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The Good, the Bad and the Unclear

Environmental Budget Tagging -From communicating national effort to improving budgetary performance

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The Institute for Climate Economics (I4CE) is a Paris-based think tank with expertise in economics and finance with the mission to support action against climate change. Through its applied research, the Institute contributes to the dEBTte on climate-related policies. It also publishes research to support financial institutions, businesses and



territories in incorporating climate issues into their activities and operations. I4CE is a registered non-profit organisation, founded by the French National Promotional Bank Caisse des Dépôts and the French Development Agency.

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The information and opinions expressed in this report are the sole responsibility of the author.

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Executive Summary

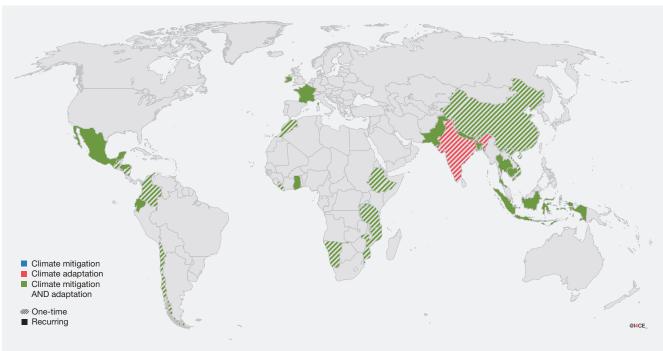
Climate and environmental issues affect all aspects of a nation's economic life. Acknowledging this reality, more and more finance ministries are implementing tools to facilitate and optimize the consideration of the environment in budgetary decisions, known as "green budgeting" tools. The Environmental Budget Tagging (EBT) is one such tool, which aims to highlight all budgetary measures related to one or more dimensions of environmental action, such as climate change, biodiversity or land degradation.

This review tries and provides answers to two questions: What are the expected benefits of these tools? Under what conditions are they achieved? It takes stock on the experience of some twenty countries and several international development institutions (UNDP, IDB, World Bank, OECD), through bibliographic reviews and a large series of interviews with national practitioners, researchers, and experts from various international institutions. 10 case studies (8 from Latin America + Indonesia and France) were examined in depth, their conclusions and comparisons being compiled in a methodological annex to this report. In particular, the study focuses on the differences between "minimal" and comprehensive evaluations, finding that the significant additional benefits associated with a comprehensive evaluation more than justify the additional effort involved.

Some design choices for an EBT must be made well in advance, as they strongly structure the entire evaluation. Such choices fall into two categories:

- methodological criteria: to be effective, a EBT must encompass a broad scope of budgetary measures, evaluate expenditures but also taxes, take into account the expected outcomes of assessed measures and not only their intention, identify measures that are unfavorable to the environment... The analysis should thus go beyond considering the environmental effort, and aim to evaluate the coherence of the budget with national objectives.
- process criteria: the full effects of a EBT are felt under two conditions:
 - excellent national ownership: the EBT must first and foremost respond to a context-specific need, clearly identified upstream, with internal resources. It must also fit into the existing administrative culture and processes, in coherence with other national green budgeting tools. This seems a simple requirement, but it often proves a stumbling block, as the perceived technical complexity and resource requirements of EBTs pushes ministries to rely on external expertise not only for designing, but also for carrying on, the work.

IMPLEMENTING ENVIRONMENTAL BUDGETING AROUND THE WORLD



Source: I4CE

- a long-term perspective: an EBT should not be a one-time exercise, but an effort to be maintained over time. This is of course necessary in order to measure the improvement or deterioration of indicators and to correct the national trajectory in "real time"; but it is also important in order to give certain processes time to take hold. In particular, it is by maintaining the exercise over time that one will be able to go beyond quantitative considerations regarding monetary volumes alone and open the dEBTte on the environmental effectiveness of the overall policy mix; it is also over time that discussions, acculturation and capacity building of the various actors can arise - and it is through these fundamental changes that an EBT has the most impact.

Under the conditions listed above, an EBT is useful both for the analytical results it produces and for the process that leads to these results. First, by improving the transparency of public action in areas where public expectations are high. Second, by establishing an interministerial dialogue that allows finance ministries and technical ministries to take ownership, within their own scope of expertise and action, of a complex subject given its very cross-cutting nature. Finally, by informing budgetary decisions with simple tools on issues that are highly complex, aggregating potentially scattered information and highlighting the cobenefits or undesirable effects of measures or packages that do not all have a stated climate objective. Finally, they provide reporting tools for international finance, both private (Green Bonds) and public (development banks), even if one must be careful because the financial incentive may bias the evaluation.

That being said, one should not expect too much from such evaluations: EBTs are an important and relevant tool for the budgetary policy of a government with environmental objectives, but it is only a tool, and a rather technical one at that. It is only useful if it serves strong political action, and as part of an ecosystem of green budgetary decision-making and planning tools.

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Table of acronyms

BIOFIN Biodiversity Finance project **CBT** Climate Budget Tagging

CCFF Climate Change Financing Framework

CPEBR Climate Public Expenditure and Budget Review **CPEIR** Climate Public Expenditure and Institutional Review

DAC **Development Assistance Committee**

EBT Environmental Budget Tagging

EU European Union FTE Full-Time Equivalent

Grupo de Financiamiento Climático para América Latina y el Caribe **GFLAC**

(Latin American and Caribbean Climate Finance Group)

GHG Greenhouse gases

IADB Inter-American Development Bank

IDFC International Development Finance Club

MDB Multilateral Development Bank NGO Non-Governmental Organization

Obligation Assimilable du Trésor OAT

(French sovereign bond)

OECD Organization for Economic Cooperation and Development **PEFA** Public Expenditure and Financial Accountability program

SDG Sustainable Development Goal

UNDP United Nations Development Programme

UNFCCC United Nations Framework Conference on Climate Change

Note: In this document we use the term Environmental Budget Tagging (EBT) as a generic name for the exercise of reviewing (on a recurrent and automated basis, as well as on an ad hoc basis) budget measures that have an impact on the environment. When we refer to concrete examples of assessments that have focused solely on climate impacts (most existing assessments to date), we prefer the term Climate Budget Tagging (CBT).

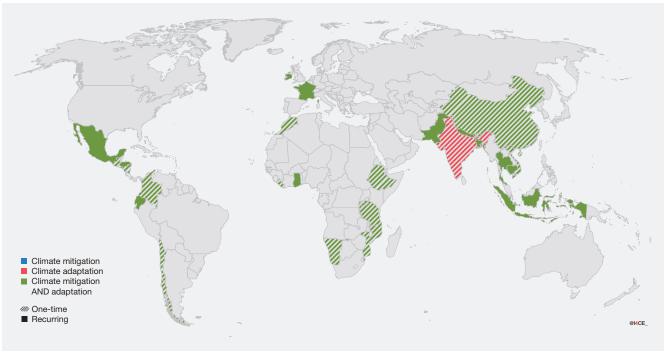
1. Introduction

Climate and environmental issues are no longer distant concerns for specialists. They must be taken into account here and now, in the daily work of a large number of public agents. On climate, the latest IPCC report (AR6 - 2021) confirms without ambiguity that greenhouse gas emissions due to human activities are responsible for about 1.1°C of warming since 1850-1900, and notes that a "widespread, rapid and intensifying" climate change is expected to bring us to or above 1.5°C of warming in the next 20 years. The Global Assessment Report on Biodiversity and Ecosystem Services is not much more optimistic, noting that more than one million species are threatened with extinction in the short to medium term. Both reports emphasize that change is already occurring on a large scale, with no turning back, requiring significant adaptation measures; and that without an equally ambitious mitigation effort, we will soon cross dangerous thresholds into areas of much greater uncertainty and damage.

State budget tools should be at the heart of the necessary efforts, but environmental expertise has for too long been isolated in specific departments. While environmental ministries are the natural authority for technical expertise, the magnitude of the necessary actions requires inter-ministerial action far beyond them. Finance Ministries in particular should have their say and do their share, as taxes and government spending are powerful drivers of action. Direct action, when governments invest, for example, in low-carbon transportation infrastructure or reforestation projects; indirect action, when national taxes and spending alter the choices of private economic actors. As awareness of this responsibility grows, finance ministers are committing to take a leading role in environmental action, as demonstrated, for example, by the recent Coalition of Finance Ministers for Climate Action around the Helsinki Principles, or the OECD's Paris Collaboration on Green Budgeting.

Environmental budget tagging (EBT) is an important tool within the emerging 'green budgeting' policy toolbox. An EBT aims to highlight all budgetary measures related to one or more dimensions of environmental action, such as climate change, biodiversity or land degradation. EBTs started out more than a decade ago in several Southeast Asian countries (Nepal, Bangladesh, Cambodia, Thailand) and have since been implemented in more than 50 countries (see map below). As environmental ambitions rise, these tools are gaining renewed interest, particularly in Europe: the European Commission's post-Covid recovery and resilience fund only supported national recovery plans when they included more than 37 percent environmental spending, making their assessment almost mandatory; and 16 member states are currently training in environmental budget tagging for their own benefit, under another Commission program.





Source: I4CE

This review takes stock of existing experience to answer two questions: What are the expected benefits of these tools? Under what conditions are they achieved? It complements a series of recent publications by the World Bank, UNDP, OECD, IDB, and the European Union (forthcoming) on the issue; our work focuses specifically on the differences between "minimal" and comprehensive assessments, both in terms of expected benefits and structuring choices and constraints. In addition to the abovementioned reports, we have drawn on an extensive literature review of existing EBTs, and on a series of bilateral interviews with national practitioners, researchers, and experts from

various international institutions. We attempt to reproduce here many relevant quotes from these interviews1. 10 case studies (8 from Latin America + Indonesia and France) were examined in depth, with their findings and comparisons compiled in a methodological annex to this report. The report is organized in two parts:

- Part 2 focuses on the benefits to be expected from a EBT for the administration, public decision makers and civil
- Part 3 explores the requirements associated with an ambitious EBT, their rationale and consequences.

In order to protect the anonymity of our interviewees, only the type of structure (Ministry/Research/International Institution) to which they belong will be mentioned

2. The multiple benefits of environmental budget tagging

EBT is useful both for the analytical results it produces and for the process that leads to these results. First, by improving the transparency of public action in areas where public expectations are high. Second, by establishing an interministerial dialogue that allows finance ministries and line ministries to take ownership, within their own scope of expertise and action, of a complex subject given its very cross-cutting nature. Finally, by informing budgetary decisions with simple tools on issues that are highly complex, aggregating potentially scattered information and highlighting the co-benefits or undesirable effects of measures or packages that do not all have a stated climate objective. Finally, they provide reporting tools for international finance, both private (Green Bonds) and public (development banks), even if one must be careful because the financial incentive may bias the evaluation.

