

The Green Budgeting Transition

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Greening fiscal policies and public financial
management

Technical Reports

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Résumé

La mise en œuvre de la transition vers une économie verte nécessite des ressources financières importantes, tant publiques que privées, pour réaliser les investissements nécessaires. Elle requiert également que les États se dotent d'outils pour réaligner leurs politiques publiques sur une trajectoire compatible avec l'accord de Paris.

Les ministères des Finances ont un rôle central à jouer, à travers l'outil budgétaire et la gestion des finances publiques, pour impulser la transition vers une économie verte. La transition budgétaire verte vise à aligner les processus de perception des recettes et de réalisation des dépenses publiques sur les objectifs environnementaux et climatiques.

Ce rapport détaille les quatre axes d'actions à la main des ministères des Finances au titre de la transition budgétaire verte. Ceux-ci concernent l'intégration des objectifs environnementaux et climatiques dans la planification budgétaire, dans la politique budgétaire, dans l'exécution budgétaire et dans la gestion des actifs et des passifs de l'État. These different dimensions are illustrated by examples from different countries.

Mots-clés :

Finances publiques, climat, environnement, budget, action publique, analyse des politiques publiques

Géographies :

Multi-pays, Afrique, Amérique, Asie, Europe, Océanie

Abstract

Implementing a transition to a green economy requires

significant financial resources, both public and private, to make the necessary investments. It also requires States to realign their public policies on a trajectory compatible with the Paris agreement.

Finance ministries have a central role to play, through fiscal policy and public financial management, to drive the transition to a green economy. The green fiscal transition aims to align revenue collection and public expenditure processes with environmental and climate objectives.

This report details the four main areas of action of the Ministries of Finance under the green fiscal transition. These relate to the integration of environmental and climate objectives into budget planning, fiscal policy, budget implementation and the management of state assets and liabilities. These different dimensions are illustrated by examples from different countries.

Keywords :

Public finance, climate, environment, budget, public action, public policy analysis

Areas :

Multi-country, Africa, Asia, America, Europe, Oceania

Introduction

Finance ministries have a key role to play in upholding the international commitments made by states under the 2015 Paris Agreement and the United Nations Convention on Biological Diversity. Through the use of budgeting tools and the notion of the Green Budgeting Transition, they can drive the transition toward a green economy¹ and—chiefly—finance the low-carbon transition.

The IPCC estimates that, by 2035, countries around the world will annually need to devote between 1.8% and 6% of their GDP to these funds in order to remain on a trajectory compatible with the Paris Agreement (De Coninck et al., 2018). Such an amount can only be attained by mobilizing both public and private financial resources.

The Green Budgeting Transition: Definition

The OECD defines the “Green Budgeting Transition” as the utilization of all the tools of budgetary policy and public financial management to bring national expenditure and revenue processes into alignment with environmental and climate goals (OECD, 2019).

Finance ministries have a crucial role to play in using information, regulation, taxation, and public spending to steer consumption and investment choices by governments, households, and businesses toward resource-efficient and carbon-efficient infrastructure and technology.

A global drive

There is currently a strong drive to advance the Green Budgeting Transition, both in developing and developed countries. Nearly fifty countries have implemented various green budgeting systems on a recurrent or ad hoc basis. Additionally, over sixty countries have joined the Coalition of Finance Ministers for Climate Action.

In France, various initiatives have been launched to contribute to the Green Budgeting Transition. These include the elaboration of a green budget appended to the yearly finance bill since 2020, the issuance of green sovereign bonds (Green OATs) since 2017, the responsible public spending policy initiated in 2016, and environmental taxation. On April 29, 2021, the French Ministry of the Economy, Finance and the Recovery also published its first Climate Plan, detailing the ministry’s areas of activity to support the low-carbon transition.

This technical report provides a conceptual framework to guide finance ministries in their approach to the Green Budgeting Transition and the various dimensions through which this transition is concretely to be unfolded.² These different dimensions are illustrated by examples from different countries. The report also details the tools and networks of experts that specialize in this field.

¹An economy is “green” when it encourages eco-responsible investment and behavior by businesses and consumers. It integrates the real value of natural capital (climate, biodiversity, air quality, etc.) in economic decision-making and reduces the pressure of human activity on ecosystems.

It thereby redirects—at the best cost-effectiveness ratio—capital, jobs, and technologies towards economic activities compatible with sustainable growth.

