management and adaptation strategies, can help businesses to stay competitive and become more resilient to the changes expected in the future.

However, SMEs often lack the necessary skills to conduct thorough assessments of climate risks as well as business opportunities, and to develop adaptation strategies, which should be part of their overall risk management.

• Overall women and other vulnerable groups are more affected by the impacts of climate change. Including them into efforts to adapt the private sector to climate change from an early stage is therefore of utmost importance.

• Relevant to all types of sectors, from entrepreneurs and MSMEs to large scale companies.

• Climate change adaptation for SMEs is still an incipient area that is quickly gaining importance as the impacts of climate change become more relevant.

• Tools range from guides on how policy makers can be supported in integrating the private sector into adaptation planning to practical company tools, self assessments and ToTs.
LIMITATIONS AND CHALLENGES

- There are still important blind spots when it comes to companies addressing climate change adaptation. There is still limited awareness of companies regarding the need for systematic risk management and climate change adaptation, even if climate change risks and proper adaptation measures have been identified.

- Additionally, many of the companies that do identify climate risks and adaptation strategies fall short of taking into account the impacts relevant for the supply chain or related to wider social issues respective to the surrounding environment or clients.

DO’S AND DON’TS

- When addressing climate change adaptation in businesses, take into account and communicate the economic drivers of adaptation, which include business opportunities, social advantages, social licences to operate, reputation, reduced operational costs, reduced disruption of production, and changing demands for goods and services.

- A systematic approach including soft, hard and ecosystem-based adaptation measures would help to gradually manage and mitigate possible climate change impacts and risks.

- Companies should look beyond their immediate company impacts (i.e. past damage from extreme weather events) to proactively identify possible climate risks that could influence their business in the future.

WORKS WELL WITH:

- POLICY & REGULATION:
  - Green Economic and Employment Strategies and Policies
  - Green Public Procurement
  - Macroeconomic Modelling for Green Growth
  - Green Investment Climate
  - Green Fiscal Policies

- SUPPORTING FUNCTIONS:
  - Green and Climate Resilient Value Chains
  - Green Finance for SMEs
  - Eco-Industrial Parks
  - Business Support Organisations as Promoters of Green Growth

- COMPANY:
  - Resource Efficiency and Circular Production
  - Green Business Models and Eco-Innovation
  - Eco-Labelling, Sustainability Reporting and Voluntary Standards
Climate Change Adaptation

TOOLS DETAILED IN THIS NAVIGATOR

• Engaging the Private Sector in National Adaptation Planning Processes (NAP Global Network)
• The Climate Expert (GIZ)

RECOMMENDED FURTHER READING

• The Roles of the Private Sector in Climate Change Adaptation (adelphi): This brief gives an introduction to the role that the private sector can play in climate change adaptation.
Developed by the National Adaptation Plan (NAP) Global Network in partnership with GIZ, this study provides guidance to governments and practitioners in designing strategies to engage the private sector in national adaptation planning processes. It highlights the relevance of engaging private sector organisations and business investors in supporting national climate adaptation, exploring the barriers to and enabling factors for successful engagement and providing entry points for engaging organisations in the NAP process.

The Toolkit for Engaging the Private Sector in National Adaptation Plans, launched in 2020 by the NAP Global Network and the United Nations Framework Convention on Climate Change (UNFCCC) Adaptation Committee, complements the study with a step-by-step approach on the key four steps of the NAP process:

1) Lay the groundwork and address gaps,
2) Preparatory elements,
3) Implementation of strategies and reporting,
4) Monitoring and review.

The Toolkit includes a list of additional resources linking private sector engagement and adaptation activities.

• Clear and concise knowledge product, complemented with practical private sector engagement strategies at the country level.
• Resources from Peer Learning Summit discussions, with 50 representatives from 12 countries.

• Guidelines and approaches are not universal and should be adopted according to the national or local context and specifics.

• Gender considerations in private sector engagement are addressed.
• Inclusiveness is partly considered in the guidelines.

• No specific economic sector nor geographic focus. The guide is suitable for any country involved in national adaptation planning processes.

• Engaging the Private Sector in National Adaptation Planning Processes
• Peer Learning Summit
LESSONS LEARNT

• Share climate information to the private sector to have them clearly understand the effects of climate change, the potential impacts on their business activities, and the options available to engage in NAP processes.

• Ensure the private sector has access to finance for adaptation activities and financial instruments available to enhance investments in NAP processes.

• Support the private sector’s implementation of NAP processes by identifying market opportunities for business actors to undertake adaptation activities (e.g. producing and distributing sustainable goods and services, greening value chains, etc.)

• Engage the private sector in monitoring and evaluation of the NAP process, as their contribution can be highly valuable to the NAP process (e.g. through data collection, disclosure of climate-related outcomes and risks in their activities, etc.)

IMPACTS

“The resources the NAP Global Network shared and the toolkit launched have been very significant in helping develop the concept for the Climate Information Business Network Kenya, especially on engagement of private sector as implementers and not just enablers as financiers.”

Faith Ngige
Kenya Private Sector Alliance

PRIVATE SECTOR ENGAGEMENT IN NAP DEVELOPMENT AND IMPLEMENTATION IN VIETNAM

The NAP Global Network, through its Country Support Hub, provided technical assistance to the Government of Vietnam in developing the country’s NAP Private Sector Engagement Strategy, which was completed in 2020.

The assessment’s goal was to study the impact of climate change on a group of businesses from the Vietnamese aquaculture, agriculture, and tourism sectors, geographically located in areas vulnerable to climate change effects. It was based on a series of structured interviews and surveys with private sector organisations, and on two workshops organised by the Ministry of Environment, where members from the private sector, the government and academia discussed ways to enhance private sector participation in NAP processes. Based on the findings, the strategy proposed specific activities and solutions to encourage the private sector’s active participation in climate change adaptation.
The Climate Expert (GIZ)

DESCRIPTION

The Climate Expert was developed by GIZ and helps SMEs as well as industrial zones to better adapt to climate change. Based on an excel-tool and additional working materials, it follows a simple 5-step approach:

1) Identification and analysis of climate change impacts,
2) Assessing climate risks and analysing climate change opportunities,
3) Identification of suitable adaptation measures, their costs and benefits,
4) Development of an adaptation strategy,
5) Identification of suitable financial instruments.

