

# **Sustainable Budgeting Approach**

## **United Nations Environment Programme (UNEP)**

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**A contribution to the ‘Compendium of Practice from a Global Community of Ministries of Finance and Leading Organizations: Economic analysis and modeling tools to assist Ministries of Finance in driving green and resilient transitions’**

**Topic:** Specific analytical tools and approaches relevant to Ministries of Finance

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**Access the full Compendium at [www.greenandresilienteconomics.org](http://www.greenandresilienteconomics.org)**

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## Overview

The UNEP-University of Oxford Sustainable Budgeting Approach (SBA) is a decision-support tool designed to help policymakers identify and resource strategic policy opportunities that promote national economic development while addressing critical environmental and social objectives. It is easy to use, evidence-based, and contextualized for each country. The SBA is intended for use by many stakeholders, such as Ministries of Finance and line ministries, parliaments, supreme auditing institutions, credit rating agencies, investors, businesses, development partners, civil society, and researchers.

The SBA is a starting point for governments wishing to adopt better budgeting processes, where decisions on how to tax and spend are informed by a wide range of “green” criteria as well as social and economic criteria. Based on leading socio-economic and environmental science, the SBA can automatically provide perspectives for any given policy to help understand its potential developmental, environmental, and social consequences and then boost learning by comparing this policy with similar actions by other nations.

The basic approach can be fine-tuned to any individual country based on the priorities of the Government and guidance of in-country experts. To assist budget decision-making, the SBA does the following:

1. It provides a taxonomy for categorizing policies. The SBA defines and standardizes 40 policy archetypes and 206 subarchetypes to categorize policies based on shared environmental and economic characteristics. This is distinct from other taxonomies, which categorize policies solely based on either environmental or economic criteria. The SBA is a living tool, and the full universe of possible archetypes and subarchetypes is completely customizable to national, regional, and international research progress and policy developments.
2. It provides a method to assess any potential policy impact on economic, social, and environmental grounds, for every subarchetype, tuned to individual countries. Many potential assessment criteria are discussed for this purpose, including long-run growth, job creation, (short- and long-term) greenhouse gas emissions, natural capital, air pollution, adaptation and resilience (A&R), wealth inequality, and rural inequality. The methodology proposes the selection of core assessment criteria is based on a nation’s unique context and domestic priorities. To avoid information overload, which could defeat the SBA’s purpose, it is advised that governments limit the number of selected core criteria. UNEP provides an indicative global assessment of the potential impacts on each of the criteria noted above—one assessment per criterion per subarchetype is appended. The SBA assessments are both quantitative and directional, based on a combination of global benchmarks, peer-reviewed studies, and local expert adjustments. For each policy archetype, indicative assessments provide insights into economic, social, and environmental impacts using data-driven models. Criteria such as job creation, emissions, and resilience are chosen based on national priorities, with the flexibility to incorporate local nuances. These assessments aim to guide policymakers in identifying the relative strengths of policies without overwhelming them with complexity. Indicative assessments are simple but powerful, based on leading scientific and economic understanding. Again, it is proposed that deviations from the global assessments are made based on local contexts, with the support of an independent panel of local experts. Health, education, and security impacts, etc., are not included in this iteration of the methodology, but are of importance to fiscal decision-making.
3. It provides a tool, adaptable to any nation’s unique context, to (a) compare policy options against each other for informed decision-making, and (b) aggregate net impacts across an entire budget (or a subset thereof). For (a), proposed policies might be compared, on the grounds of their likely impact, with alternative government proposals or a database of over 8,000 other policies (and growing). While ex-post analysis has not been conducted on policies

included in the GRO dataset, both the GRO and the SBA address uncertainty by focusing on directional guidance rather than attempting to feign precision in estimates. The use of directional impact assessments provides policymakers with clear, comparative insights without implying precise predictions of future outcomes, which are inherently uncertain. This approach avoids the risks associated with overconfidence in modeled results and ensures SBA outputs remain grounded in practical, actionable guidance. In this way, a proposed policy might be replaced by a superior one or otherwise adapted to better meet the criteria identified as important by Government. For (b), by applying the tool across entire budgets, perhaps on a recurrent basis over multiple years, a Government (MoF or line ministry) might track shifts in fiscal policy relating to key economic, social, or environmental criteria they deem important. The same use is possible for other relevant stakeholders, including parliaments, oversight bodies, credit rating agencies, investors and businesses (including sovereign creditors), development partners, civil society, and researchers.