²Report derived from documentary work carried out by PwC on behalf of AFD (PwC, 2021).

1. Approaching the Green Budgeting Transition

1.1. Pursuing environmental goals

As indicated by the definition mentioned above, the Green Budgeting Transition can drive the attainment of goals other than those of climate change mitigation and adaptation. It can also be steered toward achieving other environmental goals such as biodiversity preservation, water resource management, and pollution control.

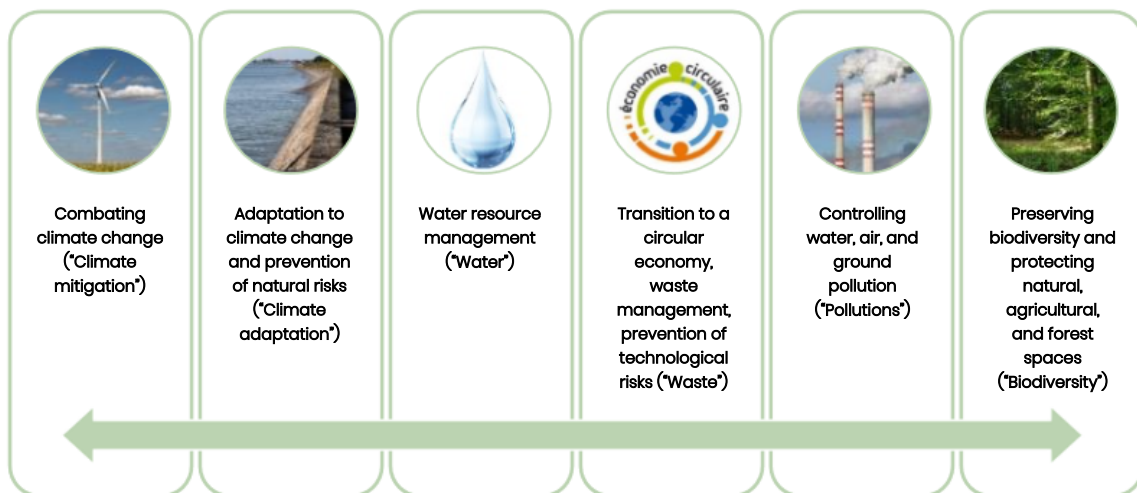
Indeed, as instruments for financing public policies, fiscal policy and public financial management must lead the way in bringing climate and environmental issues into consideration throughout every stage of the policy-making process, from planning to funding and implementing public policies. This requires a systematic approach that encompasses the entire budget cycle. More specifically, it means that budget planning, revenue management, public investment, and public procurement should take the climate and the environment into account.

Box 1. Green or climate? Two sets of complementary analyses

The transition to a green economy encompasses a broader range of issues than does the strictly low-carbon transition. The green economy is concerned with all the relationships between economic activity and natural capital. A green economy strategy can therefore incorporate issues other than the climate, such as biodiversity or water resource management. Countries may choose their goals based on their situation, the structure of their economy, and their local policy priorities.

Diagram 1, for example, lists the green objectives included in France's green budget.

