



NAVIGATING GREEN PUBLIC FINANCIAL MANAGEMENT

A REFERENCE GUIDE FOR MINISTRY OF FINANCE OFFICIALS

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FOREWORD

In December 2019, the German Federal Ministry of Economic Cooperation and Development (BMZ) mandated the Deutsche Gesellschaft für Internationale Zusammenarbeit GmbH (GIZ) with implementing the Sector Programme (SP) Good Financial Governance (GFG). This programme advises BMZ on public finance topics such as taxation, budgeting, administrative reforms, and financial control, while also hosting the secretariats of the Addis Tax Initiative and the Network of Tax Organisations.

The Multi-Donor Action **“Collect More – Spend Better: Green Public Financial Management (GPFM)”** is jointly co-financed by the European Union and BMZ and implemented by GIZ as part of the SP GFG. Its overall objective is to develop and implement Green Public Financial Management measures through a dual approach: analytical work and policy design under the **“Green PFM Toolkit”**, and peer-learning exchange formats involving the EU, its Member States, and partner countries. **This publication is a cornerstone of the “Green PFM Toolkit.”**

As the global urgency to address climate change and environmental sustainability grows, so does the number of resources and tools designed to help governments green their public finances. This toolkit aims to help navigate this expanding body of knowledge by serving as a **one-stop, user-friendly reference** for Ministries of Finance, policymakers, and stakeholders. While not exhaustive, this guide strikes a balance between comprehensiveness and practicality.

The guide presents **72 resources spanning all stages of the PFM cycle**, offering thematic and geographical diversity. These resources support reform assessment, prioritization and implementation, and provide country examples that resonate with those facing similar challenges, vulnerabilities, and objectives. Resources are also included to enhance institutional preparedness through technical assistance and capacity-building.

The guide’s **structure and practical approach** to resource descriptions aim to facilitate navigation and understanding of the *who, when, what, why and how* of each resource. This enables users to identify tools worthy of further exploration based on their specific needs and interest.

The **analytical overview** of this toolkit (detailed in section 2.2) reveals a particular focus on upstream processes, which are primary entry points for GPFM reforms. The predominance of assessment and implementation resources reflects an emphasis on needs identification, prioritization, and actionable guidance for reform implementation.

The analysis also underscores the **thematic and geographic diversity** of the resources. They address a wide range of climate and environmental sustainability issues, such as fossil fuel and agricultural subsidies, biodiversity, disaster risk management, and more, reflecting the complexity of integrating green priorities into fiscal systems. The extensive geographical coverage of country examples, with an emphasis on the Global South, demonstrates the toolkit’s global applicability.

Additionally, with over two-thirds of **resources published in the post-pandemic era**, including some as recent as December 2024, the dynamic nature of this evolving field and the urgency of climate action and fiscal reforms are evident.

Through this publication, we hope to provide a valuable reference for Ministries of Finance, policymakers and other stakeholders as they work to integrate environmental considerations into public financial management, contributing to sustainable development and climate resilience.

ACRONYMS

AAAA	Addis Ababa Action Agenda	GRI	Global Resilience Index
ADB	Asian Development Bank	GSI	IISD's Global Subsidies Initiative
AFAF	African Tax Administration Forum	G-SRAT	Global Systemic Risk Assessment Tool
AFD	Agence Française de Développement	IBFCCA	Inclusive Budgeting and Financing for Climate Change in Africa
AI	Artificial Intelligence	iBiT	Artificial budget intelligence powered toolkit
APEC	Asia-Pacific Economic Cooperation	IBP	International Budget Partnership
B4SDG	Budgeting for the Sustainable Development Goals	IEA	International Energy Agency
BER	Biodiversity Expenditure Review	IEEP	Institute for European Environmental Policy
BFP	Biodiversity Finance Plans	IGF	Intergovernmental Forum on Mining
BHI	Biodiversity-harmful Incentives	IHLEG	Independent High-Level Expert Group
BIOFIN	Biodiversity Finance Initiative	IISD	International Institute for Sustainable Development
BMZ	German Federal Ministry for Economic Cooperation and Development	IMF	International Monetary Fund
CABRI	Collaborative Africa Budget Reform Initiative	INFF	Integrated National Financing Framework
CBD	Convention on Biological Diversity	InfraGov	Infrastructure Governance Assessment Framework
CBT	Climate Budget Tagging	INTOSAI	International Organisation of Supreme Audit Institutions
CCBA	Climate Change Benefit Analysis	MAPS	Methodology for Assessing Procurement Systems
CCBII	Climate Change Budget Integration Index	MCC	Mercator Research Institute – Global Commons & Climate Change
CCBT	Climate Change Budget Tagging	NBSAPS	National Biodiversity Strategies and Action Plans
CCFF	Climate Change Financing Framework	NDC	Nationally Determined Contribution
CFF	Climate Fiscal Framework	ODI	Overseas Development Institute
CFMCA	Coalition of Finance Ministers for Climate Action	OECD	Organization for Economic Cooperation and Development
COP	Conference of the Parties to the UNFCCC	PCCFAF	Pacific Climate Change Finance Assessment Framework
CPAT	Climate Policy Assessment Tool	PEFA	Public Expenditure and Financial Accountability
CPEIR	Climate Public Expenditure and Institutional Review	PER	Public Expenditures Review
C-PIMA	Climate Public Investment Management Assessment	PEER	Public Environmental Expenditures Review
CPIT	Carbon Pricing Incidence Tool	PFM	Public Finance Management
Defra	UK Department for Environment, Food & Rural Affairs	MoF	Ministry of Finance
DRF	Disaster Risk Financing	MTFF	Medium Term Fiscal Frameworks
DRR	Disaster Risk Reduction	PMR	Partnership for Market Readiness
EFT	Ecological Fiscal Transfers	R&D	Research and Development
EHS	Environmentally Harmful Subsidies	SAI	Supreme Audit Institutions
EU	European Union	SBA	Sustainable Budget Approach
FAD	IMF's Fiscal Affairs Department	SDGs	Sustainable Development Goals
FAO	Food and Agriculture Organization	SIDS	Small Island Developing States
FFFSR	Friends of Fossil Fuel Subsidy Reform	SOE	State-Owned Enterprise
FNA	Financial Needs Assessment	SP GFG	GIZ's Sector Programme Good Financial Governance
G20	Group of 20	SPP	Sustainable Public Procurement
GBF	Global Biodiversity Framework	TADAT	Tax Administration Diagnostic Assessment Tool
GBFs	Green Budgeting Frameworks	TEEB	The Economics of Ecosystems and Biodiversity initiative (by UNEP)
GBRF	Green Budgeting Reference Framework	UNDP	United Nations Development Programme
GDP	Gross Domestic Product	UN DESA	United Nations Department of Economic and Social Affairs
GFDRR	Global Facility for Disaster Reduction and Recovery	UNFCC	United Nations Framework Convention on Climate Change
GPFP	Global Public Finance Partnership	UNICEF	United Nations Children's Fund
GHG	Greenhouse gas	UNITAR	United Nations Institute for Training and Research
GPFM	Green Public Finance Management	WGEA	Working Group on Environmental Auditing
GR-CCB	Gender-responsive climate change budgeting		

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1. INTRODUCTION TO THE GUIDE AND GPFM OVERVIEW

1.1. ABOUT THIS GUIDE

Purpose

- **One-stop reference guide.** The green approach to public finance has gained significant momentum on the international agenda in recent years. Innovative global initiatives, resources and tools have been developed by a diversity of organisations to support country reforms towards greener Public Financial Management (PFM) systems. By consolidating relevant resources and tools, this toolkit serves as a: (1) navigation aid and one-stop reference for countries seeking guidance to align public finances with sustainability and climate goals; (2) support tool to help identify and select the most relevant resources to advance green PFM reforms; (3) mapping resource for capacity development, providing insights into tools that enhance institutional readiness and expertise.
- **Limitations.** Note that this document is not meant to be exhaustive as efforts have been made to balance comprehensiveness and practicality. Furthermore, the dynamic nature of Green PFM means that new or updated tools and resources may emerge after publication.

Audience

- **Policymakers** involved in shaping fiscal and environmental strategies and policies;
- **Ministry of Finance (MoF) officials and other Public Finance managers**, particularly those involved in the revenue and budget cycle management;
- **Stakeholders** involved in PFM reforms, from environmental ministries and development partners to civil society organisations.

Structure of the Guide

- **The introductory part (part 1)** opens by briefly touching on the persisting or even aggravating climate finance gap, and the need to green the PFM cycle by aligning public finance with national and global environmental goals ([section 1.2](#)). An overview of Green PFM follows ([section 1.3](#)), including its meaning and relevance for promoting sustainable development ([1.3.1](#)), foundational principles ([1.3.2](#)) and international frameworks driving Green PFM ([1.3.3](#)).
- The **main body of the document (part 2)** presents an inventory of resources and tools with a practical description for each. The section starts outlining the methodological approach to their classification to deliver a toolkit as practical and user-friendly as possible ([section 2.1](#)). An analytical overview of the resources and tools, presented and grouped as follows, highlights their breadth and diversity:
 - **Comprehensive tools and resources** ([section 2.2](#)) offer a holistic approach, addressing the entire PFM cycle from start to finish.
 - **Those clustered by PFM Stage priority** ([section 2.3](#)) primarily address a specific PFM cycle stage:
 - > **Strategic planning/fiscal framework** ([2.3.1](#)) resources help incorporate environmental considerations into macro-fiscal frameworks, revenue strategies, or fiscal sustainability analysis.
 - > **Budget preparation** ([2.3.2](#)) tools help integrate environmental objectives into budget formulation, covering budget tagging, impact assessments, or climate-sensitive allocation.
 - > **Budget execution and accounting** ([2.3.3](#)) resources help manage environmental project funds, covering public investments, infrastructures and procurement.
 - > **Control and audit** ([2.3.4](#)) resources offer best practices to assess green budget performance and audit climate finance measures.
- **Concluding the guide (part 3)** is a recap of key points and proposed next steps, as well as an annex ([part 5](#)) with all resources and classifications, including responsible organisation and year of release, for quick reference.

1.2. SETTING THE SCENE

- **Climate finance.** This guide was being finalised as the UN's 2024 Climate Change Conference concluded. Dubbed the “Finance COP” for its emphasis on climate finance, it underscored the urgent need for increased and more effective financing mechanisms to mitigate the impact of climate change. Developed nations committed to a US\$300 billion annual contribution by 2035 (see COP's [closing remarks](#)), a positive step that nevertheless fell short of the US\$1.3 trillion requested by developing countries. The third [report](#) of the Independent High-Level Expert Group (IHLEG) on Climate Finance further estimates the required annual funding by emerging markets and developing countries at US\$2.4 trillion by 2030, and US\$3.2 trillion by 2035. Against this background, over 70% of the cost burden would need to be financed with domestic private and public resources.
- **Public finance and the broader green finance.** Despite a fresh private finance impetus changing the historically equal split between public and private climate finance, at least a quarter of investment to meet climate goals will still need to come from public sources ([Systems Change Lab](#)), more so in developing countries. The image shows the public finance effort needed to close this gap, which is a fraction of the broader green finance agenda¹.
- **Role of Ministries of Finance.** Addressing the finance gap while ensuring fiscal sustainability in a context of limited fiscal space, competing spending demands, high public debt, and a narrow scope for tax increase amidst the growing cost of living is challenging. This was highlighted at the Ministerial Meeting of the Coalition of Finance Ministers for Climate Action (CFMCA) during COP29 (see [meeting brief](#)), as was their key role in leveraging finance for mitigation and adaptation to climate change. With MoFs worldwide collectively managing government expenditure exceeding US\$300 trillion or one-third of global GDP, in addition to ownership stakes in SOEs, development banks and the multilateral system, they hold the key to potentially unlock global climate change investments ([CFMCA 2024](#)).

Mobilising domestic resources through innovative financing solutions, and mainstreaming environmental risks and considerations into fiscal policies, public spending and investment are critical to align public finance with national and global environmental goals and commitments.

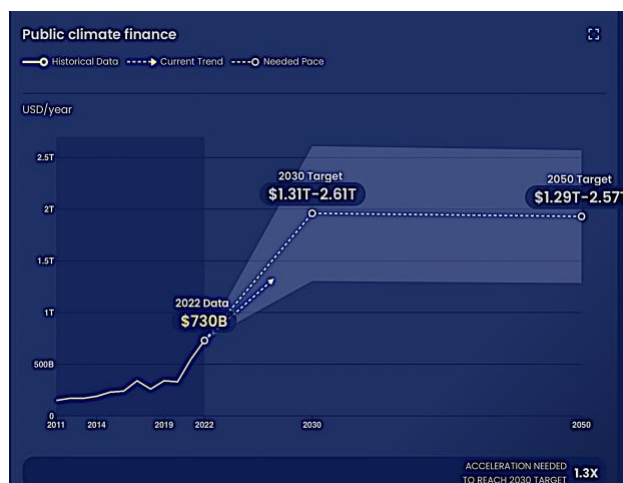


Figure 1. Trend and Projections of Public Climate Finance
Source: Systems Change Lab, based on CPI data, 2023

1.3. GPFM OVERVIEW

1.3.1. GPFM AND ITS RELEVANCE IN PROMOTING SUSTAINABLE DEVELOPMENT

- **Green Public Financial Management (GPFM) is a priority-based approach** to public finance. Like gender-responsive budgeting or SDG-budgeting, the GPFM approach highlights a specific strategic priority or concern for a country, in this case environmental sustainability and responsiveness to

¹ Green Finance encompasses a broader agenda, including climate change mitigation and adaptation (two sides of a coin), disaster risk reduction (DRR), sustainable production and consumption, ecosystem services/biodiversity, or a sustainable blue economy. Adaptation and DRR, closely linked, are vital for building resilience to climate risks, while biodiversity investments support sustainable development and preserve natural capital.

climate change related challenges. GPFM seeks to mainstream these environment and climate related perspectives into the management practices, systems and frameworks of public finances.

- **A more sustainable growth and development.** By greening the PFM cycle, MoFs can better allocate resources to address pressing environmental and climate-related challenges while fostering economic growth and a more sustainable development path. GPFM plays a pivotal role in creating resilient and climate-shock-proof economies, reducing long-term fiscal risks posed by climate change, and ensuring both fiscal and environmental sustainability.
- **Infrastructure and broader public investments as a driver of sustainability.** Greening public finances is particularly relevant for public investments, including infrastructure and non-infrastructure solutions across sectors. Integrating climate and environmental considerations into public investment management and procurement systems ensures alignment with national sustainability goals and global commitments. For instance, natural resource management in the water sector or the One Health approach in healthcare highlight the interconnectedness of environmental and social priorities. Initiatives like the EU's [Global Gateway Strategy](#), which supports sustainable and high-quality infrastructure investments worldwide, exemplify the role of GPFM in mobilising and managing resources for transformative projects that contribute to resilient and sustainable economies.

1.3.2. WHAT DOES MAINSTREAMING MEAN AND HOW DOES IT LOOK IN PRACTICE

- **Mainstreaming environmental and climate considerations in PFM practices** goes beyond contemplating the financing needs of pressing environmental and climate related challenges, and mobilising and allocating public resources to that end. It also means understanding how fiscal policy making and budgetary decisions addressing other socio-economic objectives may support or inadvertently hinder environmental sustainability (e.g. social protection mechanisms based on energy subsidies that lead to an unintended consumption increase of fossil fuels and by non-targeted income groups, or fiscal incentives to promote rural development and employment, yet that inadvertently lead to deforestation). Any policy, tool or instrument should build on a deep and balanced insight to, at the very least, not offset advances made through the mobilisation and allocation of funds for environmental sustainability and climate change and adaptation and mitigation efforts.
- **At its core, GPFM leverages tools and processes that are already in place**, embedding “green” or environmental and climate principles. The figure from IMF’s publication “[Climate-Sensitive Management of Public Finances—“Green PFM”](#)” suggests entry points and areas of intervention within, across, and beyond the PFM cycle, underscoring the importance of a comprehensive approach that spans the entire PFM architecture. Some examples entail:
 - Introducing practices like climate risk assessments for more sustainable macro-fiscal frameworks; climate-responsive budgeting; public investment management strategies supporting resilience, economic and sustainability goals; or implementing green procurement policies at both national and subnational levels to favour goods and services with lower environmental footprint.
 - Using tools such as green budget tagging; subsidies or price and tax incentives to reduce environment-harming practices and increase fiscal space for climate change funding; or innovative financing like sustainability-linked bonds (e.g. green or blue bonds) or public-private partnerships to catalyse private financing for climate resilient infrastructure.

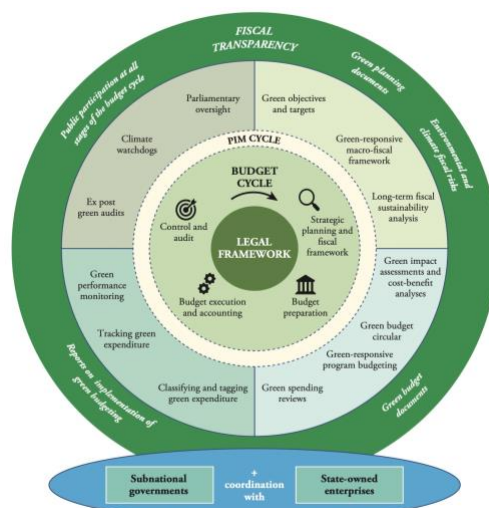


Figure 2. Holistic Approach to Green Public Finance Management
Source: 2024 IMF Climate sensitive Management of Public Finances

1.3.3. KEY PRINCIPLES FOR GPFM IMPLEMENTATION

- Some foundational or enabling principles for the implementation of Green PFM reforms include:
 - **Establishing a strong strategic framework** that prioritises practices based on unique environmental risks, aligned with national priorities and capacity levels.
 - **Ensuring ownership**, as well as strong political backing and institutional commitment
 - **Empowering the MoF to lead and drive reforms**, foster cross-sector coordination and collaboration, and establish clearly defined roles, responsibilities and mechanisms.
 - **Ensuring the basic elements of a PFM system are in place**, and integrating green PFM reforms with the overall PFM reform agenda to enhance efficiency and effectiveness.
 - **Enhancing institutional readiness and local expertise** through training, skills development, capacity building, and peer learning from countries with similar contexts.
 - **Sequencing GPFM reforms appropriately**, tailored to local contexts, and starting with practical, achievable steps and quick wins.
 - **Communicating progress effectively** through reliable and regular reporting of comprehensive and accessible information to ensure transparency, buy-in and manage expectations.

1.3.4. GREEN PFM IN THE CONTEXT OF INTERNATIONAL AGREEMENTS

- GPFM is shaped and driven by key international **agreements** addressing climate change, environmental sustainability and development goals on a global scale. This section outlines relevant international frameworks with a direct impact on GPFM practices.

The Addis Ababa Action Agenda (AAAA) and the SDGs: Financing for Sustainable Development	
> The 2030 Agenda for Sustainable Development, adopted in 2015, sets out 17 Sustainable Development Goals (SDGs) across three dimensions of sustainable development (economic growth, social inclusion and environmental protection). Goals directly linked to environmental sustainability include SDG13 (Climate Action), SDG14 (Life Below Water), and SDG15 (Life on Land), yet most are indirectly related given its cross-cutting nature, and some have embedded environmental targets.	> The Financing for Development Addis Ababa Action Agenda (AAAA) outlined a global framework for SDG financing at country level. It emphasises the need to develop nationally owned holistic financing strategies using an Integrated National Financing Framework (INFF) to mobilise and align the full range of financial resources, public and private, with the country's development priorities.
Paris Agreement: Scaling Up Climate Finance	
> The Paris Agreement, adopted in 2016, is a legally binding treaty seeking to limit global warming to well below 2°C above pre-industrial levels. The agreement emphasises the need to scale up climate finance by mobilising domestic resources and leveraging international finance to support mitigation and adaptation efforts.	> Advocated fiscal policies to incentivise low-carbon transitions include carbon taxes and emissions trading (COP29 recently agreed on the institutionalisation of a carbon market). Every five years, signatories are expected to submit updates on progress in adaptation and mitigation measures and results, and climate action plans known as Nationally Determined Contribution, or NDC.
Glasgow Climate Pact (COP26): Striving to end to fossil fuel subsidies	
> The Conference of Parties. All signatory countries of the 1992 UNFCCC ² multilateral treaty meet yearly at the Conference of Parties (COP) to measure progress and negotiate multilateral responses to climate change. COPs	> A milestone of COP26, the Glasgow Climate Pact calls on countries to step up climate financing, with developed countries committing to provide \$100 bn/yr to support developing nations. An agreement

² UNFCCC or the United Nations Framework Convention on Climate Change is one of three global agreements (together with the UN Conventions on Biological Diversity and to Combat Desertification) reached in the 1992 *Rio Earth Summit* to combat climate change and address its impact. With a near-universal membership of 198 signatories or "Parties to the Convention", these meet yearly at the Convention of Parties (COP) to assess progress and take decisions for the effective implementation of the Convention.

have created global milestones for the climate movement (such as the Kyoto Protocol in 1997 and the Paris Agreement in 2015), setting standards and advancing action. Especially relevant for MoFs is the 2021 COP26.	was reached during COP29 to triple such commitment to \$ 300 billion per year. The Glasgow pact also includes commitments to phase down unabated coal power and inefficient fossil fuel subsidies.
The Kunming-Montreal Global Biodiversity Framework (GBF): the Paris Agreement for Nature	
> From the Convention on Biological Diversity to the Kunming-Montreal Global Biodiversity Framework. The 1993 Convention on Biological Diversity (CBD) was the first treaty aimed at conserving biodiversity. In 2022, a post-2020 Global Biodiversity Framework (GBF) promoted as the “Paris Agreement for Nature” was adopted. The framework is structured around the 2050 Vision for Biodiversity, with four goals for year 2050, and 23 global targets for immediate action during this decade.	> Relevant financial commitments include: identifying and reforming harmful incentives, while scaling up positive incentives; and mobilising and aligning financial resources to support the implementation of national biodiversity strategies and action plans to bridge the biodiversity finance gap (this Finance Initiative report provides a high-level roadmap with recommendations for financing, supervisory and policymaking entities).
The Sendai Framework for Disaster Risk Reduction: Building resilient development	
> The Sendai Framework was adopted at the 2015 UN World Conference on Disaster Risk Reduction. The Framework aims to substantially reduce disaster risk and losses in lives, livelihoods, and the economy by 2030. The close link between climate change and disaster risk means the Sendai Framework works hand in hand with the other agreements aforementioned.	> Investment in disaster risk reduction (DRR). COVID-19 and complex disasters have highlighted the need for developing sustainably of ex-ante investments in resilience and prevention of risks. Investing in DRR, one of the Frameworks four priority actions, requires to reorienting financial resources, and de-risking public and private investments.