2.1. Revealing the extent of climate-budget links: raising awareness, improving transparency

KEY MESSAGES

- EBT is often driven by parliamentarians and the executive branch of government, but the primary beneficiaries are the administrations themselves
- Implementing an EBT allows Finance and line ministries to increase their competence on climate issues
- It also allows line ministries to take ownership of environmental issues in an operational way, within their own scope of expertise and decision
- The results of the analysis provide an excellent entry point for environmental concerns in the discussions and negotiations during budget construction

"They started their EBT for communication reasons; in the end they feel that the main benefit was the increased awareness in their own administrations."

Researcher or consultant

2.1.1. An exercise often driven by accountability concerns...

The first sponsors: parliamentarians and executive government

Elected officials have a particular interest in carrying out an EBT: they design and vote the national budget, and thus they must ensure the consistency of the objectives and the actions implemented and resources used. In order to do this, they must overcome three issues:

- First, the environmental impacts of a budget are crosscutting and diffuse. Several hundred budget measures typically have an impact (positive or negative) on GHG emissions, they are spread across all ministries, rather than associated with a small number of overarching budget programs.
- · Second, most countries' budget follow a universality principle, i.e., almost all revenues and expenditures are voted together, in a vast "common pot" through which they all interact; therefore, one should assess the climate impact of the budget as a whole, since policy measures interact strongly and almost none can be changed "all other things being equal" (see "A broad scope: taxes, tax niches, public operators").
- Finally, assessing the coherence of these measures with national objectives requires specific expertise, a good knowledge of national roadmaps (see sections 3.2.1 et 3.3.1), and considerable time resources, which decisionmakers cannot afford at the time of their choices and votes; the synthetic format offered by an EBT is therefore particularly well suited to these audiences.

"Our EBT answered primarily a request for transparency from parliamentarians."

Ministry of the Environment

Several countries such as Mexico, Indonesia, France, and Nicaragua, among others, publish the results of their **EBT** as part of their budget process. Several mentions to the French EBT have been recorded in public speeches by national parliamentarians, demonstrating that there is at least some measure of knowledge and ownership of this work among this audience.

The demand for transparency is also growing within civil society

Civil society is also an important driver for the implementation of EBT, especially as governments are facing increasing demands for transparency and accountability on their environmental action (OECD 2021). Indeed, social movements such as those recently experienced in Ecuador (2019), Egypt (2019) or France (2018) arise from, among other things, a lack of knowledge (or distrust) of the state's use of environment-related revenues, particularly with regard to carbon or energy taxes; and many studies have shown that trust in government is a key condition for the implementation of environmental taxation (Kallbekken and Aasen 2010; Klenert et al2017; Drews and van den Bergh 2016).

However, even if expectations are high, communication to the general public is difficult; most EBTs are technical exercises, lacking a strong media message, which makes them difficult to popularize. Some countries, such as Nepal and Bangladesh, nevertheless publish public versions of their EBTs in the form of "Citizens' Climate Budgets", which are aimed directly at civil society. Specific narratives, such as the "zero brown spending" commitment of several post-covid recovery plans or the innovative work of Indonesia to issue a "Green Sukuk"2, can support the communication around these exercises.

On the other hand, EBT is an excellent starting point for training and informing expert associations who will be able to use these figures, reanalyze them, and build their own tools. Indonesia reports that the results of their climate budget tagging (CBT) are widely used for international communications, and for training academic researchers and specialized organizations. In addition, a government that commits to conducting this exercise on a recurring basis provides NGOs with a platform to voice their own comments and demands annually, at a time when budget issues are most visible. These actors are the most effective in conveying EBT results to a wider audience.

"Before the first green budget, NGOs had only 40% of climate-related spending on their radar."

Ministry of Finance

Feeding international reporting on environmental effort

Furthermore, EBT is an important building block for international reporting exercises. International communications aiming to trace the progress of each country towards a specific environmental objective necessarily include a "financing" component, where EBT results can be directly used. This is the case, for example, for the biennial climate reports to the UNFCCC3. In Indonesia, data from the national CBT were used for the third national communication to the UNFCCC (Bain, Nguyen, and Baboyan 2019, 45).

2.1.2. ... but whose effects are most visible in the culture of the administrations

An opportunity for discussion between Budget and Environment

EBT provides an opportunity for environmental ministries to engage in inter-ministerial discussions on environmental issues and to influence budget discussions. It is an opportunity for an environment ministry that has a good grasp of environmental issues, but lacks the resources to implement concrete actions, to transcribe its priorities into the language and agenda of the budget. It is also an opportunity to better understand the budgetary mechanics underlying certain expenditures, and thus to

Sovereign bond meeting both environmental and Islamic finance criteria.

These reports must be completed by all UNFCCC member countries, both Annex I and non-Annex I countries. In addition, non-Annex I countries are asked to report on international financing received and additional financing needs, which is well covered by EBT. This reporting framework is to be harmonized by 2024 in the new and Enhanced Transparency Framework.

better integrate the constraints of its counterparts. Finally, an EBT assessment also provides a means for environmental ministries to enhance the value of their action by revealing the extent of the sectors and resources related to climate change.

For budget specialists, EBT makes it possible to better identify and monitor the performance of a very crosscutting policy that is otherwise difficult to grasp (see next section 2). Ministries of Finance are key players in national environmental strategies and as such, they should act in close cooperation with environmental ministries. Beyond the awareness of the variety and quantity of environmental expenditures, running an EBT allows the construction of a common culture and a transfer of skills from environmental

specialists to budget specialists through case-by-case discussions on the inclusion and/or rating of specific expenditures. This is especially true when the tagging includes harmful spending, since this is usually where most discussions arise (see "Identify adverse actions").

This collaboration between environment and budget teams is often institutionalized. For example, Indonesia sets up each year, as part of its ECB process, extended "reconciliation meetings" allowing the different actors to discuss the budget codes used, and to resolve particular cases that emerge. France relies on a small cross-cutting team (5-6 people), with very regular exchanges, for the same purpose.

"EBT is the Environment's foot in the door of budget discussions"

Ministry of Finance

Support capacity building in line ministries, state agencies and local administration

ETB allows line ministries to improve their knowledge of environmental issues and to participate to the collective effort. Indeed, these ministries (agriculture, education, justice, etc.) do not always have a perfect knowledge or awareness of the environmental impacts of all their actions, even though they are in the best position to offer new ideas and solutions in their scope of expertise and work; a sound understanding and ownership of environmental issues is thus crucial and will have the most sustainable impacts in these ministries. EBT can facilitate this ownership because it flows through the budget authority, which is an entry point to all line ministries, and it borrows the budget language shared across all the government (Bain, Nguyen, and Baboyan 2019, 43).

Some countries go further, using EBT to enforce operational changes by setting a series of performance targets or constraints on spending – even setting up exclusion clauses or conditions. For example, Indonesia has required that the share of current expenditure identified in the national CBT be reduced each year in favor of capital expenditure.

EBT can also be used in the discussions between central government and local authorities. A national-level standard provides a reference point for assessing transfers from central to local governments, which in turn raises the profile of environmental issues in local concerns. For example, the French stimulus plan provided an opportunity to require from departmental prefects that the credits granted should not finance infrastructure that was harmful to the environment, "in the sense of the national EBT" - which obliged grant applicants to position themselves on this criterion.

"The ultimate goal of the exercise is to foster ownership"

Institution internationale de développement

Note, however, that "ownership" by line ministries is more difficult to achieve when EBT design includes a highly centralized governance, as in the abovementioned case of France; in contrast, a decentralized approach such as Indonesia's requires significant resources for capacity building and coordination, but is better suited to streamline the concepts in line ministries (OECD 2021, 29).

2.2. Facilitate trade-offs and prioritization of expenses

KEY MESSAGES

EBT exercises facilitate decision-making through three main channels:

- they synthesize numerous and diffuse information, allowing an overall vision of the budget-environment nexus;
- they identify the additional cost related to pro-active environmental action, but also the amounts associated with measures whose environmental impact is not intended;
- they highlight contradictory efforts, such as a carbon tax alongside fossil fuel subsidies, and additional funding needs.

These qualities make them particularly effective in contexts of rapid decision making that do not follow an established trend, like the recent post-Covid stimulus packages.

Finally, EBTs can point out information or evaluation gaps and pave the way for further studies on the environmental effectiveness of expenditures and/or revenues, or the effectiveness of budget execution on environment-related measures.

2.2.1. Synthesize a large mass of diffuse information

The budget is one of the main tools of a government, but also one of the most complex. Public spending impacts almost every sector of the economy: energy, infrastructure, buildings, but also health, defense, security, research, education, social transfers, etc. Taxes, too, affect all sectors of the economy. The budget is at the center of national action, but it covers several thousand expenditures, and thus a quantity of information too large to be absorbed as a whole by the parliamentarians who vote on it (see Figure 1).

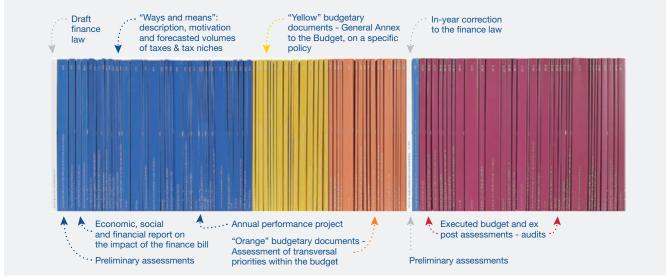
Yet environmental impacts are found in every budget program and many a budget item.

EBT consolidates this scattered information, allowing additional evaluation needs to be identified. For example, the CBT conducted by I4CE for France identified more than 250 actions related to the reduction of GHG emissions alone (Fetet, Perrier, and Postic 2019), and yet still pointed to a large number of gaps, such as the energy consumption of public buildings, or the environmental impact of research grants.

"Budget documentation is 20,000 pages every year! It's impossible to find your way in there without a dedicated census."

Ministry of Finance

FIGURE 1: FRANCE - BUDGET DOCUMENTATION FOR ONE YEAR



Source: Budget Department (Budget Department 2018) 4

The blue documents detail the provisional budget and its performance objectives; the yellow ones go into more detail, at the request of parliamentarians, on certain specific public policies; the orange ones evaluate cross-cutting themes (environment, gender, social inclusion, cities, etc.). Finally, the red ones evaluate ex post the actual expenditures and the achievement of objectives.