The Climate Expert website contains the excel-tool and additional material in various languages as well as case studies and a consultant data base that can help connect businesses with potential trainers or facilitators.

TARGET GROUP

• SMEs and industrial zones, as well as consultants, multipliers and experts who want to support the private sector in addressing climate change adaptation.

GENDER/INCLUSIVENESS

• Gender is not explicitly addressed.

• Inclusiveness is addressed through aspects of employment and community.

FOCUS (GEOGRAPHIC/SECTOR)

• No specific sectoral or geographic focus, but provides examples from Asia, Africa and Latin America.

ADVANTAGES

• Quick assessment and online courses as introductory materials for SMEs.

• Full checklist tool that enables companies to do a comprehensive assessment.

• Contacts to local consultants in a number of countries are provided.

• Complete service packages for training of consultants approach available in various languages.

LIMITATIONS

• The excel-based assessment tool is publicly available to SMEs but the Climate Expert application usually requires facilitation through a trained expert.

EXTERNAL LINKS TO THE TOOL

• The Climate Expert Website
• Case Studies
• Tools
LESSONS LEARNT

- Experience has shown that results of implementing the Climate Expert are better when trained external experts or consultants are involved in the analysis process.

- Awareness of climate change impacts is still weak on the side of businesses. In order to make the Climate Expert and the topic of climate change adaptation more accessible to SMEs, ITC developed the Online Course Become a Climate Resilient SME (ITC SME Trade Academy), which is directly tailored to SMEs. The course is offered on a regular basis.

IMPACTS

- As a consequence of the application of the Climate Expert, participating companies in several countries reported an increased awareness for climate change adaptation.

- In Kenya, for example, participating companies from the coffee sector implemented measures such as installation of new drying structures that protected coffee from heavy rain fall, contracted climate risk insurance, implemented soil conservation or increased coffee shading by planting avocado or macadamia trees.

CLIMATE EXPERT APPLICATION WITH URWIBUTSO IN SINA GERARD, RWANDA

URWIBUTSO, founded in 1983, is a Rwandan company dedicated to food processing activities (fruit juices, water, bread, etc.) at the national and international level. The company participated in a Climate Expert application as part of the GIZ global project Private Sector Adaptation to Climate Change (PSACC).

The climate risk assessment conducted indicated that the increase of rainfalls and the seasonality shifts were the main risks for URWIBUTSO. Future production processes of the company’s food items would be affected while more frequent landslides or power outages would affect its logistic activities. The use of the Climate Expert tool helped to identify a set of climate change adaptation actions, including:

- Preparation of emergency plans for the most frequented and/or most vulnerable routes,
- Installation of a micro-water-energy plant,
- Better transport organisation to ensure production continuity and to avoid material destruction.
Voluntary Sustainability Standards (VSS) contribute to sustainable and transparent practices among producers, manufacturers and other actors at multiple levels of the value chain, as they inform about the environmental as well as social impacts of their products and services.

- **Eco-Labelling** is a voluntary method or tool used for environmental performance certification. An eco-label identifies products or services proven to comply with a pre-defined set of standards and communicates these environmental credentials to buyers and consumers. Labels encourage businesses to produce environmentally-friendly products and to expand to market segments where environmentally-conscious consumers make informed purchasing choices.

- **Sustainability Reporting** helps businesses to build consumer confidence and gain the trust of different stakeholders through openly disclosing their environmental and social performance. It improves corporate reputation through social responsibility programmes and transparent risk management.

- Eco-labels can also incorporate economic and social aspects related to the impact of a product’s life cycle.

- Relevant to policy makers that promote environmental incentive schemes, BSOs supporting businesses to apply sustainable practices and companies seeking to access markets for eco-label products and services.

- Credible eco-labels and standards can contribute to finding new markets. They also help SMEs to compete against larger organisations.

- VSS include labels and certifications, product declarations, ratings, footprinting and life-cycle assessments.
LIMITATIONS AND CHALLENGES

- Lack of harmonisation between eco-labels or reporting standards as well as lack of credible information can lead to the need of a single product or service to comply with multiple standards to satisfy market demands.

- Mislabelling, greenwashing and abusing green marketing may occur in contexts with a lack of rigorously enforced standards.

DO’S AND DON’TS

- Support businesses with compliance and provision of accurate and verifiable environmental impact related information of their products and services. Generating trust in consumers increases demand of products and services with low environmental impact and opens the door to new green markets.

- Conduct awareness raising on the value of VSS and help interested SMEs in establishing sustainability reporting procedures in accordance with existing local sustainability standards and reporting frameworks.

- Assist companies in designing and maintaining thorough internal reporting processes to improve the value of sustainable reporting.

WORKS WELL WITH:

POLICY & REGULATION:
- Green Public Procurement

SUPPORTING FUNCTIONS:
- Green and Climate Resilient Value Chains
- Green Finance for SMEs

COMPANY:
- Resource Efficiency and Circular Production
- Climate Change Adaptation
- Green Business Models and Eco-Innovation
TOOLS DETAILED IN THIS NAVIGATOR

- Standards Map and Self-Assessment Tool for Companies (ITC)
- GRI Standards

OTHER TOOLS AND RESOURCES

- There is an extensive number of existing eco-labeling schemes, programmes, and certificates. Relevant examples are: EU Eco-Label, Nordic Swan Eco-Label, Green Seal (USA), Green Label Scheme (HK) and Eco Mark (Japan). The Global Eco-Labeling Network, composed of 33 eco-label organizations worldwide, provides lists classifying eco-labels by product category and by country.

RECOMMENDED FURTHER READING

- Guidelines for Providing Product Sustainability Information (UNEP): The report provides guidance on how to make effective claims to consumers on product-related sustainability information, with the ultimate goal of leading consumers to make informed sustainable choices.
The Standards Map, launched by ITC in 2011, is an online database with over 300 sustainability standards that aims to enhance transparency and enable comparability of standards in order to strengthen the capacity of producers, exporters and consumers to participate in more sustainable production and trade practices. The tool collects and organises information on sustainability standards through a filter map that allows users to identify standards by geographic location, sector, value chain process or mandate. Users can compare between different standards and assess in detail the ones currently available and applicable to their needs. Topics addressed include environment and climate change, human and labour rights, gender and inclusiveness as well as food safety and quality production processes. The Standards Map also includes a knowledge section with e-learning modules and tutorials introducing sustainability standards, certification procedures and other related topics.