2. A TOOLKIT FOR GREENING THE PFM CYCLE: MAPPING RESOURCES AND TOOLS

2.1. CLASSIFICATION METHODOLOGY AND GUIDE NAVIGATION

- **Resource selection criteria:** (1) **Relevance** is based on **coverage** of PFM cycle stages and **utility** to determine benchmarks, identify gaps or weaknesses, and prioritise reforms (assessment tools); guide the implementation of identified and prioritised reforms (methodologies and frameworks); explore best practices and lessons learned from country experiences (reviews and stocktake); and build capacity and scout technical assistance options. (2) **Year and source of publication:** preference for recent resources (generally 5 last years, at most last decade), from reputable institutions and publicly accessible. (3) **Balanced coverage** of specific topics and regions to cater to different needs and interests (e.g. biodiversity, disaster risk, fossil fuels, agriculture, SIDS, etc).
- **Classification and navigation:** The methodological approach to the classification of resources and navigation of the guide offers a practical step-by-step structure that balances clarity and usability:
 - **STEP 1. Choose the scope.** Begin by identifying PFM cycle stage of interest:
 - > **Comprehensive tools** address the entire PFM cycle and are a good starting point for countries at the early stages of reforms, in need of an overarching framework for mainstreaming environmental sustainability.
 - > **Stage-specific tools** focus on individual PFM cycle stages: **Strategic Planning & Fiscal Framework, Budget Preparation, Budget Execution, and Control and Audit**. These resources are helpful for countries already engaged in reforms, such as green budget tagging, seeking targeted resources to build on or complement existing practices.

Note that most stage-specific resources address multiple PFM stages, yet are grouped based on their primary objective.

- **STEP 2 – Choose the type of support.** Within each PFM category, determine the functionality:
 - > **Diagnostic/Assessment Tools or Guidance** are useful to assess system responsiveness to climate change, and identify gaps, weaknesses, entry points and priority areas for action.
 - > **Implementation Frameworks/Methodologies** provide step-by-step guidance or non-prescriptive frameworks for implementing identified reforms.
 - > **Stocktake/Country Experiences** offer insights and lessons learned from country experiences, which might be particularly relevant in comparable fiscal and environmental contexts.
 - > **Technical Assistance/Capacity Building** offer financial and technical support, training and peer-learning opportunities to enhance institutional readiness.
- **STEP 3 – Use thematic and geographical tags.** When applicable, resources are “tagged” to help users locate those relevant to specific priorities or contexts: (1) thematic tags 🏷️ highlight resources focused on specific environmental aspects rather than general climate change or environmental sustainability (e.g., biodiversity, subsidies, taxation, or budget tagging); (2) geographical tags 🌐 identify resources offering country examples or region-specific guidance. For instance, countries with large endangered land or maritime ecosystems may benefit from thematic tools on biodiversity, or SIDS particularly vulnerable to climate change can explore scalable solutions tested in comparable contexts.
- **Snapshot - A summary table of resources and tools.** At the beginning of each PFM cycle stage, a table lists categorised resources and tools, each hyperlinked to their corresponding description. These descriptions include background, purpose, and features, highlighting how each resource can support GPFM reforms. Symbols in the snapshot tables are used for quick identification:

* * Resources with more than one functionality.

🏷️ Thematic tags for specific environmental aspects (no tag indicates coverage of general climate change and environmental sustainability).

🌐 Geographic tags for country examples.

To provide an accessible overview of all tools and resources covered in this guide, a complete categorised, tagged and hyperlinked list (along with responsible organization and year of release) is also included in [Annex I](#).

2.2. ANALYTICAL INSIGHTS INTO THE TOOLKIT

- **Toolkit analysis.** The application of the classification methodology has resulted in a diverse toolkit, with each of its 72 resources (see [Annex I](#) for a complete list) offering unique contributions to greening PFM systems. While comprehensive, the toolkit reflects a conscious selection bias, prioritizing recent relevant resources produced by globally recognized organizations (e.g. from the UN, IMF, OECD, and World Bank). As such, the findings and trends presented are illustrative of the selected tools, and should not be viewed as representative of all existing resources or the broader Green PFM landscape.
- **Focus across the PFM cycle.** The resources span all stages of the PFM cycle, with 21 Comprehensive Tools (just under one third of the total), 27 Strategic Planning and Fiscal Framework resources, 16 Budget Preparation, 4 Budget Execution, and 4 Control and Audit. Just short of two thirds of the 72 resources (and

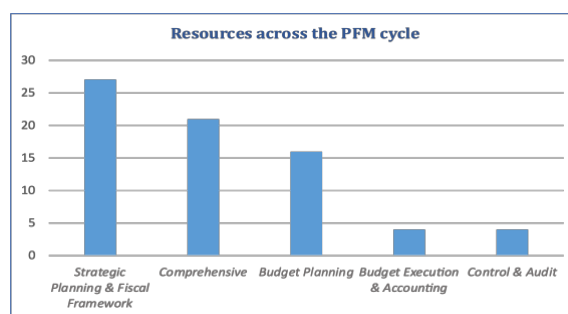


Figure 3. Resources across the PFM cycle
Source: The author

84% of the 51 stage specific resources) focus on upstream PFM processes (Strategic Planning / Fiscal Framework and Budget Preparation), often primary entry points for GPFM reforms.

- **Functional categories.** The majority of resources fall under Implementation Frameworks (32), followed by Assessment Tools (21), Technical Assistance/Capacity Building (10), and Stocktake (9). This reflects the toolkit's emphasis on needs identification, prioritisation, and actionable guidance for Green PFM reform implementation, complemented by technical support, capacity building, and knowledge-sharing through case studies and examples.

Half of the diagnostic resources (10) are concentrated in the Fiscal Framework stage, which also features a high number (12) of Implementation resources. Similarly, the Budget Planning stage is dominated by implementation frameworks (11).

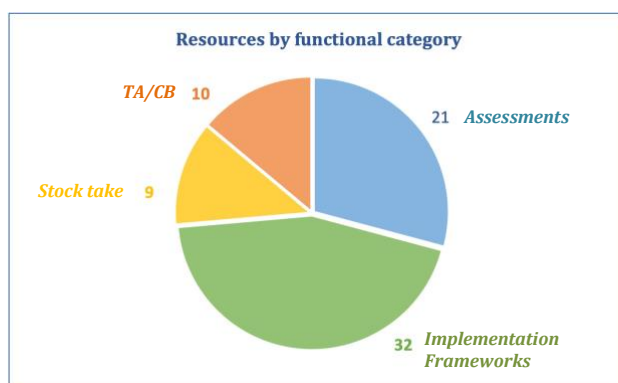


Figure 4. Resources by functional category
Source: The author

Strategic Planning & Fiscal Framework	27
Diagnostic/Assessment Tools or Guidance	10
Implementation Frameworks/Methodologies	12
Stock take/Country experiences	1
Technical Assistance/Capacity Building	4
Comprehensive	21
Diagnostic/Assessment Tools or Guidance	7
Implementation Frameworks/Methodologies	5
Stock take/Country experiences	4
Technical Assistance/Capacity Building	5
Budget Planning	16
Diagnostic/Assessment Tools or Guidance	1
Implementation Frameworks/Methodologies	11
Stock take/Country experiences	3
Technical Assistance/Capacity Building	1
Budget Execution & Accounting	4
Diagnostic/Assessment Tools or Guidance	3
Stock take/Country experiences	1
Control & Audit	4
Implementation Frameworks/Methodologies	4
Grand Total	72

Figure 5. Resources by PFM cycle stage and functionality
Source: The author

- **Thematic coverage.** The toolkit addresses a wide range of themes, with 24 general climate or environmental sustainability resources, and 48 tagged with specific themes. Subsidies (12) is the most prevalent theme, spanning agricultural, biodiversity and fossil fuel subsidies, followed by biodiversity and green taxation (6 each). This thematic diversity underlines the complexity of integrating green priorities into fiscal systems and the need for multidimensional approaches.
- **Geographical coverage.** Two thirds (41) resources feature country-specific examples, 32 of them focusing on the Global South, with prominence of Asian (14) and African (8) countries. The toolkit's global applicability is evident in its coverage of diverse regional challenges across both the Global South and North.
- **Temporal Trends.** The rapid pace of resource development is reflected in the publication timeline, with 52 resources released between 2021 and 2024, including 4 while this document was under preparation in November and December 2024. Earlier resources (2012-2019) focused on comprehensive guidance and upstream processes (Fiscal Frameworks), while later resources expanded to cover all stages of the PFM cycle.

This evolution reflects the urgency of addressing climate and sustainability challenges through fiscal reforms, and the dynamism of support efforts. However, the fast-evolving nature of the field means that even as this toolkit is published, new tools and resources may already be emerging.

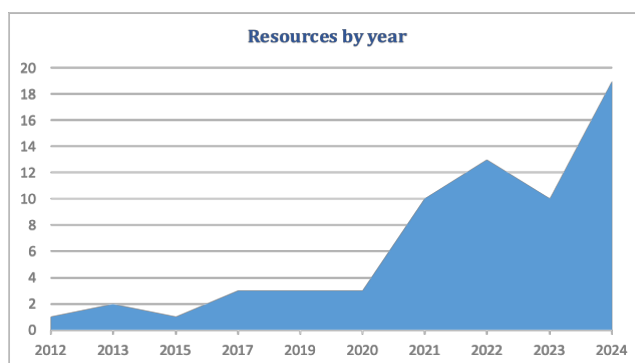


Figure 6. Resources by Year of Release
Source: The author

2.3. COMPREHENSIVE RESOURCES

- **Comprehensive tools are broad in scope.** They provide overarching frameworks and methodologies, system-wide assessments, or resources cutting across all stages of the PFM cycle, as illustrated in the figure. These include areas such as policy and regulatory frameworks, fiscal transparency or institutional strengthening, skilling and capacity building.
- **Some resource examples.** Tools like *Climate-PEFA*, *Climate Change Budget Integration Index (CCBII)*, or *Climate Public Expenditure and Institutional Review (CPEIR)* analyse cross-cutting areas such as policy, regulatory and institutional frameworks, budget management, and the climate resilience of systems. The *Catalogue of Climate-Related Capacity Building Support* offers resources to strengthen the capacities of finance ministries to implement green budgeting practices across all stages of the PFM cycle.
- **Snapshot and notes** on the resources and tools in this *Comprehensive Resources* section. Those offering both assessment tools and implementation frameworks are marked *. Tags are used for resources with a specific thematic  focus (other than climate change and environmental sustainability in general) or geographic  (country experiences are showcased, which may be applicable and of interest to other countries). All resources are hyperlinked to their corresponding description for easy access.



Figure 7. PFM Framework
Source: IMF Macroeconomics of Climate Change: Green Public Finance, e-course

COMPREHENSIVE RESOURCES & TOOLS	
NAME OF THE RESOURCE	THEMATIC FOCUS/COUNTRY EXAMPLES INCLUDED
Diagnostic/Assessment Tools or Guidance	
Climate Responsive Public Expenditure and Financial Accountability (PEFA Climate)	
Climate Public Expenditure and Institutional Review (CPEIR)	
Pacific Climate Change Finance Assessment Framework (PCCFAF)	 Disaster Risk  Asia Pacific SIDS
Climate Change Budget Integration Index (CCBII)	
Budgeting for the Sustainable Development Goals (B4SDG) *	 SDGs
Capability Assessment Framework (CAF) for Mainstreaming Climate Action in MoFs	
Disaster Resilient and Responsive Public Financial Management (DRR-PFM)	 Disaster Risk
Implementation Frameworks/Methodologies	
Green PFM - How to Make the Management of Public Finances Climate Sensitive	 Worldwide
Driving Climate Action Through Economic and Fiscal Policy and Practice	 Worldwide
Strengthening the Role of Ministries of Finance in Driving Climate Action	 Worldwide
The Green Budgeting Transition	 Worldwide
Budgets for Climate Sustainability and Social Inclusion: A Rapid Review of Approaches and Tools	 Worldwide
Stocktake/Country experiences	
UNDP Global Climate Public Finance Review	 Worldwide
Green budgeting and tax policy tools to support a green recovery	 OECD
Inclusive Budgeting and Financing for Climate Change in Africa (IBFCCA)	 Africa
Regional Synthesis Report of the Pacific Climate Change and Disaster Risk Finance Assessments	 Disaster Risk  Asia Pacific SIDS

Technical Assistance/Capacity Building	
Catalogue of Climate-Related Capacity Building Support from Institutional Partners for Ministries of Finance	
Macroeconomics of Climate Change: Green Public Finance (e-learning)	
Global Public Finance Partnership	
INFF Facility	 SDGs
Global Facility for Disaster Reduction and Recovery (GFDRR)	 Disaster Risk

- **Note on tagged resources.** Some resources have a specific thematic  focus, or highlight examples from specific  regions. For instance, the *PCCFAF* assessment tool and its *Regional Synthesis Report* (under *Stocktake/Country Examples*) focus on disaster risk in SIDS in the Pacific, offering insights that may also be useful for SIDS in the Caribbean and Indian Ocean³. The *B4SDGs Modular Handbook* (*) provides overarching guidance to assess SDG alignment across the PFM cycle, along with methodologies to embed SDGs into budgetary and monitoring processes.
- **Note about C-PIMA:** The *Climate Public Investment Management Assessment* evaluates the full Public Investment Management (PIM) cycle for alignment with climate and sustainability goals. While its comprehensive scope could justify inclusion in this section, it is categorised under *Budget Execution* resources to emphasise its primary application in operational stages like project implementation, procurement, and monitoring.

DIAGNOSTIC/ASSESSMENT TOOLS

Climate Responsive Public Expenditure and Financial Accountability (PEFA Climate)

- **Background:** The PEFA Supplementary Framework for Assessing Climate-Responsive PFM was first published in 2020, with its final version incorporating findings from the piloting phase released in 2024. The PEFA framework, a tool for assessing and reporting on the strengths and weaknesses of PFM systems, uses evidence-based indicator scores to measure performance. The supplementary frameworks, including PEFA Climate, are the product of a partnership involving the **European Commission, IMF, World Bank**, and the governments of **France, Luxembourg, Norway, Slovak Republic, Switzerland, and UK**.
- **Purpose:** The climate module is a set of supplementary indicators that build on the PEFA framework to assess PFM system's readiness to support and implement government climate change policies. It evaluates how climate-responsive the system is, providing a foundation for reform planning, dialogue on strategy and priorities, and progress monitoring.
- **Features:** The supplementary indicators assess whether laws and regulations, institutions, systems, procedures and processes support climate change activities across the budget cycle.

SPOTLIGHT: PEFA CLIMATE IN MEXICO

In 2022, the Municipal Government of Chihuahua, Mexico, decided to undertake a [PEFA evaluation including the climate module](#). The analysis strived to establish a baseline of municipal PFM strengths and weaknesses, including in terms of level of integration of climate considerations, to inform effective decision-making and enhance overall system quality and readiness to address environmental challenges. The analysis focused on fiscal years 2019-20, took six months, and engaged IAD, the Government of the State of Chihuahua and private sector. In response to PEFA-Climate recommendations, a Climate Change Council has been established, a budget tagging system introduced to help identify contributing actions to climate change mitigation, and the prioritisation of environmentally friendly products has been incorporated to public procurement guidelines.

³ For a comprehensive overview of SIDS shared development finance challenges, see UNDP's Guidance Note on [INFFs and SIDS](#).

PEFA Climate can be conducted as a stand-alone self-assessment or an external assessment by non-governmental actors (e.g. staff from international organisations and/or consultants). Ideally, it is undertaken concurrently with a general PEFA assessment to optimise resources, data collection, and consistency. A PEFA typically involves 3-7 PFM experts over 6-8 months, with an estimated cost of around US\$180,000 from initial consultations to final report ([PEFA 2023](#)). Like the general PEFA framework, repeated PEFA Climate enable progress tracking over time, with a recommended frequency of 3-5 years.

[Climate Public Expenditure and Institutional Review \(CPEIR\) Methodological Guidebook](#)

- **Background:** The 2015 CPEIR methodological guidebook by **UNDP** builds on lessons learned from reviews conducted in 2011-2015 by various practitioners). The methodology is based on the World Bank's standard Public Expenditures Review (PER)⁴ approach, with the first pilot CPEIR conducted in Nepal in 2011. A CPEIR examines how national climate change policy goals are reflected in public expenditures and how institutions deliver climate financing coherently across government. It also connects to frameworks like PEFA (see overview and linkages [here](#)). A Climate Change Financing Framework (CCFF) and the Climate Fiscal Framework (CFF) can complement the CPEIR by assessing future financing needs, and outlining the expected role of domestic and international public and private finance in meeting such needs (for further information, check this UNDP [guidance note on CCFFs](#) and this [CFF example from Bangladesh](#)).
- **Purpose:** The CPEIR provides a qualitative and quantitative analysis of a public expenditures in relation to climate change, evaluating their effectiveness and efficiency in addressing climate change challenges. It identifies opportunities and constraints for integrating climate concerns into national and sub-national budget allocation and expenditure process.
- **Features:** A CPEIR involves three main analyses: (1) policy analysis (climate objectives integration in national policies); (2) institutional analysis (roles, responsibilities, capacity, and coordination of government and development partners); and (3) climate public expenditure analysis (encompassing all climate financing instruments, including fiscal policies like tax incentives and subsidies). The guidebook outlines methodologies, tools, and challenges for conducting a CPEIR, offering stakeholders a structured approach to implementation.

CPEIRs can be conducted as self-assessment or by external entities (e.g., donors or practitioners). Successive reviews, recommended every 4–5 years, help track progress over time. A typical review requires 9-12 months and an investment of ca. US\$150,000. However, as climate budget tagging becomes more systematic, it may be a less resource-intensive alternative for continuous climate finance analysis.

[Pacific Climate Change Finance Assessment Framework \(PCCFAF\)](#)

- **Background:** The **Pacific Islands Forum Secretariat's** PCCFAF builds on the CPEIR methodology (above) to address the unique challenges faced by Pacific Island countries (heightened climate-related disaster risk paired with constrained capacity to access and manage financial resources). In 2019, this framework was further extended to include gender and social inclusion dimensions (see the [Regional Synthesis Report](#) under the *Stocktake / Country Examples* resources in this section).
- **Purpose:** The assessment framework provides MoFs in Pacific Islands with insights to improve access to and management of climate change resources. By analysing climate change and disaster risks

⁴ PERs analyse the allocation, management and results of public expenditure, looking at what was planned to be spent (the budget); what was actually spent (in terms of expenditures); what was achieved (outputs) and whether these achievements met policy objectives (outcomes). Similarly, a Public Environmental Expenditure Review (PEER) examines allocations in the context of the environmental management framework and priorities.

alongside funding and country capacity limitations, the framework helps policymakers make informed decisions. Though tailored for Pacific Island countries, the methodology has potential applications in other countries, particularly SIDS in the Caribbean and the Indian Ocean facing similar challenges.

- **Features:** The PCCFAF assesses six key dimensions: (1) funding sources, (2) policies and plans, (3) institutions, (4) PFM and expenditure, (5) human capacity, (6) development effectiveness. The PFM system analysis evaluates the strength of a country's system, fiscal sustainability, expenditure effectiveness, and value for money in service delivery.

Climate Change Budget Integration Index (CCBII)

- **Background:** The CCBII, released by **UNDP** in 2017, is a rapid assessment tool designed to evaluate the level of integration of climate change into national PFM systems (see overview and linkages with PEFA [here](#)). The findings guide government's reform agendas, help UNDP structure its support to countries, and enables cross-country comparisons. Initially developed to overcome the challenges of fragmented evaluations in Asia, the tool expanded in 2016 to a CCBII+ version, incorporating gender and social inclusion dimensions.
- **Purpose:** The CCBII identifies strengths and weaknesses in budgeting for climate change responses, helping countries understand whether their PFM system supports the achievement of climate change policy outcomes.
- **Features:** Gap analysis allows to set baselines, targets and reform priorities across four PFM dimensions: (1) policy (extent to which climate change policies are formulated, costed, prioritised and integrated); (2) systems (capacities and practices to mainstream climate change); (3) accountability (extent to which accountability mechanisms incorporate climate change); (4) development partners (integration of partners' climate change finance). While a stand-alone tool, a CCBII assessment can be conducted alongside a CPEIR (see above), which provides a more detailed review of climate change policy reflection in public expenditures. As an internal UNDP country office assessment, the CCBII incurs no additional costs beyond personnel working days, making it a practical option for rapid diagnostics (7–10 working days).