2.2.2. Facilitating trade-offs

An EBT report synthesizes four valuable kinds of information to facilitate budgetary trade-offs:

- Specific budget items that impact on environmental objectives, and their amount. Some measures are decided for reasons that have nothing to do with the environment, yet they do have environmental impacts; highlighting this provides additional information for the final spending (or tax) decision. EBT makes this information accessible in the simplest and most direct way.
- The size of the national budgetary effort devoted to environmental action on a specific dimension, such as reducing GHG emissions. If one is able to isolate the effort specifically dedicated to climate from expenditures that have only an "opportunity" co-benefit, but would have taken place anyway (see section 3.1.1), one has useful information to communicate to the general public (see section "The demand for transparency is also growing within civil society") or to international partners (see section "2.3. Facilitating access to international financing" below). Beyond external communication, EBT is also an important decision-making tool for allocating limited budget resources among multiple priorities.
- Conflicting efforts. Undoing with one hand what you do with the other is an extremely inefficient use of public money... But not always easy to identify in the absence of a summary document. For example, many countries have implemented a carbon tax in parallel with pre-existing

- subsidies to fossil fuels, sometimes impacting the same actors and sectors. Each measure has its own purpose and rationale, which are not necessarily environmental, but the fact remains that this superimposition can be incoherent from an environmental point of view; highlighting this fact makes it possible to search for more coherent "policy packages". This is especially true when several environmental dimensions are considered in the same assessment (see section 3.1.3).
- Additional financing needs. Almost all countries in the world now have long-term environmental targets, including at least some for climate change 5. These targets are most often set out in roadmaps, the implementation of which requires a certain level of dedicated financing, both public and private. Some exercises aim to quantify these needs precisely (Deep Decarbonization Pathways Project 2015; Standing Committee on Finance 2018; Climate Economics Institute et al. 2020); in cases where such a quantification of needs exists, an EBT makes it possible to complete the diagnosis by identifying the sectors where public spending is sufficient and those where additional efforts are needed. This work has been initiated in Mexico and Colombia, for example (DNP 2016; UNDP 2018a).

For example, Pakistan's Ministry of Water uses the national ECB for its own departmental planning (Bain, Nguyen, and Baboyan 2019). The technical departments of several French local governments (Fetet and Nicol 2020) have initiated reflections to change their practices after realizing the extent of climate-damaging spending within their area.

"I want to know how much I'm spending, and if I'm spending it right."

Ministry of Finance

BOX 1: THE STIMULUS PACKAGES, A CONTEXT VERY WELL SUITED TO THE USE OF EBTS

RECOVERY PLANS, A PRIVILEGED MOMENT FOR THE APPLICATION OF EBTS

Countries that have implemented an EBT in the context of post-Covid-19 recovery report that the effects of the exercise have been greater and more immediate than in "traditional" budgets. They offer three explanations for this:

- Emergency. EBT aggregates existing assessments (sometimes complex exercises themselves) in a synthetic, easy to understand, "ready to use" format. In a crisis context, this is an important asset.
- Fresh money. An annual budget contains a great deal of recurrent spending, which has been negotiated and evaluated in the past, and which is difficult to challenge in the short term. In particular, tax breaks granted for social or competitive reasons are very difficult to renegotiate. The new and additional expenditures discussed in a recovery plan do not affect acquired benefits and are therefore more easily discussed.

See for example the official UNFCCC website, https://www4.unfccc.int/sites/NDCStaging/Pages/All.aspx

· High expectations / visibility. In many countries, the pressure to "build back better" has translated into commitments to green recovery. This is the case in many European countries, and in Europe itself, where 30% of the budget and 37% of the support for Member States' recovery plans are conditional on demanding environmental criteria. Such a context carries both a high expectation of decision-makers, and room for easy-to-communicate messages. France's EBT was thus used to verify that the "zero brown spending" commitment in the national plan was kept.

Political pressure around recovery plans has also highlighted the limits of this obligation of results for an EBT: France has thus classified its State support to the automobile and aeronautics sectors as "neutral", on the basis that this support was conditional - even though said conditions were of debatable ambition, and non-binding anyway (Fetet and Postic 2020). The stronger the expectations or commitments, the more institutional safeguards are needed to guarantee the integrity of EBT and avoid drifting towards greenwashing (World Bank 2021).

> "That's where we had the most impact, we really weighed in on decisions in real time."

> > Ministry of the Environment

2.2.3. Highlighting the need for specific assessments

Finally, EBT serves as a starting point for in-depth assessments; by hihlighting environment-related volumes and possible inconsistencies, it explicitly points to evaluation gaps. These assessments can address several dimensions:

- The quality of the budget process itself: the execution rate 6 and the nature of expenditures inform on the quality of the budget process on the environment-related perimeter, paving the way for tradeoffs or improvements. For example, Nepal showed that climate-related ministries had lower budget execution rates than others, and took steps to correct this problem (Bain, Nguyen, and Baboyan 2019, 45); Indonesia's CBT led to a sharp decline in current spending in favor of investment in climate-related areas. In Mexico, on the other hand, wage spending (the majority) and investment spending (marginal) are blended in the national reports, a lack of information which national interviewees pointed out as a real flaw in budget reports.
- The environmental effectiveness of individual measures. For example, a subsidy for the purchase of clean vehicles only makes sense if it encourages vehicles that are compatible with the national decarbonization strategy, and not just better than the existing one; a subsidy to a particular industrial sector (e.g., steel, or construction) should comply with a number of conditions so as not to hinder climate action (e.g., support for certain products and practices only; commitment of the beneficiaries to internal emission reduction policies; etc.).

- The effectiveness of policy mixes, when many budget items impact the same audience, possibly with very different objectives. For example, energy consumption in buildings is often the subject of numerous subsidies (for low-income households, for renovation, for the competitiveness of small businesses, for the development of tourism, etc.) which require good coordination so as not to harm each other.
- The search for environmentally friendly alternatives to certain measures with a negative environmental impact. Fossil fuel subsidies, for example, are not put in place to harm the environment; their negative side effects can be mitigated by changing or replacing them with schemes that also achieve their original purpose, without climate side-effects. In Ecuador and France, EBT has been one of the bases for discussion of the withdrawal of some of these subsidies.

EBT makes it possible to see the big picture, and thus also to identify information and/or evaluation gaps.

The execution rate is the amount of a budgeted expenditure that was actually spent during the year.

2.3. Facilitating access to international financing

KEY MESSAGES

EBT can be a useful resource for facilitating a country's external financing on international markets or through bilateral/multilateral institutions, especially if domestic environmental resources are limited.

It highlights the quality of the projects supported, the rigor of the management, the national effort and potentially the climate risk incurred by the investments.

However, undertaking an EBT exercise primarily to access international funding puts the quality of the exercise at risk (temporal continuity, greenwashing), and therefore endanger its usefulness to the government itself.

EBT can be a useful resource to facilitate a country's external financing, whether on international markets (green bonds – see Box 2 below –, Article 6 of the Paris Agreement?) or via specific international financiers (Green Climate Fund, development banks, bilateral agreements, etc.). EBTs are actually often funded and/or implemented by development institutions such as the UNDP (BIOFIN Guatemala 2016), the IDB (Banco Interamericano de Desarrollo 2021), the World Bank (World Bank 2021) or the OECD (OECD 2021), which see the value of this information to their own strategy and activities. For example, the implementation of green budget markers in El Salvador (UNDP 2018b) was part of the country's accession to the Green Climate Fund.

- Depending on the format chosen (see section 1), an EBT report can highlight three crucial elements:
- The quality of the projects supported, and the contribution of the funder. See for example Figure 2 resulting from Indonesia's CBT: these results were used to support the country's Green Bond and Green Sukuk issuances. The framework provided by the Indonesian CBT allows for both ex ante selection of the most relevant projects (exact nature of the projects, source of funds, public contribution, nature of expenditure, etc.), and ex post reporting on their implementation.

- The effort made by the country: it is then necessary to use quantifications such as the one proposed by the OECD-DAC with the Rio Markers (see section 2.1.1) or the UNDP's "cost-benefit" approach (UNDP 2015), in order to isolate the activities that respond primarily to an environmental concern, from those for which environmental impacts are only a secondary effect from the point of view of the intention
- Climate risk (Pizarro et al. 2021, 5): some budget items and national projects are more sensitive to climate change and disaster. Identifying these measures refines the country's climate risk assessment, information sought by international donors.

It should be noted that funding for environmental priorities, such as allowed by EBT, can be very attractive when domestic resources allocated to the environment are limited. Several interviewees agree that ministries of the environment are particularly keen to launch pilots in low-income countries, when their technical expertise puts them in a privileged position to solicit international donors to carry out such studies, but their financial resources depend very heavily on international aid. The risk in this type of configuration is that the effort is dependent on a specific opportunity and is not sustained over time (see Box 5).

"Many countries are interested in the success factors of our Green Sukuk; our CBT is clearly one of them."

Ministry of Finance

⁷ Article 6 of the Paris Agreement offers the opportunity for voluntary collaboration among Parties to enable greater ambition.

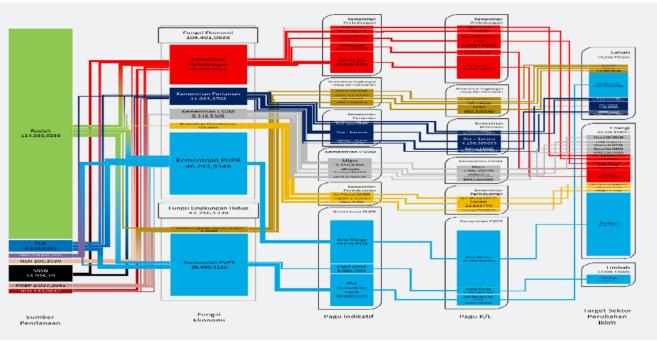


FIGURE 2: INDONESIA: DISAGGREGATION OF THE MEASURES IDENTIFIED IN THE CBT (2017)

Source: Indonesian government

BOX 2: EBTS AND GREEN BONDS

EBTS AND GREEN BONDS

From non-existent in 2006, the green bond market represented almost \$260 billion in 2019 (Climate Bonds Initiative 2019); sovereign green bonds piled up to more than 50 billion since 2017 (Climate Bonds Initiative 2021), in contexts as diverse as France (26.5 billion dollars since January 2017), Chile (7.4 billion dollars since June 2019) or Indonesia (first Green Sukuk in February 2018, first Green Bond in July 2018). This resource has significant appeal for many countries, with the dual benefit of communicating the use of debt products and diversifying a country's investor base. EBT then offers prime support for the issuance of such bonds, facilitating the identification of green budget lines that can be included as part of the reporting required for the issuance of a green bond.