Diagram 1. France's green budget: The objectives adopted

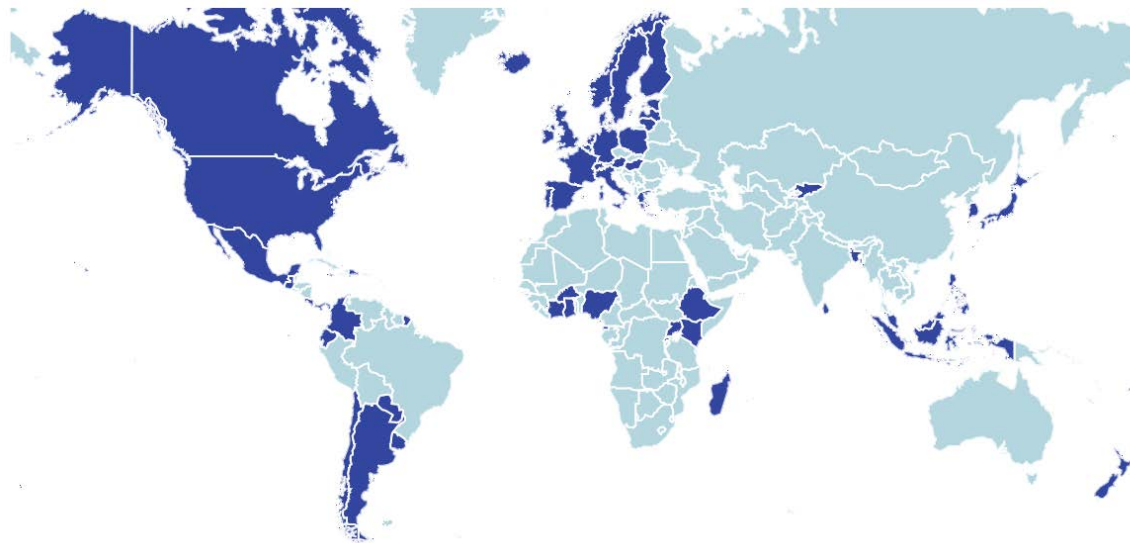


Source: Rapport sur l'impact environnemental du budget de l'État - septembre 2021 (Report on the environmental impact of the national budget - September 2021) - <https://www.vie-publique.fr/sites/default/files/rapport/pdf/281883.pdf> - French Republic.

1.2. The Coalition of Finance Ministers for Climate Action

The Green Budgeting Transition approach was institutionalized at an international level by the Coalition of Finance Ministers for Climate Action, launched in 2019. This Coalition endorsed the “Helsinki Principles” elaborated to encourage national climate action, particularly through fiscal policy and public financial management. As of June 2021, over sixty countries have pledged to actively contribute to the Coalition.

Map 1. Member countries of the Coalition of Finance Ministers for Climate Action (June 2021)



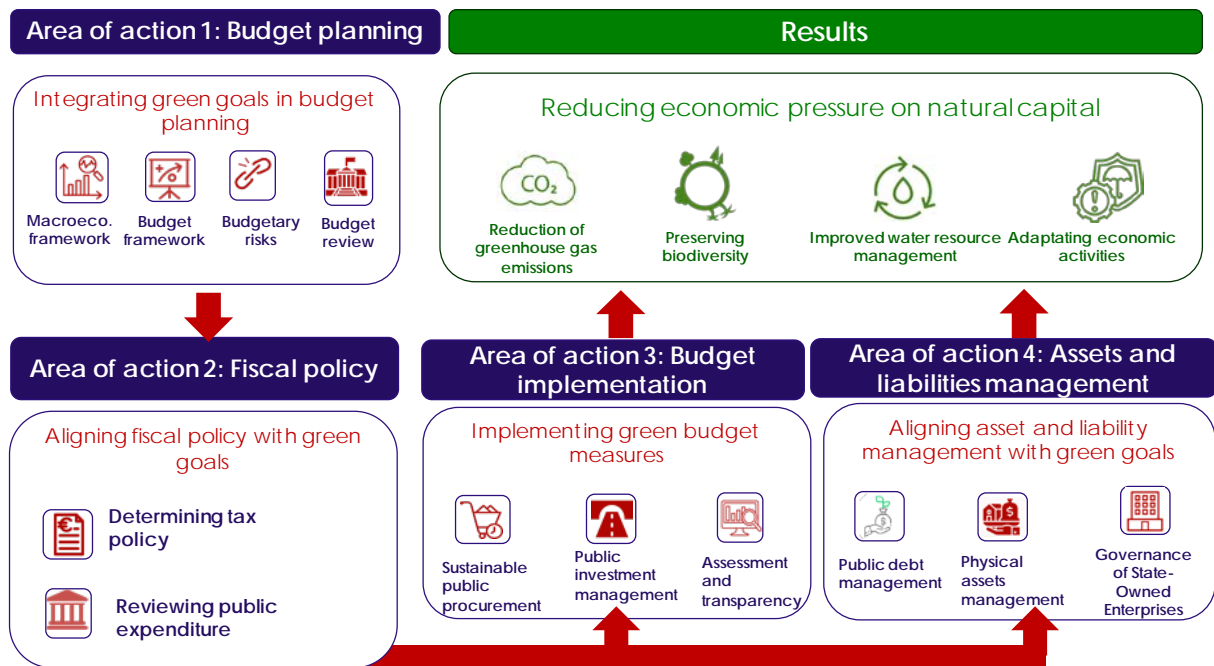
Source: The Coalition of Finance Ministers for Climate Action - financeministersforclimate.org.