**TARGET GROUP**
- Businesses, governments, trade promotion agencies, civil society organisations, academia and consumers.

**GENDER/INCLUSIVENESS**
- Gender is explicitly addressed in the database.
- Inclusiveness is explicitly addressed in the database.

**FOCUS (GEOGRAPHIC/SECTOR)**
- The Standards Map allows users to filter standards by the country or region in which operations can be certified. With a few exceptions, all countries in the world can be selected via the filter.
- There is no sector focus but the tool also allows to filter standards based on economic sector or product, with over 300 product types to choose from.

**ADVANTAGES**
- Simple and user-friendly filter options, with further options in the advanced search section.
- More than 300 standards available.
- Up to date and frequently revised standards (last update for most standards was in the last 2 years).

**LIMITATIONS**
- Broad searches for general sectors or countries can lead to a very large number of results, which might be overwhelming for some users.

**EXTERNAL LINKS TO THE TOOL**
- ITC Standards Map
LESSONS LEARNT

- The Standards Map is mostly used to identify and compare sustainability standards per sector, product or country and less used for self-assessment.

- Using the self-assessment tool of the Standards Map requires coaching and specific training for companies as well as a follow-up once the self-assessment report has been issued in order to mitigate the issues and fill the gaps, improve certain aspects of production and improve overall compliance to sustainability standards requirements.

- The new Standards Map version of 2021 launched at the end of September offers additional features to analyse and compare standards by using thematic filters for gender, child labour, migrant workers, inclusiveness, human rights, due diligence, climate change, biodiversity, etc.

IMPACTS

In Burundi, impacts reported by the 17 cooperatives and companies, which had been the beneficiaries of the ITC Standards Map Training in Burundi in June 2021 include:

- Operational changes implemented at the farms working with the tea and coffee cooperatives through coaching and training on the self-assessment tool.

- Impacts on occupational health and safety, e.g. handling chemicals in compliance with best practices, preventing young workers from having to deal with hazardous substances and overall better-quality management of the final product at the farm.
GRI Standards

DESCRIPTION

The Global Reporting Initiative (GRI) is an independent, international organisation that helps businesses, government entities and NGOs take responsibility for their impacts on economy, environment and people, by providing them with the global common language to communicate those impacts. GRI has developed and promotes the application of the most widely used standards for sustainability reporting—the GRI Standards.

These are a set of interrelated standards designed to help businesses prepare and disclose sustainability reports, assessing, in a transparent and systematic manner, the sustainability impacts of their activities. The 300 Series (Environment) addresses topics such as level of emissions, energy consumption, waste management, use of natural resources, biodiversity and environmental compliance. Each standard defines

1) mandatory instructions (requirements),
2) encouraged actions (recommendations), and
3) background information and examples (guidance).

ADVANTAGES

- The 39 Standards are divided between impacts related to economic, social and environmental aspects.
- An online database with all reports published in the past 20 years is available on the GRI website, together with a list of certified tools and software to help organisations improve their sustainability reporting.
- Standards are available in 12 different languages.
- Linkages to other resources make it easier to connect GRI Standards with other frameworks, including SDGs, SASB and CDP.

EXTERNAL LINKS TO THE TOOL

- GRI Standards
- GRI Sector Program—Revised List of Prioritized Sectors

TARGET GROUP

- Multi-national companies, SMEs, BSOs and NGOs.

GENDER/INCLUSIVENESS

- Gender aspects are addressed within the social standards (e.g. GRI 401 and GRI 405).
- Inclusiveness is addressed within the social standards (GRI 405 and GRI 411).

FOCUS (GEOGRAPHIC/SECTOR)

- GRI Standards focus on 40 sectors with high sustainability impacts. The following 10 have been prioritised: mining, food, textiles and apparel, banking, insurance, asset management, utilities, renewable energy, forestry and metal processing.
- The aim is to provide a global reference, standards can be applied to organisations in any geographic location.
Green Business Models (GBM) can be understood as business activities that contribute to overcoming environmental challenges through technological and non-technological innovation that benefit the environment and make economic sense (eco-innovation). GBMs can be divided into two types and evaluated from two perspectives, which are by no means mutually exclusive (see also Defining Green Business):

1) **Process Focus**: Promoting the application of green business practices. The products and services provided are based on environmentally friendly production processes, significantly reducing the environmental burden in comparison to the conventional way these products or services are produced in a specific geographic context. This can be achieved through innovative processes along the value and supply chain. These may include circular or cradle-to-cradle based models, for instance, or the implementation of resource efficiency measures, such as using renewable energy sources and recyclable, biodegradable, organic, and/or locally sourced materials.

2) **Output Focus**: Tapping the market for environmental or environmentally friendly goods and services. This refers to technological innovations that reduce greenhouse gas emissions, facilitate recycling and/or help render production processes of other businesses more environmentally friendly. Specific examples include renewable energy technologies, sharing-based business models and circular economy models (e.g. waste transformation businesses).

- **GENDER/INCLUSIVENESS**
  - Making GBMs inclusive enhances implementation success, avoids political resistance, and expands the producer and consumer base and market potential.

- **AREA OF APPLICATION AND RELEVANCE**
  - Relevant to all types of sectors, private sector actors, including SMEs, MNCs and BSOs.
  - Potential to establish new and to transform existing markets, enabling a transition to a green economy with positive income and employment effects.
  - Tools comprise methodologies and guides to eco-innovate processes as well as products and services along the value chain, from production to the end-of-life.
**LIMITATIONS AND CHALLENGES**

- Limited understanding and competences in the area of eco-innovation and venture building.
- Lack of awareness of available public and private support schemes.
- Insufficient policy and government support, for instance to incentivise investments in green sectors and technologies (e.g. green mobility).
- Entrepreneurs in developing countries are often faced with an unfavourable business environment with legal barriers or limited access to finance, for instance, in case of high-volume and/or high-risk investments in technology or infrastructure development (e.g. charging station networks).
- Low market demand due to lack of adequate pricing of environmental costs and continuous fossil fuel subsidies that render conventional products more price competitive than green alternatives, and therefore more attractive to consumers.