## Strengths

- Systematically identify new policy ideas.** By collating and reporting policy measures from many nations, in unified and granular categories (subarchetypes), countries using the SBA will contribute to a rich database for policy learning. This is differentiated from international systems of national accounting (e.g., UN SNA) in that reports are at the policy level rather than at a programmatic or sectoral level (which is much broader). Practically, a policymaker proposing a policy measure provides details for the measure to the database and is then automatically able to view all similar policy measures introduced by other nations, including those with similar economic functions but stronger environmental benefits. The precursor to the SBA, the Global Recovery Observatory (GRO), in its tracking of COVID-19 measures, already provides over 8,000 examples of fiscal policy categorized in 221 subarchetype categories. This list includes over 1,000 examples of green policies with descriptions and sources. As the SBA is applied to “normal” budgeting cycles (annual or multiannual), even more policies will be identified and categorized, expanding the set a policymaker might learn from.
- Track the overall environmental, development, or social characteristics of an entire budget (expenditure and taxation revenue).** Once all budget policies have been categorized using the SBA fiscal taxonomy, the user of the SBA can compute the aggregate appropriations of a budget (or budget subset) on any of the SBA’s economic/development, social, or environmental criteria. These figures could be tracked over time to understand trends in fiscal efforts, and/or be compared with those for other nations that use the SBA taxonomy. Note that at this stage the SBA does not incorporate interaction effects between policies, potentially impacting the accuracy of figures on aggregate budget impact.
- For MoFs, enable clear objective-based fiscal decision-making.** Application of the SBA could help MoFs ascertain ex-ante the degree to which line ministry spending proposals support national objectives (formulated in SBA metrics), including on climate. On this basis, MoFs would have justification for proposed amendments to line ministry proposals to better meet national objectives.
- For line ministries, provide guidance for formulating sustainable policy proposals (for submission to MoFs).** Line ministries could apply the SBA to proposed policies to understand their likely performance against the criteria used by the MoF for decision-making. With this information, line ministries could then adapt their proposals to better align with national priorities and score better on the selected SBA criteria. For this purpose, line ministries might also look to the SBA and GRO policy databases for inspiration from how other nations have previously approached similar choices.

## Limitations

- **Static economic conditions:** The SBA currently assumes static economic conditions, limiting its ability to model dynamic interactions between policies. While this is useful for directional analysis, it may not fully capture the complex interdependencies that exist in real-world economies, especially when multiple policies are implemented concurrently.
- **Reliance on policy descriptions:** The effectiveness of the SBA depends heavily on the accuracy of policy descriptions provided by governments. Vague or incomplete policy information can reduce the precision of assessments, underscoring the importance of clear and detailed documentation for each fiscal measure.
- **Requirement for strong political commitment:** The challenge of securing political commitment is primarily an implementation issue rather than an inherent limitation of the SBA. The tool's design is adaptable and scalable, but its effective use requires policymakers to embrace evidence-based decision-making, which can challenge entrenched practices. The SBA is structured to facilitate this transition by demonstrating clear benefits and offering capacity-building support to ease adoption.