Budgeting for the Sustainable Development Goals (B4SDG) Modular Handbook

- **Background:** Recognising the critical role of fiscal policy in achieving the 2030 Agenda, **UNDP** released the B4SDG [Guidebook](#) in 2020 to address challenges in budgeting for the SDGs. It introduced a framework comprising four building blocks to embed the SDGs into PFM systems: SDG context analysis (conducting, for instance, [MAPS](#) or [DFA](#) assessments), PFM system review (understanding the budget system), institutional or stakeholder analysis, and reform agenda formulation. Expanding on the Guidebook, this 2022 Modular Handbook provides additional technical assessment modules, and a how-to guidance based on lessons learned from SDG budgeting initiatives across countries.
- **Purpose:** The handbook provides policymakers and stakeholders (including from MoFs, local governments, audit and oversight institutions) technical guidance to align public budgets with SDGs. It adopts both a systems approach (strengthening processes, institutions and legal frameworks) and a policy approach (designing and implementing SDG-aligned budget policies) to assess alignment, identify gaps and generate financing for the SDGs.
- **Features:** The handbook comprises four modules: 1) entry points and reform sequence for SDG budgeting; 2) linking SDGs to strategic budgeting processes; 3) success factors and solutions for monitoring SDG aligned expenditures; and 4) sub-national budgeting structures and functions. Additionally, a sample Terms of Reference is annexed to request technical assistance. Useful complementary resources to the handbook include: [SDG Budgeting – Origins and Practices](#), which

documents challenges, lessons learned and emerging practices from country experience reviews and case studies; and a guidance note on [INFFs and Climate Change](#), which showcases how integrated policymaking around finance (public and private) can help countries achieve national climate goals, and guides the financing needs and landscape assessment.

Capability Assessment Framework (CAF) for Mainstreaming Climate Action in Ministries of Finance

- **Background:** The 2024 capacity assessment framework is a rapid, high-level self-assessment tool to inform discussions on how to further strengthen the MoFs role in whole-of-government climate action. It was developed by experts from the **IMF, NDC Partnership**, including **IDB, E3G** (Third Generation Environmentalism) and the **2050 Pathways Platform**, under the **Grantham Research Institute** coordination. It addresses the institutional capacity challenges that MoFs face to successfully integrate climate into their core functions.
- **Purpose:** The CAF aims to support MoFs in implementing the wide-ranging “opportunities for action” presented in the CFMCA’s 2023 [flagship guide to climate action](#) (see under *Implementation Frameworks/Methodologies*) by assessing the level of integration of climate action, identifying gaps and barriers, and setting capacity building or technical assistance priorities.
- **Features:** The CAF can be completed by a single responder or a small team (e.g., a climate unit), independently or with support from technical assistance providers. It enables MoFs to evaluate the level of climate action integration into core responsibilities and capabilities, take stock of climate-related activities and policies taking place across the ministry, identify key gaps and barriers to action, define priorities for action, and determine the need for follow-up in-depth assessments, capacity building or technical assistance tailored to the needs of the ministry. The framework is currently available as a pilot version in the form of a word document that can be accessed by getting in touch with the CFMCA Secretariat (coalitionsecretariat@financeministersforclimate.org).

Disaster Resilient and Responsive Public Financial Management Assessment Tool (DRR-PFM)

- **Background:** This 2022 **World Bank** tool evaluates the resilience and responsiveness of PFM systems to rapid onset disasters caused by natural hazards (biological, meteorological and hydrological, and geophysical), though it could also be relevant in pandemics. It builds on an earlier analytical tool designed to support resilience in nine Caribbean countries. The user guide enables governments to conduct self-assessments with technical support if needed.
- **Purpose:** The DRR-PFM strengthens PFM systems to better prepare for, respond to, and recover from disasters. It identifies opportunities for reforms to laws, regulations, policies, and systems that reinforce disaster-risk management while maintaining essential PFM functions during and after disasters.
- **Features:** The tool evaluates five key PFM system areas and three cross-cutting themes: planning and budgeting, public investment and asset management, budget execution and control, public procurement, audit and oversight; as well as institutional arrangements, IT systems and records, and social inclusion. It evaluates the level of resilience and responsiveness (low, basic, moderate or advanced integration) across the five key areas, focusing on the unique requirements of rapid onset disasters (anticipating potential financial needs for disaster response, adapting to new policy priorities, or enabling expedited approval processes). The modules can be applied separately allowing countries to assess specific areas of their PFM systems.

A DRR-PFM Review takes about a month, with costs ranging from US\$60,000 – 100,000 depending on the number of experts involved ([PEFA 2023](#)). Successive reviews to track progress may not require

fieldwork and can be conducted through desk-based reform updates. Technical and financial assistance is available through the *Global Facility for Disaster Reduction and Recovery (GFDRR)* (see under the *Technical Assistance/Capacity Building* resources below in this section). For a more comprehensive view of overall financing (public and private) in support of DRR, see UNDP's guidance note on *INFFS for Disaster Risk Reduction*. It shows how integrated policymaking around finance can support governments in achieving their DRR objectives, and guides financial and non-financial risk assessments to inform finance-related decisions.

IMPLEMENTATION FRAMEWORKS/METHODOLOGIES

How to make the Management of Public Finances Climate-Sensitive – Green PFM

- **Background:** The IMF *Staff Climate Note* published in 2021 outlined a Green PFM framework, providing a comprehensive view of entry points and opportunities for integrating environment or climate-perspectives into PFM practices and processes. Building on this Note, the 2022 *How-to-Note* expands the framework with detailed guidance and a wide range of country examples.
- **Purpose:** The note provides operational advice to support governments in integrating environmental and climate priorities within, across, and beyond the budget cycle, i.e. strategic planning and fiscal framework, budget preparation, budget execution and accounting, control and audit, as well as cross-cutting components like legal frameworks, fiscal transparency and external oversight, risk management, or coordination with state-owned enterprises and subnational governments.
- **Features:** A complete picture of entry points at every step and for every component of the PFM cycle is illustrated by numerous country examples. Principles for the effective implementation of green PFM strategies are also identified, such as tailoring approaches to country context, strong ownership, political backing and MOF stewardship, the basic elements of a PFM system, proper sequencing of reforms, or effective communication on progress to build buy-in and manage expectations.

The IMF's Fiscal Affairs Department (FAD) supports Green PFM through bilateral technical assistance missions, peer-learning seminars, and an [online course](#) on *Green Public Finance* (see [details](#) under the *Technical Assistance and Capacity Building* resources).

Driving Climate Action Through Economic and Fiscal Policy and Practice

- **Background:** Produced in 2022 by the CFMCA under Helsinki Principle 4 work-stream (Mainstream Climate in Economic Policies), this note highlights the critical role of MoFs in leading robust climate action, and the risks of failure to act. The Helsinki Principles, endorsed by finance ministers from over 90 countries, are a set of six principles that promote national climate action through fiscal policy and public finance. Under Principle 4, members are encouraged to contribute to the development of practical tools, being this note one of the products.
- **Purpose:** The note aims to support MoFs in mainstreaming climate considerations into five key areas, namely a climate-sensitive macroeconomic modelling, climate-informed fiscal risk assessment, green budgeting, public investment and asset management, and green public procurement.
- **Features:** For each of the five aforementioned areas of action, the note describes the what, why, who and how, drawing on country experiences and practices: what the action entails, why is it essential for driving climate action, who should be responsible and involved, and how to implement the action effectively. It also includes a curated list of frameworks, guidance, and tools to support MoFs in

mainstreaming climate change into each of the five key areas. It draws on experiences from member countries to illustrate practical applications and successes.

Strengthening the Role of Ministries of Finance in Driving Climate Action

- **Background:** The 2022 CFMCA [report](#) “*Strategies for Mainstreaming Climate Action in Ministries of Finance: Governance, Capacities, and Research Practices*” highlighted the critical role of MoFs in driving climate action through economic, fiscal and financial policies. This 2023 guide, developed under the Helsinki Principle 2 (Share Experiences and Expertise) details the wide range of opportunities for climate action. Recognising the economic and financial consequences of biodiversity loss, the Coalition is already working on an updated version that integrates nature-related challenges. The 2022 report also noted significant capacity gaps to mainstream climate action at the required speed and scale. To address the gap, in 2024, the Coalition also announced an assessment tool to gauge the level of integration of climate action within MoFs core functions, identify gaps and barriers, and set priorities for capacity building or technical assistance (see the [CAF](#) under the *Diagnostic/Assessment Tools and Guidance* above).
- **Purpose:** The guide aims to raise awareness among MoFs about actionable opportunities through core functions (economic, fiscal, and financial) and capabilities (leadership, coordination, and human and analytical) for mainstreaming climate action into economic strategy, fiscal policy and budget management, as well as financial policy, regulation and oversight to drive the shift towards a zero carbon, climate-resilient future.
- **Features:** Organised around the three core functions and capabilities, and with the cross-cutting need in mind of a just transition, the guide provides a menu of action areas adaptable to diverse starting points (as differing national capabilities, culture, flexibility or the economic structure in which MoFs operate mean that pathways and priorities for reform are ultimately country- specific). For each action area, details on the critical role of the MoF, trade-offs, barriers and strategies to overcome them, supported by real-world examples, and reform opportunities are presented. In addition to the full report, a [key messages document](#), an [executive summary](#), and a [synthesis report](#) are available.

Green Budgeting Transition: Greening Fiscal Policies and Public Financial Management

- **Background:** France pioneered its first green national budget in 2019, offering financial and technical assistance to other countries for implementing the Green Budgeting Transition. Defined as the use of budgetary and PFM tools to align national expenditure and revenue processes with environmental and climate goals, the transition has been informed by lessons learned from France’s experience and that of other countries. These insights are captured in this 2022 technical report by the AFD (Agence Française de Développement).
- **Purpose:** The report provides a conceptual framework to guide MoFs in their approach to the Green Budgeting Transition and alignment of revenue collection and public expenditure processes with environmental and climate objectives.
- **Features:** The report details the four main areas of MoF action, namely integration of environmental and climate objectives into (1) budget planning, (2) fiscal policy, (3) budget implementation (including audit and assessment of expenditures), and (4) management of state assets and liabilities. The various actions covered under these four dimensions are illustrated by examples from various countries. The report also details tools and expert networks involved in supporting the Green Budgeting Transition.

Budgets for Climate Sustainability and Social Inclusion: A Rapid Review of Approaches and Tools

- **Background:** Published in 2022 by **UNDP** and **UNICEF**, this report addresses the dual challenges of climate change and equity in the post-COVID recovery. It emphasises the need for integrated fiscal strategies that ensure environmental sustainability while promoting social inclusion (reference is made to gender, the rights of children or marginalised groups, for instance). Drawing from a range of international experiences, the report presents practical resources and tools applicable across the different phases of the budget cycle, focusing on the expenditure side.
- **Purpose:** This review seeks to improve understanding of how public finance systems can adapt to address both climate and social priorities simultaneously. It supports governments and developing partners in identifying gaps and opportunities for integrating budgeting for SDGs, social inclusion, and climate adaptation and mitigation.
- **Features:** Structured around the stages of the budget cycle (strategic planning, budget preparation and execution, and monitoring and review), the review highlights key tools, methods and best practices for integrating climate sustainability and social priorities into budgets. It also provides preliminary actionable recommendations, including steps to improve coordination, capacity building or data availability. References to examples from countries that have successfully integrated climate and social priorities into their budgets offer insights into challenges, successes, and lessons learned.

STOCKTAKE/COUNTRY EXPERIENCES

UNDP Global Climate Public Finance Review

- **Background:** Released in September 2022, this review by **UNDP** provides a global stocktake of country reforms aimed at mainstreaming climate change considerations into PFM systems. It analyses efforts across the budget cycle and highlights lessons learned from various countries, offering a comprehensive view of progress in climate-responsive PFM.
- **Purpose:** The review seeks to share country experiences with policymakers and practitioners to support deeper integration of climate change into PFM systems. It also aims to accelerate international development cooperation for climate actions by providing actionable insights and recommendations.
- **Features:** Structured around an adapted version of the IMF's *Green PFM framework* (see [above](#) under the *Implementation Frameworks* resources), the review covers the whole budget cycle. It explores additional areas interacting with climate public finance reforms, such as extra-budgetary expenditures, subnational governments, and state-owned enterprises. For each stage of the budget cycle, the review presents: main findings, key lessons learnt from country experiences, and recommendations on practical steps to strengthen climate-responsive budgeting across the entire PFM cycle.

Green budgeting and tax policy tools to support a green recovery

- **Background:** Published in 2020, this **OECD** policy brief responds to the economic and social challenges posed by the COVID-19 pandemic. It highlights the potential for governments to leverage fiscal policy tools, such as green budgeting and tax reforms, to design recovery stimulus packages aligned with decarbonisation goals. The brief draws on the OECD Green Budgeting Framework and includes examples of green stimulus measures in OECD countries.
- **Purpose:** By taking stock of existing tools, methodologies, and examples across OECD countries, the brief aims to support governments at different stages of development in using green budgeting and tax

policy tools to prioritise low-carbon, sustainable investments in recovery efforts. It also provides guidance on reporting and assessing the environmental impacts of fiscal measures.

- **Features:** The first section of this note offers concrete suggestions for using green budgeting tools (such as budget tagging, impact assessments or spending reviews) to design and implement green recovery packages. The second section of this note looks at how well-designed tax policy tools (particularly carbon pricing) can complement recovery packages and create an enabling environment for decarbonisation during recovery and beyond. It emphasises the integration of environmental objectives into medium- and long-term fiscal frameworks, along with the importance of transparency and accountability in fiscal measures.

[Inclusive Budgeting and Financing for Climate Change in Africa Programme \(IBFCCA\)](#)

- **Background:** The IBFCCA, launched in 2020, is a [5-year programme](#) to support the integration of climate change into budget processes across African nations. Led by a coalition of partners including the **CABRI** (Collaborative Africa Budget Reform Initiative) **UNDP**, **IIED** (International Institute for Environment and Development), **IBP** (International Budget Partnership) and **Sida** (Swedish International Development Cooperation Agency), the programme emphasises synergies between gender and climate sensitive budgeting. It features a strong South-South learning component led by CABRI, alongside country level technical assistance and capacity building for climate finance reforms and governance. A peer learning event held in February 2021 brought together 45 officials from 17 African countries to share best practices and scalable solutions.
- **Purpose:** The IBFCCA aims to promote climate resilience in Africa by adopting an inclusive, gender-responsive approach to climate change budgeting and financing. The programme consolidates knowledge on measures adopted across African countries and identifies future directions for climate integration reforms, supporting low-carbon growth and resilience, particularly for women and vulnerable groups.
- **Features:** The event's [Keynote Paper](#) and a [Policy Brief](#) provide an overview of climate and gender integration approaches and progress across the PFM cycle in African countries, future reform directions, and key takeaways. The documents offer insights for other MoFs aiming to advance inclusive, climate -sensitive budgeting agendas.

[Regional Synthesis Report of the Pacific Climate Change and Disaster Risk Finance Assessments](#)

- **Background:** This 2019 Regional Synthesis Report by the **Pacific Islands Forum Secretariat** summarises key findings and recommendations from the application of the PCCFAF across 10 Pacific Island countries. It incorporates the original six PCCFAF pillars (referenced under the *Diagnostics / Assessment Tools and Guidance* [above](#)) and a newly added pillar focusing on gender and social inclusion.
- **Purpose:** The report establishes a baseline for regional observations on accessing and managing climate change and disaster risk finance. It provides a foundation for future tracking mechanisms to monitor and evaluate the outcomes of the recommendations, and facilitates targeted interventions to address regional challenges, drawing on identified gaps and lessons learned.
- **Features:** The report synthesises findings from PCCFAF conducted from 2013 to mid-2019 across 10 Pacific Island countries, and discusses the framework's pillars and their relevance to regional challenges. It identifies common issues, trends, and recommendations for improving access and management of climate and disaster risk finance. It concludes with annexed profiles detailing country-specific observations and findings.

Catalogue of Climate-Related Capacity Building Support from Institutional Partners for Ministries of Finance

- **Background:** The 2022 CFMCA [report](#) “*Strategies for Mainstreaming Climate Action in Ministries of Finance: Governance, Capacities, and Research Practices*” highlighted the critical role of MoFs in driving climate action through economic, fiscal and financial policies, yet identified significant capacity gaps hindering the mainstreaming of climate priorities. To address the gap, the Coalition published in June 2023 a catalogue showcasing a collection of 11 capacity building programmes from a range of Institutional partners.
- **Purpose:** The Catalogue aims to assist MOFs in leveraging and scaling up their capacity to drive action and mainstream climate across economic policies.
- **Features:** For each of the eleven capacity building programmes included in this first iteration of the Catalogue, a detailed description is provided, including information on the organising and service delivery partners, target countries, and contact points for accessing the programmes.

Macroeconomics of Climate Change: Green Public Finance

- **Background:** Part of the IMF’s six-module *Macroeconomics of Climate Change* series, this e-learning programme explores the science, economics, and policy options for addressing climate change. Free to access, the series covers adaptation, mitigation, and green economic transitions. Government officials registering through the [IMF’s Training Application System](#) can have course completion recorded in their IMF training transcripts, enhancing eligibility for face-to-face IMF courses.
- **Purpose:** The course provides government officials a framework to translate climate targets into actionable policies, while maintaining macroeconomic and financial stability, and ensuring a just transition to a low-carbon economy.
- **Features:** The Green Public Finance course focuses on entry points for mainstreaming climate change across and beyond the budget cycle, supported by country examples and key principles for effective reform strategy implementation. Estimated at 2-3 hours per week over 3 weeks, it is complemented by additional modules of potential interest for MoF officials: [Mitigation Strategies](#) offers an overview of the science and economic costs of climate change, and discusses policy options for adaptation and mitigation, including carbon pricing and fossil fuel subsidy removal; [Economics of Adaptation](#) introduces DIGNAD, a climate modelling tool for resilience to analysis; and [Climate Risks for the Financial Sector](#) explores regulatory and supervisory frameworks for managing climate risks. The IMF’s Fiscal Affairs Department (FAD) also provides capacity development through technical assistance missions and peer-learning seminars.

Global Public Finance Partnership (GFPF)

- **Background:** Launched in 2024, this IMF’s flagship multi-partner initiative is designed to enhance fiscal capacity development in emerging markets and developing countries. The GFPF consolidates existing thematic and bilateral delivery vehicles to improve coordination and maximize impact. It integrates capacity development across revenue and spending domains while addressing critical cross-cutting priorities (climate change, gender, inclusion, and digitalization) and emphasizing support in LIDCs and fragile and conflict-affected states. With an initial funding target of US\$200 million over five

years, the partnership is supported by multilateral organizations like the World Bank and the European Commission, alongside contributions from a number of partner countries.

- **Purpose:** The GPFP provides a holistic and integrated approach to public finance, aiming to promote sound policies and effective fiscal management while advancing inclusive development, sustainability, and technological innovation for resilient and equitable fiscal systems.
- **Features:** The GPFP's modular approach to its Revenue Component (Tax Policy, Revenue Administration, and TADAT) and Spending Component (Spending Policy and PFM), includes supporting modules for training and peer learning, fiscal tool development and research and analysis. Single unified workplans integrate all components and modules for a country, are developed in consultation with local authorities and development partners, and ensure alignment with national priorities and needs. The Secretariat, hosted by the IMF, oversees project coordination and implementation, as well as the transition plan to phase out and integrate legacy thematic funds into the new framework. See [here](#) a state of play recording from the 2024 Annual Meetings.

INFF Facility

- **Background:** The Integrated National Financing Framework ([INFF](#)) was developed to help countries bridge national development plans with sources of finance (public, private, domestic and international). The process begins with a Development Finance Assessment ([DEFA](#)) to evaluate needs, financing landscape, risks and binding constraints. Findings from the assessment inform the development of an Integrated Financing Strategy, which identifies solutions to accelerate progress towards the SDGs. To meet the growing demand for support in developing countries, the INFF Facility was launched in 2022 as a joint initiative by **UNDP**, **UN DESA**, the **OECD**, **UNICEF**, the **EU** and the Governments of **Italy**, **Spain** and **Sweden**.
- **Purpose:** The Facility aims to support governments in designing and implementing the building blocks of the INFF approach, transforming national financing systems to accelerate SDG progress.
- **Features:** Support is provided in the form of tailored technical assistance, knowledge exchange (through a knowledge based platform and peer learning events), and access to technical guidance (methodological and [technical guides](#), [stocktake](#) and [e-learning courses](#)). In the area of public finance, this support is helping countries advance reforms to embed SDGs (including climate, nature and gender equality) across the budget cycle, reconfigure tax policy to align with SDGs, enhance sovereign risk financing, manage debt risk or innovating thematic debt instruments.

Global Facility for Disaster Reduction and Recovery (GFDRR)

- **Background:** Established in 2006, the GFDRR is a multi-donor partnership managed by the **World Bank** and supported by 38 countries and 7 international organisations. The Facility provides knowledge, funding, and technical assistance to help developing countries reduce their vulnerability to natural hazards and adapt to climate change.
- **Purpose:** The GFDRR seeks to integrate disaster risk management and climate change adaptation into development strategies and investment decisions (ex-ante support), while assisting countries with effective recovery and risk reduction after disasters (ex-post assistance).
- **Features:** The GFDRR focuses on four thematic and two cross-cutting areas of action: risk identification for a risk-informed decision-making; risk reduction through structural and non-structural measures (e.g. infrastructure, land use planning, policies and regulation); disaster preparedness and resilient recovery; and financial preparedness to manage disaster and climate shocks, which involves a disaster resilient and responsive PFM system. The cross-cutting areas are: the

disaster - fragility/conflict/violence nexus, and inclusive and gender sensitive disaster risk management. As for other supporting resources, see the PFM-DRR assessment tool under the *Diagnostic/Assessment Tools and Guidance* [above](#), or the *Fundamentals of Disaster Risk Finance* e-learning course in the knowledge hub of the GFDRR platform (click linked title).