**DO’S AND DON’TS**

- Depending on the type of intervention and GBM approach pursued, consultation or involvement of relevant stakeholders such as government, business associations or civil society organisations can be of advantage. For instance, in the scope of innovation acceptance research (e.g. for renewable energy technologies such as wind farms).
- Enable exchange of information, best practices, and experiences among entrepreneurs can facilitate the identification or stimulate the development of eco-innovations.
- Strengthen the demand side and create enabling conditions, for instance, through infrastructure provision (e.g. charging stations for electric vehicles), awareness campaigns on SCP or product labels and incentives for investment in clean technologies.
- Facilitate access to finance for eco-entrepreneurs at all stages of venture development stages, also covering early stages of R&D and business model development.

**WORKS WELL WITH:**

**POLICY & REGULATION:**
- Green Economic and Employment Strategies and Policies
- Green Public Procurement
- Macroeconomic Modelling for Green Growth
- Green Investment Climate
- Green Fiscal Policies

**SUPPORTING FUNCTIONS:**
- Green and Climate Resilient Value Chains
- Green Finance for SMEs

**COMPANY:**
- Green Business Development
- Eco-Labelling, Sustainability Reporting and Voluntary Standards

---

Green PSD Navigator Overview of Green Growth Approaches for Private Sector Development
Green Business Models and Eco-Innovation

TOOLS DETAILED IN THIS NAVIGATOR

- Green Business Model Navigator (GIZ)
- Eco-Innovation Manual (UNEP)

OTHER TOOLS AND RESOURCES

- Green and Inclusive Business Models Toolbox (GIZ): An overview of tools related to Green and Inclusive Business (GIB), addressing topics such as finance, capacity development, GIB markets and policy.
- The Switchers Toolbox (UNEP and EU): Provides a set of methodologies and tools for sustainable business development.
- Several exchange formats and programmes (e.g. dedicated platforms, incubators and accelerators) aim at getting businesses and start-ups together to create and implement new GBMs, e.g. Green Hackathon, Kuer Competition and The Switchers Community.
- The Lab of Tomorrow Manual (GIZ): Provides tools to catalyse tailored, innovative business ventures that address local SDG challenges.

RECOMMENDED FURTHER READING

- Promoting Eco-Innovation: Challenges and Potential Solutions for Private Sector Development (GIZ): This study provides insights into the role of eco-innovation in PSD, relevant demand and supply side factors and recommendations on the promotion of eco-innovation in PSD programmes.
- Why New Business Models Matter for Green Growth (OECD): This report stresses the relation between business models and green growth and highlights how GBMs can be scaled up through policy action, drawing on 55 case studies from 14 OECD countries.
- Green Business Models and the Green Finance Landscape. Green Win Project (European Commission): This report provides a review of GBM concepts, an overview of the green finance landscape, and an analysis of different stakeholders’ roles in GBM development and financing.
DESCRIPTION

The Green Business Model Navigator is an interactive document that provides readers with a comprehensive overview of the concept of GBM. Divided into three main sections, the Navigator

1) introduces what GBMs are, outlines the benefits, success factors and challenges, and elaborates on the role of different stakeholders in scaling up GBMs,
2) includes a database with 44 different tools, which are accessible through interactive links,
3) provides practical examples for the different categories of GBMs along the entire value chain, from production to end-of-life.

Further information is provided on the website of the Collaborating Centre on Sustainable Consumption and Production (CSCP) that has produced the Green Business Model Navigator.

TARGET GROUP

• Entrepreneurs, development organisations, consultants and service providers, large businesses, innovation centres as well as financial institutions.

GENDER/INCLUSIVENESS

• Gender is not explicitly addressed.
• Inclusiveness is explicitly addressed in the stakeholder section.

FOCUS (GEOGRAPHIC/SECTOR)

• Covers business processes as well as products and services with no specific sectoral focus.
• Provides examples from Asian, African, European, and Latin American countries.

EXTERNAL LINKS TO THE TOOL

• Green Business Model Navigator

ADVANTAGES

• Comprehensive, concise and easy-to-navigate overview document because of its interactive design.
• Includes a broad selection of specific tools to promote GBMs.

LIMITATIONS

• As the Green Business Model Navigator is not updated regularly, some of the links to external references on specific tools and documents are outdated.
LAB OF TOMORROW: KICKSTARTING GREEN BUSINESS MODELS IN EMERGING MARKETS

The lab of tomorrow (lot), implemented by GIZ, is a business ideator and incubator programme that connects companies, investors, development agencies and other stakeholders in order to leverage the market potential of sustainable business and to support the process of developing innovative business ideas that contribute to achieving the SDGs. At its core, the programme is based on a matchmaking of businesses, non-profits and political decision makers to co-create and implement business solutions in developing countries that have a social and ecological impact on the ground.

Consisting of three phases in total, each lab of tomorrow process is initiated around a specific development challenge with business potential, such as rural electrification in Uganda or plastic waste in Thailand. After successful identification and a three-month period of thorough research on the business model, the lab of tomorrow invites interested businesses and other actors to an innovation sprint, where business ideas are co-created, developed and pitched throughout a 4-day workshop. All promising ideas are then supported by a three-month incubation and business design phase that leads to market testing, proving the viability of the business model. In the final stage, successful business solutions are pitched to potential investors.

A total of 16 lots have already been implemented or are currently in implementation. A number of successful ventures have been developed via the lab process, including green businesses such as Wamala Energy, which developed mobile solar-powered cooling systems that produce ice cubes to cool milk or Agali Awamu, which is converting organic waste into biogas.

IMPACTS

The lot is a tool for activating the private sector to create market-based solutions to development challenges. The outcomes are sustainable businesses that can scale and finance themselves while creating jobs and impact on the ground.