## Relevance to Ministries of Finance

The SBA's emphasis on **integrating economic, social, and environmental indicators** makes it an invaluable tool for MoFs seeking to optimize their fiscal policies for sustainable growth. Specifically, SBA helps MoFs to do the following:

- **Align fiscal policies with national and global objectives:** The SBA enables MoFs to identify and prioritize fiscal measures that support long-term economic stability, social equity, and environmental sustainability. It provides a customizable framework for MoFs to assess how budgetary decisions affect multiple dimensions of national well-being, ensuring alignment with both national development goals and international commitments such as the SDGs and the Paris Agreement.
- **Maximize the impact of public spending:** By employing the SBA's granular taxonomy, MoFs can assess the potential impacts of fiscal policies down to the archetype level, allowing for a precise allocation of resources. This level of detail enables governments to maximize the return on public spending, ensuring every dollar supports sustainable economic growth while addressing social and environmental challenges.
- **Support sustainable financing mechanisms:** The SBA offers a structured approach for integrating fiscal policies with sustainable financing mechanisms such as green bonds, debt-for-nature swaps, and sovereign guarantees. The tool provides MoFs with a transparent method for tracking the economic, social, and environmental impacts of fiscal measures, improving the credibility and attractiveness of government-backed financial instruments.
- **Facilitate evidence-based decision-making:** The SBA's integration of economic, social, and environmental criteria supports evidence-based fiscal decision-making. MoFs can use the SBA to assess trade-offs between different policy options, ensuring decisions are backed by comprehensive data on potential impacts across multiple dimensions. This makes the SBA a powerful tool for improving the accountability and transparency of national budgets.

## Key policy/analytical questions addressed

- How can fiscal policies be optimized to achieve long-term growth, reduce emissions, and promote social equity simultaneously?
- What are the trade-offs between different policy options across the indicators important to national decision-makers, and how can fiscal policies be structured to balance competing national objectives, such as economic recovery and climate resilience?

