

SDG CHARTER

### ADVANCING ENVIRONMENTAL AND CLIMATE GOALS THROUGH A MULTIDIMENSIONAL MODEL OF GREEN BUDGETING

#### Abstract

While environmental regulation is the principal responsibility of environmental ministries, their locus standi in terms of implementation is limited as much of the implementation lies with other line ministries/departments and public agencies. Hence, it is essential that 'environment' is mainstreamed across ministries, departments, and sectors. A growing body of literature views 'green budgeting' as a mainstreaming tool for environmental sustainability measures. Annual budget processes offer a high level of periodicity as budget-related planning is not only done annually but also throughout the year. Through a review of existing practices, the primary goal of this policy brief is to sensitize stakeholders on green budgeting as a policy tool that can be used worldwide. Green budgeting is still an evolving policy innovation. and many methodologies are being developed and applied to mainstream the environment across various policy interventions. This paper advocates for a multidimensional model of green budgeting to contribute to environmentally and climate-sensitive resource allocation. planning. implementation. This approach allows the flexibility to add other lenses while using green budgeting as a selfassessment tool.

#### **Keywords**

green budgeting, green growth, sustainable development, policy innovation, public policy





#### **Authors**

Shailly Kedia, Palak Khanna, Madhuparna Maiti

#### Advisor

Prodipto Ghosh

#### Contact

wsds@teri.res.in

#### Acknowledgements

We thank The Royal Norwegian Embassy [Country Partner], Bloomberg Philanthropies [Star Partner], Tata Cleantech Capital Ltd [Associate Partner] and Johnson Controls [Associate Partner] for their support for the World Sustainable Development Summit/Act4Earth. We thank experts who shared their insights, which helped strengthen this brief; the deliberations from the stakeholder consultations can be accessed from <a href="here">here</a>. We thank our colleagues Sonali Mathur, Heena Makhija, and Shivangi Raj for their teamwork. We express our profound gratitude to Ravi Nair and John Andruse for administrative support. We thank Sushmita Ghosh for her support with the copyediting.

## **Suggested Citation**

The Energy and Resources Institute. (2023). Advancing Environmental and Climate Goals through a Multidimensional Model of Green Budgeting. SDG Charter, Act4Earth and World Sustainable Development Summit. New Delhi: The Energy and Resources Institute.

ISBN: 978-93-94657-32-8

# Contents

| 1. | Mainstreaming Environmental and Climate Action through Green Budgeting | 1 |
|----|--|---|
| 2. | Methodological Approaches in Green Budgeting                           | 2 |
|    | Rio Markers  | 2 |
|    | European Union Coefficient Methodology                                 | 2 |
|    | Multilateral Development Banks' Joint Methodology                      | 2 |
|    | Multidimensional Mapping   | 2 |
| 3. | International Experience   | 3 |
| 4. | Experience in India  | 4 |
| 5. | Towards a Multidimensional Model for Green Budgeting                   | 7 |
| Re | eferences  | 9 |

#### 1. Mainstreaming Environmental and Climate Action through Green Budgeting

We are living in a time of polycrisis. The three key challenges confronting the world include: planetary crises, the sliding back of key sustainable development goals, and the ever-growing conflict situation threatening world peace. It is more important than ever that sustainable development is mainstreamed across various sectors and issue areas. Target 17.14 of Goal 17 of the sustainable development goals (SDGs) is 'Enhance policy coherence for sustainable development'. Addressing anthropogenic climate change, biodiversity loss, and environmental degradation requires coordinated efforts in terms of planning, coherent policy design, and system-wide approaches. Considering the urgency due to climate change risks, planning and self-assessment need to be done more frequently instead of only following the cycles of revisions of nationally determined contribution (NDC). Budget processes offer a high level of periodicity since planning is not only done annually but also throughout the year.

Issue-based budgeting is seen as a policy innovation for mainstreaming specific issues in cross-cutting and cross-sectoral areas. The prominent types of issue-based budgeting include green budgeting, climate budgeting, gender budgeting, youth budgeting, and child budgeting. Since budget exercises are periodically undertaken by all departments, annual government budgets that consider climate and environmental dimensions can be a potential driver to mainstream SDGs and climate actions into the development activities towards achieving environmental targets. Furthermore, government budgets can also be used as a tool to assess governments' activities on various national and international environmental commitments.