With its photovoltaic coolers, Wamala Energy improves access to affordable and reliable energy in Uganda. Impacts created by this GBM include:

- Wamala Energy increases farmers’ productivity by up to 25%.
- Farmers in the first pilot produced an additional 4,000 liters of milk per month.
- Solar panels also provide lighting and phone charging capabilities.
DESCRIPTION

Developed by UNEP’s Eco-Innovation Project and funded by the European Union, the Eco-Innovation Manual provides a comprehensive introduction to eco-innovation for SMEs, especially in developing and emerging countries. The website offers an overview of and additional practical resources on all aspects of eco-innovation, including an introductory video, sector-specific guides, case studies and good practices.

The Eco-Innovation Manual provides step-by-step guidance to service providers and SMEs, with tools addressing preparation, strategy setting, business model development, roadmap development, implementation and review phases. The Business Case for Eco-Innovation emphasises the business rationale for eco-innovation, highlighting case studies to prove that implementation increases resilience and profitability.

TARGET GROUP

• SMEs, BSOs and government departments working on SME and start-up development.

GENDER/INCLUSIVENESS

• Gender aspects and equality are embedded into the manual and included in all chapters.
• Inclusiveness is explicitly addressed.

FOCUS (GEOGRAPHIC/SECTOR)

• Covers processes, products and services without specific sectoral focus. However, sector-specific supplements for agri-food, metals and chemicals, and textiles as well as (currently under development) building products and electronics.
• Provides success stories from all regions.

EXTERNAL LINKS TO THE TOOL

• Eco-Innovation Website
• Eco-Innovation Manual
• Business Case for Eco-Innovation

ADVANTAGES

• Comprehensive overview of eco-innovation and the business case.
• Provides step by step guidance, templates and examples.
• The manual is available in Spanish, French, Romanian and Portuguese.

LIMITATIONS

• Difficult for SMEs to implement if financial sector support is not readily available, thus should be coupled with policy support.
• Companies that have already been exposed to resource efficiency are more open to apply eco-innovation.

TOOL

Eco-Innovation Manual (UNEP)
LESSONS LEARNT

- It is important to include governments and industry representatives when working on eco-innovation in order to ensure the provision of an enabling policy environment as well as value chain-wide support.

- In addition to environmental benefits, eco-innovation also improves both short-term and long-term resilience of companies, as they develop the skills and agility to react to shocks. It is therefore important that any action on introducing eco-innovation also has a strong business case to safeguard adequate buy-in.

IMPACTS

Eco-innovation results in customised GBMs. Impacts cannot be aggregated, as they differ from company to company. However, examples include:

- **Naturesse (Colombia)** adopted eco-innovations into their business operations which strengthened employee loyalty during the COVID-19 pandemic—they increased their customer base, could continue operations and would not have survived with their previous business model that focused on serving hotels.

- **Nets Printwork | Green Printing Solutions (Malaysia)** applied eco-innovation by sourcing local sustainable resources, and now make additional revenue advising other companies to do the same.

- **U10 CERTIFIED CEYLON IN SRI LANKA**

  U10 is a consortium of 10 farmer-owned plantations of Ceylon cinnamon. Plantation owners face strong international competition from Cassia cinnamon producers, which is cheaper in terms of production costs. However, with the assistance from the Sri Lankan National Cleaner Production Centre, U10 implemented measures on promoting eco-innovation with the objective to identify business model opportunities. Initial plans to capitalise on growing local tourism by selling demonstration tours—and thereby also increasing direct sales to consumers—were put on hold due to COVID-19, but U10 diverted to other business models to absorb the shock:

  - U10 planted other spices to increase biodiversity and reduce fertiliser reliance, creating an additional income stream to buffer against shocks to cinnamon demand.
  
  - U10 valorised outer bark scraping waste to extract cinnamon leaf oil, which they now sell to pharmaceutical companies. In 2019, they exported 60 metric tons of extracted oil.
3 RESULTS MEASUREMENT
Monitoring and Results Measurement for Green PSD Programmes

As all projects, also Green PSD projects and programmes need a strong monitoring and evaluation of their performance in terms of results and impacts:

- Tracking and regularly assessing project progress allows identifying to which extent the intervention is on track with respect to its economic and environmental objectives.
- It helps with the early identification of problems and the need for corrective measures towards these objectives. This includes spotting potential conflicts of interest between PSD and environmental objectives early on and allowing to work against them, finding those solutions that benefit everyone.
- A good monitoring system increases accountability and efficiency. It helps to detect those approaches that work best and might therefore be replicated.
- Effective M&E is integrated into the project design by developing, establishing and implementing a coherent M&E framework right from the beginning.

AVAILABLE TOOLS AND RESOURCES

- The DCED promotes a common approach to monitoring and evaluation among development agencies through the DCED Standards for Results Management. These aim to provide a framework, tools, and incentives to systematically assess programmes working in complex market systems. The framework is not specifically aimed at Green PSD but already includes aspects of social development and has been linked to Corporate Sustainability Reporting.

- Indicator framework for an inclusive green economy (EU): The EU has developed an indicator framework to foster an inclusive green economy. Indicators are intended to help design interventions, improve monitoring and evaluation, and facilitate the aggregation and reporting of results achieved. Indicators have been harmonised with indicators used under other relevant frameworks, such as the SDG indicators and those used by the 10 Year Framework of Programmes on Sustainable Consumption and Production Patterns, wherever possible.
Articulating the Theory of Change

In a first step, the programme needs to articulate their theory of change: How do the planned activities lead to outputs, outcomes, and eventually to impacts? This:

- helps to explain the logic of a programme and why certain activities are pursued,
- is the basis for further evaluation of impacts.

Visualising the theory of change can help to illustrate the pathways to change in detail. Usually, this is done along the four categories activities, outputs, outcomes, impacts and shows the connection between those. One possible format is a results chain. The theory of change should be based on adequate research and reviewed regularly to guide the programme’s activities.

RECOMMENDED FURTHER READING

- The DCED Standards for Results Management provides detailed guidelines on results chains with further examples and instructions how to draw them.

RECOMONOMY: GREEN ECONOMY IN EASTERN EUROPE

RECOMONOMY is an inclusive and green economic development programme of the Swedish International Development Cooperation Agency (Sida), implemented by HELVETAS in the Eastern Partnership and the Western Balkan countries. The goal is to enable women and young people, in particular excluded and disadvantaged groups, to benefit from economic opportunities by increasing their income and taking up decent jobs, inclusively and sustainably. RECOMONOMY works along three workstreams (policies & regulations, skills development & intermediation, and financial & business services) and addresses cross-cutting systems such as finance, trade and migration, technology and digitalisation, regulatory systems, and green economic development.