While the Green Budgeting Transition drive is led by the finance ministries, strong inter-ministerial coordination is required to achieve coherence in implementing the entire set of public policies. Senior officials from environment ministries must work hand in hand with those from finance ministries. Implementing the transition calls for the allocation of human resources on the one hand **and** the ability to arbitrate on the other. The identification and resolution of potential contradictions in legislation, regulation, or priorities amid the various sectoral policies and their impact on the climate must be carried out at inter-ministerial level.

2. Areas of action for the Green Budgeting Transition

The levers available to governments to implement the Green Budgeting Transition can be classed into four distinct areas of action, shown in Diagram 1 and elaborated below it.

Diagram 1. Areas of action for the Green Budgeting Transition



Source: Authors.

Area of action 1: Integrating environmental and climate goals into budget planning

It is essential to integrate green goals into budget planning for three main reasons. It enables governments to anticipate environmental and climate impacts on the economy, to plan medium- and long-term development strategies, and to incorporate these issues into the budget preparation process. This area of action for budget planning covers four dimensions.

2.1.1. The macroeconomic framework

At the macroeconomic level, incorporating climate issues into macroeconomic models facilitates assessment of the economic, social, and financial impacts of public policies concerning the environment and the climate. It also enables evaluation of the environmental and climate impacts of medium- and long-term development strategies.

Malawi: Modeling the use of resources on GDP

Malawi uses a general equilibrium model to measure the impact of the government's economic and fiscal policy on the economy and on poverty. This model also makes it possible to test external shocks, including shocks linked to soil erosion, temperature rise, and the fluctuation of certain international

prices. It enables analysis of the static and dynamic, direct and indirect, and short-term and long-term effects of the policies discussed by the government. For instance, the model has brought to light the disparities in income and consumption presumably caused by climate change. These findings influenced the government's climate strategy.

2.1.2. Budget planning over the medium term

Annual and multi-annual budget forecasts must be coherently aligned with sectoral strategic plans, public investment programs, and the strategy for fighting climate change. Climate change strategies therefore call for the allocation of necessary resources and, where applicable, the funding required for their implementation.

Bangladesh: Budget planning for climate change

In Bangladesh, the Ministry of Finance coordinates the drafting of a medium-term budget framework that details revenue and expenditure forecasts over a three-year period. To align this framework with the climate policy, the ministry conducted a review of expenditure in this area. Even though the level of spending in favor of the climate turned out to be higher than anticipated (1 billion US dollars, 75% of which was financed by internal resources), a financing gap that remained to be filled was identified. This prompted the Ministry of Finance to lead government efforts to mobilize international funds. Indeed, the Ministry of Finance department responsible for economic relations has since become the accredited authority for the Bangladeshi Green Climate Fund.

2.1.3. Fiscal risk assessment

Assessing fiscal risk under green budgeting involves subjecting public finances and national wealth to climate risk stress tests (for instance, ensuring that fiscal policy is resilient to climate-related shocks and disruptions) and anticipating the consequences of the low-carbon transition and climate change on the budget balance.

Jamaica: Incorporating climate into fiscal risk analysis

Jamaica is a country that has a high public debt and is also tremendously exposed to natural disasters, including hurricanes. To take the effects of such disasters into account, the Ministry of Finance conducts scenario analyses. A first baseline scenario sets out the revenue and expenditure forecasts required to maintain a balanced budget. A second scenario considers the impact a disaster would have on the country's economy and public finances. The difference between the two scenarios indicates a risk of a 4.5% cut in GDP. This research serves to document the context in which the government makes decisions to improve its resilience to climate change.

2.1.4. Reviewing the budget from a "green" angle

The expenditure tagging implemented to review the budget from a green angle calls for the following measures: setting up procedures and drafting a budget calendar that enable ex ante assessment of the projected environmental impact of the forecast expenditures and revenue; providing clear guidelines (via budget circulars) on how sectoral ministries should put forward measures for mitigating and adapting to climate change; classifying expenditures (including tax expenditures) and revenues according to their impact on climate change, as well as on other environmental areas if applicable (biodiversity, pollution, etc.); incorporating a presentation in the budgetary documentation submitted to Parliament of the impact of budgetary and fiscal measures on the environment and how this impact is set to evolve over time.

France: The first green budget

In 2020, France was the first country in the world to present a green budget to Parliament. The Ministry of Government Action and Public Accounts and the General Commission for Sustainable Development

identified all the impacts of the government's budget—both positive and negative—in relation to the country's environmental goals (climate change adaptation and mitigation, water resource management, waste management and technological risk prevention, pollution control, and biodiversity). The results were published in a report appended to the 2021 draft budget presented to Parliament. They show an increase in expenditure favorable to the environment (43 billion euros) and a drop in expenditure unfavorable to the environment (7.2 billion euros).