2.4. RESOURCES CLUSTERED BY PFM STAGE

2.4.1. STRATEGIC PLANNING & FISCAL FRAMEWORK



- **The Strategic Planning and Fiscal Framework stage** is the foundation of sound PFM systems. It provides quantitative targets, macroeconomic forecasts, revenue generation strategies, and a descriptive narrative that contextualises the budget.
- **In the context of Green PFM**, this foundational phase must ensure that climate risks and sustainability goals are factored into national long-term fiscal planning policies, which entails:
 - A national development strategy that incorporates long-term climate objectives and targets.
 - A climate-responsive macro-fiscal framework, using forecasting and modelling practices that account for climate impacts to inform fiscal strategy and budget preparation.
 - A climate-aware long-term sustainability analysis (at least qualitative, to begin with), based on the identification and analysis of climate-related risks, impacts, probabilities, and mitigation strategies. This includes addressing the fiscal risks associated with climate adaptation and mitigation costs, and ensuring that fiscal rules are flexible enough to allow for emergency responses to climate-related events.
 - Greening the Medium-Term Fiscal Framework (MTFF) by integrating green objectives to guide fiscal policy and inform the downstream budget preparation process.
- **Snapshot and note** of resources and tools available under this *Strategic Planning and Fiscal Framework* section. Those offering both assessment tools and implementation frameworks (*) and/or capacity building options (*) are marked. Tags are used for those with a specific thematic  focus (other than climate change and environmental sustainability in general) or geographic  (country experiences are showcased, which may be applicable or of interest to other countries). All resources are hyperlinked to their corresponding description for easy access.

STRATEGIC PLANNING & FISCAL FRAMEWORK RESOURCES & TOOLS	
NAME OF THE RESOURCE	THEMATIC FOCUS/COUNTRY EXAMPLES INCLUDED
Diagnostic/Assessment Tools or Guidance	
The Climate Policy Assessment Tool (CPAT): A Model for Climate Mitigation Policy Analysis	 <i>Worldwide</i>
Quantitative Climate Risk Assessment Fiscal Tool (Q-CRAFT)	 <i>Risk assessment</i>
Global Resilience Index (GRI) Risk Viewer	 <i>Infrastructure</i>

A Guidebook to Reviews of Fossil Fuel Subsidies: From Self-Reports to Peer Learning	🔗 Subsidies (fossil fuels) 🌐 Worldwide (China, Peru, Finland, Sweden, NZ)
Measuring Fossil Fuel Subsidies in the Context of Sustainable Development Goals	🔗 Subsidies (fossil fuels) 🌐 Egypt, Indonesia, India, Morocco, Zambia
Carbon Pricing Incidence Tool (CPIT)	🔗 Carbon Pricing 🌐 Worldwide
Carbon Pricing Metrics: Analyzing Existing Tools	🔗 Carbon Pricing
BIOFIN Workbooks 2018 and 2024 *	🔗 Biodiversity 🌐 Global South & emerging economies
Identifying and Assessing Subsidies and Other Incentives Harmful to Biodiversity *	🔗 Subsidies & biodiversity 🌐 Nordic and EU countries
Guidance to Identify and Address Incentives Harmful to Biodiversity	🔗 Subsidies & biodiversity 🌐 UK
Implementation Frameworks/Methodologies	
Green Fiscal Rules: Challenges and Policy Alternatives	🔗 Fiscal rules and MTFF
Building Financial Resilience to Climate Impacts: A Framework for Governments to Manage the Risks of Losses and Damages	🔗 Disaster risk. 🌐 The Philippines
Approaching Disaster Risk Financing in a Structured Way	🔗 Disaster risk. 🌐 Romania, Indonesia
A Toolbox for Reforming Environmentally Harmful Subsidies in Europe	🔗 Subsidies 🌐 EU
A Guidebook to Fossil Fuel Subsidy Reform for Policy-Makers in Southeast Asia	🔗 Subsidies (Fossil fuel) 🌐 Southeast Asia
The Nature of Subsidies: A Step-by-Step Guide to Repurpose Subsidies Harmful to Biodiversity	🔗 Subsidies & Biodiversity 🌐 Worldwide (Global South & emerging markets focus)
Agricultural Producer Subsidies: Navigating Challenges and Policy Considerations	🔗 Subsidies (Agricultural)
A Multi-Billion Dollar Opportunity: Repurposing Agricultural Support to Transform Food Systems	🔗 Subsidies (Agricultural) 🌐 Global South (Africa, Latin America, Asia)
Environmental Tax Handbook	🔗 Taxation 🌐 Africa
Carbon Tax Guide: A Handbook for Policymakers	🔗 Taxation (Carbon) 🌐 Worldwide. (+ case studies: British Columbia, Chile, Ireland, Mexico, South Africa)
UN Handbook on Carbon Taxation for Developing Countries	🔗 Taxation (Carbon) 🌐 Worldwide
The Future of Resource Taxation: 10 Policy Ideas to Mobilize Mining Revenues *	🔗 Taxation (Mineral Resources) 🌐 Worldwide (focus Africa)
Stocktake/Country experiences	
Green Taxation in non-OECD Countries: A review of experience and lessons learned	🔗 Taxation (Carbon) 🌐 Ghana, Guyana, Morocco, Viet Nam, Zambia
Technical Assistance/Capacity Building	
Green Fiscal Policy Training Course	🔗 Subsidies, carbon tax, environmental fees
Fossil Fuel Subsidy Reform (FFSR) Webinars	🔗 Subsidies
BIOFIN capacity building resources	🔗 Subsidies & Biodiversity
Carbon Taxation E-Course	🔗 Taxation (Carbon)

- **Note on tagged resources.** Most resources in this section focus on specific thematic areas 🔗 or reference country experiences 🌐 to illustrate best practices or build on lessons learned from both successful and unsuccessful implementation. These combinations are particularly valuable for countries facing similar challenges or vulnerabilities.

Several resources combine assessment tools (to identify and prioritise reforms) with implementation guidance, or pair implementation frameworks with technical assistance and capacity-building facilities. For instance, *The Future of Resource Taxation* draws lessons from African countries that are also relevant for Latin American and Asian countries with significant mining sectors. The organisations

behind this resource also provide technical assistance and capacity building support (*). BIOFIN publications (*Workbooks* and guidance for *Identifying and Assessing Subsidies*) are primarily classified as *Assessment Guidance* but also include frameworks for implementation (*). Adaptations of the BIOFIN methodology in Global South countries and economies in transition demonstrate its flexibility across diverse contexts.

DIAGNOSTIC/ASSESSMENT TOOLS AND GUIDANCE

The Climate Policy Assessment Tool (CPAT): A Model for Climate Mitigation Policy Analysis

- **Background:** CPAT is an IMF tool adapted for government use through a multi-year collaboration with the **World Bank**. The [2023 version](#) is a spreadsheet-based model covering 200 countries, including all Paris Agreement signatories. The tool enables rapid and detailed analysis of the economic, environmental, fiscal, and social impacts of mitigation policies, while facilitating cross-country comparisons of mitigation ambitions. CPAT provides insights into emissions, fuel use, mitigation efforts, and efficient fuel pricing based on NDCs, supporting processes under the UNFCCC.
- **Purpose:** CPAT helps policymakers weigh trade-offs and synergies in climate mitigation policies. It supports the design and implementation of effective, efficient and equitable policies to accelerate decarbonisation, ensure a just transition, and achieve broader government objectives (like poverty eradication and energy access). Additionally, it enhances domestic resource mobilisation, improve tax system efficiency, and incentivise greener behaviour across economic actors.
- **Features:** This IMF working paper details the model's data sources, assumptions, and key components: (1) mitigation module to estimate energy, emissions and economic impacts of policies; (2) distribution module to analyse household and industry incidence; (3) air pollution module to assess air quality impacts; and (4) transport specific module.

The tool requires minimal prior knowledge and limited external data input. Users interact via a dashboard that facilitates policy simulations with customisable parameters and country-specific data. Simulations cover a wide range of climate mitigation policies, including carbon taxes, emissions trading systems, fossil fuel subsidy reforms, renewable energy subsidies, energy efficiency regulations, and policy combinations. Results on impacts (e.g. on energy demand, prices, emissions, revenues, welfare, GDP, household impacts and other metrics) are presented through a chart interface, enabling experimentation and sensitivity analyses. Results are downloadable for use in reports (access the tool [here](#) and the user guide [here](#); see a results demo in [this](#) brief recording).

Quantitative Climate Risk Assessment Fiscal Tool (Q-CRAFT)

- **Background:** Q-Craft, introduced in November 2024, is a key addition to the IMF's [Fiscal Risk Toolkit](#), which helps governments to identify the most important sources of fiscal risks, quantify their potential impacts, and prioritise areas work. This specific tool emphasises fiscal risks posed by climate change under various Intergovernmental Panel on Climate Change (IPCC) emission scenarios through 2100, making it particularly valuable for climate-vulnerable states.

- **Purpose:** Q-CRAFT helps governments quantitatively assess the long-term fiscal risks of climate change and analyse impacts on key macroeconomic and fiscal indicators, such as GDP, fiscal deficits, and the debt-to-GDP ratio, offering insights into fiscal sustainability under varying climate conditions.
- **Features:** The tool allows for user-defined assumptions and the integration of additional shocks, such as natural disasters to reflect country-specific circumstances. The MS Excel-based assessment [tool](#) as well as the accompanying [user guide](#) are publicly available on the IMF's webpage. The IMF's Fiscal Affairs Department collaborates with member countries to enhance cross-government efforts. This has led to the inclusion of climate fiscal risk analyses in Fiscal Risk Statements in various countries, many of which publish their results.

SPOTLIGHT: Q-CRAFT IN RWANDA

Rwanda's MoF applied the Q-CRAFT tool to analyse long-term fiscal risks from climate change under different emission scenarios. It led the implementation through a workshop with experts from the Central Bank, the Ministry of Environment and Meteo Rwanda. By using national data and leveraging Q-CRAFT's preloaded international data, Rwanda has assessed climate-related fiscal risks through 2100. The results, integrated for the first time in the FY2023/24 Fiscal Risk Statement ([index.php](#)), enable informed policy decisions using GDP and government debt projections across various climate scenarios.

Global Resilience Index (GRI) Risk Viewer

- **Background:** The GRI Risk Viewer is part of the overarching programme *Resilient Planet Data Hub* (formerly the Global Resilience Index Initiative) established in 2020 at the request of the UN Special Envoy on Climate Action and Finance. Based on the **University of Oxford's** Global Systemic Risk Assessment Tool (G-SRAT), originally funded by the **World Bank**, the data and analytics portal was launched at COP28 in 2023. It provides open-access data for visualisation and download, covering hazards (e.g. flooding, cyclones, extreme heat, or earthquakes), exposure, vulnerability, and risk to infrastructure and people.
- **Purpose:** By identifying and assessing spatial vulnerabilities and risks to assets and people under current and future climate scenarios, the GRI aims to support climate adaptation decision-making in critical infrastructure investment planning and development. It can support risk reduction strategies, and the alignment of investment strategies with national climate adaptation goals and international frameworks like the Sendai Framework for Disaster Risk Reduction.
- **Feature:** The GRI Risk Viewer is a user-friendly interface offering a dashboard and interactive maps to easily visualise multi-hazard risks for infrastructure investments. This enables policymakers to prioritise areas for resilience-building based on identified vulnerabilities. The platform includes a guide and a library of data sources. This three-minute [video](#) offers an overview of the platform.

A Guidebook to Reviews of Fossil Fuel Subsidies: From Self-Reports to Peer Learning

- **Background:** Published by **IISD** (International Institute for Sustainable Development) in 2017, this guidebook provides a structured approach for governments conducting self- or peer-reviews of fossil fuel subsidies (FFS). It draws on conceptual work by organisations like the **OECD**, **IEA**, **IMF** and the IISD Global Subsidies Initiative, and empirical material, including individual self-reports and peer-reviews by G20 and APEC member countries, expert interviews and media reports.
- **Purpose:** The guidebook aims to improve transparency, accountability, and policy coherence (intended economic/social objective vs potential counteracting impact on sustainable development and fiscal stance) by supporting governments in designing and conducting reviews of FFS. While implementation guidance is beyond its scope, it highlights the economic inefficiency, social regressiveness, and environmental harm of FFSs, and lays the groundwork for reform efforts (see

Guidebook for Fossil Fuel Reform under Implementation Frameworks/Methodologies below for implementation guidance).

- **Features:** The document outlines the main building blocks for FFS review, including identification, measurement evaluation, and next steps towards subsidy reform. Combinable methodological options allow tailoring reviews to specific national contexts. It also includes practical annexes such as templates for subsidy identification and reporting in the framework of international commitments, or principles for review processes. Case studies from China, Finland, New Zealand, Peru, and Sweden are featured to showcase diverse approaches to subsidy reviews and lessons learned.

Measuring Fossil Fuel Subsidies in the Context of Sustainable Development Goals

- **Background:** This 2019 **UNEP** publication, developed in collaboration with **IISD's** Global Subsidies Initiative and the **OECD**, provides methodological guidance for measuring fossil fuel subsidies (FFS) in the context of **SDG 12** (responsible consumption and production). Specifically, it supports the reporting on indicator **12.c.1** which tracks FFS as a proportion of GDP. The methodology addresses limitations in data quality and harmonisation by promoting a country-driven approach to data collection and reporting, while ensuring alignment with international standards. It is intended for use by National Statistical Systems in compiling national estimates of FFS.
- **Purpose:** The report aims to assist policymakers in quantifying FFS and assessing their implications for sustainable development. It supports the design of equitable subsidy reform strategies aligned with global climate and development objectives, improves transparency, and enables better tracking of national and global trends.
- **Features:** Following a definition and overview of global FFS and indicator **12.c.1**, the document reviews current monitoring practices and suggests a step-by-step approach to identify and quantify such subsidies. Three sub-indicators are recommended for reporting on the indicator: 1) direct transfer of government funds; 2) induced transfers (price support mechanisms); and (3) an optional sub-indicator reflecting tax expenditures, revenue foregone, and under-pricing externalities like pollution of goods and services. It highlights lessons from Egypt, Indonesia, India, Morocco, and Zambia on minimising social and economic disruptions during subsidy reform processes.

Carbon Pricing Incidence Tool (CPIT)

- **Background:** Carbon pricing is one of the most effective ways of reducing climate-damaging emissions, yet implementation challenges are often considerable, especially in developing countries and emerging economies. A new digital calculation platform, developed by the **Mercator Research Institute** on Global Commons and Climate Change (MCC) with support from **GIZ**, was presented at COP28 in 2023 to address the challenges. It is based on national statistical household surveys from over 87 countries (representing two thirds of the world's population, from advanced economies to emerging markets and low-income nations). It uses advanced input-output modelling techniques to assess the distributional impacts of carbon pricing and compensatory policies on different income groups, industries, or geographic regions.
- **Purpose:** CPIT supports policymakers and other stakeholders in designing socially just and effective carbon pricing mechanisms. It helps develop targeted compensatory measures to enhance equity and acceptability, while improving communication and stakeholder engagement.
- **Features:** CPIT is an interactive and user-friendly tool that visualises the environmental and economic effects of different policy options with just two inputs: country selection and choice of carbon pricing policy, including compensation measures (proportion and mechanisms). Further optional inputs based

on population characteristics, such as income groups, urban vs. rural households, or household composition, add depth to the analysis. The results shown are direct impacts (i.e. additional expenditure on fossil fuels, rather than indirect effects via product price), customisable (as a percentage of household expenditure, absolute terms, average value or statistical distribution), and can be downloaded as graphic image file, or as an Excel table for further analysis.

Carbon Pricing Metrics: Analyzing Existing Tools

- **Background:** Developed in 2022 by the **Platform for Collaboration on Tax (PCT)** partners, including **IMF, OECD, UN, and World Bank**, the report provides a comprehensive diagnostic of the methodologies and tools used to evaluate carbon pricing instruments globally (see [executive summary](#)). With carbon pricing becoming a key policy tool for reducing GHG emissions, the report highlights the diversity of approaches and metrics developed over the last decade to assess effectiveness. It reflects on the role of international organisations in advancing these metrics and their significance in informing policy decisions.
- **Purpose:** The report is designed to help policymakers and practitioners: understand global best practices by showcasing effective carbon pricing metrics and tools; select appropriate methodologies for their unique context by comparing different approaches; benchmark and refine existing carbon pricing systems against global standards and best practices.
- **Features:** The report explores methodologies and tools developed by PCT partners, such as the OECD's Effective Carbon Rates, IMF's FFS analysis, and the World Bank's Carbon Pricing Dashboard. It proposes a framework for comparing metrics based on policy coverage, pricing forms (explicit, implicit, positive, negative), and methodologies. By highlighting the strengths and limitations of various metrics, the report provides practical guidance for selecting or improving tools based on national or regional needs. With a global perspective, it examines metrics across developed and developing countries, emphasising their relevance for achieving climate objectives and SDGs.

BIOFIN Workbook 2018 and Workbook 2014

- **Background:** The [Biodiversity Finance Initiative \(BIOFIN\)](#), launched in 2012 by **UNDP** in partnership with the **European Commission**, is a global initiative that mobilises financial resources for biodiversity conservation. It brings together a broad coalition of partners (governments, civil society, and international institutions) to support the alignment of financial policies with biodiversity goals in over 40 participating countries (mostly from the Global South, but also economies in transition from the Global North) to meet commitments under the Kunming-Montreal Global Biodiversity Framework and the SDGs. Through capacity building, knowledge sharing, and technical assistance, BIOFIN provides tools to identify financing gaps, design innovative finance solutions, and mainstream biodiversity into national financial planning processes. The BIOFIN Workbooks, published in 2018 and 2024, present a structured approach for integrating biodiversity considerations into national financial systems.
- **Purpose:** The Workbooks provide a foundational framework for governments to assess biodiversity financing needs, gaps, and opportunities, laying the groundwork for developing actionable Biodiversity Finance Plans (BFPs). While primarily focused on assessment (hence its inclusion under this assessment resource category), they also offer some guidance for prioritising and delivering financing solutions, bridging assessment and implementation functionality.
- **Features:** The workbooks offer three main assessment tools, all customisable to adapt to specific environmental, fiscal and institutional contexts: (1) Policy and Institutional Review (PIR) to assess

biodiversity-related policy, institutional, and financial landscape; (2) Biodiversity Expenditure Review (BER) to analyse past, current, and projected expenditures; (3) Financial Needs Assessment (FNA) to estimate financing requirements to deliver national biodiversity plans, and identify financing gap (which requires costing targets and actions of the National Biodiversity Strategies and Action Plans, or [NBSAPs](#) for short). The [2018 Workbook](#) (191 pages long) introduced foundational methodologies for developing and applying BFPs, illustrated with country examples. The [2024 update](#) (199 pages long) further covers approaches for monitoring and evaluating finance plans, and success stories and lessons learned from a decade of implementation. A key update is an expanded role for the private sector in supporting nature positive investments. The workbooks are designed to be used independently or sequentially, offering tailored solutions for diverse country context.

Identifying and Assessing Subsidies and Other Incentives Harmful to Biodiversity

- **Background:** Published in November 2022, this **OECD** working paper provides a comparative review of national-level assessments on subsidies and incentives (directly or indirectly) harmful to biodiversity. Despite commitments under the Convention on Biological Diversity and its Aichi Targets, few countries have conducted assessments, a critical first step toward reforms. The paper examines 23 cases across 12 Nordic and EU countries, noting that most focus on environmentally harmful subsidies, with only eight addressing biodiversity specifically. The report provides practical guidance for governments embarking on similar efforts for the first time.
- **Purpose:** The paper aims to support governments in identifying and evaluating national biodiversity-harmful subsidies and incentives by outlining good practices and key steps for conducting self-assessments. While implementation guidance is beyond its scope, the paper enables policymakers to select and prioritise subsidies for reform and understand their economic, social and environmental impacts, to design realistic reform plans that consider the needs of vulnerable groups.
- **Features:** A brief literature review on subsidies harmful to biodiversity precedes a detailed review and comparison of existing national level assessments. Diverse methodologies are highlighted in the process, including quantitative and qualitative approaches, such as traffic light systems to rate biodiversity impact levels, or tools previously developed by the OECD like the *quick scan* and *checklist* tools ([OECD, 2005](#)), or the *integrated assessment framework* ([OECD, 2007](#)). Based on the analysis, the paper proposes guidance and good practice insights structured around a 4-step process: (1) scoping to define types of incentive to assess; (2) screening to identify those potentially harming; (3) data gathering for evaluation; and finally (4) assessment to analyse and prioritise incentives for reform.

Guidance to Identify and Address Incentives Harmful to Biodiversity

- **Background:** Commissioned by **Defra** (UK Department for Environment, Food & Rural Affairs) and published in 2012 by the **IEEP** (Institute for European Environmental Policy), this guidance document supports the implementation of the Convention on Biological Diversity (CBD) Incentive Measures for Biodiversity, which calls for the identification, elimination, and reform of biodiversity-harmful incentives (BHIs). It builds on international work (e.g. from the OECD, or The Economics of Ecosystems and Biodiversity – [TEEB initiative](#) by UNEP) and the UK’s national experience, offering a conceptual and methodological framework adaptable to diverse national contexts for addressing BHIs.
- **Purpose:** The document equips governments and policymakers with tools to assess and reform economic incentives that harm biodiversity, an entry point for broader EHS reforms. The framework is applicable to a wide range of subsidies and incentives, and susceptible to tailoring for further sector-specific assessments.