Public spending and the instruments for revenue raising can greatly impact the environment, both beneficial and detrimental. This is apart from regulatory regimes for the environment, such as the environmental impact assessment appraisal process for *ex-ante* identification of environmental impacts of projects, programme, and policies, as well as monitoring and enforcement of environmental standards. While environmental regulation is the principal responsibility of environmental ministries, their *locus standi* in terms of implementation is limited as much of the implementation lies with other line ministries/departments and public agencies. Hence, it is essential that the environment is mainstreamed across ministries, departments, and sectors. A growing body of literature views 'green budgeting' as a mainstreaming tool for environmental sustainability measures (TERI and ADRI 2022; Bova 2021; Petrie 2021; TERI 2020; PSCST-TERI 2014; Sinha et al., 2015; Russel and Benson 2014; Wilkinson et al., 2008).

Green budgeting is a policy tool that can help in systematic mapping and tracking schemes, outlays, and expenditures, which, in turn, can support coordinated policy design and identification of periodic and continuous finance needs to achieve green objectives, i.e., those relating to the climate and environmental dimensions. Green budgeting is a mechanism of budgetary policymaking. This approach can help in systematic mapping and tracking the sources of funds, outlays, expenditures, and policies, which, in turn, can support coordinated policy design and identification of periodic and continuous finance needs to achieve green objectives, that is, those relating to the climate and environmental dimensions. Climate

budgeting is a part or subset of green budgeting wherein climate change activities are accounted for in the annual budget-making exercise.

The primary goal of the policy brief is to sensitize stakeholders on green budgeting as a policy tool, which can be used across the world. The brief seeks to highlight the multidimensionality of this evolving environmental policy innovation.

# 2. Methodological Approaches in Green Budgeting *Rio Markers*

The OECD's Development Assistance Committee (DAC) created the Rio markers to monitor member states' support for the 1992 Rio Conventions on Climate Change, Biological Diversity, and Desertification (OECD, 2016). They are meant to offer uniform definitions across DAC countries for comparing development assistance data. The markers' methodology rates activities based on their climate change objective: 'principal' for core motivation, 'significant' when not central, and 'zero' for no focus. The methodology serves as the basis for many of the current approaches to climate budget tagging, biodiversity finance, and green budgeting.

#### European Union Coefficient Methodology

In the 2014–20 Multiannual Financial Framework (MFF), the European Union (EU) utilized the qualitative 'Rio markers', which are aligned with the OECD DAC, to identify specific environmental goals in development aid projects, including desertification, climate change mitigation, adaptation, and biodiversity. The EU's climate mainstreaming methodology has evolved for the 2021–27 MFF, introducing an effect-based approach through 'EU climate coefficients' (European Commission, 2022). EU climate coefficients categorize activities based on their expected contributions to climate objectives.

#### Multilateral Development Banks' Joint Methodology

The Multilateral Development Banks (MDBs) use a joint methodology to track climate finance; it combines elements of the Rio markers approach with an activity-based focus (European Investment Bank, 2022). This aims to monitor MDBs' financial support for climate and development finance in developing and transitioning economies. 'Climate co-benefits' financing falls under both development and climate goals. MDBs report yearly on total climate finance and its proportion in overall development finance, setting targets from organizational to unit levels.

#### Multidimensional Mapping

TERI has formulated a multidimensional approach to green budgeting, which includes dimensions of issues, areas/themes, activities, and SDGs. This approach can allow for the addition of other policy priorities and commitments as and when departments are further sensitized on these dimensions. Other dimensions could include international commitments, state action plans on climate change, and biodiversity-based commitments. This process of identifying various dimensions begins with defining green budgeting objectives and a clear scope to delineate the focus of this exercise. Stakeholder engagement for sensitization, as well as including various aspects within dimensions, is the key. This process not only evaluates the effectiveness of government initiatives but also helps identify gaps and reinforces the

government's capacity to design, implement, and monitor policies for sustainable development. Mapping of SDGs allows for outcome-based tracking when linked to SDG indicator frameworks. Mapping of themes allows alignment with environmental issues and action of that area/region and activities allow to ensure that the required set of policy instruments are deployed, such as programmatic implementation, technology development, and awareness.

#### 3. International Experience

The concept has its roots in 1987 with the Brundtland Commission's report urging central agencies to ensure ecologically and economically sustainable development in policies, programmes, and budgets. In the late 1980s, Norway and France pioneered experimental integration of environmental considerations into public financial management. Norway introduced an Environmental Profile of the State Budget in 1989, and France mandated a report on environmental protection expenditure in the late 1980s and 1990s (Gonguet, 2021). Italy joined early efforts, instructing the government in 1999 to highlight environment-related allocations in the annual budget, leading to the creation of an 'environmental budget (ecoBilancio)'. Subsequently, subnational governments in Europe experimented with methodologies like ecoBudget and City and Local Environmental Accounting and Reporting (CLEAR) to link environmental considerations to budgetary processes, emphasizing local targets and indicators for a comprehensive green budgeting approach (OECD, 2023).