The following slide shows an exemplary results chain of a RECOMONOMY intervention in Kosovo that promotes the green business idea competition “Climate Launch Pad” and aims at improving the income of women and youth and supporting local green business models.
This example is based on a real case from RECONOMY but modified for learning purposes.
RESULTS MEASUREMENT

Defining Indicators

Indicators specify how the expected outputs, outcomes, and impacts will be measured and define how a success of the programme will look like. There should be at least one indicator for every step in the results chain in order to check whether the expected changes really occur.

A good indicator should be relevant, precise, measurable, time-bound, realistic, and useful. Also, the sustainability of results should be assessed.

Exemplary Indicators that are relevant for Green PSD Programmes:

- GHG emissions avoided or reduced
- Energy use avoided or reduced
- Hectares of sustainably managed land
- Increase in income
- Number of firms or individuals that meet firm-specific, national, or international sustainability standards
- Number or legal reforms implemented that improve resource efficiency and low carbon development

Gender/Inclusiveness

- Indicators can capture disaggregated data with regards to vulnerable groups (e.g. women, youth, indigenous communities etc.) in order to understand how the programme affects different population groups.

Recommended Further Reading

- The DCED Standard provides guidelines for defining indicators.
- The DCED suggested a set of harmonised indicators for PSD which is used by several donor organisations.
- The IRIS+ metrics measure an organisation’s environmental, social, and financial performance. They were originally developed by the Global Impact Investing Network (GIIN) for impact investing but many are useful for PSD more generally.
Results Measurement

Measuring Change

Measuring change is key to monitor results of the programme. A results measurements plan needs to define which indicators are measured when, how, and by whom. Outputs and early outcomes should be monitored on a regular basis, and this information should be used to adjust the approach. Outcomes and impacts should be measured with more intensive research from time to time. Depending on the programme, different research designs and methods can be used.

The question of attribution is important: Are the observed changes caused by the programme or would they have happened anyway? In Green PSD programmes, the chain of impact is often long and other external factors could influence results. Therefore, measuring attributal change is important to understand the real impacts of the programme.

Sometimes, measuring attribution is not possible. In this case, measuring contribution can be a good solution, i.e. showing how the programme contributed to change rather than measuring the portion of change. A contribution analysis can give insights into the factors that contributed to the observed change and gives valuable insights for evaluation of the programme.

Recommended Further Reading

• DCED guidelines on measuring attributable change.

• Besides direct impacts on the beneficiaries, some programmes also aim at measuring systemic change to capture indirect impacts on market structures and wider systems. The DCED provides guidelines on assessing systemic change that also links to other sources and guidelines regarding this topic.
### MAKING A RESULTS MEASUREMENT PLAN FOR RECONOMY

According to the DCED Standard, change should be measured for each step of the results chain. This allows to check whether each step leads to the subsequent one and helps to establish a causal link between project activities and impact. The example here shows a simplified section of the measurement plan for boxes 11 and 12 (outcome and impact level) in the results chain. The whole measurement plan would entail completing such a table for all the change boxes in the results chain.

<table>
<thead>
<tr>
<th>BOX</th>
<th>QUANTITATIVE INDICATOR</th>
<th>QUALITATIVE INFORMATION COLLECTION NEEDS</th>
<th>HOW TO MEASURE</th>
<th>WHEN</th>
</tr>
</thead>
</table>
| Box 11  
Youth and women have skills, ideas and entrepreneurial knowledge for green energy start-ups. | Number of youth and women who have improved skills, ideas and entrepreneurial knowledge for green energy start-ups. | The type of skills and knowledge that they develop due to participating at the Climate Launch Pad. | In-depth interviews with xx number of youth and women to see if they attained new skills and knowledge which they did not have before. | Immediately after the completion of Climate Launch Pad competition. |
| Box 12  
Youth and women establish green energy start-ups. | Number of youth and women who establish green energy start-ups. | The type of start-up established.  
Why people started these.  
What are people who haven't established start-ups doing. | Follow up in-depth interviews with all respondents who confirmed they learned new skills assessed in box 11 above. | 1 year after the completion of Climate Launch Pad competition. |
4 CONCLUSIONS AND MAIN LESSONS
Conclusions and Main Lessons

APPROACHES ARE NOT STAND-ALONE AND HAVE TO BE ADAPTED AND COMBINED DEPENDING ON THE COUNTRY AND THEMATIC CONTEXT.

The approaches and related tools introduced are interconnected elements of the transformation to a resource efficient, low-carbon and socially inclusive economy. The promotion of Green PSD will be most effective when combining different approaches and tools within and across the three intervention levels outlined in this navigator.

For instance, green public procurement (policy and regulation) will have a stronger impact and potential to unfold its incentive effect if it is linked to

- an overall strategy or policy framework to drive Green PSD (policy and regulation),
- while having measures in place that strengthen green value chains (supporting functions), i.e. facilitate the development of markets for greener and climate resilient products and services, as well as
- supporting the private sector in developing green business models and eco-innovation (company) that allows them to offer adequate products and services that fulfil the criteria and requirements of green public procurement.
Conclusions and Main Lessons

THERE ARE GAPS WITH REGARD TO THE AVAILABILITY OF PRACTICAL, HANDS-ON TOOLS.

While general background material, summary documents and reports on case study experiences are available for all approaches covered in this navigator, there is a limited number of practical, ready-to-use tools and these sometimes only cover a small aspect of a specific approach. This applies to supporting the private sector, especially SMEs, in accessing green finance in particular, with one reason being the difficulty to adequately reflect the complexity of an approach in a simple tool. However, efforts to address and close such knowledge and instrument gaps, providing more hands-on and step-by-step guidance, will certainly benefit Green PSD and be an asset to development practitioners.

SPECIFIC GUIDANCE ON HOW TO INTEGRATE GENDER AND INCLUSIVENESS AS THE SOCIAL DIMENSIONS OF GREEN PSD IS OFTEN MISSING.