- **Features:** The report consists of three volumes: (1) a [summary](#) of overall findings and policy implications; (2) results of the rapid review of biodiversity incentives in the UK; and (3) [guidance](#) tool for the identification and reform of BHIs. The guidance provides a step-by-step approach to identify and address BHIs, leveraging tools like the OECD's *quick scan* and *checklist* ([OECD, 2005](#)), or the *integrated assessment framework* ([OECD, 2007](#)). It features practical examples to illustrate challenges and strategies for reforming BHIs.

IMPLEMENTATION FRAMEWORKS/METHODOLOGIES

Green Fiscal Rules: Challenges and Policy Alternatives

- **Background:** Published by the **IMF** in 2024, this working paper examines the design, implementation, and challenges of fiscal rules that integrate climate-related spending while maintaining fiscal sustainability. As governments grapple with the dual challenge of addressing climate change and managing rising debt levels, this paper examines the trade-offs and opportunities associated with adopting green fiscal rules. It emphasises the role of Green MTFFs in incorporating climate considerations into fiscal policy design comprehensively.
- **Purpose:** The report aims to guide policymakers in navigating the trade-offs involved in adopting green fiscal rules by: quantifying fiscal and debt implications under different scenarios, highlighting operational challenges of their design, and proposing alternative strategies to balance climate goals and fiscal sustainability
- **Features:** The paper includes scenario simulations, to analyse the implications of green fiscal rules (that exempt green spending from fiscal rule limits) and illustrate potential risks to debt dynamics, non-green budgets, and budget credibility when the net-zero emissions goal relies heavily on spending-based instruments (e.g. investment and subsidies). It explores issues in defining and financing green spending while maintaining fiscal transparency and simplicity. Finally, it discusses desirable elements of Green MTFFs, supported by examples from countries like Denmark, the UK, New Zealand, France and Senegal. It also advocates for supplementing a Green MTFF with other green PFM practices, like climate budget tagging and climate-smart public investment.

Building Financial Resilience to Climate Impacts: A Framework for Governments to Manage the Risks of Losses and Damages

- **Background:** Released by the **OECD** in 2022, this framework builds on the OECD report [Managing climate risks, facing up to losses and damages \(2021\)](#) to address the PFM challenges posed by climate-related fiscal risks. It provides a strategic framework for governments to assess, manage, and finance climate-related risks, tailored to different national contexts, fiscal resources and borrowing capacities.
- **Purpose:** The framework supports sound PFM strategies that address budgetary and financing constraints, particularly in emerging market and developing economies facing increased climate-related extreme events. It also fosters broader national and international actions to manage climate-related losses and damages effectively.
- **Features:** The document first provides an evidence-based context summarising global climate impacts, economic consequences and public financial strategies for managing climate risks. It then explores government exposure to climate hazards, fiscal vulnerabilities, and the integration of climate change into fiscal forecasting and reporting. It evaluates budgetary and financial instrument options to

manage disaster-related costs (e.g. budget reallocations, contingency funds, public guarantees for catastrophe risk insurance programmes, debt financing or risk transfer mechanisms). Finally, it outlines a strategic framework for action starting with the identification, assessment and reporting of climate-related risks and impacts on public finances, financial loss mitigation measures through adaptation and risk reduction, and development of an integrated multi-pronged financial strategy to fund government expenditure needs. To illustrate the application of the framework in managing disaster-related fiscal risks, it features a case study on the Philippines.

[Approaching Disaster Risk Financing in a Structured Way](#)

- **Background:** Published by the **European Commission** in May 2024, the paper addresses the growing fiscal risks posed by increasingly frequent and severe climate-related disasters in the EU. It highlights the need for a coherent strategy across Member States to systematically integrate disaster risk financing (DRF) measures in public finances, and proposes a phased approach to that end. This implementation approach complements the World Bank [DRR-PFM assessment tool](#) (see under *Comprehensive / Diagnostic and Assessment tools*).
- **Purpose:** This discussion paper aims to contribute to a shared understanding of the key steps and stages of development of DRF. It provides a reference through a structured approach for relevant authorities in Member States willing to further structure and develop their DRF processes to better understand, plan for and manage the fiscal cost of disasters and enhance their climate fiscal resilience.
- **Features:** The suggested approach is organized into four key pillars, each with its defining elements: (I) fiscal impact of disasters (realised and estimated costs and expenditures); (II) private sector disaster risk management (through insurance coverage); (III) public sector fiscal risk management (from disaster prevention/preparedness mechanisms and public insurance schemes, to public budgets and compensation rules); (IV) institutional arrangements (from transparency and monitoring, to governance and coordination). Each pillar's elements are categorized into different stages of maturity (essential, intermediate and advanced) to help identify potential areas for further action and development, and a brief list of guiding questions for self-assessment to identify gaps is annexed. Complementing the implementation framework are examples from Romania and Indonesia.

[A Toolbox for Reforming Environmentally Harmful Subsidies in Europe](#)

- **Background:** Published in 2022 by the **European Commission**, this toolbox addresses the reform of environmentally harmful subsidies (EHS) in the European Union (EU). It recognises that EHS not only hinder environmental goals, but also exacerbate fiscal inefficiencies. The toolbox aligns with the objectives of the European Green Deal and the Paris Agreement, consolidating conceptual insights and empirical evidence from national and international reports, expert interviews, and data sources to support effective reforms.
- **Purpose:** The toolbox seeks to facilitate and accelerate EHS reform processes by providing stakeholders with a step-by-step guidance; practical methodologies to identify, map and evaluate subsidies; and recommendations for implementing reforms. It is tailored to support EU Member States in addressing the environmental, social, and fiscal impacts of EHS while navigating political, economic, and technical challenges.
- **Features:** The document maps the EHS landscape across the EU, emphasising that fossil fuel subsidies are only part of a broader issue. It highlights five national reform programs, offering insights into success factors and challenges. It presents detailed factsheets on specific subsidies, including their environmental, social, and fiscal impacts, policy background and reform approaches. It explores potential EHS candidates for reform, highlighting key arguments and approaches for change. It also

provides practical recommendations for EU and national stakeholders on organising effective reform processes to overcome political, economic, and technical obstacles. And finally, an [Online Toolbox](#) offers additional resources (inventory of subsidies and data sources for mapping, or examples of reform initiatives).

[**A Guidebook to Fossil Fuel Subsidy \(FFS\) Reform for Policy-Makers in Southeast Asia**](#)

- **Background:** Published in 2013 by IISD under the Global Subsidies Initiative (GSI), this guidebook addresses the practical challenges of reforming FFS, a critical step in fostering sustainable energy transitions. While tailored to the Southeast Asian context, its principles and approaches are applicable globally. Unlike the assessment-focused *Guidebook to Reviews of Fossil Fuel Subsidies* (under the *Diagnostics/Assessment Tools/Guidance* above), this resource focuses explicitly on implementing reforms.
- **Purpose:** The guide supports the formulation of effective reform strategies tailored to a country's specific objectives and circumstances. It provides policymakers with tools to overcome common obstacles in FFS reforms, enabling them to achieve environmental, fiscal, and social goals.
- **Practical Features:** The guidance identifies key phases of reform, including planning, stakeholder engagement, policy design, and implementation, and offers methodologies to design reform strategies. It proposes strategies for engaging stakeholders, addressing public concerns, and implementing compensatory measures for vulnerable populations. It suggests alternative uses of fiscal savings (e.g. renewable energy, energy efficiency, or social welfare programs for economic and social impact mitigation). It also highlights successful practices from countries around the world, with special focus on Malaysia, the Philippines, Thailand and Vietnam. Numerous policy briefs and reports on subsidy reform implementation are available at the [ISSD GSI resource platform](#), including a cautionary example from Ecuador's subsidy reform experience [here](#).

[**The Nature of Subsidies: A Step-by-Step Guide to Repurpose Subsidies Harmful to Biodiversity**](#)

- **Background:** Published in 2024 by the BIOFIN initiative, this guide provides a comprehensive framework to identify, assess, and reform subsidies with negative biodiversity impact. Launched in 2012 by UNDP in partnership with the **European Commission**, the [Biodiversity Finance Initiative \(BIOFIN\)](#) is a global initiative that brings together a broad coalition of partners to support over 40 countries in mobilising resources for biodiversity conservation and align financial policies with biodiversity goals. See further details on the initiative in [this](#) earlier BIOFIN resource under *Diagnostics/Assessment Tools and Guidance*.
- **Purpose:** The guide aims to assist governments, particularly in developing countries, in evaluating the (often unintended) biodiversity impacts of harmful subsidies, and developing action plans to redesign these mechanisms. The goal is to enhance biodiversity outcomes while optimising social and economic benefits.
- **Features:** The guide outlines a structured subsidy reform process, proposing a step-by-step methodology to map and quantify existing subsidies; assess their economic, social and environmental impact and cost; define options through a multidimensional analysis that considers social, gender equality, environmental, economic and political economy concerns; and develop and implement action plans to redesign prioritised subsidies. It draws on experiences from BIOFIN countries to illustrate the process and provide actionable insights for policymakers, and includes detailed case studies from Austria, Colombia, Ecuador, France, Kyrgyzstan, Malawi, Nepal, Indonesia, Switzerland, and Viet Nam, showcasing successful subsidy reforms, challenges and lessons learned.

Agricultural Producer Subsidies: Navigating Challenges and Policy Considerations

- **Background:** Published in 2024, this **IMF** note explores the fiscal, economic, environmental, and social implications of agricultural producer subsidies. It responds to global crises, such as the 2008–2009 food price crisis, the COVID-19 pandemic, and the Russian invasion of Ukraine, which have highlighted the critical role of subsidies in addressing food security challenges. The report provides an empirical and analytical foundation for evaluating and reforming subsidies within broader fiscal and policy frameworks.
- **Purpose:** The note aims to guide policymakers in designing, implementing, or reforming agricultural producer subsidy programs. It highlights the intended benefits and actual limitations of subsidies, while offering alternative policy measures to achieve similar objectives more effectively.
- **Features:** The note provides: (1) an overview of scope, prevalence, size and fiscal implications of agricultural subsidies globally; (2) an analysis of the efficiency, distributional, and environmental consequences of subsidies, including their potential to create fiscal burdens and misallocate resources; (3) guidance on designing and targeting subsidy programs, addressing the complexities of subsidy reform, including effective communication strategies, timing, and sequencing to mitigate resistance and ensure successful implementation; (4) more effective alternative expenditure policies, such as investments in agricultural R&D, infrastructure or market information. Lessons are drawn from successful and unsuccessful subsidy programs globally, illustrating best practices and common pitfalls.

A Multi-Billion Dollar Opportunity: Repurposing Agricultural Support to Transform Food Systems

- **Background:** This 2021 joint **FAO-UNDP-UNEP** report calls for a fundamental rethinking of agricultural subsidies, which often lead to inefficiencies, environmental degradation and social inequities. Rather than eliminating support altogether, the report advocates for phasing out the most distorting and environmentally and socially harmful, and redirecting them toward more sustainable investments in public goods and services, such as research, development and infrastructure, or decoupled fiscal subsidies.
- **Purpose:** The report aims to equip policymakers and stakeholders with evidence-based insights into the negative impacts of current agricultural support systems. It demonstrates how repurposing these funds can drive the transition to sustainable food systems, and offers practical guidance on designing and implementing reforms to maximise benefits for people, the planet, and economies.
- **Practical Features:** The report presents an analysis of agricultural producer support globally and by country income group over time, evidence on the potential positive impact of eliminating negative support, and a six-step approach to agricultural subsidy reform: (1) Estimating existing support; (2) Assessing positive and negative impacts; (3) Identifying repurposing options and reform options; (4) Forecasting their impacts; (5) Refining proposed strategies and implementation plans; and (6) Monitoring the outcomes of the new agricultural producer support. Country experiences illustrate the diverse approaches to repurposing agricultural support (Ethiopia, Malawi, South Africa, Brazil, China, India, and Vietnam), demonstrating both challenges and opportunities for food system transformation. A summary of this 180-page-report can be found [here](#) and a more recent policy brief [here](#).

Environmental Tax Handbook

- **Background:** In 2023, **ATAF** (African Tax Administration Forum) released its [Policy Guidelines for Carbon Tax](#), which explored both upstream (fuel-based) and downstream (emissions-based) approaches to carbon taxation, key design parameters tailored to the African context (including tax rate setting, tax base definition, and revenue allocation), and complementary policies (reducing

harmful fossil fuel subsidies) to maximise their environmental effectiveness. ATAF's 2024 handbook expands its guidance to other environmental taxes and environmental fiscal reforms in general.

- **Purpose:** This publication provides the tools for African tax authorities to implement and expand a full-fledged environmental tax regime that renders environmentally beneficial outcomes, and a sustainable revenue stream to support development and offset fiscal challenges in middle and low-income contexts.
- **Features:** Rather than being prescriptive, the handbook presents consideration factors (including the administrative cost and burden of environmental taxes), different instruments, innovative ideas, and examples of good practices that enable relevant authorities to develop and implement environmental taxes suitable to their needs. It covers foundational policy principles and design choices for carbon taxes (scope, tax rate, regulation, monitoring and reporting, impact assessment), as well as application examples worldwide. It presents the benefits, pitfalls and practical considerations for the implementation of other environmental taxes (energy, transport, pollution and resource taxes). Examples of innovative approaches from Côte d'Ivoire, Senegal and Tunisia are showcased, and an innovative idea around taxes targeting motor vehicle use (such as fuel and annual vehicle ownership taxes) is explored. In addition to guidelines, ATAF offers technical assistance to member countries for the design and implementation of environmental fiscal reforms.

[Carbon Tax Guide: A Handbook for Policymakers](#)

- **Background:** About half of NDCs submitted by governments under the Paris Agreement include carbon pricing measures, a cost-effective tool for reducing GHG emissions to meet climate targets. To address the technical, economic, and political complexities of carbon pricing, the **World Bank** released in 2017 a practical guidance on the implications, benefits, and drawbacks of different approaches. It draws on the technical work of its Partnership for Market Readiness (PMR) programme and country experiences.
- **Purpose:** The guide aims to help policymakers determine whether a carbon tax is the most suitable for their policy objectives, and to guide the design and implementation of taxes tailored to national needs and circumstances.
- **Practical Features:** The guide offers a comprehensive framework, covering all aspects of carbon taxation, from policy objectives and design choices to implementation, oversight, and evaluation. It provides detailed advice on tax modelling, tax base selection, rate determination, revenue use, and communication strategies. Worldwide examples illustrate the wide range of practices, and case studies showcase the successful implementation and adaptation to local contexts in British Columbia (Canada), Chile, Ireland, Mexico and South Africa. Building on this handbook, the PMR and the UNITAR have jointly created an e-course (see under the *Technical Assistance/Capacity Building* below).

[United Nations Handbook on Carbon Taxation for Developing Countries](#)

- **Background:** The handbook, published in October 2021, is a comprehensive and practical guidance developed by the **UN Committee of Experts on International Cooperation in Tax Matters** (Subcommittee on Environmental Taxation Issues) in response to the need for clear directions on using carbon taxes as a policy instrument in developing countries.
- **Purpose:** It aims to guide decision-makers in the effective design, implementation and administration of carbon taxes that reflect the priorities and realities of the country. The objective is to reduce emissions, enhance revenue mobilization for sustainable investments, manage distributional impacts, and integrate carbon pricing into broader fiscal policy frameworks.

- **Features:** The handbook outlines reasons for introducing a carbon tax, and provides options for policy design and administration catering to different country needs and priorities. It raises awareness of potential challenges and opportunities, pros and cons of possible options, and provides a guide on how to increase the acceptability of carbon taxation and how to deal with potential interactions with other existing laws and policy measures. The practical guide contains many real-world examples and practical tools, including checklists.

The Future of Resource Taxation: 10 Policy Ideas to Mobilize Mining Revenues

- **Background:** Launched in 2020 by the [IGF](#) (Intergovernmental Forum on Mining, Minerals, Metals, and Sustainable Development) and [ATAF](#), this multi-stakeholder research initiative aims to rethink how resource-rich countries can maximise financial benefits from their mineral wealth. Published in 2023 by [IISD](#), host of the IGF Secretariat, the handbook reflects a participatory process involving governments, civil society, academia, and industry. It provides innovative fiscal measures to address revenue challenges in the mining sector, and aligns with trends like the transition to low-carbon energy and technological advancements.
- **Purpose:** The handbook offers a comprehensive menu of innovative fiscal measures to strengthen revenue collection from the mining sector. It seeks to equip resource-rich countries with tools to maximise financial returns from mineral resources while addressing global challenges (such as the transition to low-carbon energy, technological changes, and increasing inequality) to balance fiscal sustainability with broader economic and social objectives.
- **Features:** The handbook is structured into 15 chapters, covering: (1) sector-specific challenges and fiscal instruments; (2) global trends impacting revenue collection and mining fiscal policies; (3) an evaluation framework of principles and tools to assess policy proposals; (4) ten innovative fiscal measures to improve revenue collection, including objectives, implementation methods, benefits, challenges, and lessons from other countries; (5) legal considerations addressing domestic and international frameworks for implementing new measures. Both IGF and ATAF provide technical assistance to member countries, and ATAF offers tailored foundational courses in the area of tax audit.

STOCKTAKE/COUNTRY EXPERIENCES

Green Taxation in Non-OECD Countries: A Review of Experience and Lessons Learned

- **Background:** Published in June 2023 by the **European Commission's** Directorate-General for Environment, the report sets out to draw together lessons learned from existing environmental tax instruments in non-OECD countries, and to identify best and less effective practices in their implementation. It focuses on environmental taxes beyond the well-documented carbon-energy taxes (e.g. e-waste, plastics, and resource taxation). By collating results from a literature review (conducted in 2022–2023) and incorporating five “deep dives” (Ghana, Guyana, Morocco, Viet Nam, and Zambia), the report provides a comprehensive overview of green taxation practices in low- and middle-income countries.
- **Purpose:** The report generates robust evidence on the impacts and interactions of environmental taxes to inform development cooperation organizations and policymakers in non-OECD countries. It offers guidance on designing effective environmental taxes, avoiding common pitfalls, and managing potential trade-offs between social equity, environmental effectiveness, and domestic revenue mobilization.
- **Features:** The review outlines the current state of research on environmental taxation in non-OECD countries, revealing data gaps and limited public information. It presents lessons learned from five

detailed case studies (deep dives) and numerous other country examples from Africa, Asia and Latin America, identifying trade-offs in tax design, governance challenges, and the limitations of current fiscal regimes in addressing environmental problems. It provides insights on improving tax design, enforcement, and impact assessment to make environmental taxation more effective in mobilizing revenue and promoting sustainable development. The report also highlights the need to create a robust evidence base and a better understanding of the impacts and interactions of environmental taxes through collaboration and exchange initiatives, describing nine such initiatives (e.g. CFMCA, the African Tax Administration Forum, or Tax Inspectors Without Borders).

TECHNICAL ASSISTANCE/CAPACITY BUILDING

Green Fiscal Policy Training Course

- **Background:** Green fiscal policies are critical for addressing climate change and achieving the SDGs. **UNITAR, UN Environment** and **UNDP** jointly developed this e-learning course as an introduction to green fiscal policy tools and a practical approach to fostering sustainability through fiscal reforms.
- **Purpose:** The course provides participants with a solid understanding of fiscal policy instruments that advance the green economy transition. It empowers policymakers and practitioners to implement the tools in diverse policy contexts, promoting low-carbon, resource-efficient, and sustainable economies.
- **Practical Features:** This self-paced course consists of five 20-minute lessons covering: (1) overview of green fiscal policies and role in sustainability; (2) fiscal instruments such as carbon taxes, subsidy reform, and environmental fees; (3) effective fiscal reform strategies; (4) application of green fiscal policy in key sectors; and (5) collaboration strategies for maximising impact. The course includes case studies of successful policy implementations, links to further readings, and tools for deeper exploration.

Fossil Fuel Subsidy Reform (FFSR) Webinars

- **Background:** Established in 2010, the **FFFSR** (Friends of Fossil Fuel Subsidy Reform) is an informal global network advocating for the reduction of environmentally harmful and economically inefficient fossil fuel subsidies. Supported by over 30 non-G20 countries and 50 international organisations, the FFSR works with partners like the G20, APEC, OECD, World Bank, and UNFCCC to promote reforms aligned with sustainable development through a knowledge-sharing platform.
- **Purpose:** These webinars aim to enhance policymakers' knowledge and skills in designing and implementing fossil fuel subsidy reforms. They cover the environmental, social, and economic benefits of subsidy reform, address implementation challenges and political economy considerations, and practical approaches and global best practices for reform success.
- **Practical Features:** The platform offers a library of recorded webinar, downloadable, high-level event notes, and infographics. Topics include policy design and implementation practices and connections with trade, gender, SDG monitoring, communications and just transition strategies.

BIOFIN capacity building resources

- **Background:** Launched in 2012 by **UNDP** in partnership with the European Commission, the [Biodiversity Finance Initiative \(BIOFIN\)](#) mobilize resources for biodiversity conservation aligns

financial policies with biodiversity goals. It operates in over 40 countries (mostly from the Global South, but also economies in transition from the Global North) supporting commitments under the Kunming-Montreal Global Biodiversity Framework and the SDGs.

- **Purpose:** Through capacity building, knowledge sharing, and technical assistance, BIOFIN provides tools and methodologies to help policymakers and practitioners identify financing gaps, design innovative finance solutions, and mainstream biodiversity into national financial planning processes.
- **Features:** The platform's rich resource library includes [workbooks and guides](#), [webinars](#) and [podcasts](#) with practical insights and country experiences, and an [online catalogue](#) of tools and strategies with links to further guidance material or case studies. Resources address both high-level policy planning and practical implementation challenges.