Until the early 2010s, green budgeting was relatively unexplored. The UNDP and World Bank funded climate budget tagging in Asia-Pacific countries like Bangladesh and Nepal, driving its emergence. Climate budgeting advances in Asia-Pacific can be seen in exercises in countries such as Cambodia, India, Indonesia, Philippines, and Pakistan (OECD, 2023). Policymakers possess a range of tools for integrating environmental considerations into the budget process. These include measures such as green budget tagging, green budget statements, and infusing green perspectives into spending reviews (OECD, 2020).

In Indonesia, with the UNDP support, the Ministry of Finance piloted climate budget tagging in 2020 across three provinces: Gorontalo, Riau, and West Java. This followed the national-level methodology from 2014. The process of sub-national tagging involves two steps: first, identifying output-level expenditures linked to climate adaptation or mitigation, done jointly by the Ministry of Finance and line ministries and second, quantifying allocated funds per output. This process occurs during budget preparation (Ministry of Finance of the Republic of Indonesia, 2020)

Similarly, in the Philippines, the Climate Change Act of 2009 and the National Climate Change Action Plan mandated the central government to create a climate-responsive budget. To achieve this, the central government adopted climate budget tagging, assigning codes to climate-related programmes in the budgets of national agencies. Starting in 2015, subnational governments were also directed to tag climate programmes in their annual investment plans. The central government, through departments such as Budget Management, Climate Change Commission, and Interior and Local Government, established a Climate Change Typology for Local Government. This categorizes adaptation and mitigation activities from the National Climate Change Action Plan. Sub-national governments use this typology to determine if their

programme aligns with climate adaptation or mitigation. If at least one objective is an adaptation or mitigation measure, the sub-national government considers the entire programme or project budget as a climate change expenditure. If only specific components are adaptation or mitigation measures, then only the budgets for those specific components are considered as climate change expenditures (Government of Philippines, 2021).

A recent survey by the European Union (2023) indicates that 12 Member States (Austria, Greece, Spain, Finland, France, Ireland, Italy, Luxembourg, Portugal, Sweden, Denmark, Netherlands) are currently engaged in various forms of green budgeting, and five intend to adopt such practices in the future. In comparison to the data from 2021, Greece, Portugal, and Spain have introduced and put into action new approaches, and certain countries have broadened their existing methodologies (such as Austria, Finland, France, Ireland, and Sweden).

Italy and France issued a 'green budget statement' in 2000 and 2020, respectively. This statement describes the budget's provisions on green policies, tracks practical advancements, and gauges the impact of green budgeting on individuals and businesses. In France, which became the first country to present a comprehensive green budget in 2020 that presented a special interest (UNDP, 2022), budget items are categorized as 'favourable', 'neutral', or 'unfavourable' in terms of their environmental impact. Further budget items are also assigned subcategories, such as Agriculture, Ecology, Research, and Regional Development (Zakhartchouk, 2019). France's green budgeting involves coordinated efforts by the General Inspectorate of Finances (IGF) and the General Council for the Environment and Sustainable Development (CGEDD). The IGF created a 'yellow book' along with a guide to aid ministries and public institutions in effectively implementing green budgeting processes (EU-IMF-OECD, 2021). Italy also employs the 'tagging' technique within its green budgeting approach. The guidance provided by the central government has played a pivotal role in effectively executing this method (EU-IMF-OECD, 2021). The Italian Parliament has asked the Ministry of Environment, Land, and Sea for a list of subsidies not related to the environment. Italy regularly updates its Parliament on the environmental impact of budget implementation. Green budgeting in Italy primarily concentrates on expenses aligned with green policy. Both the Ministry of Finance and the Ministry of Environment, Land, and Sea play active roles in implementing the green budget. Essential tools for green budgeting in Italy include the 'Eco budget and Eco-Report' (Halil, 2022).