2.2. Area of action 2: Aligning fiscal policy with environmental and climate goals

This second area of action focuses on aligning the two instruments of fiscal policy—public revenue and expenditure—with green objectives. While the first area of action is organizational in nature (exploring how to organize matters in such a way as to bring green issues into the budget), the second is allocational (determining what decisions should be taken in the draft budget to act on these issues). A government that adopts green tax measures and green expenditure steers public funding toward a green and/or low-carbon transition while also encouraging private actors to change their consumption and investment practices. This area of action covers both dimensions.

2.2.1. The definition of tax policy

This area covers the implementation of environmental taxation and, more broadly, the alignment of the tax policy contained in medium-term budget forecasts with the climate strategy.

Sweden: The gradual introduction of a carbon tax

In 1991, Sweden was one of the first countries to introduce a carbon tax. To make this tax acceptable while also giving the private sector time to adapt, the Swedish government teamed up with businesses to work out a timetable for gradually raising the tax. Alongside this, a comprehensive tax reform was included whereby the introduction of the new tax was offset by a reduction in old levies. Specific measures were also adopted to reduce the impact of the carbon tax on fragile businesses and low-income households. This approach has allowed Sweden to raise its carbon tax from 28 US dollars to 127 US dollars per ton in thirty years, without causing social blockages or loss of competitiveness. Revenue from this tax now comes to 2.9 billion US dollars per year, or 2% of government revenue.

2.2.2. Review of public expenditure

Strengthening the alignment of expenditure with green economy objectives and climate change action primarily involves reviewing subsidies and so-called “brown” tax expenditures—such as those facilitating the use of fossil fuels—that undermine low-carbon development, as well as implementing a public green investment plan.

Indonesia: Reforming fossil fuel subsidies

Over the past two decades, Indonesia has reformed its fossil fuel subsidies. The gradual reduction of these subsidies has encouraged consumers to burn less fuel while also saving the government 15 billion US dollars a year. After the first attempt at reform in 1998, large-scale protests forced the government to back down. However, thanks to a targeted aid policy aimed at mitigating the impact of rising prices on the poorest households, subsequent reforms did not elicit such opposition. Indonesia has thus conducted a large-scale monetary transfer program (2 billion US dollars per year) and reinvested part of the savings accumulated to increase food subsidies for the poorest. To achieve this, an intensive campaign of information and surveys was carried out, monitoring civil society's acceptance of the reform measures and adjusting these where necessary.

2.3. Area of action 3: Integrating environmental and climate goals in budget implementation

This third area of action aims to reduce the impact of budget implementation on the environment and the climate, particularly at the level of procurement and public investment management. It also aims to strengthen the accountability and transparency of the government's green commitments.

2.3.1. Public procurement

In order to consider the carbon (and ecological) impact of the products and services that make up the public order, responsible expenditure schemes must be implemented and buyer support secured through guides and training.

China: The use of eco-labels in public procurement

In China, since 2006, the Ministry of Finance and the Ministry of Ecology and Environment have jointly maintained a list of products awarded one or more eco-labels from certification bodies. This list is public, and procuring entities are required to refer to it. In line with the government's sustainable expenditure policy, these entities must prioritize the purchase of certified products. To monitor the application of this policy, the Ministry of Finance set up a mechanism to distinguish the portion of public purchases that holds an eco-label. Consequently, at the last count, 82% of calls for tender resulted in the purchase of products holding an energy efficiency label.

2.3.2. Public investment management

The integration of environmental and climate goals in public investment management occurs at various levels: (i) aligning the legal or regulatory frameworks of public investment projects with these goals, (ii) defining environmental criteria to select and attribute degrees of priority for investment projects, and (iii) drawing up an investment plan specific to the climate change transition.

Peru: Greening the public investments program

In 2018, Peru adopted a new framework for investment programming and management. It now sets minimum requirements for climate risk management, applicable to all public investment projects. These requirements are derived from research conducted with a local university following extreme climate events in the north of the country. By identifying the characteristics of the infrastructure that remained intact, the Peruvian government was able to formulate the minimum requirements needed for any new project. These practices enable local governments (regions and municipalities) to focus on building more resilient bridges, roads, and structures.