However, there are several points of attention to be noted, both from the feedback from our interviews and from the existing literature:

- As mentioned above and detailed in the World Bank's review of experiences (World Bank 2021), a strong financial motivation implies a high risk of greenwashing, voluntary or not; important safeguards must then be put in place to preserve and guarantee the integrity of EBT.
- . The development of an EBT for cyclical or even opportunistic reasons can also be very detrimental to the development of a more sustainable exercise, and here again, failure to repeat the exercise over time greatly reduces its potential benefits. Since the first step of such an exercise is costly, setting it up on an ad hoc basis risks wasting a lot of resources (Box 5).
- Finally, several actors pointed out that the projects financed would have been financed by another type of debt if the green bonds had not been issued; this does not constitute a solid basis for legitimizing the relevance of EBT in the national budget construction process.

In summary, it seems that while reporting on sovereign green bond issuance is an interesting outcome for an EBT report, it is inappropriate or even counterproductive to make it the primary reason for conducting this analysis.

> "Everywhere it is the same: they decide on a budget, and then they finance it. Green Bonds do not change anything to that."

> > International development institution

3. "No pain, no gain": Design requirements for efficient environmental budget tagging

Most of the benefits listed in the previous chapter come with conditions for conducting the evaluation. Here, the recommendations all point in the same direction: to be useful, EBT must have ambitious objectives and the means to achieve them. These success factors can be broken down into two categories:

- Methodological criteria: to be effective, EBT must encompass a broad budget perimeter, evaluate not only expenditures but also taxes, take into account the impacts of measures and not only their intention, identify measures that hinder or harm environmental action... In short, it must aim to evaluate the coherence of the budget with national objectives, and not only the environmental effort. These elements, discussed below, are further developed in the methodological Annex to this study: "Green Budget processes - Structuring methodological factors".
- Process criteria: the full effects of EBT are felt under two express conditions:
 - excellent national ownership: EBT must first and foremost respond to a context-specific need, clearly

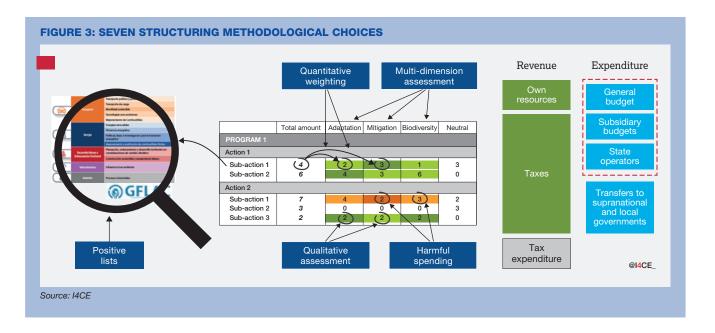
- identified upstream, by using internal resources. It must also fit into the existing administrative culture and processes, in coherence with other national green budgeting tools;
- a long-term approach: EBT should not be a onetime exercise, but an effort sustained over time. This is of course necessary to measure the improvement or deterioration of indicators and to correct the national trajectory in "real time"; but it is also important to give certain processes time to take hold. In particular, it is by repeating the exercise over time that one will go beyond considering only quantitative amounts of expenses/ taxes, and highlight specific measures or packages for further assessment of their environmental effectiveness; it is also over time that discussions, assimilation and capacity building of the various actors can be established - and it is through these fundamental changes that EBT has the most impact.

3.1. Methodological ambition: key choices

KEY MESSAGES

A small number of key technical and/or methodological choices strongly condition the resources required, the scope of the results, and the general spirit around a given EBT assessment. They are summarized in Figure 3. Identifying them allows one to correctly size one's EBT upstream.

- Limiting the assessment to explicit environmental effort should generally be avoided, as the information generated is too restrictive for most internal uses. In particular, it is important to include in the analysis measures that are harmful to the environment
- "Optimal" EBT includes expenditures and revenues, on the general budget and all its annexes (social security, public operators, possibly local authorities), at the highest possible level of disaggregation. Any reduction from this reference perimeter reduces the interest of the exercise and must be carefully considered
- EBT should be based on a taxonomy of environment-related actions; developing a national taxonomy requires additional resources but allows national specificities and objectives to be taken into account
- Existing EBTs consider up to 6 environmental dimensions simultaneously. For this additional effort to be useful, it is important to rate these expenditures in parallel for each dimension, and to avoid blending categories, such as climate mitigation and adaptation.



3.1.1. Measuring effort - a pitfall to avoid

The first generation of EBTs focused more on identifying national effort, identifying the volume of expenditures committed by the government to environmental action (usually, on climate action) (see Box 5 and World Bank 2021). These exercises were primarily motivated by transparency and access to international financing (see section 2.3).

More recent exercises (France, Indonesia, Ireland) show the interest of going beyond this logic and considering the coherence of expenditures with national objectives, thus moving from a tool mostly used for external communication (accountability, access to financing) to an internal performance process.

"We know the outcome in advance, 'We need more money'. It's limited!"

International development institution

This paradigm shift is reflected primarily in two methodological choices: tagging budget measures on the basis of their impact rather than their intent, and tagging measures that are counterproductive to the national environmental effort.

Consider the function, not only the intent

Going through an EBT involves qualifying the environmental relevance of budget measures. This qualification can be very simple (a single category, "has an impact") or more elaborate (multiple levels of positive impact, inclusion of negative impacts, see Figure 4).

Historically, many assessments have relied on the policymaker's intent to qualify the greenness of a budget measure: many use the Rio Marker classification proposed by the OECD (OECD DAC 2016), which identifies three categories of expenditures: those with a primary environmental objective, those with a secondary environmental objective, and those with no identified environmental objective. This practice has the advantage of simplicity: for example, automatic semantic searches can be performed on budget narratives; entire programs,

such as the budget of the Ministry of the Environment, can be classified at once. It also makes it possible to effectively identify the public effort in favor of the environment.

However, such an approach excludes a large number of budget items, potentially with high environmental impact, if environmental action is not among their stated objectives. As an example, the exercise conducted by I4CE for France showed that 75% of taxes with climate impacts do not have climate objectives, and that climate-harmful (hopefully, unintendedly so) expenditures added up to similar amounts as positive impact spending (Fetet, Perrier, and Postic 2019).

Existing reviews therefore emphasize the importance of categorizing measures according to their expected impact or outcome, not just the presence or absence of an environmental objective, which "does not necessarily allow for the construction of categories that are tailored to the interest of policymakers" (Pizarro et al. 2021). This does not precludes highlighting the items that have both environmental impact, and active intentions behind them, as shown on Figure 4 below.

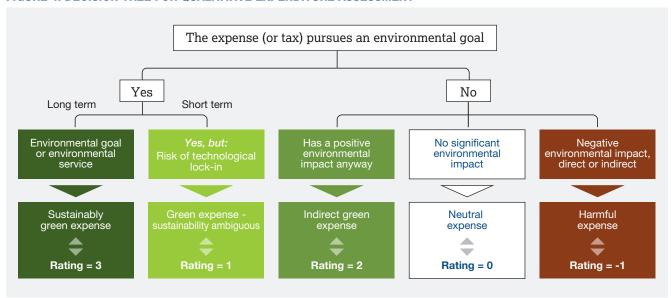


FIGURE 4: DECISION TREE FOR QUALITATIVE EXPENDITURE ASSESSMENT

Source: (Alexandre et al. 2019, 27)

Three common practices have been identified to qualify budget items according to their expected environmental impact:

- In relation to the existing situation: a measure is green if it improves, even marginally, the existing situation;
- · Against an international catalog of good practices, such as the taxonomy of the European Union (EU Technical Expert Group for Sustainable Finance 2020), the Multilateral Development Banks (African Development Bank et al. 2019), or the NGO GFLAC (DNP 2016);
- In relation to a national strategy (see Box 3);

The last two options are highly preferable: true, they imply additional work (expert judgment when the national strategy is not precise enough, quantitative modeling to isolate expected benefits), yet if this work is not carried out, there is a risk of classifying as "positive" measures that, by improving the existing situation with very limited ambition, represent a waste of resources in relation to the achievement of national objectives. This is the case, for example, in France with the state support scheme for purchasing clean cars, which is considered to be green, whereas this schemes support a number of new vehicles that are more efficient than the average fleet but incompatible with national and European climate strategies.

In order to use the results of the tagging for decision making, it is therefore much more efficient to describe the environmental impact of budget items in terms of low-carbon objectives, and not only in comparison with the existing situation. This evaluation must also integrate a temporal dimension (over what time horizon is the impact measured? Short? Long? Both?8), even though this increases the data collection challenge.

For example, natural gas may be an attractive alternative to other fossil fuels for a time, but investing in liquefied natural gas terminals locks the country into a dependence on fossil fuels for decades.

BOX 3: THE VALUE OF A NATIONAL TAXONOMY

INTEREST OF A NATIONAL TAXONOMY

The environmental assessment of a budget is necessarily based on a reference framework that can range from a simple list of environmentally relevant measures to a complete taxonomy (or even several parallel taxonomies) reclassifying the budget measures according to criteria that differ from the original budget classification. This frame of reference responds to a twofold desire:

- · Identify environmental measures,
- Support the analysis of these measures.

To this end, administrations may rely more or less heavily on international reference taxonomies, adapting them to a greater or lesser extent to their national framework, or develop their own taxonomy ex nihilo. Table 1 lists some taxonomies developed, with a climate focus.

TABLE 1: INTERNATIONAL TAXONOMIES FOR CLIMATE ACTIVITIES

Reference document	Author		
Taxonomy: Final report of the Technical Expert Group on Sustainable Finance	EU Technical Expert Group		
Handbook on the OECD-DAC Climate Markers	OECD-DAC		
MDB-IDFC Common Principles on climate change mitigation and adaptation	MDB, IDFC		
Standard CPEIR Typology (see Annex 8)	UNDP		
Classification of Environmental Activities	Eurostat		
Climate Bonds Initiative - Sector Criteria	CBI, 2020		
GFLAC Methodology Guide	GFLAC		
IPCC Guidance for National GHG Inventories	IPCC		
IPCC Guidance on Risk Management and Adaptation to Climate Change	IPCC		
Framework for the Development of Environmental Statistics	UN-Statistical Division		

Using international lists and standards has several advantages: it provides an already developed and proven framework, it allows for cross-country comparisons, and guarantees certain temporal stability, allowing for time series analyses (international frameworks often prove to be more stable than national definitions). Finally, an EBT that is compatible with the taxonomy used by an international funder (typically the MDB-IDFC taxonomy) facilitates the tracking of grants, and thus facilitates accessing these grants (Bain, Nguyen, and Baboyan 2019, 24; OECD 2021, 35).