Carbon Taxation E-Course

- **Background:** About half of NDCs submitted by governments under the Paris Agreement include carbon pricing measures, recognised as a cost-effective tool for reducing GHG emissions and meeting climate targets. As pricing schemes expand and grow in complexity to meet diverse policy needs and contexts, the demand for knowledge and skills grows. The **World Bank's** Partnership for Market Readiness (PMR) and **UNITAR** jointly developed this e-course building on the World Bank's guidance document [Carbon Tax Guide: A Handbook for Policymakers](#) (check the *Implementation Frameworks/Methodologies* above).
- **Purpose:** The course provides a comprehensive introduction to carbon taxation to support policymakers and practitioners in designing and implementing effective and equitable tax schemes suited to specific national circumstances and objectives.
- **Features:** The freely accessible self-paced 12-hour course offers a modular learning sequence, with the flexibility to select modules based on individual preferences. Its five modules include: Why and when to use carbon taxes; Preparing for adoption; Key design decisions; Avoiding unwanted effects including distributional impacts; Options for revenue use. Additional resources (references, publications and relevant databases) for more in-depth study, and practical insights and lessons learned from carbon tax implementation globally are also available.



2.4.2. BUDGET PREPARATION

- **Budget Preparation** is the stage where national priorities are translated into budgetary allocations, and efforts are made to optimise budget distribution subject to the fiscal allowance for the exercise.
- **Factoring in climate concerns** in budget decision at this stage is critical to ensure that government expenditures reflect sustainable national objectives, aligned with international goals and commitments. This entails introducing:
 - Green/climate budget circulars requiring ministries to identify climate-related spending in budget submissions.
 - Ex-ante climate impact assessments to anticipate the effects of new policy measures on climate change prior to adoption.

- Green/climate spending reviews in terms of contribution to environmental or climate goals of existing policies.
- Green/climate budget tagging, based on identified sustainable finance taxonomies, helps identify the positive or negative contribution of each component of the budget to green objectives.
- **Snapshot and note** of the resources and tools available under this *Budget Preparation* section. Tags are used for those with a specific thematic  focus (other than climate change and environmental sustainability in general) or geographic  (country experiences are showcased, which may be applicable or of interest to other countries around the world). All resources are hyperlinked to their corresponding description for easy access.

BUDGET PREPARATION RESOURCES & TOOLS	
NAME OF THE RESOURCE	THEMATIC FOCUS/COUNTRY EXAMPLES INCLUDED
Diagnostic/Assessment Tools or Guidance	
Artificial budget intelligence powered toolkit (iBiT) - upcoming	 <i>SDGs</i>  <i>MENA countries</i>
Implementation Frameworks/Methodologies	
Budget Credibility and Integrated National Financing Frameworks	 <i>Budget credibility</i>  <i>Africa & Asia (Case studies: Ghana, Kenya, Malawi, Namibia, Nepal, Nigeria)</i>
Budgeting for Climate Change: A Guidance Note for Governments to Integrate Climate Change into Budgeting	 <i>Medium-term budgeting</i>  <i>Worldwide, focus on Asia Pacific</i>
Results-Based Budgeting for Biodiversity - A Guidebook	 <i>Results-based budgeting & Biodiversity</i>  <i>Worldwide (Case studies: Guatemala, Indonesia, Kyrgyzstan, Mongolia, the Philippines, Thailand, Vietnam)</i>
Global Biodiversity Expenditure Taxonomy	 <i>Taxonomies & Biodiversity</i>
Sustainable Budgeting approach (SBA)	 <i>Taxonomies & SDGs</i>  <i>Gabon</i>
Green Budget Tagging: Introductory Guidance & Principles & Beyond Green Tagging	 <i>Budget tagging</i>  <i>Worldwide</i>
European Union Green Budgeting Reference Framework (GBRF)	 <i>Budget tagging</i>  <i>EU</i>
Knowing What You Spend: Guidance Note for Governments to Track Climate Change Finance in Their Budgets	 <i>Budget tagging</i>  <i>Africa & Asia</i>
SDG Alignment and Budget Tagging: Towards an SDG Taxonomy	 <i>Budget tagging</i>  <i>Colombia</i>
Climate Change Benefit Analysis Guidelines (CCBA) & Gender-responsive and socially inclusive CCBA	 <i>Cost-benefit analysis & social inclusion</i>  <i>Thailand, Cambodia, Zanzibar</i>
Framework for Enhancing Gender and Poverty Integration in Climate Finance	 <i>Social inclusion</i>  <i>Asia Pacific</i>
Stocktake/Country experiences	
Climate Change Budget Tagging: Review of International Experience	 <i>Budget tagging</i>  <i>Worldwide</i>
Green Budgeting in OECD Countries	 <i>OECD</i>
Gender-Responsive Climate Change Budgeting (GR-CCB)	 <i>Social inclusion</i>  <i>Bangladesh, Mexico</i>
Technical Assistance/Capacity Building	
Introduction to Sustainable Finance Taxonomies E-Course	 <i>Taxonomies</i>

- **Notes on tagged resources and classification.** This section includes resources primarily offering implementation guidance. Many resources feature country examples, offering insights into how methodologies can be adapted to different contexts. Others provide global overviews or analyse country-specific implementation to extract lessons learned. Several resources integrate social

inclusion dimensions, such as gender equality and poverty reduction, alongside climate considerations, reflecting the interconnected nature of environmental and social goals. An e-course on taxonomies is also included under *Technical Assistance/Capacity Building*.

While most resources focus on budget preparation, some overlap with other stages of the budget cycle. For instance, “*Green budgeting in OECD countries*” emphasises budget preparation, accountability and transparency. “*Budget credibility and INFFs*” links planning to execution and oversight by addressing root causes of budget deviations, yet it is included here because deviations often stem from unrealistic budgets, non-existing or unreliable forecasting and contingency measures, or inadequate prioritisation of objectives.

- **Note on specific resources.** An innovative tool under development by UN ESCWA for MENA countries is the AI-powered budgeting tool *iBiT*. It facilitates the assessment of the direct and indirect impacts of budget allocations on SDG outcomes. Classified under *Diagnostic/Assessment Tools or Guidance*, it supports informed decision-making to align budget planning and national sustainable objectives.

While not introducing new tools, the “[*Green Public Investment Management—Governance Aspects of Strengthening Infrastructure Sustainability*](#)” (ADB, 2023) provides a holistic perspective on integrating resilience and disaster risk management into public investment management (PIM). It situates methodologies like CPEIR, C-PIMA or PEFA within the broader context of infrastructure governance, emphasising project appraisal and prioritisation during budget preparation. This resource is merely mentioned here as a supplementary reference for understanding how PFM tools contribute to climate resilient infrastructure planning and alignment with climate goals.

DIAGNOSTIC/ASSESSMENT TOOLS AND GUIDANCE

[Artificial budget intelligence powered toolkit \(iBiT\)](#) (upcoming)

- **Background:** Launched by the ESCWA (United Nations Economic and Social Commission for Western Asia) in 2021, this initiative seeks to develop an innovative toolkit that leverages advanced artificial intelligence and machine learning technologies to enhance budgeting for the SDGs in Arab countries via improved budget planning and execution. By integrating AI-driven analysis, the upcoming iBiT shall enable governments to quantitatively assess the direct and indirect impacts of budget allocations to achieve the highest possible SDG performance with the available resources.
- **Purpose:** iBiT aims to inform decision-making for more efficient and effective environmentally and socially responsible budgeting by providing insights into the synergies and trade-offs between budgetary decisions and SDG outcomes through simulations.
- **Features:** This [presentation](#) on the iBiT illustrates the key features and functionalities of the five tools of the toolkit: (1) The *Budget Connectivity Evaluator* assesses the proportion of the budget driving progress towards SDG targets and forecasts future budget performance; (2) The *Budget Optimizer* simulates potential SDG progress by analysing expansionary policies and offsetting disinvestment scenarios; (3) The *Budget Alignment Estimator* tool provides options to improve budget alignment with environmental, social and constitutional goals; (4) *Simulation Tools* provide insights into budgetary performance, including alignment with optimal allocations and potential efficiencies; (5) *Efficiency Estimator* measures the economic and social returns on budgetary investments, helping government maximise the impact.

Budget Credibility and Integrated National Financing Frameworks (INFFs)

- **Background:** This 2024 **UNICEF** publication highlights a critical challenge faced by more than two-thirds of governments: significant deviations in expenditure composition during the fiscal year. While many governments achieve aggregate budgetary targets, funds are often misallocated, failing to support budget items most likely to advance social and environmental objectives. Addressing these deviations is crucial for bridging SDG financing gaps and ensuring coherent fiscal planning. The guidance note explores the systemic challenges underlying low budget credibility, outlining impact, causes and potential solutions with an emphasis on the role of INFFs.
- **Purpose:** Designed for government officials and stakeholders involved in adopting or implementing INFFs, the note aims to ensure that approved budgets are credible, build trust in PFM systems, and translate into practical actions that support sustainable development practices.
- **Features:** The guide is divided in two parts: understanding budget credibility, and improving budget credibility. The first part presents: (1) data on the prevalence and scale of expenditure deviations across governments; (2) analysis of underlying factors (budget planning, and execution factors, and role of monitoring and external oversight); and (3) methodologies and assessment tools to measure and analyse budget deviations. The second part offers a variety of policy options to enhance planning, execution and monitoring practices. Though framed within the INFF Building Blocks, the recommendations are universally applicable. Country examples throughout the guide illustrate good practices and policy options; and a number of country case studies are presented in an annex (Ghana, Kenya, Malawi, Nepal, Namibia, Nigeria).

Budgeting for Climate Change: A Guidance Note for Governments to Integrate Climate Change

- **Background:** The 2021 **UNDP** technical note provides a systematic approach for integrating climate change considerations into public budgeting processes, particularly within medium-term budgeting frameworks. It incorporates gender and social inclusion aspects to minimise adverse impacts vulnerable populations. Experiences from countries in the Asia-Pacific region and global best practices illustrate its adaptability to varying country-specific PFM contexts and maturity levels.
- **Purpose:** The note guide policymakers in embedding climate considerations into budgets planning and approval processes. By fostering transparency and accountability, it seeks to promote informed decision-making and ensure climate-related investments benefit vulnerable populations.
- **Features:** The note provides foundational principles and a step-by-step approach to integrate climate considerations in the budget preparation and approval process: budget strategy setting or pre-budget documentation stage (macroeconomic analysis, macro-fiscal forecasts and medium-term budget strategy); budget preparation (budget circulars, submission templates, sectoral plans and allocations, performance indicators and expenditure tracking); and budget approval and accountability (legislative approval and stakeholder participation). Each of these stages is broken into several sub-stages, with measures, tools and interventions tailored for diverse stakeholders. Supplementary information includes relevant tools and country examples to ground recommendations in real-world applications.

Results-Based Budgeting for Biodiversity - A Guidebook

- **Background:** The 2024 Guidebook, developed under the **UNDP's** BIOFIN initiative, addresses the need for aligning budgets with biodiversity outcomes. Based on the principles of results-based budgeting (RBB), it links resource allocation to measurable results and incorporates global lessons to provide a structured methodology for integrating biodiversity targets into budgeting processes.
- **Purpose:** The guidebook offers practical guidance for governments to embed biodiversity objectives into national and sectoral budget processes. By adopting an RBB approach, policymakers can enhance budgetary effectiveness and efficiency align allocations with national biodiversity targets and global commitments, and promote accountability, transparency and evidence-based decision-making.
- **Practical Features:** The guidebook introduces a five-step methodology for transitioning to RBB for biodiversity conservation, with multiple entry points for countries: (1) setting clear, specific, measurable and achievable targets for biodiversity; (2) conducting finance needs assessments to cost national targets; (3) integrating prioritised targets into medium- and long-term planning frameworks; (4) embedding biodiversity into fiscal frameworks and budgets, emphasising the budget planning and execution phases; (5) establishing monitoring and evaluation frameworks to track progress and outcomes. The guide includes tools to identify biodiversity outcomes, set baselines, and measure progress. It provides case studies from Guatemala, Indonesia, Kyrgyzstan, Mongolia, the Philippines, Thailand and Vietnam, showcasing practical applications and lessons learned.

Global Biodiversity Expenditure Taxonomy

- **Background:** Published in 2024 by BIOFIN in collaboration with **UNDP**, this taxonomy addresses the challenge of tracking biodiversity financing across public, private, and international funding sources. It provides a systematic framework to help countries understand the origins, allocation, and impact of biodiversity funding. This tool is particularly relevant for countries undertaking Biodiversity Expenditure Reviews (BERs) to bridge biodiversity finance gaps.
- **Purpose:** The taxonomy offers a standardised classification system for biodiversity-related expenditures, enabling countries to categorise and quantify contributions to biodiversity conservation. By identifying under-resourced priorities, it supports evidence-based decision-making and enhances transparency, accountability, and reporting aligned with international frameworks like the Kunming-Montreal Global Biodiversity Framework (GBF).
- **Practical Features:** The document consists of a [guidance](#) document explaining the various aspects of the taxonomy, and the taxonomy tool. The tool is an Excel-based system that classifies public biodiversity expenditures into nine primary categories, subcategories, and expenditure programs based on purpose and impact. It differentiates between direct and indirect expenditures (e.g. protected area management vs. sustainable agriculture programmes) and links these categories to global frameworks like GBF and SDGs. Future updates will include Biodiversity Attribution Rates, tied to governmental functions. The resource also provides practical insights for adapting and applying the taxonomy across diverse countries.

Sustainable Budgeting approach (SBA)

- **Background:** Significant spending and taxation policy decisions are often made with incomplete or imperfect information about the trade-offs. This is particularly challenging for vulnerable nations with limited fiscal space. To address the need for better informed decision-making, **UNEP** and the **University of Oxford** launched the SBA in 2024 after a pilot in Gabon and endorsement at the African Ministers of Finance, Economy, and Environment meeting before COP 27. The SBA's modular

framework helps governments evaluate the developmental (e.g., jobs, growth), environmental (e.g., climate mitigation and adaptation, biodiversity, air pollution), and social (e.g., wealth, gender or rural-urban inequality) impacts of budget decisions. For an overview of the extensive methodology document (ca. 250 pages), see this [policy brief](#) or the [summary background paper](#) presented at the 8th African Regional Forum on Sustainable Development.

- **Purpose:** The SBA provides policymakers and stakeholders with a structured framework to make informed and high-impact budgetary decisions. It is particularly valuable for low- and middle-income countries seeking to strengthen evidence-based planning processes that balance economic development with environmental and social objectives.
- **Features:** The framework includes: (1) a taxonomy categorising 40 policy archetypes and 206 sub-archetypes based on common environmental, economic and social characteristics; (2) a methodology to assess the multi-dimensional impacts of policies on key objectives (e.g., long-term growth, job creation, climate mitigation); (3) guidance for comparing policy options and understanding their net impacts on budgets. The SBA serves as both a decision-making and assessment tool to understand the likely net impacts of an entire budget or subset of fiscal policies. The guidelines and examples in the document are a starting point to develop tailored policy mapping and impact assessments. Gabon's implementation between 2020 and 2021 demonstrates its versatility in aligning fiscal policies with sustainable development goals.

[Green Budget Tagging](#) & [Beyond Green Tagging](#)

- **Background:** UNDP's earlier guidance on Climate Budget Tagging (CBT), "*Knowing What You Spend*" (see below), paved the way for Green Budget Tagging (GBT), which involves systematically tagging budget measures based on their impact on green objectives (e.g. climate change mitigation, adaptation, biodiversity, and pollution control). The **OECD's** 2021 "*Green Budget Tagging: Introductory Guidance & Principles*" and 2024 "*Beyond Green Tagging: How Can Public Budgeting Support Climate Goals?*" policy paper build on this foundation to offer insights and tools for implementing and refining GBT practices. Developed in collaboration with CFMCA Helsinki Principle 4 partners, including the **World Bank, UNDP, IMF, IADB**, these resources also draw from a wider range of experiences across Africa, Latin America, the Caribbean and the OECD.
- **Purpose:** The OECD documents aim to: (1) help countries establish or refine GBT practices; (2) support informed budget allocation decisions and enhance their environmental impacts; (3) assist stakeholder oversight by effectively tracking and reporting environmentally supportive budget measures. Greater visibility of government actions also supports greater resource mobilisation.
- **Features:** The 2021 guidance introduces foundational concepts, principles and steps for establishing GBT systems, an essential starting point for governments new to the practice. It presents a range of options for a coherent and tailored approach, with examples from countries like France, Ireland, Nepal, and the Philippines. The 2024 policy paper addresses limitations of existing GBT practices (e.g. data quality, granularity and integration with broader budgeting processes), proposing next-generation tools and methodologies, and

[SPOTLIGHT: CBT IN CAMEROON](#)

Cameroon's Ministry of Economy and Finance, in close collaboration with the Ministry responsible for Environmental Affairs, has focused on developing a country-specific methodology to introduce climate-sensitive budget tagging in support of adaptation, mitigation and biodiversity protection. Its successful implementation hinges on: high-quality expenditure documentation, ex-post evaluation systems to assess climate considerations in budget execution, and ample adoption (by all stakeholders, in both operating expenses and revenues). Effective implementation was introduced through the 2025 Finance Law and, initially, piloted in nine public infrastructure-linked administrations. This has resulted in a positive impact on: transparency of public finances, and reporting of public policy implementation towards climate mitigation and adaptation.

emphasises the need for tools beyond GBT (e.g. modelling and policy costing) to align international commitments, national plans, medium term budget frameworks and annual budgets, highlighting emerging practices from country experiences.

European Union Green Budgeting Reference Framework (GBRF)

- **Background:** Developed by the **European Commission**, the GBRF supports EU Member States (MS) in upgrading their budgeting practices to integrate environmental and climate considerations. It aligns with the European Green Deal and complements the broader [OECD framework on implementing green budgeting](#) to provide a standardised operational framework tailored to the unique context of EU governance for assessing, classifying, and monitoring the environmental impacts of public budgets.
- **Purpose:** The GBRF equips MS with a common and structured approach to the development of national Green Budgeting Frameworks (GBFs), while providing a scalable model for countries at different stages of green budgeting implementation. It aims to promote systematic tracking of climate and environmental expenditures, ex ante impact assessments and ex post evaluations, to increase transparency and accountability on the alignment of national budgets with EU and global climate goals.
- **Features:** To guide countries through the development and implementation process of GBFs, the GBRF introduces a scalable model with three levels of development across five key elements: (1) coverage of environmental objectives, budgetary items and public sector entities; (2) methodology to assess consistency of budgetary policies with environmental goals; (3) deliverables as specified in GBFs legal or administrative documents; (4) governance structure, clearly assigning responsibilities across stakeholders; and (5) transparency and accountability mechanisms. The three levels of development includes: essential framework, which refers to the necessary features for any country initiating green budgeting; developed framework, reflecting a more comprehensive coverage and methodology; and advanced framework, a comprehensive GBFs with full alignment across all five key elements. Practical applications from EU Member States illustrate diverse approaches to green budgeting.

Refer to the website on [Green Budgeting in the EU](#) for further resources, such as the *Green and Brown budgetary items lists*, which offer some key examples as a starting point for countries to develop their own green budget tagging methodology.

Knowing What You Spend: Guidance Note for Governments to Track Climate Change Finance in Their Budgets

- **Background:** Published by **UNDP** in 2019, this guidance note offers an overview of approaches to implementing Climate Budget Tagging (CBT) systems in countries around the world. CBT helps governments identify, track, and report climate-related expenditures within national budgets. By helping governments understand "what they spend" on climate change, this resource supports countries in meeting their climate commitments under the Paris Agreement and achieving their SDGs.
- **Purpose:** The guidance note primarily seeks to help governments identify and track climate-related expenditures within their budget systems, and improve transparency and accountability in climate finance. By adopting CBT, governments can better assess whether public financial resources are effectively contributing to national climate objectives and global climate commitments, identify funding gaps and under-resourced priorities, and make evidence-based decisions on existing resources to better align budget allocations with climate mitigation and adaptation priorities.
- **Practical Features:** The note draws on country experiences where climate budget tagging has been successfully implemented (Bangladesh, Ghana, Indonesia, Kenya, Nepal, Pakistan and the Philippines) to outline a three-phased approach to implementing CBT. Phase 1: define the purpose, scope, and

institutional arrangements of a CBT system, and map climate change policy context and PFM requirements and capabilities. Phase 2: design the technical framework, including expenditure classification, climate relevance assessment, and tagging in the PFM system. Phase 3: implement tagging in budget preparation, execution, and reporting processes. The guidance emphasises flexibility to tailor the CBT system to country-specific fiscal and institutional contexts. Additional reference material is provided in a series of annexes.

SDG Alignment and Budget Tagging: Towards an SDG Taxonomy

- **Background:** This 2022 **UNDP** publication presents a step-by-step methodology for SDG budget coding and tagging to monitor and report alignment of public budgets with SDG targets. The methodology builds on Colombia's experience adopting an Integrated National Financing Framework (INFF) approach to development finance, supported by UNDP and the Joint SDG Fund. based on Colombia's experience. A policy brief followed in 2024, [SDG Budget Tagging: A Proposal to Measure SDG Financing](#), summarising the approach, and extending its application to all SDG financing, including international development cooperation and private sector finance.
- **Purpose:** The methodology aims to strengthen fiscal transparency and SDG alignment by systematically tagging budget lines with SDG targets. It enables diagnostics of SDG financing and reduce the risk of "SDG-washing" in fiscal narratives.
- **Features:** The methodological approach to budget tagging links Financial Management Information Systems (FMIS) with the Government Financial Statistics (GFS) framework to track SDG allocations across government levels, and proposes a five-step process including: inputs and setup; definition of rules; SDG alignment of investment budget and of operational expenses; validation, reporting and visualisation. The document highlights challenges and limitations, and provides additional applications (to development cooperation and private sector finance) of the SDG tagging methodology. Suggested templates for sustainable financing reporting are also provided.