2.3.3. Audit and assessment of expenditure and revenue concerning green issues

The work of strengthening the accountability and transparency of the government's green commitments can be broken down into different areas. Firstly, environmental considerations must be incorporated into the audit reports submitted to Parliament to enable stronger parliamentary control in the monitoring of budget implementation where green issues are concerned. Secondly, assessments of environment-related expenditures and revenues must be carried out alongside assessments of the executed budget's impact on climate change so as to facilitate the identification and implementation of any adaptive budgetary measures that may prove necessary. Finally, audit and evaluation results must be disseminated to the general public to inform citizens about the government's actions.

The Netherlands: Audit of the National Climate Adaptation Policy

In 2012, the Netherlands Court of Audit performed an audit of the National Climate Adaptation Policy. The Court centered its audit around a review of the risks generated by climate change, the way in

which the public authorities organize themselves to respond to them, and the budgetary policy that enables the financing of this response. This exercise revealed that certain sectors were not covered by the government's strategy (e.g., health, transport, energy) and that no minister had been appointed to coordinate the strategy's implementation. The Court also identified the financial risks linked to poor planning of public investments, pointing out that investments such as "buildings, roads, railways, energy, and sewage networks last for decades and are costly to replace. It is more economical and efficient to adapt the design to climate change right now."

2.4. Area of action 4: Integrating environmental and climate goals in the management of state assets and liabilities

This fourth area of action covers environmental considerations in the management of financial and physical public assets and in the assessment of risks arising from the effects of climate change on the state's assets and liabilities, be they short-term physical risks related to extreme weather events, long-term risks related to environmental changes, or transition risks. This area of action is also concerned with aligning public asset supervision—particularly the governance of public enterprises—with environmental issues and issuing public loans to finance the green transition.

2.4.1. Management of public financial and physical assets

Bringing environmental and climate issues into consideration in the management of public assets involves assessing the impact of financial and physical public assets on the environment, as well as the risks arising from changing environmental conditions. These assessments inform the elaboration of strategies for climate change mitigation and adaptation in the case of public assets.

France: Energy renovation in local communities

The building sector accounts for 43% of the country's energy consumption. To reduce its greenhouse gas emissions by a factor of four by 2050, France has therefore committed to an energy renovation plan. Local authorities are spearheading this initiative, with a property portfolio of over 225,000 buildings (schools, social housing, administrative buildings). To assist this effort, the government has introduced tools that enable the local authorities to analyze their building stock (online performance comparison, energy audits, public advice), as well as financing to plan renovation strategies. Once ready, the renovation works can also receive subsidies or concessional loans through the Banque des Territoires (Caisse des Dépôts Group).

2.4.2. Public debt management

Public debt can be used to finance the green transition by issuing green sovereign bonds. Environmental and climate considerations are integrated into public debt management with the aim of ensuring that public debt effectively serves green and/or low-carbon transition efforts and that it remains sustainable in the context of the climate change.

France: Green sovereign bonds

On January 24, 2017, Agence France Trésor launched the first green sovereign bonds, Green OATs, for an issuance amount of 7 billion euros. France's Green OATs³ fund central government budget expenditure and expenditure under the "Invest for the Future" program to fight and adapt to climate change, protect biodiversity, and control pollution. The funds raised are handled like funds from a conventional OAT and managed in compliance with the general budget rule. However, they are matched to an equivalent amount of Green Eligible Expenditures and the aggregate of such

³Awarded in 2018 by the Climate Bonds Initiative.

expenditure in a given year sets the limit for Green OATs issuance. France provides several types of report to investors: an annual report on allocation and performance indicators and a report on ex post impacts. An assessment Council, composed of independent experts, drafts the reports on ex post impact.

2.4.3. Governance of public enterprises

This dimension covers both (i) the integration of specific climate-related goals, targets, and indicators in performance contracts concluded between public enterprises and the government, and (ii) the reporting on the use of funds allocated by the government to implement environmental measures in the context of investment projects and detailing the results obtained relating to the goals integrated in the performance contracts.