However, international classifications are not necessarily fully compatible with national statistical systems (see section 3.2.2), and do not take into account national circumstances (strategic priorities, budget process, degree of centralization). Yet these national circumstances are the yardstick against which budgetary and fiscal choices can be assessed, and the common thread around which to build a consistent budget. And they can easily be at odds with international standards: for example, there is absolutely no international consensus on the role of gas or nuclear power in a long-term environmental strategy. Given the maturity of national strategies, finding an international consensus would mean sacrificing a large part of the ambitions of each country. Even when using international standards as a starting basis, EBTs must therefore be adapted to each context to allow for relevant analyses (Pizarro et al. 2021).

> "If we just use other countries' taxonomies to rate our own expenditures, we will get some of our priorities guite wrong."

Ministry of Finance

It is always possible to add additional "layers of interpretation" once environment-related measures have been identified, allowing each actor to build their own understanding on how environmental action fares in budget tools, or even allowing to consider other priorities like characterization of social or gender impacts (Mukherjee et al. 2014). But each increase in the complexity of the taxonomy used increases the complexity of the overall assessment, which can strain the available resources and jeopardize the whole EBT; this should be well considered upstream (Bain, Nguyen, and Baboyan 2019, 16).

The UNFCCC Standing Committee Finance's biennial assessment of climate finance flows (Standing Committee on Finance 2018), or the World Bank's review of EBT experiences (World Bank 2021), track national choices against international lists.

Identify adverse actions

It is crucial to identify the measures that move the country away from its environmental goals, or simply prevent it from achieving them. Often these expenditures are far from anecdotal: the CBT conducted by I4CE for the French budget in 2019 identified €17 billion negative expenditures, almost half of total climate-related expenditures (Fetet, Perrier, and Postic 2019). The assessment can then no longer be limited to sectors whose (positive) environmental effect is known in advance.

"No expenditure is intended to harm the environment."

International development institution

This information is necessary for two reasons:

- It supports the improvement of the overall performance of the fiscal and budgetary tool, by highlighting room for maneuver:
 - measures that are harmful to the environment are rarely decided upon with the aim of harming it; adaptations can be envisaged that greatly improve their environmental impact while preserving their initial objective (social or economic);
 - reducing a negative environmental expenditure has the dual effect of directly freeing budgetary resources and avoiding consuming other resources to make up for adverse side effects;
 - in the case of climate action, compliance with the Paris Agreement requires achieving "a global balance between anthropogenic emissions and removals of greenhouse gases": this balance cannot be achieved by considering only those expenditures that reduce emissions and ignoring those that contribute to increasing them.
- It encourages action, more so than "positive" tagging. Experiments conducted in France at the national (French Republic 2020) and local levels 9 are conclusive:
 - at the national level, the environmental assessment of the post-Covid national recovery plan, coupled with the commitment to a green recovery, has resulted in the abandonment of investments in new roads¹⁰;
 - at the local level, the feedbacks agree on the fact that it is essentially the "brown" expenses, and the negative perceptions associated, that pushed the technical departments to take ownership of the issues and propose alternatives.

However, several points should draw attention:

- There is little interest in comparing "green" and "brown" spending:
 - the sectors concerned and the type of actions supported by public spending can be very different between "positive" and "negative" spending;

- some harmful expenditures cannot be avoided, in the short or long term (for example, military or health expenditures). It is then a matter of identifying them proving that the emissions cannot be reduced, and matching them with adequate compensation.
- The stronger communicational impact of negative spending is an important motivator for change, but it is also a stronger incentive for greenwashing (World Bank 2021); in the French case, the "zero brown" commitment has, for example, led the government to classify as "neutral", in a questionable way, a series of aids to the automobile and air transport sectors, conditional on non-binding¹¹ environmental commitments.

Guides and reviews produced by the OECD (OECD 2021), the World Bank (World Bank 2021), and the UNDP (Bain, Nguyen, and Baboyan 2019) all point out that although negative measures were historically given little attention, this information is fundamental to the relevance of EBT exercises.

3.1.2. Fine-grained, readable and comprehensive

The budget data used in EBT must meet three basic criteria:

- High granularity: working at the finest level of detail limits the use of expenditure weighting techniques;
- All types of budgetary and fiscal measures: the exercise must consider not only expenditures, but also taxes and tax niches;
- Public operators, State agencies and possibly Stateowned enterprises: in order to account for a significant part of public action, EBT must take into account not only the main budget and its annexes, but also, ideally, the budgets of public operators and local governments wherever the State has a say.

(i) Limit the use of weighting

Many EBTs use weighting systems, which are assumptions about the percentage that is environment-relevant in each budget item identified.

https://www.i4ce.org/evaluation-climat-des-budgets-des-collectivites-entretiens-avec/

¹⁰ Source: interviews with the administration

And more generally, to exclude from the scope of the unfavorable tax expenditures (aviation, diesel) which were nevertheless identified by the first census provided by the Inspectorate-General for Finance https://www.i4ce.org/budget-vert-france-climat/

TABLE 2: CPEIR CLIMATE RELEVANCE INDEX

Relevance	Weights	Rationale
High	More than 75%	Clear primary objective of delivering specific outcomes that improve climate resilience or contribute to mitigation
Medium	Between 50% - 74%	Either (i) secondary objectives related to building climate resilience or contributing to mitigation, or (ii) mixed programmes with a range of activities that are no easily separated but include at least some that promote climate resilience or mitigation
Low	Between 25%-49%	Activities that display attributes where indirect adaptation and mitigation benefits may arise
Marginal	Less than 25%	Activities that have only very indirect and theoretical links to climate resilience

Source: (Bain, Nguyen, et Baboyan 2019, 87)

These coefficients are often used to compensate for the lack of information and human resources to conduct a detailed EBT (OECD 2021). However, they often present a triple issue:

- They add a layer of complexity and even subjectivity to the exercise. The application of the weighting coefficient presupposes that operators have very precise instructions or the competence to make an informed judgment (World Bank 2021) on the environmental share of marked expenditures. If this weighting is applied upstream in the data collection process (e.g. through questionnaires to the decentralized administrations), information about the original data and the reasons for the weighting is lost (see section 3.2).
- They often do little more than duplicating qualitative information in a quantitative form: for example, the climate relevance index (see Table 2) assigns coefficients of 75-100% to high climate relevance actions, 50-75% to medium relevance actions, etc.
- They have more to do with effort measurement than with budgetary performance assessment: for example, a weighting approach could consider that only a fraction of a building renovation expense corresponds to the "climate compatibility additional cost", while actually the whole expense is compatible with national objectives as long as the final result is a low-emission building. We mentioned above (see section 3.1.1) that this notion of effort, although useful for certain specific uses, limits the scope and possible applications of EBT.

For these reasons, using weighting coefficients often leads to a significant over- or underestimation of the environmental impact of a budget.

It is therefore preferable, when collecting data, to limit their use as much as possible, using the most disaggregated data possible given the resources (time, information, skills) available, even if this means sacrificing the review of certain sectors (Box 5). If the level of disaggregation is sufficient, a binary marking (aligned/nonaligned) better reflects the notion of alignment of individual expenditures with a national roadmap.

(ii) A broad scope: taxes, tax niches, public operators

We consider here three¹² broad categories of tax and budget measures:

- Taxes,
- Budgetary expenditures, which are the actual expenditures of the State (subsidies, investments, salaries),
- · Tax expenditures, tax niches or exemptions, which are taxes that the State agrees not to levy (or to levy at a reduced rate) for certain categories of consumers.

Both the OECD (OECD 2021, 51) and the World Bank (World Bank 2021, 39) stress that the inclusion of taxes and tax expenditures in the scope of a EBT greatly increases the quality of the analysis. However, EBTs have historically focused almost exclusively on expenditures. Two recent assessments carried out for France by the French administration (Alexandre et al. 2019) and by I4CE (Fetet, Perrier, and Postic 2019) are, to our knowledge, the only two exercises that have considered this broader scope. The lessons to be learned from this first experience are multiple and confirm the position of the World Bank and the OECD:

"The goal is transparency and the big picture.
If you don't have the taxes, you're missing 50% of the picture."

International development institution

We therefore exclude others: trade revenues, transfers e.g. from Europe, pseudo expenditures such as guarantees, etc. We also exclude "structural" expenditures, in particular interest on the debt.

Not only do tax revenues account for much more money than budget expenditures among environmental impact measures, but almost all environment-related taxes have a positive impact on the environment. As an example (see Figure 5 below), for the French case climate-related budget expenditures are equivalent to tax expenditures, and almost half as large as revenues (€23 bn, €22 bn, and €53 bn respectively) (Fetet, Perrier, and Postic 2019).

The environmental assessment of these taxes often deserves special attention. They have the dual advantage of raising public resources and encouraging more virtuous behavior 13; but most of them were not created with an environmental purpose, and their environmental impact can be improved without undermining their other benefits. Identifying these taxes in a EBT not only highlights an overlooked facet of public climate action, but also helps to better identify the need for an evaluation of the effectiveness of certain taxes.

For example, in France, only 25% of climate-related taxes actually incorporate it as a goal; those concerning private cars are 85% about variable costs (gasoline, insurance), and do not effectively guide investment. (Fetet, Perrier, and Postic 2019).

Moreover, climate-related taxes are the subject of particular public attention, as the 2018 yellow vest movement in France or the 2019 Ecuadorian protests have again recently proven. As such, it is important to be able to provide the public with comprehensive information on these measures.