Climate Change Benefit Analysis Guidelines & Gender-responsive and socially inclusive CCBA

- **Background:** The CCBA guidelines, developed by **UNDP**, offer a framework for integrating climate change considerations into public investment planning and expenditure tracking. Originally developed for Thailand in 2016, the CCBA guidelines were designed to prioritise investments that reduce loss and damage from climate change or contribute to greenhouse gas mitigation. In 2023, an enhanced version was released to emphasise gender-responsive and socially inclusive CCBA, ensuring that the impacts on vulnerable groups, particularly women and the poor, are accounted for in project evaluation and selection criteria. These guides, rooted in Asia-Pacific country experiences, are globally applicable.
- **Purpose:** The guides aim to support governments in systematically incorporating climate adaptation, mitigation, and distributional effects into budget planning. They provide a robust framework for evaluating projects, enabling prioritised and climate-informed budget submissions to secure adequate funding for high-impact investments.
- **Features:** The guides cover general principles and building blocks to prepare and conduct a CCBA. Screening processes to determine project relevance, methods for estimating costs and benefits, and sensitivity analyses to assess project robustness under various climate scenarios are proposed. These include a variety of cost and benefit analysis options to adapt to different contexts and country objectives in terms of climate change mitigation and adaptation and distributional effects, as well as project size (ranging from detailed cost-benefit analyses for large investments to rapid assessments for smaller projects). The limitations of the CCBA approach are highlighted, and complementary impact

analysis and costing techniques suggested. Finally, frameworks are introduced to monitor investment effectiveness over time, as well as some institutional and operational guidance to clarify roles and responsibilities for effective analysis and monitoring. Examples from Thailand, Cambodia and Zanzibar are showcased to help operationalise the guidance material.

Framework for Enhancing Gender and Poverty Integration in Climate Finance

- **Background:** This 2021 **UNDP** publication recognises the interconnected challenges of climate change, poverty and gender issues, and the importance of their integration within climate finance systems to deliver the scale and quality of investments required to meet climate change ambitions and the SDGs. Developed with input from Asia Pacific countries, the framework is adaptable to different governance structures, budgeting practices and levels of climate finance maturity.
- **Purpose:** The framework supports national governments in embedding climate, poverty and gender considerations into policymaking processes across public, innovative and multilateral climate finance. It aligns with the cross-cutting nature of the 2030 Agenda and emphasises the importance of integrated approaches to achieve sustainable outcomes.
- **Features:** The paper takes a case-study approach to look at select cases in five countries: Bangladesh, Cambodia, Fiji, Indonesia and Thailand. The Framework is structured around four strategic pillars: governance (strengthening policymaking and operational norms), resource planning and allocation (identifying entry points for integration), accountability (monitoring and evaluation systems, including impact assessment), and capacity building (enhancing skills and knowledge for a multi-dimensional approach). On public climate finance, the publication outlines concrete steps to mainstream gender and poverty, provides a helpful checklist, and emphasises cross-ministerial coordination and capacity building. The publication includes recommendations for improving synergies in national climate finance architecture, ensuring coherence and complementarity across funding sources. A toolkit with useful resources is included in the annex.

STOCKTAKE/COUNTRY EXPERIENCES

Climate Change Budget Tagging: Review of International Experience

- **Background:** Published by the **World Bank** in 2021, this report offers a comprehensive review of international experience with Climate Change Budget Tagging (CCBT), a tool to help governments integrate climate change considerations into planning and budget processes. Originating from tagging practices for poverty, gender, and development goals, the CCBT was introduced at the country level in 2012. By 2021, 19 national and subnational governments had developed CCBT methodologies, which are critically assessed in this report. Preliminary conclusions are drawn on the strengths and weaknesses of budget tagging to support climate change policy. The report also explores the evolution of green sovereign bond frameworks and their connections to climate budget tagging.
- **Purpose:** By providing insights into diverse CCBT experiences, the review seeks to equip practitioners and government officials with a broad understanding of the issues to consider in the design and implementation of climate budget tagging methodologies. By adopting CCBT, governments can track and report climate-related expenditures, identify funding gaps, under-resourced priorities, and areas where climate finance is not fully aligned with national and global climate commitments.
- **Practical Features:** The review is structured in five sections. The first draws lessons from three precursors of climate expenditure tagging: poverty tagging, gender-budget tagging, and budgeting for

international development goals. The second provides an overview of climate finance reporting methodologies and climate expenditure reviews supported by international organisations. The third reviews technical and institutional aspects of the CCBT methodologies and practices across countries. The fourth explores the links with green bond frameworks for mobilising climate finance. The final section discusses the benefits, challenges and recommendations for CCBT adoption, and presents lessons learned from experiences.

Green Budgeting in OECD Countries

- **Background:** The [2021](#) and [2024](#) *Green Budgeting in OECD Countries* reports explore the integration of environmental and climate considerations into budgeting processes across OECD countries. While addressing elements across the budget cycle, they place particular emphasis on budget preparation, accountability and transparency. The 2021 report establishes a baseline understanding of green budgeting practices based on the 2020 OECD and European Commission *Joint Survey on Emerging Green Budgeting Practices*. Building on this foundation, the 2024 **OECD** report offers an update based on emerging practices and data from the 2022 follow-up survey, the *OECD Green Budgeting Survey*.
- **Purpose:** These reports aim to support governments adopting and strengthening green budgeting practices by sharing an overview of progress, challenges, opportunities, and actionable recommendations. They provide practical guidance to embed environmental and climate priorities into PFM systems
- **Features:** The reports are structured around the four building blocks of the OECD Green Budgeting Framework: (1) institutional arrangements; (2) methods and tools; (3) accountability and transparency; (4) enabling environment in budgeting. The 2024 report also presents a *Green Budgeting Index* and survey methodology, which includes trends in OECD countries, such as the integration of net-zero emission strategies in budgeting, climate objectives into medium-term budgeting tools, and the climate and environmental consideration into oversight functions. It highlights the challenges identified in the survey, and areas for future work when designing and implementing green budgeting (e.g. resources, technical expertise or impact data limitations, and the need to improve measurements, monitoring and transparency). The *Green Budgeting Index*, which does not measure effectiveness but rather focuses on the presence and maturity of green budgeting practice, enables cross-country comparisons and benchmarking to foster knowledge-sharing and best practices.

Gender-Responsive Climate Change Budgeting (GR-CCB)

- **Background:** The **IBP** (International Budget Partnership), in collaboration with development and climate finance partners, published this study in 2021 to explore gender-responsive climate change budgeting (GR-CCB). The study highlights the intersection of gender inequality and climate change, emphasising the central role of PFM to address this dual challenge. It focuses on Bangladesh and Mexico, two countries facing significant climate risks and contrasting PFM systems and approaches to integrating gender and climate considerations into public budgets.
- **Purpose:** By analysing existing practices, approaches and opportunities, the study seeks to identify core guiding principles to support governments in integrating gender equality and climate change as equally critical priorities within PFM. The actionable recommendations provided help strengthen budget processes and enhance the equity, efficiency and effectiveness of public financial resources.
- **Features:** The study offers an overview of global landscape and a detailed analysis of the experiences of Mexico and Bangladesh in double mainstreaming gender equality and climate change into public budgets and expenditures. It provides insights on the drivers of GR-CCB and its effectiveness in influencing decision-making, resource allocation and accountability. It also includes recommendations

on budget reporting, methodologies, capacity building and resource mobilisation. For a detailed exploration of Bangladesh’s GR-CCB practices, opportunities and challenges including its climate fiscal framework, tagging methodologies, and institutional arrangements, see the related study “[Gender-Responsive Climate Change Budgeting in Bangladesh: Exploring Opportunities Toward an Inclusive Climate Resilient Future](#)” (2021).

TECHNICAL ASSISTANCE/CAPACITY BUILDING

Introduction to Sustainable Finance Taxonomies E-Course

- **Background:** Launched in 2023, this e-course was developed by **GIZ** and the **SBFN** (Sustainable Banking and Finance Network) on behalf of **BMZ** (German Federal Ministry for Economic Cooperation and Development). It responds to the growing demand for guidance and hands-on support to develop and implement sustainable finance taxonomies tailored to regional or national contexts. These taxonomies provide a common understanding of what qualifies as “sustainable”, helping assess the contribution of economic activities to sustainability goals, and fostering market transparency, accountability and integrity. Taxonomies can indirectly influence macro-fiscal frameworks by guiding alignment of national financial policies with sustainability objectives (e.g. informing green bond design or sustainable investment policies). This course introduces participants to the principles, objectives, and practical applications of sustainable finance taxonomies, supporting green PFM, notably fiscal policy design and green finance frameworks,
- **Purpose:** The course aims to build awareness and capacity of policymakers, financial regulators, investors, and other stakeholders to effectively mobilise and channel finance effectively toward sustainable development.
- **Features:** This interactive self-paced course is freely accessible and provides a comprehensive overview of sustainable finance taxonomies, relevance, purpose, and practical use cases. It explains the core elements of taxonomies, introduces principles and good practices for their development, and includes real-world examples and case studies from China, Colombia, the EU, and South Africa. Available in English, Spanish and French, the course takes approximately 4 hours to complete.



2.4.3. BUDGET EXECUTION & ACCOUNTING

- **During Budget Execution**, governments allocate and spend resources on policies and programs approved during the budget preparation stage (subject to the amount of appropriations voted by the legislature), while accounts and financial reports are prepared for control and oversight.
- **A green PFM approach** calls for expenditures to align with national environmental objectives. This section offers tools that help MoFs manage funds for green infrastructure projects and ecosystem conservation, and implement environmentally responsible procurement practices.
- **Snapshot and note** on the resources and tools available under this *Budget Execution and Accounting* section. One resource, marked with the 🌐 symbol, offers an overview of ecological conservation fiscal transfers implemented in a number of countries across various regions (Latin America, Asia, Africa and Europe). All resources are hyperlinked to their corresponding description for easy access.

BUDGET EXECUTION & ACCOUNTING RESOURCES & TOOLS	
NAME OF THE RESOURCE	THEMATIC FOCUS/COUNTRY EXAMPLES INCLUDED
Diagnostic/Assessment Tools or Guidance	
Climate Public Investment Management Assessment (C-PIMA)	
Methodology for Assessing Procurement Systems (MAPS) - Sustainable Public Procurement (SPP)	
Infrastructure Governance Assessment Framework (InfraGov)	
Stocktake/Country experiences	
A global review of ecological fiscal transfers (EFTs)	 Fiscal Transfers  Worldwide

- **Note on C-PIMA.** While the Climate Public Investment Management Assessment tool is categorised under *Budget Execution* resources due to its strong focus on operational aspects like procurement, contract management, and implementation oversight, it is important to note that its scope extends across the entire PIM cycle. C-PIMA supports governments in assessing and enhancing systems for planning, budgeting, implementing, and evaluating public investments. This comprehensive approach ensures infrastructure projects contribute effectively to fiscal and climate goals. Users may therefore also find its insights valuable for upstream phases such as strategic planning and budgeting.

DIAGNOSTIC/ASSESSMENT TOOLS

Climate Public Investment Management Assessment (C-PIMA)

- **Background:** The IMF developed the Public Investment Management Assessment (PIMA) in 2015 to help countries improve the institutions and processes for infrastructure governance. In 2021, Climate-PIMA was introduced adapting the assessment framework to measure how public investment management can support climate change mitigation and adaptation (see [here](#) the policy paper introducing the complementary module).
- **Purpose:** By assessing a country's capacity to manage climate-related infrastructure and identifying institutional readiness and bottlenecks for infrastructure governance, the C-PIMA aims to help governments determine potential improvements in public investment institutions.
- **Features:** C-PIMA is designed around five PIM pillars for a climate-aware infrastructure: planning, coordination across government, project appraisal and selection, budgeting and portfolio management, and risk management. Key practices across 15 pillars (so-called "institutions") are assessed for their design (organisation, policies, rules and procedures on paper) and effectiveness. The framework also examines three cross-cutting factors: legal and regulatory framework,

SPOTLIGHT: C-PIMA IN BENIN

In March 2023, an IMF mission to Benin launched both a PIMA and C-PIMA. The findings and recommendations presented in the [technical assistance report](#) have resulted in enhanced PIM and PFM practices that incorporate climate considerations. The assessment of public infrastructure projects in terms of climate risk susceptibility and resilience has helped identify key planning, budgeting and risk management gaps. This has enabled the development, with support from the IMF, GIZ and other organizations, of a detailed and sequenced action plan to improve practices in the context of climate change. Such reform measures were prerequisites to access the IMF Resilience and Sustainability Facility (RSF). At a more granular level, better informed decision-making in regard to climate-related risks has led to improved budget documentation and project appraisal methodologies.

information technology systems, and staff capacity. The assessment concludes with country-specific, comprehensive, and prioritised recommendations in the form of a sequenced action plan for strengthening low-carbon and climate-resilient infrastructure governance.

The C-PIMA involves a two-week mission from the IMF Fiscal Affairs Department and requires broad governmental engagement (from MoF divisions overseeing the entire public investment cycle and infrastructure governance, to environment ministries, line ministries, and sub-national governments), being effective inter-departmental coordination essential for its success. It can be carried out alone or combined with a PIMA, and periodic assessments of progress in strengthening PIM are usually a component of any technical assistance from the IMF. Additionally, for a more comprehensive view of overall infrastructure financing (public and private), check UNDP's guidance note on [INFES and Infrastructure Financing](#). It shows how integrated policymaking around finance can support governments in achieving their DRR objectives, and provides a broad selection of tools and information sources to assess financing needs, landscape, risks and binding constraints.

MAPS Sustainable Public Procurement (SPP)

- **Background:** The Methodology for Assessing Procurement Systems ([MAPS](#)) is originally a joint initiative created in 2003 by the **World Bank** and **OECD's** DAC to assess and improve public procurement systems in developing countries. A multi-stakeholder revision took place between 2015 and 2018 to make MAPS globally applicable and match today's public procurement challenges such as sustainability. The complementary SPP module was first launched in 2019, and a final version integrating lessons learned from the piloting phase was released in 2023.
- **Purpose:** The MAPS SPP module allows countries to assess the sustainability (in its three dimensions of economic, social and environmental sustainability) of the public procurement system, supporting the implementation of modern, efficient, sustainable and more inclusive SDG aligned systems.
- **Features:** The SPP module builds on the principles and best practices of the core MAPS, and follows the same four-pillar structure with a set of specific indicators and sub-indicators per pillar: (1) Legal, Regulatory and Policy Framework; (2) Institutional Framework and Management Capacity; (3) Procurement Operations and Market Practices; (4) Accountability, Integrity and Transparency. It introduces new practices contributing to social development, environmental protection and value for money. Based on a gap analysis, recommendations for a prioritised reform strategy are formulated to address identified weaknesses.

Like the core MAPS, the SPP module is open to anyone and can be conducted as a self-assessment or with the help of external partners, and as a stand-alone assessment or in conjunction with or after the core MAPS assessment (see user's guide and methodology [here](#)). Countries can receive a certification following a set of rules and quality standards and after verification by the MAPS Secretariat (see practical guidance on process, supplementary modules, certification, risks and red flags and more [here](#)).

SPOTLIGHT: MAPS IN RWANDA

Rwanda conducted a [MAPS assessment](#), including SSP indicators, between February 2019 and May 2020. The World Bank, AfDB, DFID the Rwandan Public Procurement Authority (RPPA) engaged in the exercise. Key resulting recommendations included updating regulations, enhancing RPPA's budget, and improving contract management practices. This has led to the development of a comprehensive procurement legal framework, the introduction of the e-procurement system UMUCYO, and strengthened professionalization in public procurement. The findings in terms of sustainability informed the SSP policy launched by RPPA in November 2024.

Infrastructure Governance Assessment Framework (InfraGov)

- **Background:** In 2020, the **World Bank** introduced InfraGov to address governance challenges surrounding infrastructure development. One cross-cutting issue for quality infrastructure governance is sustainability, including environmental sustainability. A guidance note was released providing an overview of governance elements that lead to quality infrastructure, as well as resources and methodologies for conducting an assessment.
- **Purpose:** The guidance note aims to help countries optimise infrastructure investments by identifying bottlenecks and serious governance gaps, and providing problem-driven actionable recommendations that result in concrete policy changes.
- **Features:** The analytical framework is intended for self-use and not meant to prescribe specific systems or institutions, rather just point at desired functional behaviour (acknowledging there may be diverse routes) conducive to good infrastructure outcomes. A number of infrastructure governance dimensions are considered across three major areas: (1) the lifecycle of an infrastructure project; (2) key cross-cutting issues for good infrastructure, including environmental considerations and resilience to climate change and natural disasters (dimensions four and five); (3) the ways in which infrastructure services are provided to consumers. Recognising different levels of development and country needs, the framework can be applied to country systems in a comprehensive or modular manner, using any combination of dimensions to examine a subset of priority areas based on relevance, demand, resources, and local context.

STOCKTAKE/COUNTRY EXPERIENCES

A global review of ecological fiscal transfers (EFTs)

- **Background:** EFTs integrate ecological criteria into the tax revenue sharing scheme, and entail the transfer of public revenue between governments within a country based on ecological indicators. The objective is to compensate subnational governments for the costs of conserving ecosystems (mainly the opportunity cost of not developing the land). First implemented in Brazil in 1991, this finance mechanism rapidly expanded to Portugal, France, China and India to compensate for conservation plans already taking place. Other countries are now exploring the concept to incentivise additional rather than existing conservation plans. The first global review of EFTs ever conducted was published in 2021 (see a summary [here](#)). Funded by **Norad** (Norwegian Agency for Development Cooperation), the study benefited from contributions from 15 countries as well as **UNDP's** BIOFIN and the **UNEP** World Conservation monitoring Centre.
- **Purpose:** In view of the rapid growth of interest in the EFT mechanism, the study takes stock of experiences around the world to draw conclusions on conditions under which such mechanism emerges, how it should be designed or its effects has. The study is useful for countries interested in greening intergovernmental transfers and promoting the protection of nature.
- **Features:** The study reviews existing, emerging and proposed EFT between 1991 and 2020. Existing EFTs reviewed are those in Brazil, Portugal, France, China and India. Emerging EFTs (i.e. EFTs recently enabled through government legislation, decrees or planning documents, but with no record of transfers at the time of publication) include Indonesia, Mongolia, Uganda. And EFTs that had been proposed at the time of publication include Germany, Switzerland, Poland, Ukraine, Australia, and the EU. The study covers topics such as indicators and allocation formulas, environmental and revenue outcomes, intended and unintended effects on recipients (whether intended or unintended), or visibility and transparency.

A more recent example is the EFT mechanism formally introduced in Malaysia's budget cycle in 2019 and 2021 with support from UNDP-BIOFIN (see an overview of Malaysia's approach [here](#)). And a framework for analysing EFTs published on the Journal of Latin American Studies in 2021 can be found [here](#). The framework is applied to assess the fiscal transfer mechanism in the case of the Brazilian Atlantic Forest, however the evaluation criteria hints to the elements to consider when designing and implementing EFTs.



2.4.4. CONTROL & AUDIT

- **The control and audit phase of the PFM cycle** seeks to ensure its integrity and effectiveness by providing reasonable assurance to stakeholders that the processes along the cycle are implemented in compliance with rules, and that the information provided by the government is accurate and complete. Audit results contribute to government transparency, and can support policy enhancement.
- **A green PFM approach** entails integrating climate change considerations into ex post evaluation and audit methodologies, and ensuring parliamentary oversight over the achievement of climate objectives. General guidance for greening oversight functions is usually covered in the broader view of comprehensive resources, albeit in a seemingly less exhaustive manner than other PFM functions. This may be a reflection of the sequencing of Green PFM reforms, which logically prioritise upstream processes in the strategic planning and budget preparation stages. Additionally, the specificity of audit and oversight processes may complicate its integration into broad frameworks, necessitating specialised guidance, already developed by bodies such as the International Organisation of Supreme Audit Institutions (INTOSAI) or the Inter-Parliamentary Union (IPU).
- **INTOSAI's Environmental Auditing WGEA and Development Initiative.** Supreme Audit Institutions (SAIs), as independent oversight entities, rely on INTOSAI for specialized guidance, frameworks, reviews, and capacity-building resources. It is in particular its [Working Group on Environmental Auditing \(WGEA\)](#), established in 1992, that strives to increase the expertise and governance in environmental auditing through high-quality contributions and visibility. The WGEA focuses on two overall themes: (1) Climate and Biodiversity, with projects such as the ClimateScanner (below), developed in cooperation with the [INTOSAI's Development Initiative \(IDI\)](#) (established in 1986 to support SAIs institutional capacities and performance); and (2) Green Economy. Studies and guidance by the WGEA, for instance to audit climate finance (2022), SDGs (2022) or biodiversity (2019), can be found [here](#).
- **Parliamentary oversight.** While primarily addressing audit institutions and oversight mechanisms within governments, this section also acknowledges resources that empower parliamentary oversight and civil society engagement. The IPU, a global organisation founded in 1889 and currently comprising 179 national Parliaments and 13 regional parliamentary bodies, works closely with UN partners to help parliaments make progress on the Paris Agreement and other climate treaties through its research, tools and meetings (see related publications and events [here](#)). Through its [Parliaments for the Planet](#) campaign, IPU aims to mobilise and equip parliamentarians with the needed resources to address climate change effectively. Two of the resources to enhance legislative scrutiny of SDG budgeting and of climate related governments spending are described below, given their direct relevance to government accountability processes and potential to inform collaboration between MoFs and parliamentary bodies to advance the needed reforms.