Brazil: The Brazilian Development Bank's action against climate change

The Brazilian Development Bank (BNDES) is a Brazilian public bank that provides long-term and concessional loans for projects of social and economic interest. It is supervised by the Ministry of Economy, that appoints three (out of eleven) of its administrators. Nearly 80% of its resources come from national treasury loans and transfers of budgetary funds. In 2018, under the impetus of state administrators, the bank adopted a CSR (corporate social responsibility) action plan and made the greening of the economy one of its four strategic priorities. On the basis of this new mandate, the BNDES developed a new area of activity aimed not at replacing but at mobilizing the private financing required to combat climate change. This involves financing public-private partnerships to set up low-carbon public transport, co-financing renewable energy projects, and creating climate bonds. The bank's evolution from the role of funder to that of fundraiser has catalyzed the financial sector, accelerating Brazil's transition to a low-carbon economy. In 2018, 20% of BNDES disbursements (4 billion US dollars) supported the green transition.

3. Specialized tools and expert groups

3.1. Diagnoses related to the Green Budgeting Transition

A number of tools have been developed to draw up diagnoses on how consideration of environmental and climate goals has been embedded into the public policies of governments and their public finances in particular. Such diagnoses can be classified into three main groups:

- Green growth diagnoses: these diagnoses, designed by the OECD early in the first decade of the 2000s and conducted by government authorities, seek to identify the main bottlenecks hampering the green transition in any given country (e.g., dependence on fossil fuels, perverse subsidies, infrastructure deficit). This analysis in turn allows the authorities concerned to choose and prioritize policy instruments (such as policies to support technology, carbon pricing, or investment programs) according to how each issue impacts the transition, taking into account national priorities and constraints. Since public finances are only a means of giving substance to policies—they are not policies in themselves—this is an important stage in providing content and direction to the Green Budgeting Transition.
- The PEFA Climate diagnosis: in 2020, the PEFA (Public Expenditure and Financial Accountability) diagnosis, that assesses the state of a country's financial management system, was broken down into a specific "PEFA Climate" module designed to gauge a public financial management system's sensitivity to the climate (PEFA, 2020). Using these PEFA Climate diagnostics, an action plan can be created that lays out a set of initiatives and reforms designed to remedy any weaknesses and help achieve the desired results.

- The Climate Public Expenditure and Institutional Review (CPEIR) is a diagnostic tool developed by the UNDP in 2015 to analyze the effectiveness and efficiency of public expenditure in combating climate change.

3.2. The network of actors and expert groups involved in the Green Budgeting Transition

Finance ministries can mobilize tools and expertise to assist in implementing each of the areas of action for the Green Budgeting Transition. This includes the following in particular:

- The public institutions leading the international initiatives identified in this report can be mobilized. The documentation produced (reports, assessments, methodological frameworks, etc.) by each of the institutions concerned, including French and European institutions, could be consulted and public experts contacted in order to share experiences.
- The Institute for Climate Economics (I4CE) provides expertise in assessing environmental budgets at the central and regional levels. The institute participated in launching France's first green budget by providing a comprehensive preliminary assessment of the national budget in 2019 (Fetet et al. 2019). It also helped build a methodological framework to assess climate considerations in the budgets of French local authorities. Drawing on its experience in France, the institute also analyzed the tools for the environmental assessment of budgets implemented in around twenty countries, thus enabling these experiences to be cross-referenced (Postic, 2021).
- The economic modeling tools offering integrated approaches that bring the environmental, economic, and social dimensions together and enable analysis of the impact of environmental public policies are: the GEMMES model developed by AFD (Giraud et al. 2016; DEPF, 2021 to be applied to Morocco), and the TreeME model developed by Science Po's center for economic research, the Observatoire français des conjonctures économiques (French Economic Observatory, OFCE) (Reynes et al., 2021).

Box 2. Support for the Green Budgeting Transition by technical and financial partners: AFD as example

AFD financially and technically assists the implementation of the Green Budgeting Transition in several countries.

1/ Funding from public policy budgeting backs the implementation of reforms related to the Green Budgeting Transition and helps advance public policy dialogue. Two public policy loans granted by AFD are currently being implemented in Mexico and Costa Rica, and a third is undergoing finalization in Uzbekistan.

2/ Capacity building and technical cooperation projects have been set up to assist in the various dimensions of the Green Budgeting Transition. As these projects include a technical cooperation component, they can particularly benefit from France's experience in this area.

The table below details capacity building activities funded by AFD.