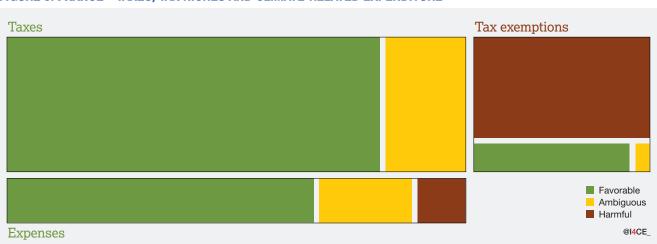


FIGURE 5: FRANCE - TAXES, TAX NICHES AND CLIMATE-RELATED EXPENDITURE

Source: Authors, based on (Fetet, Perrier, and Postic 2019)

Climate-related tax niches are most often subsidies to fossil fuels, which are highly damaging to the environment. Highlighting them allows decision-makers to study other ways to achieve the same economic and social outcomes, without negative side effects for the environment (see section "Identify adverse actions").

Finally, it is recommended (OECD 2021, 20) that the scope of the analysis should include annex budgets and public operators, where possible, so as not to limit the vision to the main budget (especially in highly decentralized countries). However, the feedback and interviews conducted for this report indicate that this extension is sometimes too great a challenge in terms of data collection, and should be left aside in the first stage of the process, at the risk of not being able to renew it (Box 5).

3.1.3. Run separate assessments for each environmental dimension considered

According to UNDP (Bain, Nguyen, and Baboyan 2019, 24) and OECD (OECD 2021, 45), a climate budget assessment should at a minimum consider the "adaptation" and "mitigation" dimensions of public action; past exercises have more broadly addressed three strands of climate action (mitigation, adaptation, risk and disaster management) and a "biodiversity" dimension (primarily through the BIOFIN project (BIOFIN Guatemala 2018)).

Some recent budget assessments go beyond climate action and integrate a broader vision of the environment, even of development:

- Mexico assesses its budget's contribution to the overall SDGs (Estados Unidos Mexicanos 2019);
- New Zealand publishes a "well-being assessment" that includes a series of national indicators (New Zealand Treasury 2019);

¹³ This double effect has been widely documented for "carbon" taxes, and more generally for all so-called "Pigouvian" taxes.

- France has adopted the six environmental dimensions of the European taxonomy of sustainable activities (EU Technical Expert Group for Sustainable Finance 2020): mitigation, adaptation and disaster prevention, water resource management, waste and technological risk
- management, air and soil pollution, and biodiversity (see Figure 6);
- · Iceland is simultaneously addressing the gender and SDG assessments of its budget (OECD 2021).

"Our assessment doesn't separate adaptation and mitigation, this is of very little use."

Ministry of the Environment

A major interest of this multidimensional approach is to highlight the points of convergence and the tradeoffs between several environmental priorities in order to optimize decisions. In this case, it is imperative to be able to compare the impacts of a measure on several environmental dimensions: it may have positive consequences for mitigation and negative consequences in terms of waste, as is the case for nuclear investments, for example.

It is then desirable, as much as possible, to evaluate the different environmental impacts separately for each budget item. In the past, some CBTs used to choose between "adaptation" or "mitigation" when tagging a climate-relevant item, even if some cases included a "both" category as well (DNP 2016; Pacific Islands Forum Secretariat 2019); this practice cannot be sustained when the number of environmental dimensions rated increases. A budget items cannot be "split" between six exclusive environmental dimensions when it impacts them all. Separate assessments also allow each assessment guidelines to evolve independently; for example, a revision of the "mitigation" rating of a measure does not necessarily affect its rating on the "adaptation" dimension. Figure 6 below provides an example of a six-dimensional environmental assessment.

FIGURE 6. ASSESSMENT OF MULTIPLE ENVIRONMENTAL DIMENSIONS

		€	1		((
		Expenditure 2019 (€)	Climate change mitigation	Adaptation an risk manage- ment	Water resources	Waste and techno- logical risks	Air and ground pollution	Biodiversity and protection of natural areas
Action 04: Road maintenace		317,718,400	0	0	0	0	0	0
Action 41: Rail transportation		2,431,309,731	2	0	-1	-1	1	-1
Action 42: Waterways	VNF - State waterway operator	251,415,663	2	2	2	0	2	0
Action 43: Large maritime ports	GPM - Marseille Harbour	99,124,836	1	0	0	0	1	0
Action 43: Ports (support of inland navigation)	Support for inland navigation	650,000	2	2	2	0	2	0
Action 44: Public transport		22,551,745	2	0	0	0	2	0
Action 45: Combined transport		32,109,039	3	0	0	0	2	0
Action 47: Supports services		17,801,600	0	0	0	0	0	0
Action 50: Inland transport		5,641,831	0	0	0	0	0	0
Action 52: Air transport		34,907,000	-1	-1	0	0	-1	0

Source: Alexandre et al. 2019

3.2. Ensuring national ownership

KEY MESSAGES

The value of EBT depends heavily on it being sustained over time, both to enable the administrations to increase their competence and because tracking progress is more useful to budget management than a single snapshot. Achieving this time consistency requires to place the exercise at the heart of national performance processes, and to have it carried out internally.

This entails:

- Including EBT as a monitoring tool in a broader national strategy,
- Utilizing resources from existing performance processes,
- Relying primarily on the administration itself to carry out the evaluation (and in particular the Finance ministry).

"Many EBTs are useless for national strategies because they are not consistent over time."

International development institution

3.2.1. Answering a national question...

It is fundamental that the use of EBT results is clear from the start, and serves a broader national environmental strategy. For example, Costa Rica's markers (under construction) will aim to monitor the implementation of the national decarbonization (Gobierno de Costa Rica 2019),

public investment (Mideplan 2018), and adaptation (Gobierno de Costa Rica 2018) strategies; France's EBT helped to ensure that the post-Covid recovery package did not include environmentally negative measures. The UNDP guide (Bain, Nguyen, and Baboyan 2019, p.13) provides a catalog of possible motivations, and the actors most involved, for implementing EBT.

"Many did it on a budget surplus, without any long-term thoughts. That makes for reports that stay on a shelf, and a lot of wasted money."

International development institution

A purposeless evaluation can lead to a significant waste of public resources. Several international organizations (IDB, PEFA, World Bank, UNDP) have warned that some EBTs are undertaken more because funds are available than to feed into a previously identified internal strategy. Such evaluations are rarely renewed, and their results even more rarely properly exploited, which greatly limits their impact.

Furthermore, starting with a clear target allows to:

- Structure the results and guide their analysis:
 - The scope of the study, the measures to track and their rating may vary according to the question asked, even within the same country: it is not equivalent to say that an expenditure does not harm the environment, or that it is consistent with the national decarbonization plan. The European criteria for identifying green spending in one's own budget differ from those established to
- validate the environmental share of stimulus packages in Member States; the criteria of the French EBT (French Republic 2020) are not those used for reporting on national green bonds.
- Progress (or room for progress) can only be measured against a target. Without a reference point, it is difficult to make sense of the mass of information that EBT produces. Without proper structure, the results will be too difficult to use and easily discarded (Pizarro et al. 2021). If the assessment supports the implementation of a national trajectory, it can be structured for that purpose from the outset, directly drawing from the categories of the national roadmap.
- Facilitate political support and communication:
 - EBT depends on high-level political support to ensure that it runs smoothly, as it requires significant inter-

ministerial coordination (see section "An opportunity for discussion between Budget and Environment"). It must therefore necessarily support a well-identified, pre-existing national priority. For example, Mexico's environmental budgeting effort is based not on national climate goals, but on efforts toward a sustainable budget aligned with the 2030 Agenda.

- A clear objective that is adapted to the national context facilitates communication to a wider audience: as we saw earlier (see section 2.1.1), one of the main motivations for EBT is to respond to a demand for transparency on the part of various actors (citizens, NGOs, parliamentarians). For the results to be accessible to these audiences, the assessment must be clearly linked to explicit national objectives.

3.2.2. ... as part of a national performance process...

It is important that EBT fit as well as possible into the existing budget process for two main reasons:

- the existing processes condition the initial data available (quality, coverage, format);
- the performance and budget construction process in place determine the optimal EBT design, in terms of the impact of its results.

Adapting to the existing process can be broken down into two components: fitting to existing formats, and adapting to the calendar and relevant actors.

Input-wise, design options should aim to make the most of existing data. The choice of the type of data to be analyzed (finance bill, budget execution, multi-year plans) depends on their ease of use, but also on the entry point sought in the budget cycle (see next paragraph, "adapting to the agenda"). It is important to take into account the existing structure of the budget classification, both for reasons of legitimacy and readability (relying on official data) and for operational reasons (facilitating automation, allowing decentralization). For example, Ecuador's guidance for the classification of expenditures was designed to be implemented by decentralized entities, using a simplified code and guidance questionnaires (Gobierno de Ecuador 2017).

Regarding outputs, the processes and structures in place dictate the adequate format in order to maximize the impact of EBT reports. With three main motivations:

- Technical possibilities for reusing the results. The IDB emphasizes the importance of connecting national EBTs to international statistical systems to allow comparison of results over time, and across countries (Pizarro et al. 2021). This is an important prerequisite for measuring state environmental performance.
- Policy relevance of the deliverables, and how they relate to other evaluation tools (see Box 4). It is important to identify the format that is most likely to bring about change in a given context. Depending on the country, EBT outputs may take the form of a dedicated parliamentary

report (French Republic 2020), a wide audience publication (Freedom Forum 2019), an annex to the draft finance bill (Estados Unidos Mexicanos 2020)... UNDP (Bain, Nguyen, and Baboyan 2019) traces some of the most relevant formats according to national objectives and actors, and this point is further detailed in section 3.3.2).

Feasibility. The effort must be well adapted to the expected impact: producing results that compatible with various databases may not always be worth the extra effort. The French EBT, for example, is not currently coded in the national statistical system, in order to preserve its flexibility (it is easier to work on an independent Excel file than to modify the automatic codes of the entire national financial information system). It is, however, based entirely on the published draft finance bill.

The design of an EBT assessment should consider the agenda of the national budget process to maximize its impact on decision making. It can feed into

- The preliminary budget preparation phase: this is generally the recommendation of the OECD (OECD 2021), considering that this is the stage where administrations need the most information and are most flexible in their decisions.
- The discussion of the draft finance bill in Parliament: this is a moment of greater media exposure, and depending on the country, the Parliament may have considerable leeway to amend the draft budget
- The budget performance evaluation phase (execution reports, audit documents). This ex-post evaluation is particularly relevant when the executed budget differs greatly from the one that is voted. It can also feed into the preliminary phase of preparing the budget for the following year. Many interviewees consider that this is the most effective option in the absence of a wellestablished performance process, but point out a limitation: in some countries, audit reports are not available for two years. This time lag makes it difficult to use them as a basis for budget management.