While gender and inclusiveness is taken into account by many tool developers, the research conducted suggests that there is still room for improvement, as these topics are often covered in generic terms rather than providing specific guidance for their effective integration.
There is limited availability of impact data on the level of approaches and tools.

Very little is known and/or documented on the outputs and outcomes achieved by a specific approach or related tool, especially in terms of aggregated impact data. It is suggested to encourage users of the approaches and tools to provide feedback on the impacts of their activities as well as lessons learnt back to tool developers, as this will greatly contribute to donors and development practitioners’ decision-making on the selection of approaches and tools.

Collecting evidence on the potential impact of approaches is absolutely essential for promoting Green PSD programmes. While the impacts of selected tools can be illustrated through case studies of their application, measuring the impact of approaches is complex due to challenges in aggregating related data in a meaningful way.

Further research on how to promote the collection of both quantitative as well as qualitative data in the context of Green PSD programmes could be beneficial. For instance, some organisations such as the EU are starting to collect and mainstream progress reporting across different projects while BMZ has introduced standard indicators to be collected by every BMZ-funded project. These are first steps towards understanding the impacts and benefits of Green PSD programmes and the integrated approaches. The DCED could play a role in starting discussions on different approaches to monitoring and evaluation or collecting impact data and success stories across its member organisations.

For organisations developing tools it is important to keep results measurement in mind. Such guidance should ideally be directly integrated into the design of tools.
APPENDICES
References

POLICY & REGULATION:


18. OECD. Green Public Procurement. (Accessed June 2021)


SUPPORTING FUNCTIONS:


12 Salo, J. B (2016). Greening Value Chains: how large companies in Latin America and the Caribbean can influence natural resource use and environmental impact management in their value chains. IDB. (Accessed June 2021)


COMPANY:


<table>
<thead>
<tr>
<th>Number</th>
<th>Source</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>10</td>
<td>UNEP. Eco-Labelling.</td>
<td>(Accessed August 2021)</td>
</tr>
</tbody>
</table>
## Abbreviations