Country	Activities within the framework of AFD projects
Mexico	<ul style="list-style-type: none"> - Implementation of the 3ME model (OFCE) to estimate: (i) the macroeconomic impacts of the updated Nationally Determined Contribution (NDC); (ii) the impacts of reforming carbon tax and the carbon market. - Study on the methodology for identifying and quantifying climate expenditure. - Benchmark study and proposals for the modification of the carbon tax.
Costa Rica	<ul style="list-style-type: none"> - I4CE is conducting: (i) a benchmark study on Green Budgeting methodologies in ten countries; (ii) a study on the success factors for implementing a green budget. - Peer exchanges with France on the Green Budgeting methodology.
Indonesia	<ul style="list-style-type: none"> - Peer exchanges with France on Green Budgeting methodology and environmental taxation. - Study with I4CE on the social impacts of green fiscal measures.
Uzbekistan	<ul style="list-style-type: none"> - Discussions for technical support on strategy formulation, economic modeling, inventory of fossil subsidies, green budgeting, sustainable public procurement, and responsible public enterprises.

Reference list

- DE CONINCK, HELEEN, AROMAR REVI, MUSTAFA BABIKER, PAOLO BERTOLDI, MARCOS BUCKERIDGE, ANTON CARTWRIGHT, WENJIE DONG, JAMES FORD, SABINE FUSS, JEAN-CHARLES HOURCADE, DEBORA LEY, REINHARD MECHLER, PETER NEWMAN, ANASTASIA REVOKATOVA, SETH SCHULTZ, LINDA STEG, AND TAISHI SUGIYAMA. 2018.** “Strengthening and Implementing the Global Response.” In *Global Warming of 1.5° C*. IPCC (Intergovernmental Panel on Climate Change) Special Report. Geneva: IPCC.
- DEPF. 2021.** *L'économie marocaine face aux enjeux du changement climatique: scenarii d'impact à l'horizon 2050 et politiques d'adaptation*. Policy Brief No. 25. Rabat: Department of Studies and Financial Forecasts (DEPF) of Morocco's Economy and Finances Ministry.
- GIRAUD, GAEL, FLORENT MC ISAAC, EMMANUEL BOVARI, AND EKATERINA ZATSEPINAS. 2016.** *Coping with collapse: A stock-flow consistent monetary macrodynamics of global warming*. AFD Research Papers No. 29. Paris: AFD.
- FÊTET, MARION, QUENTIN PERRIER, and POSTIC SÉBASTIEN. 2019.** *Une évaluation climat à 360° du budget de l'État*. Paris: Institute for Climate Economics (I4CE). <https://www.i4ce.org/wp-content/uploads/2019/09/I4CE-Etude-EvalClimat360%C2%B0BudgetEtat.pdf>.
- OECD. 2020.** *OECD Green Budgeting Framework Highlights*. Organisation for Economic Co-operation and Development. <https://www.oecd.org/environment/green-budgeting/OECD-Green-Budgeting-Framework-Highlights.pdf>.
- PEFA. 2020.** *Climate Responsive Public Financial Management Framework – PEFA Climate*. <https://www.pefa.org/resources/climate-responsive-public-financial-management-framework-pefa-climate-piloting-phase>.
- UNDP. 2015.** *A methodological guidebook: Climate public expenditure and institutional review (CPEIR)*. Bangkok: UNDP.
- POSTIC, SEBASTIEN. 2021.** *Évaluation environnementale du budget. De l'outil de transparence à l'instrument de performance : revue des expériences internationales*. Paris: Institute for Climate Economics (I4CE).
- PwC. 2021.** *Les appuis de l'AFD à la transition budgétaire verte*. Internal document. Paris: Agence française de développement.
- FRENCH REPUBLIC. 2021.** *Rapport sur l'impact environnemental du budget de l'État*.
- REYNES, FREDERIC, GAEL CALLONNEC, AURELIEN SAUSSAY, GISELA LANDA, PAUL MALLIET, ADELIN GUERET, JINXUE HU, MERIEM HAMDICHERIF, AND HERVE GOUËDARD. 2021.** *ThreeME Version 3: Multi-sector Macroeconomic model for the Evaluation of Environmental and Energy Policy – A Full Description*. Working paper. Paris: ThreeME.

List of acronyms and abbreviations

AFD	Agence Française de Développement (AFD) (French Development Agency) (AFD)
BNDES	Brazilian Development Bank
CPEIR	Climate Public Expenditure and Institutional Review
I4CE	Institute of Economics for Climate
IPCC	Intergovernmental Panel on Climate Change
CDN (NDC)	Nationally Determined Contribution
OECD	Organization for Economic Cooperation and Development
OFCE	French Observatory of Economic Conjunctures
PEFA	Public Expenditure and Financial Accountability
UNDP	United Nations Development Program

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