Of course, EBT is ideally conducted on these three types of documents, to feed almost continuously into the budget process (OECD 2021; World Bank 2021)... But in practice, one must take into account the resources available to conduct the analysis, and also the availability of the interlocutors to absorb the results and their implications (see section 3.3.2).

"You have to work with what you have, even if the quality isn't there. You are not going to revolutionize an entire budget process."

Ministry of Finance

FIGURE 7: USING ERT RESULTS AT DIFFERENT STAGES OF THE BUDGET PROCESS



Source: (OECD 2021, 40)

Finally, it is important to identify from the outset who will be the main audience for the results, according to criteria specific to each country. These interlocutors (see section 2.2.1) can be technical ministries, specific offices of the Ministry of Finance or Environment,

parliamentarians, the executive, civil society, etc. This key audience must be regularly reconsidered, to adapt to changes in the political context. Here again, the aim is to fit into a specific environment as well as possible, not to apply a one-size-fits-all solution to very different contexts.

BOX 4: EBT AND OTHER GREEN BUDGETING TOOLS

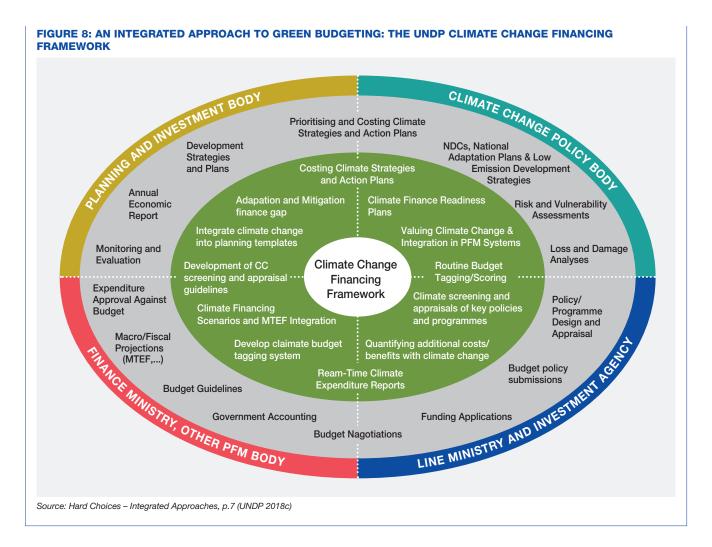
EBT AND OTHER GREEN BUDGETING TOOLS

The toolbox of so-called "green budgeting" practices goes well beyond environmental budget tagging.

Environmental budgeting tools can be classified into 4 categories:

- Plans and strategies: these are the fundamental documents that provide the reference for action and evaluation. This category includes national long-term objectives and their translation into international commitments; long-, medium-, and short-term objectives, both general and sectoral, and the associated roadmaps.
- Technical assessment guidelines: these are all the guidelines that set the ground for identifying, appraising, highlighting environmental action. They include environmental provisions in national investment, project appraisal, procurement, carbon reference values, etc. These documents, which must reflect national objectives and trajectories, may be adapted from international benchmarks.
- Analytical tools: these are the methodologies that will ultimately support decision making. These include impact assessments, cost-benefit and cost-effectiveness analyses, climate-related fiscal risk assessments, etc.
- Final decisions: these are the actual measures: purchases, investments, carbon pricing or, more broadly, tax reform, etc.

To effectively support decision-making that is consistent with national goals and means, EBT must rely on some of these tools (strategies, evaluation frameworks) and coexist with others (cost-benefit analysis, spending charters, guardian values). Several international actors propose comprehensive frameworks that integrate several green budgeting tools (Nicol and Park 2021; UNDP 2018c; PEFA 2020). One example is UNDP's Climate Change Financing Framework, summarized in Figure 8, and implemented for example in Pakistan (Government of Pakistan 2017) or Nepal (Government of Nepal 2017).



3.2.3. ... by relying on internal resources

The division of roles and responsibilities for the implementation of EBT is a fundamental topic. It has been addressed by all of the recent major publications on the issue (Bain, Nguyen, and Baboyan 2019; OECD 2021; World Bank 2021; Banco Interamericano de Desarrollo 2021). We therefore refer the reader to these publications for more details on possible concrete allocations, to focus here on three key elements that should underpin the mindset of this allocation:

It is crucial that the tagging is carried out internally, with implication from the Budget Department.

· First, because the acculturation of administrations to environmental issues is one of the primary benefits of EBT, particularly that of budget authorities (see section 2.1.2). However, acculturation is achieved through engaging actors, not merely giving them oversight on the process and results. Many interviews confirm that while external consultants can provide useful expertise in the early stages of EBT, it is does not serve the impact and continuity of the exercise to delegate the implementation of tagging (see Box 5).

- · Second, because budget authorities are very often in the best position, by far, to support the implementation of the exercise and to aggregate the necessary data, if only because they hold the purse strings (OECD 2021), and most of the financial information systems already in place.
- Beyond budget authorities, environmental specialists and line ministries are also essential for the technical expertise they possess (see section 2.1.2), and other institutions can be mobilized, including planning departments, depending on the specific country context (see Table 3); but internal resources should still be mobilized first.

TABLE 3. ROLES AND RESPONSIBILITIES FOR THE GREEN BUDGTET TAGGING PROCESS - SOME EXAMPLES

		CBT dev	elopment	CBT implementation			
País	Custodio de la EAP	Basis for identifying CC activities	Tagging procedure design	Tagging	Validation	Reporting	
Bangladesh	MOF	National policy	MOF	MOF/ line ministries	-	MOF	
Ghana	MOF	Terminology list	MOF	MOF/ line ministries	MOF/CCPB	ССРВ	
Indonesia	MOF	National policy	MOF	Line ministries	MOF	MOF	
Kenya	Treasury	CPEBR	Treasury	MOF/ line ministries	MOF/ inter-ministerial coordination committee	ССРВ	
Nepal	Planning body	CPEIR	Working group led by Planning body	Line ministries	MOF/ inter-ministerial coordination committee	MOF	
Pakistan	MOF/CGA/ CCPB	CPEIR	MOF	CC Exp'ture Tracking and Monitoring Committee	ССРВ	MOF/CCPB	
Philippines	DBM/CCPB	National CC policy	DBM/CCPB	Line ministries	ССРВ	Budget department	
France	MOF/CCPB	National policy	MOF	MOF/ line ministries	MOF/ inter-ministerial coordination committee	MOF	

Source : (Bain, Nguyen, et Baboyan 2019, 36)

"The Ministry of Finance snatching it from us was the best thing that could happen to our EBT."

Ministry of Environment

We can separate the topics of identification, qualification, and complementary analyses-both over time and across stakeholders.

- The first step in EBT is to identify budget lines/taxes that have an impact on the environment. This step builds on existing strategies and taxonomies (see Box 4), and consistency over time is essential for the quality of the analyses (see previous section 3.2.2).
- The second step is the analytical processing of identified budget items. This step can include rating them in different shades of green and brown (see Figure 5), applying

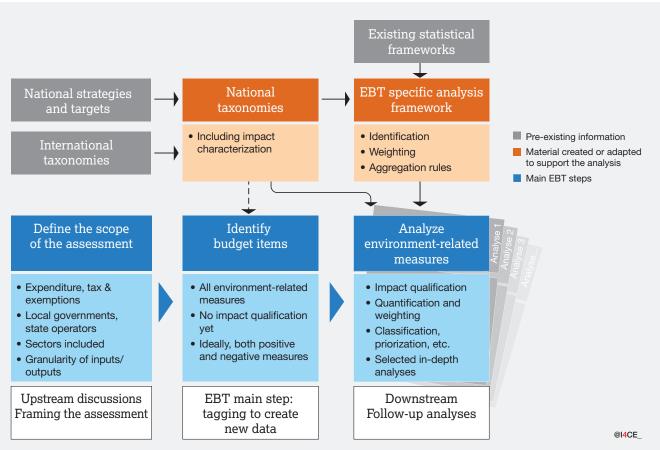
quantitative weighting, and classifying them according to a specific structure. This analysis can take place at the same time as the census, but can also be run separately, by other actors. In particular, it is possible, as is the case in France, to upload EBT data online as "Open Data" to allow actors outside the State to use it.

 The third step is to conduct specific analyses to extract key insights from the available data. This step builds on the previous two and is crucial to making the raw results usable and justifying the continuation of the exercise over time. It is detailed in the next section 3.3.

"The key step is the identification. Everyone can then put their own rating and analysis on the list of measures."

International development institution

FIGURE 9: THE STEPS OF A GREEN BUDGET



Source: Author

The demand for resources must be carefully calibrated.

An exercise that is too resource-intensive in relation to the interest identified has little chance of being sustained over time. EBT ambition should adapted to the country's institutional capacities and needs in terms of sectors covered, level of disaggregation, number of environmental dimensions analyzed, etc. (see section "Methodological ambition: key choices") above) but also in terms of decentralization: as already mentioned, it is much more time-consuming to operate a decentralized EBT. A centralized evaluation conducted by a small team, on the other hand, can be quite resource-efficient, even for an ambitious exercise (three to four FTEs in the French case, dealing with six environmental dimensions, adverse measures, taxes and tax niches).

BOX 5. PILOTS, DIAGNOSTICS, AND LONG-TERM VISION

PILOTS, DIAGNOSTICS, AND LONG-TERM VISION

A EBT is an ambitious exercise, involving a learning curve. This has two consequences:

It is almost inevitable to start with a "pilot" phase. However, there are two schools of thought on this subject:

- Implement a full-scale diagnostic, with no ex ante decision on making the assessment periodic. The UNDP's Climate Public Expenditure and Institutional Review (CPEIR) (UNDP 2015), for example, provides countries with such comprehensive assessments. Countries that renew these diagnostics do so every 4-5 years.
- · Establish an annual process from the first year, starting with a limited scope and increasing the ambition over time. EBT should then be able to evolve over time before reaching its cruising speed (OECD 2021; World Bank 2021), and even afterwards as national targets evolve or new data becomes available. The European Commission's Green Budget Reference Framework (European Commission Forthcoming) is more in line with this logic with its "staged approach" methodological outline, as is the OECD and its "phased approach to implementation" (OECD 2021, 49).