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Full Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>AfDB</td>
<td>African Development Bank</td>
</tr>
<tr>
<td>BDS</td>
<td>Business Development Services</td>
</tr>
<tr>
<td>BMZ</td>
<td>German Federal Ministry of Economic Cooperation and Development</td>
</tr>
<tr>
<td>BSO</td>
<td>Business Support Organisations</td>
</tr>
<tr>
<td>CDP</td>
<td>Carbon Disclosure Project</td>
</tr>
<tr>
<td>CGIAR</td>
<td>Consultative Group on International Agricultural Research</td>
</tr>
<tr>
<td>CRED</td>
<td>Climate Resilient Economic Development</td>
</tr>
<tr>
<td>CSCP</td>
<td>Collaborating Centre on Sustainable Consumption and Production</td>
</tr>
<tr>
<td>DCED</td>
<td>Donor Committee for Enterprise Development</td>
</tr>
<tr>
<td>DFI</td>
<td>Development Finance Institutions</td>
</tr>
<tr>
<td>DG</td>
<td>Directorate-General</td>
</tr>
<tr>
<td>EGS</td>
<td>Environmental Goods and Services</td>
</tr>
<tr>
<td>EIP</td>
<td>Eco-Industrial Parks</td>
</tr>
<tr>
<td>EPR</td>
<td>Extended Producer Responsibility</td>
</tr>
<tr>
<td>EQuIP</td>
<td>Enhancing the Quality of Industrial Policies</td>
</tr>
<tr>
<td>EREK</td>
<td>European Resource Efficiency Knowledge Network</td>
</tr>
<tr>
<td>ESG</td>
<td>Environment, Social, Governance</td>
</tr>
<tr>
<td>EU</td>
<td>European Union</td>
</tr>
<tr>
<td>FCDO</td>
<td>Foreign, Commonwealth &amp; Development Office</td>
</tr>
<tr>
<td>FDI</td>
<td>Foreign Direct Investment</td>
</tr>
<tr>
<td>FI</td>
<td>Financial Institutions</td>
</tr>
<tr>
<td>FÖS</td>
<td>Forum Ökologisch-Soziale Marktwirtschaft</td>
</tr>
<tr>
<td>GAIN</td>
<td>Green Jobs Assessment Institutions Network</td>
</tr>
<tr>
<td>GBM</td>
<td>Green Business Models</td>
</tr>
<tr>
<td>GCF</td>
<td>Green Climate Fund</td>
</tr>
<tr>
<td>GDP</td>
<td>Gross Domestic Product</td>
</tr>
<tr>
<td>GEF</td>
<td>Global Environment Facility</td>
</tr>
<tr>
<td>GEM</td>
<td>Green Economy Modelling</td>
</tr>
<tr>
<td>GEIPP</td>
<td>Global EIP Programme</td>
</tr>
<tr>
<td>GEPA</td>
<td>Ghana Export Promotion Authority</td>
</tr>
<tr>
<td>GGGI</td>
<td>Global Green Growth Institute</td>
</tr>
<tr>
<td>GGKP</td>
<td>Green Growth Knowledge Partnership</td>
</tr>
<tr>
<td>GGWG</td>
<td>Green Growth Working Group</td>
</tr>
<tr>
<td>GHG</td>
<td>Green House Gas</td>
</tr>
<tr>
<td>GIB</td>
<td>Green and Inclusive Business</td>
</tr>
<tr>
<td>GIIN</td>
<td>Global Impact Investing Network</td>
</tr>
<tr>
<td>GIZ</td>
<td>Deutsche Gesellschaft für Internationale Zusammenarbeit GmbH</td>
</tr>
<tr>
<td>GPP</td>
<td>Green Public Procurement</td>
</tr>
<tr>
<td>GRI</td>
<td>Global Reporting Initiative</td>
</tr>
<tr>
<td>HK</td>
<td>Hong Kong</td>
</tr>
<tr>
<td>I4CE</td>
<td>Institute for Climate Economics</td>
</tr>
<tr>
<td>Abbreviation</td>
<td>Full Form</td>
</tr>
<tr>
<td>--------------</td>
<td>-----------</td>
</tr>
<tr>
<td>IADB</td>
<td>Inter-American Development Bank</td>
</tr>
<tr>
<td>IGEM</td>
<td>Integrated Green Economy Modelling</td>
</tr>
<tr>
<td>ICLEI</td>
<td>Local Governments for Sustainability</td>
</tr>
<tr>
<td>ICR</td>
<td>Investment Climate Reform</td>
</tr>
<tr>
<td>ICT</td>
<td>Information and Communications Technology</td>
</tr>
<tr>
<td>IISD</td>
<td>International Institute for Sustainable Development</td>
</tr>
<tr>
<td>ILO</td>
<td>International Labour Organisation</td>
</tr>
<tr>
<td>IMF</td>
<td>International Monetary Fund</td>
</tr>
<tr>
<td>IPA</td>
<td>Investment Promotion Agencies</td>
</tr>
<tr>
<td>IPC</td>
<td>Indonesian Port Corporation</td>
</tr>
<tr>
<td>ITC</td>
<td>International Trade Center</td>
</tr>
<tr>
<td>ITPO</td>
<td>Investment and Technology Promotion Office</td>
</tr>
<tr>
<td>KGZ</td>
<td>Kyrgyzstan</td>
</tr>
<tr>
<td>KPI</td>
<td>Key Performance Indicator</td>
</tr>
<tr>
<td>LDC</td>
<td>Least Developed Country</td>
</tr>
<tr>
<td>LED</td>
<td>Light-emitting Diode</td>
</tr>
<tr>
<td>IoT</td>
<td>Lab of tomorrow</td>
</tr>
<tr>
<td>M&amp;E</td>
<td>Monitoring and Evaluation</td>
</tr>
<tr>
<td>MBI</td>
<td>Market-based Instruments</td>
</tr>
<tr>
<td>MNC</td>
<td>Multi-national Corporation</td>
</tr>
<tr>
<td>MSME</td>
<td>Micro, Small and Medium-sized Enterprises</td>
</tr>
<tr>
<td>MSP</td>
<td>Multi-Stakeholder Platforms</td>
</tr>
<tr>
<td>MPI</td>
<td>Ministry of Planning and Investment</td>
</tr>
<tr>
<td>NAMA</td>
<td>Nationally Appropriate Mitigation Actions</td>
</tr>
<tr>
<td>NAP</td>
<td>National Adaptation Plan</td>
</tr>
<tr>
<td>NCPC</td>
<td>National Cleaner Production Centre</td>
</tr>
<tr>
<td>NDC</td>
<td>Nationally Determined Contributions</td>
</tr>
<tr>
<td>NGO</td>
<td>Non-governmental Organisation</td>
</tr>
<tr>
<td>NORAD</td>
<td>Norwegian Agency for Development Cooperation</td>
</tr>
<tr>
<td>OECD</td>
<td>Organisation for Economic Co-operation and Development</td>
</tr>
<tr>
<td>PAGE</td>
<td>Partnership for Action on Green Economy</td>
</tr>
<tr>
<td>PPD</td>
<td>Public-Private Dialogue</td>
</tr>
<tr>
<td>PREMA</td>
<td>Profitable Resource Efficient Management</td>
</tr>
<tr>
<td>PSACC</td>
<td>Private Sector Adaptation to Climate Change</td>
</tr>
<tr>
<td>PSD</td>
<td>Private Sector Development</td>
</tr>
<tr>
<td>R&amp;D</td>
<td>Research and Development</td>
</tr>
<tr>
<td>RECP</td>
<td>Resource Efficient and Cleaner Production</td>
</tr>
<tr>
<td>SASB</td>
<td>Sustainability Accounting Standards Board</td>
</tr>
<tr>
<td>SCORE</td>
<td>Sustaining Competitive and Responsible Enterprises</td>
</tr>
<tr>
<td>SCP</td>
<td>Sustainable Consumption and Production</td>
</tr>
<tr>
<td>SDG</td>
<td>Sustainable Development Goals</td>
</tr>
<tr>
<td>SECO</td>
<td>Swiss State Secretariat for Economic Affairs</td>
</tr>
<tr>
<td>SEEA EEA</td>
<td>System of Environmental-Economic Accounting–Experimental Ecosystem Accounting</td>
</tr>
<tr>
<td>SIA</td>
<td>Sustainable Industrial Areas</td>
</tr>
<tr>
<td>Acronym</td>
<td>Full Form</td>
</tr>
<tr>
<td>---------</td>
<td>-----------</td>
</tr>
<tr>
<td>Sida</td>
<td>Swedish International Development Cooperation Agency</td>
</tr>
<tr>
<td>SME</td>
<td>Small and Medium-sized Enterprise</td>
</tr>
<tr>
<td>SPP</td>
<td>Sustainable Public Procurement</td>
</tr>
<tr>
<td>STAP</td>
<td>Scientific and Technical Advisory Panel</td>
</tr>
<tr>
<td>ToT</td>
<td>Training of Trainers</td>
</tr>
<tr>
<td>TRIGGER</td>
<td>Towards Rural Inclusive Growth and Economic Resilience</td>
</tr>
<tr>
<td>UK</td>
<td>United Kingdom</td>
</tr>
<tr>
<td>UNCTAD</td>
<td>United Nations Conference on Trade and Development</td>
</tr>
<tr>
<td>UNDESA</td>
<td>United Nations Department of Economic and Social Affairs</td>
</tr>
<tr>
<td>UNDP</td>
<td>United Nations Development Programme</td>
</tr>
<tr>
<td>UNEP</td>
<td>United Nations Environment Programme</td>
</tr>
<tr>
<td>UNFCCC</td>
<td>United Nations Framework Convention on Climate Change</td>
</tr>
<tr>
<td>UNIDO</td>
<td>United Nations Industrial Development Organisation</td>
</tr>
<tr>
<td>USA</td>
<td>United States of America</td>
</tr>
<tr>
<td>USAID</td>
<td>US Agency for International Development</td>
</tr>
<tr>
<td>VDI ZRE</td>
<td>Verein Deutscher Ingenieure–Zentrum Ressourceneffizienz</td>
</tr>
<tr>
<td>VSS</td>
<td>Voluntary Sustainability Standards</td>
</tr>
<tr>
<td>WB</td>
<td>World Bank</td>
</tr>
<tr>
<td>WEE</td>
<td>Women's Economic Empowerment</td>
</tr>
</tbody>
</table>