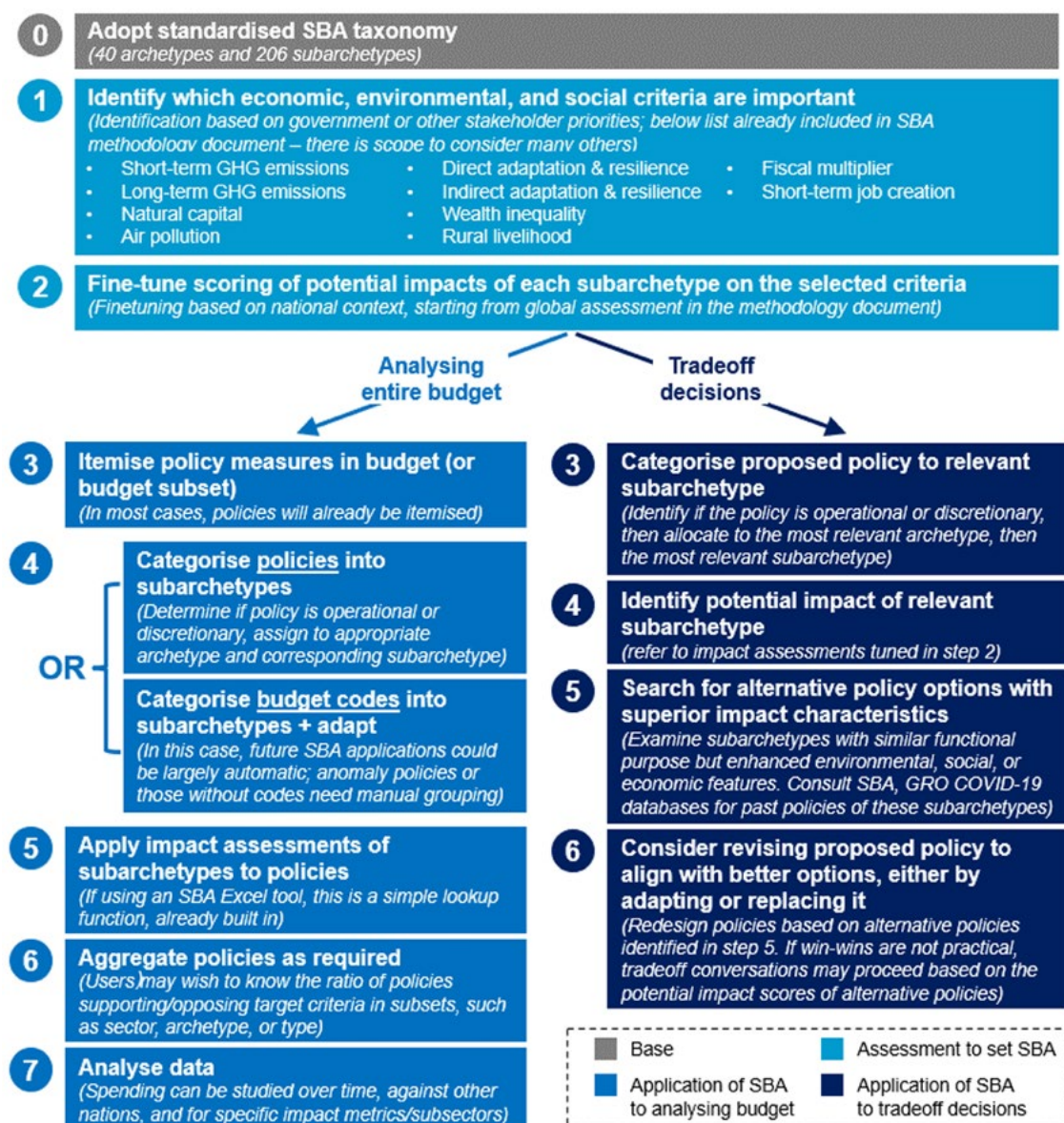


- Which policies can produce win-win outcomes across indicators important to national decision-makers and aligned with international economic, social, and environmental commitment?
- Looking at peer countries regionally and globally in a specific policy context, which policies performed best relative to a desired national outcome?

## Use in practice

Figure 1 summarizes how the SBA might be used as a tool for (i) tracking and transparency, analyzing the overall characteristic of a budget (or a subset of budgetary policies) and (ii) decision-making to optimize policy selection according to national priorities.

Figure 1. Use of the SBA in practice



Source: Smith School of Enterprise and the Environment, University of Oxford and UNEP (2024)

## Analysis in action

A case study application of the SBA is based on work with the Government of the Gabonese Republic in 2021–2022 (more information is given in the online methodology document (UNEP and University of Oxford, 2022)). The SBA allowed the Gabonese Ministry of Economy and Finance and Ministry of Water, Forests, the Sea and Environment to better understand the overall “greenness” of the national budget and provided scope to introduce a semi-automated tool to allow the same process to be repeated every year. It also provided a prompt for nuanced and evidence-based decision-making to be systematically incorporated into the budgeting process. Figures in UNEP and University of Oxford (2022) illustrate the trade-off decision-making function of the SBA, reprinting the simplified SBA output to help senior policy officials compare theoretical spending in support of a new gas power plant with an ostensibly more sustainable alternative: investment in a new solar energy generation facility. SBA implementation is being started in Lao PDR, Cambodia, Viet Nam, El Salvador and 12 other countries across Asia-Pacific, Africa, and Latin America and the Caribbean. Linking SBA to development finance institution operations is also under discussion with the Asian Development Bank and CAF – Development Bank of Latin America.

## Conclusions

Effective fiscal management aims to maximize well-being, but complex, interconnected economies make optimizing fiscal allocations difficult, particularly in vulnerable nations where fiscal systems may be inadequate or overly focused on traditional metrics such as job creation but neglecting factors such as natural and social capital. The SBA addresses this by offering a flexible, modular tool that integrates economic, social, and environmental impacts into fiscal decision-making. The SBA's taxonomy, based on shared economic and environmental characteristics, allows governments to customize their analysis based on national priorities. While the SBA provides detailed instructions and case studies such as its application in Gabon, future refinements may include more granular taxonomies, expanded impact assessments (e.g., health and security), integration with dynamic economic modeling, and automated policy analysis through machine learning. These advancements will enhance its usability and objectivity, unlocking deeper insights for policymakers.

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## Reference

Smith School of Enterprise and the Environment, University of Oxford and UNEP (2024) *Introducing the Sustainable Budgeting Approach*. <https://greenfiscalspolicy.org/introducing-the-unep-university-of-oxford-sustainable-budgeting-approach/>.