Both options have proved useful in the past, and the "comprehensive diagnostic" approach has long been the most used. However, it is the subject of several criticisms from the recent literature (World Bank 2021) and from our interview feedback:

- These analyses often rely heavily on external resources (World Bank 2021), as the technical and human resources required for this initial diagnosis are already substantial. With at least two consequences:
 - internal ownership of the issues and methods is greatly reduced;
 - the work is not repeated annually, which implies an additional loss of capacity: a high entry cost is paid for each new diagnosis. This discontinuity reduces the possibility of measuring the progress made.
- This ad hoc approach often responds to an immediate opportunity rather than a long-term strategy. This may reduce the link with the national effort. Moreover, many of these evaluations are specifically aimed at seeking international funding; the incentive to greenwash is strong, and even when the results are not biased, they are limited to pointing out the need for additional funding and the country's ability to channel it correctly. This is only a small fraction of the lessons to be learned from EBT.

Expertise must be maintained and developed over time. This effort is complex, since EBT aggregates expertise and skills from different ministries, and possibly from a large number of actors when the evaluation is decentralized. Here again, the arrangements differ from country to country, but some common points can be identified:

- high-level political support is necessary to ensure that the information gathering structure stays consistent over time, and to avoid each ministry focusing on priorities that would end up diverging;
- internal documentation to guide the identification and evaluation of measures is necessary to prevent the loss of skills associated with the turnover of staff. This documentation must be kept up to date, and must allow for easy appropriation: a report that is too imposing and static is not necessarily the best format; several interviewees recommended a simple

	Excel file that is properly documented;
•	 a cross-functional team is more resilient than relying on a very small number of experts; but too much decentralization quickly becomes costly in terms of capacity management.
	"The exercise was not repeated
	because it was too resource intensive." Ministry of Finance

3.3. Bringing EBT to life

KEY MESSAGES

The environmental assessment of a budget is primarily a starting point for analysis: Are the efforts effective individually? Are the packages of measures coherent? Is the total effort sufficient?

Furthermore, for the exercise to be useful, EBT results must be widely communicated and used in budget discussions and decisions; this requires a high degree of proactivity as well as specific and binding follow-up processes.

It is therefore important that the Ministry of the Environment (in particular) appropriate the results: it concentrates the technical expertise necessary for further studies, the highest environmental motivation, and the most relevant dissemination networks to promote the results and associated proposed changes.

In any case, it is important to keep in mind that the people who produce the data are not necessarily the best placed to use them; and to proactively organize a phase of dissemination of the results, if they are to be put to good use.

"Transparency and technical quality are not enough."

Researcher or consultant

3.3.1. Use quantitative statements on spending amounts to trigger more qualitative analyses

The information on spending amounts is interesting in that it allows one to identify large blocks of expenditure and revenue, possible inconsistencies, and not obvious/not intuitive environmental impacts. It leaves three main grey areas, which are closely linked:

- Are the efforts effective individually? An effective environmental budget does not necessarily mean unlimited increases in green spending. On the contrary, for the largest expenditures, the question of the proper use of public funds becomes primarily a question of efficiency.
- Are the efforts collectively effective? We should not stop at identifying counterproductive efforts. Different fiscal and budgetary measures interact and support or undermine each other; capturing these effects is necessary for effective environmental policy.
- Is the effort sufficient? This question of course raises the issue of volume, but it is impossible to provide an answer without first addressing the two points above.

These questions refer to the effectiveness and environmental efficiency of the expenditure and tax system (see Figure 10 and (OECD 2021, 40)). Answering them requires a detailed understanding not only of the measures concerned, but also of their links with the other tools available to the state on environmental issues (especially regulations) (World Bank 2021), and of the complex interactions between the economy and the environment, further along the chain of impacts.

The ball is therefore back in the court of the Ministry of the Environment, which has the technical expertise to carry out these specific analyses.

- They are the ones who will ensure that the results are used to their fullest potential, and therefore that the whole exercise is and useful; this is a prerequisite for its continuation.
- It is also a way to avoid simplistic messages that aim only to increase the "green share" of the budget, both in relative and absolute terms (see section 3.1.1). This risk was particularly emphasized in our interviews, both at the national and local government levels.

"It's not enough to identify expenditures. You have to match them to policy responses and link them to impacts."

International development institution

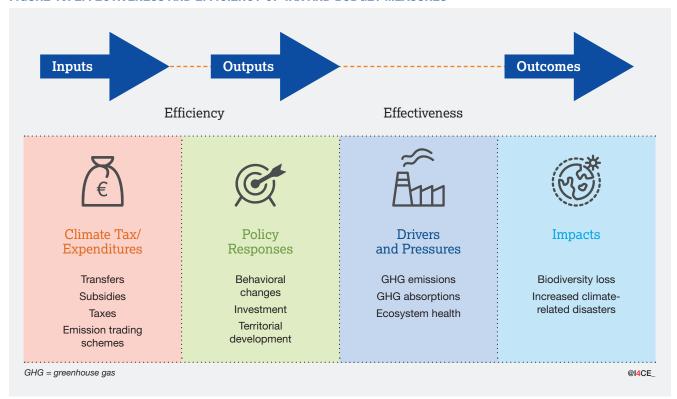


FIGURE 10: EFFECTIVENESS AND EFFICIENCY OF TAX AND BUDGET MEASURES

Source: Adapted from (Pizarro et al. 2021, p.14)

3.3.2. Putting EBT results at the heart of decisions

To be useful, the results must be known to the right people; this requires a high degree of proactivity. Inserting EBT into the national performance process (see section 3.2.2) is a necessary, but not sufficient, condition for ensuring that the results and analysis from the exercise find the right target, at the right time. It must be accompanied by two complementary efforts: ensuring institutional appetite for this information, and informing the most relevant actors on a case-by-case basis.

Binding and specific monitoring processes need to be put in place. Many institutions can use EBT outputs: the Parliament, the executive, the Court of Auditors, and line ministries are all in a position to take these results into account in their annual exercises around the budget cycle. The general performance framework must be complemented by specific provisions to ensure that this is done (PEFA 2020): parliamentary reporting requirements, use of information to negotiate annual appropriations, etc. The literature is extensive on the different constraints and processes that can be put in place (Bain, Nguyen, and Baboyan 2019), what matters is that this reflection takes place and actually leads to provisions specific to the national institutional structure and environmental issue.

Information should also be disseminated in a targeted way to relevant stakeholders. For many potential users of the results, the environment is not necessarily a priority. Beyond the specific institutional framework, several interviewees in environmental ministries underscored the need to directly approach their counterparts in other ministries to point out the implications that EBT results might have for them. This part of the work can hardly be institutionalized; it is caseby-case and relies heavily on the ability of the environment ministry to bridge the gap between the information at its disposal and the needs of the moment. For example, if the French EBT was a major input to the national recovery plan (see Box 1), it is partly because the people who developed this tool were able to make it available when it was most useful (in a crisis context, requiring rapid decision-making, with a strong environmental constraint). UNDP also proposes to give visibility and impact to EBTs by relying on a government climate champion, appointed by the president or the prime minister (Bain, Nguyen, and Baboyan 2019, 48).

The audience for EBT results extends beyond the state administration. As highlighted in the first part of this report, EBT is a transparency tool, whose audience includes civil society, academic experts, and the general public. Although outreach to the latter may be difficult, NGOs, think tanks, and research institutes play two important roles:

• They are consumers of the results, which they reuse for their own research and disseminate to the public. It is therefore necessary to make the data available in accessible formats: at least a public report, which can be the parliamentary report, and disaggregated data in Open Data format.

• They guarantee the integrity of the exercise. It is important that EBT be subject to an external validation process, to prevent drifts, in particular greenwashing (see Box 2 and (World Bank 2021)), and to include a broader view of environmental impact so that certain measures are not missed during the identification process. EBT assessments thus can involve external experts throughout the process of carrying out the study, and also submit the audit of the work carried out to a suitable review committee (which could be the Court of Auditors). In this respect too, the presentation of public results guarantees their appropriation by the relevant actors.

Conclusion: A tool to accompany change, not a miracle solution to achieve it

Based on numerous international experiences, this study lists the main benefits to be expected from an environmental budget tagging exercise, and the associated points of vigilance in the design and execution of the exercise.

On the benefits side, EBT facilitates the trade-offs necessary for budgetary management and oversight: by synthesizing cross-cutting and diffuse information, it highlights the global monetary volumes that affect the environment, but also the lack of coherence or evaluation, the gaps or points of friction between complex policy packages, thus allowing for better overall efficiency of budgetary action. It is also an excellent tool for facilitating access to international funding; but care must be taken, as the financial motivation can create incentives for "greenwashing", or focus attention on proactive efforts and associated funding needs, to the detriment of the overall vision and thus of informed decision-making. Finally, and most importantly, a recurrent EBT promotes awareness outside the Ministry of the Environment, both by administrations, parliamentarians and civil society; it also encourages interministerial cooperation, which is highly necessary given the scope of environmental issues and their cross-cutting nature.

These potential benefits come with conditions on the design and ambition of an EBT assessment.

- First, the exercise must be strongly embedded in a national dynamic, by using a taxonomy that is adapted to national objectives; by adapting the evaluation process to national budgetary specificities (deadlines, available data, human and technical resources) before seeking to converge on an international standard; and, above all, by calling on internal resources to carry out the evaluation, since a significant part of its interest lies in its implementation and the discussions that accompany it. In this prospect, it seems absolutely necessary to strongly involve the Ministry of Finance in the conduct and execution of the exercise.
- In addition, a small number of methodological choices (assessing several environmental dimensions, scope and granularity of data, format of the working group) strongly define the form of an EBT assessment: the resources needed to carry it out, but also its usefulness and scope. These choices must be made with the expected use of the exercise in mind, and the resources that can be devoted to it over time.

• Finally, EBT is a complex tool, with results often difficult to disseminate, on subjects that are rarely among a government's top priorities. Consequently, efforts must not stop with the publication of the results, at the risk of seeing them ignored and the exercise quickly cast aside. On the contrary, dedicated people must take them up to bring them to the attention of relevant stakeholders, use them for budgetary arbitration, and build upon them for follow-up analyses - for example, on the blind spots identified by the EBT, or as a basis for articulating climate with other sustainable development objectives. This work is not necessarily the prerogative of the people in charge of producing the evaluation itself; it can be done by environmental specialists rather than budget specialists, and/or by civil society organizations.

Finally, it should be noted that most of our sources converge on one point: EBT does not replace political ambition, and if it allows for awareness, it is not sufficient in itself to bring about a cultural change. At best, it accompanies it. Although the exercise is certainly useful for steering change, the impetus cannot come from such a technical, bottom-up exercise. The environmental assessment of a budget is an important tool, but it is only as good as the use to which it is put, and it only comes into its own as one element of a complete green budgeting toolbox.

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