- **Civil society oversight.** The International Budget Partnership (IBP) and Climate Finance Group for Latin America and the Caribbean (GFLAC) have developed a [methodological framework](#) to empower civil society and other stakeholders to analyse public budgets' alignment with climate action.. Though not directly targeting government actors, and focused on advocacy and public participation in budget analysis, the resources is highlighted here for its value in engaging non-governmental actors to enhance budget oversight. Additionally, UNDP and IBP's [Budgeting for a Greener Planet](#) reviews the accountability ecosystems for climate change finance in four Asia-Pacific countries (Bangladesh, India, Nepal, and the Philippines), drawing lessons from the role of CSOs and media, and offering guidance on entry points to strengthen oversight systems.
- **Snapshot** of the resources and tools available under this *Control and Audit* section. In this case, one of the tools included (*ISAM*) is enriched with lessons learned and country examples from the piloting phase. All resources are hyperlinked to their corresponding description for easy access.

CONTROL & AUDIT RESOURCES & TOOLS	
NAME OF THE RESOURCE	COUNTRY EXAMPLES INCLUDED
Implementation Frameworks/Methodologies	
ClimateScanner	
SDGs Audit Model (ISAM) 2024	 Worldwide
Parliamentary Oversight of National Climate Commitments	
Guidelines for Parliamentarians on Budgeting for the SDGs: Making the Most of Public Resources	 Worldwide

IMPLEMENTATION FRAMEWORKS/METHODOLOGIES

[ClimateScanner Handbook](#)

- **Background:** The [ClimateScanner Initiative](#) was globally launched by INTOSAI in November 2022 to design a rapid review tool for the independent assessment of national responses to climate change, and to consolidate a global overview. Under the lead of INTOSAI WGEA (Working Group on Environmental Auditing), the methodology was developed, piloted in a number of countries, refined and captured in the Handbook released in March 2024 (see [roadmap](#) of the process). A first round of rapid reviews was conducted by 61 SAIs in 2024, and initial consolidated results (see [here](#) a brief note) presented during a session of the 2024 COP29 ("At What Stage Are Governments in Their Climate Action? ClimateScanner Assessment Results"- special report expected [here](#)). With auditors from 141 countries trained in 2024 through regional workshops and other capacity building activities, another round of reviews is expected in 2025, with consolidated results to be presented at the COP30.
- **Purpose:** The guidance is meant to enhance the capacity of SAIs in conducting climate-related audits, assess information, consolidate data with other SAIs, and clearly communicate relevant information. With ClimateScanner, SAIs can in turn help governments improve their response to climate change, identify priority areas, and assess their progress in meeting climate commitments.

- **Features:** The framework is built in the form of a matrix, with three pillars (governance, policies, and finance) and 19 components organised along those pillars. The framework identifies the required evidence needed to assess each component and to ensure quality of information. According to preliminary results of climate finance assessments, most weaknesses are identified in the finance axis, particularly with tracking and reporting climate-related expenditure, which results in an incomplete picture of how much governments are spending on climate action, or on policies leading into the opposite direction. This weakens government oversight of both direct and indirect spending in climate action, and underlines the relevance of emphasising upstream green PFM reforms.

SPOTLIGHT: CLIMATE SCANNER IN BRAZIL AND KENYA

Brazil and Kenya were among the first SAIs to conduct a ClimateScanner assessment (2023 pilots, and 2024 first round of final methodology implementation). The tool was used to assess their respective governments' preparedness for climate action in terms of the policies, governance structures and mechanisms in place for mobilizing and tracking climate finance. Key national government ministries were engaged in the exercise, such as Kenya's Ministry of Environment, Climate Change and Forestry, the National Treasury and Economic Planning. Both SAIs underscored the short time and resource investment relative to other performance audit assessments, with just 3 months in Kenya and 2 in Brazil. In those two months, SAI Brazil employed a team of two auditors and two assistants, all dedicated only part-time to the assessment, and was able to leverage information from other recent performance audits in areas like disaster management and adaptation in agriculture. Another highlight is the user-friendly chart-format overview of results. ClimateScanner results helped both SAIs understand their respective country's position in compliance with the Paris Agreement, and identify focus areas for future audits.

SDGs Audit Model (ISAM) 2024

- **Background:** The INTOSAI's IDI launched the [Auditing SDGs](#) initiative to support SAIs in conducting high quality audits of SDGs. Initially, the initiative focused on audits of preparedness for the implementation of SDGs, and now the focus has shifted to audits of implementation of SDGs as per individual national priorities.
- **Purpose:** The SDGs Audit Model (ISAM) released in 2024 provides a practical "how-to" guidance to SAIs for auditing the implementation of individual national targets linked to the SDGs.
- **Features:** ISAM 2024 contains a revised definition of SDG implementation audits, identifies entry points (process and programmes) for conducting such audits, and provides examples from the audits that piloted the [previous version](#) ISAM 2020, which included audits on [sustainable public procurement](#) (linked to SDG 12.7).

Parliamentary Oversight of National Climate Commitments

- **Background:** Recognising that parliamentarians play a critical role in translating climate pledges into actionable policies, the **Inter-Parliamentary Union (IPU)** developed this toolkit in response to the findings of the first global stocktake of climate finance commitments and gaps presented at COP28 (2023) and the ongoing NDC submission cycle. This 2024 toolkit complements the earlier "[10 actions for stronger national climate commitments](#)". While the earlier publication offers a practical framework for effective NDC oversight, the 2024 toolkit delves deeper into key thematic components of NDCs, focuses on actionable steps within these thematic areas, and highlights specific considerations to enhance engagement and ensure accountability.
- **Purpose:** The toolkit aims to strengthen parliamentary oversight of climate commitments, particularly NDCs, providing practical guidance to evaluate, monitor, and influence their countries' climate actions.

- **Features:** The toolkit focuses on three core thematic areas: mitigation, adaptation and climate finance. The latter highlights ways to ensure transparency, accountability and adequacy of funding for climate actions. It outlines actionable steps for parliamentarians to support the alignment of budgets with climate priorities and advocate for robust monitoring, evaluation, and reporting systems. The toolkit is designed to accommodate varying parliamentary capacities, offering a list of scalable actions adaptable to different institutional contexts, and includes links to useful tools and resources for deepening understanding and enhancing oversight of climate commitments and financing.

Guidelines for Parliamentarians on Budgeting for the SDGs: Making the Most of Public Resources

- **Background:** While awareness increases among parliamentarians worldwide about their key role in SDG financing, most of the existing guidance focuses on governments and private-sector actors. To ensure the knowledge and capacity needed to fulfil their role in this area, the **IPU** published, with **Sida** (Swedish International Development Cooperation Agency), tailored guidelines in 2021. The guidelines emphasise the unique role of parliamentarians in ensuring that public budgets are effectively aligned with the Agenda 2030 for Sustainable Development.
- **Purpose:** The guidelines aim to provide parliamentarians a better understanding of issues related to budgeting, monitoring and policy choices for the SDGs to enhance oversight of government spending, and ensure resources are allocated effectively and equitably.
- **Features:** The publication provides information on key SDG budgeting topics and current challenges, and includes actionable recommendations, reflection questions, and examples of successful practices from countries like Bhutan, Colombia, Indonesia, and South Africa. Section 1 encourages a closer look at the resources raised for national budgets to maximise existing revenue streams towards the SDGs. Section 2 explores ways in which parliamentarians can make the most of budgetary allocations. Section 3 introduces the core concepts of transparency and accountability in the context of the SDGs, and provides an overview of how parliamentarians can monitor the SDG policymaking process and its outcomes, including advocating for workable reforms to the budgetary process.

3. CONCLUDING REMARKS

- **Institutional capacity for Green PFM.** This guide started by highlighting the critical importance of integrating environmental sustainability into PFM systems, not just to deliver on international climate change mitigation commitments, but also to fund national adaptation strategies to reduce environmental and fiscal risks, enhance economic resilience and foster sustainable development pathways. Yet, the [2022 CFMCA's report](#) on governance and capacities for mainstreaming climate action in MoFs, found “the capacity and expertise to mainstream and drive climate action (in PFM systems) at the speed and scale required” to be generally inadequate.
- **One-stop reference guide.** In recent years, numerous resources and tools have emerged to address the gap in institutional readiness to adapt PFM systems and align fiscal policies with climate and environmental goals. This guide consolidates a wide range of resources to provide a one-stop reference toolkit. While not exhaustive, the guide strikes a balance between comprehensiveness and practicality. It presents the inventory of resources and tools in a structured manner to facilitate navigation and the quick identification of those most relevant to a country’s environmental priorities and the phase in the process of GPFM reforms. By briefly detailing each resource’s background, purpose and some practical

features, the guide's approach helps the user understand the what, why and how of each resource and decide where to invest the time to dig deeper.

- **Resources are categorised** by scope within the PFM cycle (comprehensive, strategic planning and fiscal framework, budget preparation and execution, and control and audit) and function, providing:
 - Insights into the extent of climate responsiveness, the strengths and gaps in existing PFM systems, and priority areas for reform (Diagnostic and Assessment Tools and Guidance).
 - Guidance for the design and implementation of tailored reforms that address identified gaps or weaknesses across the PFM cycle stages (Implementation Frameworks/ Methodologies).
 - Lessons learned from country experiences, which could be of particular interest to those with shared fiscal and environmental contexts (Stocktake / Country Experiences).
 - Information on financial and technical support to reform implementation, as well as capacity building, knowledge sharing platforms, and exchange and peer learning opportunities (Technical Assistance / Capacity Building).
- **Toolkit insights and trends.** An analytical overview of the 72 resources included in the toolkit highlights their breadth and diversity across such functionalities, as well as their thematic and geographical coverage. Notably:
 - Most resources are comprehensive or focus on upstream processes, especially in the earlier years, with those downstream-focused resources emerging more recently. This reflects the logical sequencing of reforms, prioritising effective entry points to establish foundational processes before addressing downstream stages.
 - There is a strong emphasis on needs identification and actionable guidance for GPFM reform implementation, complemented by practical support and knowledge-sharing through case studies and examples.
 - The timeline of resource development reveals the urgency of addressing climate and sustainability challenges through fiscal reforms, the dynamism of support efforts, and the growing maturity of GPFM practices. However, it also highlights a critical limitation: the fast-evolving nature of the field means that even as this toolkit is published, new tools and resources may already be emerging.
- **Next steps.** As new tools and resources are developed to address the evolving needs of practitioners, keeping this guide relevant would require periodic updates. Collaboration among stakeholders could help ensure the guide remains a valuable resource for MoFs and other stakeholders. For feedback or suggestions, please refer to the contact information provided in the introduction.

4. ANNEX I: COMPLETE LIST OF RESOURCES AND TOOLS

All resources are hyperlinked to their corresponding description in the document for easy access.

COMPREHENSIVE				
NAME OF THE RESOURCE	ORGANISATION	YEAR	 SPECIFIC THEMATIC FOCUS	 COUNTRY EXAMPLES INCLUDED
Diagnostic/Assessment Tools or Guidance				
Climate Responsive Public Expenditure and Financial Accountability (PEFA Climate)	<i>EU, IMF, WB (+ 6 EU countries)</i>	2020		
Climate Public Expenditure and Institutional Review (CPEIR)	<i>UNDP</i>	2015		
Pacific Climate Change Finance Assessment Framework (PCCFAF)	<i>PIFS</i>	2013	<i>Disaster Risk</i>	<i>SIDS in Asia Pacific</i>
Climate Change Budget Integration Index (CCBII)	<i>UNDP</i>	2017		
Budgeting for the Sustainable Development Goals (B4SDG) *	<i>UNDP</i>	2022	<i>SDGs</i>	
Capability Assessment Framework (CAF) for Mainstreaming Climate Action in Ministries of Finance	<i>NDC Partnership, IMF,</i>			
Disaster Resilient and Responsive Public Financial Management (DRR-PFM)	<i>WB</i>	2022	<i>Disaster Risk</i>	
Implementation Frameworks/Methodologies				
Green PFM - How to Make the Management of Public Finances Climate Sensitive	<i>IMF</i>	2022		<i>Worldwide</i>
Driving Climate Action Through Economic and Fiscal Policy and Practice	<i>CFMCA</i>	2022		<i>Worldwide</i>
Strengthening the Role of Ministries of Finance in Driving Climate Action	<i>CFMCA</i>	2023		<i>Worldwide</i>
The Green Budgeting Transition	<i>AFD</i>	2022		<i>Worldwide</i>
Budgets for Climate Sustainability and Social Inclusion: A Rapid Review of Approaches and Tools	<i>UNICEF, UNDP</i>	2022		<i>Worldwide</i>
Stocktake/Country experiences				
UNDP Global Climate Public Finance Review	<i>UNDP</i>	2022		<i>Worldwide</i>
Green budgeting and tax policy tools to support a green recovery	<i>OECD</i>	2020		<i>OECD</i>
Inclusive Budgeting and Financing for Climate Change in Africa (IBFCCA)	<i>CABRI, IIED, IBP, UNDP</i>	2021		<i>Africa</i>
Regional Synthesis Report of the Pacific Climate Change and Disaster Risk Finance Assessments	<i>PIFS</i>	2019	<i>Disaster Risk</i>	<i>SIDS in Asia Pacific</i>
Technical Assistance/Capacity Building				
Catalogue of Climate-Related Capacity Building Support from Institutional Partners for Ministries of Finance	<i>CFMCA</i>	2023		
Macroeconomics of Climate Change: Green Public Finance (e-learning)	<i>IMF</i>	2024		
Global Public Finance Partnership (GPFP)	<i>IMF</i>	2024		
INFF Facility	<i>UNDP, UN DESA, OECD, UNICEF (+ 3 EU Member States)</i>	2022	<i>SDGs</i>	
Global Facility for Disaster Reduction and Recovery (GFDRR)	<i>WB</i>		<i>Disaster Risk</i>	

STRATEGIC PLANNING & FISCAL FRAMEWORK				
NAME OF THE RESOURCE	ORGANISATION	YEAR	 SPECIFIC THEMATIC FOCUS	 COUNTRY EXAMPLES INCLUDED
Diagnostic/Assessment Tools or Guidance				
The Climate Policy Assessment Tool (CPAT): A Model for Climate Mitigation Policy Analysis	IMF, WB	2023		Worldwide
Quantitative Climate Risk Assessment Fiscal Tool (Q-CRAFT)	IMF	2024	Risk assessment	
Global Resilience Index (GRI) Risk Viewer	University of Oxford	2023	Infrastructure	
A Guidebook to Reviews of Fossil Fuel Subsidies: From Self-Reports to Peer Learning	IISD	2017	Subsidies (fossil fuels)	Worldwide (CHN, PER, FIN, SWE, NZL)
Measuring Fossil Fuel Subsidies in the Context of Sustainable Development Goals	UNEP, IISD, OECD	2019	Subsidies (fossil fuels)	Global South (EGY, IDN, IND, MAR, ZMB)
Carbon Pricing Incidence Tool (CPIT)	MCC, GIZ	2023	Carbon Pricing	Worldwide
Carbon Pricing Metrics: Analyzing Existing Tools	IMF, OECD, UN, WB	2023	Carbon Pricing	
BIOFIN Workbooks 2018 and 2024 *	UNDP, EU	2024	Biodiversity	Global South & emerging economies
Identifying and Assessing Subsidies and Other Incentives Harmful to Biodiversity *	OECD	2022	Subsidies & biodiversity	Nordic and EU countries
Guidance to Identify and Address Incentives Harmful to Biodiversity	IEEP	2012	Subsidies & biodiversity	UK
Implementation Frameworks/Methodologies				
Green Fiscal Rules: Challenges and Policy Alternatives	IMF	2024	Fiscal rules and MTFF	
Building Financial Resilience to Climate Impacts: Framework to Manage Loss & Damage Risks	OECD	2022	Disaster risk	The Philippines
Approaching Disaster Risk Financing in a Structured Way	EU	2024	Disaster risk	Romania, Indonesia
A Toolbox for Reforming Environmentally Harmful Subsidies in Europe	EU	2022	Subsidies	EU
A Guidebook to Fossil Fuel Subsidy Reform for Policy-Makers in Southeast Asia	IISD	2013	Subsidies (Fossil fuel)	Southeast Asia
The Nature of Subsidies: A Step-by-Step Guide to Repurpose Subsidies Harmful to Biodiversity	UNDP	2024	Subsidies & Biodiversity	Worldwide (Global South & emerging markets)
Agricultural Producer Subsidies: Navigating Challenges and Policy Considerations	IMF	2024	Subsidies (Agricultural)	
A Multi-Billion Dollar Opportunity: Repurposing Agricultural Support to Transform Food Systems	FAO, UNDP, UNEP	2021	Subsidies (Agricultural)	Global South (Africa, Latin America, Asia)
Environmental Tax Handbook	ATAF	2024	Taxation	Africa
Carbon Tax Guide: A Handbook for Policymakers	WB	2017	Taxation (Carbon)	Worldwide (+ case studies: CAN, CHL, IRL, MEX, ZAF)
UN Handbook on Carbon Taxation for Developing Countries	UN	2021	Taxation (Carbon)	Worldwide
The Future of Resource Taxation: 10 Policy Ideas to Mobilize Mining Revenues *	IISD	2023	Taxation (Mineral Resources)	Worldwide (focus Africa)
Stocktake/Country experiences				
Green taxation in non-OECD countries: A review of experience and lessons learned	EU	2023	Taxation	Non-OECD (+ case studies: GHA, GUY, MAR, VNM, ZMB)
Technical Assistance/Capacity Building				
Green Fiscal Policy Training Course	UNITAR + UN agencies		Subsidies, environment fees	
Fossil Fuel Subsidy Reform (FFSR) Webinars	FFFSR		Subsidies	
BIOFIN capacity building resources	UNDP		Subsidies & Biodiversity	
Carbon Taxation E-Course	PMR, UNITAR		Taxation (Carbon)	

BUDGET PREPARATION				
NAME OF THE RESOURCE	ORGANISATION	YEAR	 SPECIFIC THEMATIC FOCUS	 COUNTRY EXAMPLES INCLUDED
Diagnostic/Assessment Tools or Guidance				
Artificial budget intelligence powered toolkit (iBiT) - upcoming	ESCWA	Upcoming	SDGs	MENA countries
Implementation Frameworks/Methodologies				
Budget Credibility and Integrated National Financing Frameworks	UNICEF	2024	Budget credibility	Africa & Asia (Case studies: GHA, KEN, MWI, NAM, NPL, NGA)
Budgeting for Climate Change: A Guidance Note for Governments to Integrate Climate Change into Budgeting	UNDP	2021	Medium-term budgeting	Worldwide, focus on Asia Pacific
Results-Based Budgeting for Biodiversity - A Guidebook	UNDP	2024	Results-based budgeting & Biodiversity	Worldwide (Case studies: GTM, IDN, KGZ, MNG, PHL, THA, VNM)
Global Biodiversity Expenditure Taxonomy	UNDP	2024	Taxonomies & Biodiversity	
Sustainable Budgeting approach (SBA)	UNEP, Univ. of Oxford	2024	Taxonomies & SDGs	Gabon
Green Budget Tagging: Introductory Guidance & Principles & Beyond Green Tagging	OECD	2024	Budget tagging	Worldwide
European Union Green Budgeting Reference Framework (GBRF)	EU	2022	Budget tagging	EU
Knowing What You Spend: Guidance Note for Governments to Track Climate Change Finance in Their Budgets	UNDP	2019	Budget tagging	Africa & Asia
SDG Alignment and Budget Tagging: Towards an SDG Taxonomy	UNDP	2022	Budget tagging	Colombia
Climate Change Benefit Analysis Guidelines (CCBA) & Gender-responsive and socially inclusive CCBA	UNDP	2023	Cost-benefit analysis & social inclusion	Thailand, Cambodia, Zanzibar
Framework for Enhancing Gender and Poverty Integration in Climate Finance	UNDP	2021	Social inclusion	Asia Pacific
Stocktake/Country experiences				
Climate Change Budget Tagging: Review of International Experience	WB	2021	Budget tagging	Worldwide
Green Budgeting in OECD Countries	OECD	2024		OECD
Gender-Responsive Climate Change Budgeting (GR-CCB)	IBP	2021	Social inclusion	Bangladesh, Mexico
Technical Assistance/Capacity Building				
Introduction to Sustainable Finance Taxonomies E-Course	GIZ, SBFN		Taxonomies	

BUDGET EXECUTION & ACCOUNTING				
NAME OF THE RESOURCE	ORGANISATION	YEAR	 SPECIFIC THEMATIC FOCUS	 COUNTRY EXAMPLES INCLUDED
Diagnostic/Assessment Tools or Guidance				
Climate Public Investment Management Assessment (C-PIMA)	IMF	2021		
Methodology for Assessing Procurement Systems (MAPS) - Sustainable Public Procurement (SPP)	WB, OECD	2023		
Infrastructure Governance Assessment Framework (InfraGov)	WB	2020		
Stocktake/Country experiences				
A global review of ecological fiscal transfers (EFTs)	Led by DIE	2021	Fiscal Transfers	Worldwide

CONTROL & AUDIT				
NAME OF THE RESOURCE	ORGANISATION	YEAR	 SPECIFIC THEMATIC FOCUS	 COUNTRY EXAMPLES INCLUDED
Implementation Frameworks/Methodologies				
ClimateScanner	INTOSAI	2024		
SDGs Audit Model (ISAM) 2024	INTOSAI	2024		Worldwide
Parliamentary Oversight of National Climate Commitments	IPU	2024		
Guidelines for Parliamentarians on Budgeting for the SDGs: Making the Most of Public Resources	IPU	2021		Worldwide

5. REFERENCES

References are organized to align with the structure of the document and are grouped by section. Within each section, references are listed in the order they appear in the text, including main resource entries (summarised in the Annex I table) and additional references cited within the descriptions of specific resources or tools.

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