#### 4. Experience in India

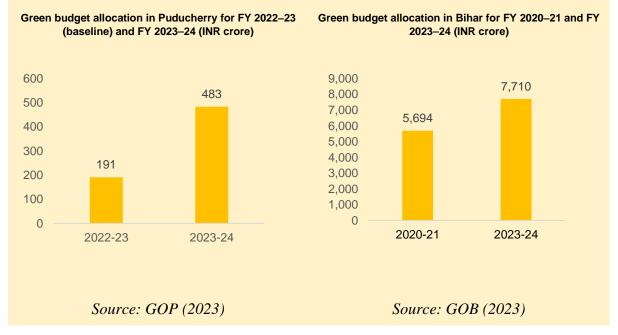
Bihar became India's first state to adopt green budgeting in 2020–21 when the state tabled the green budget in its state legislative assembly (GOB, 2020; 2021; 2022; 2023). In the case of Bihar, the Rio marker methodology was used not through qualitative assessments but proportionate contributions based on estimates provided by the concerned budget officials of those departments. Department-wise budget codes for identified schemes or programmes were recorded for tagging and tracking the sectoral programmes of relevant departments. After the initial interaction with various departments, a draft pro forma was circulated and finalized after receiving inputs from the departments. Themes and activities were developed and were part of the pro forma. The departments also had to provide budget head-wise justification in the pro

forma. TERI with the Asian Development Research Institute (ADRI) developed a multidimensional mapping technique for Bihar wherein, along with unique budget codes, themes, activities, and SDGs were mapped. In subsequent green budgets, the state has also attempted to report on expenditure. Strong political will and commitment from finance, environmental, and other line departments are the key. In the case of Bihar, this anchor was found in the *Jal Jeevan Hariyali* initiative, which had strong bureaucratic and political support.

#### **Box 1: Green Budgeting of Bihar and Puducherry**

Implementing green budgeting has shown significant results in Bihar; the budget increased from INR 5,694 crore in FY 2020–21 to INR 7710.25 crore in FY 2023–24. The number of schemes also increased from 103 to 319 during the same period. The number of departments participating in the green budgeting process increased from 17 to 19.

The green budget of the Union Territory of Puducherry increased by 153%, from INR 191 crore in the baseline year of FY 2022–23 to INR 483 crore in FY 2023–24. In Puducherry, the baseline year includes 120 schemes, while for FY 2023–24, 134 budget schemes were identified. The number of departments participating in the green budgeting process increased from 9 in the baseline year to 15 departments.



The state of Odisha has been actively engaged in climate budgeting, SDG budgeting, and agricultural budgeting. Odisha's climate budgeting initiative was introduced in the fiscal year 2020–21 and has been the first state to implement climate budgeting (Government of Odisha, 2020). Furthermore, Odisha has also introduced an SDG budget, beginning in the fiscal year 2021–22, aiming to map schemes to their respective SDG goals and targets, as articulated in the budget speeches (Government of Odisha, 2021). In SDG budgeting, analysing demand for grants from all 44 state departments involved mapping each scheme and sub-scheme onto relevant SDGs and associated targets, guided by thematic consistency. SDG budgeting includes all sectors and departments by tagging SDGs to schemes, whereas climate budgeting focuses exclusively on select departments, specifically addressing components related to climate aspects. Odisha's methodology for climate budgeting involves a phased Climate Change Impact Appraisal (CCIA). The method assesses the impact of climate change on government

development programmes by utilizing two measures: Climate Change Relevance Share (CCRS) and Climate Change Sensitivity Share (CCSS). CCRS evaluates the climate-related benefits of a programme based on assigned rankings and degrees of climate relevance. In contrast, Phase II's CCSS assesses the sensitivity of the programme benefits to climate change by ranking their potential impact and quantifying the overall sensitivity percentage.

Puducherry became the first federal unit to announce its green budget in the legislative assembly during the budget session. In the case of Puducherry, TERI followed a similar approach as Bihar. After consultation, a draft pro forma was circulated, which was later finalized. Post the issuance of a circular by the finance and environment departments, line departments identified schemes that promote environmental sustainability and collected the corresponding allocation and expenditure data for the fiscal year. Along with the Puducherry Climate Change Cell (PCCC), TERI developed a multidimensional approach for Puducherry wherein mapping was undertaken for themes, activities, and SDGs. The idea behind activity mapping is to eventually link with the SDG indicator framework for the union territory. The union territory of Puducherry also chose to develop a baseline to assess green budgeting performance in subsequent years (GOP, 2023). In the case of Puducherry, a climate-vulnerable state, this anchor was found in the SAPCC process, which was being revised at the time of the initiation of the discussion between TERI and the Puducherry government in 2022.

In the budget session for the year 2023–24, the state of Assam introduced its 'Green Budget', marking it as the second state in India and the first in the northeastern region to adopt such an approach. The methodology involved a comprehensive examination of each budget component, scheme, and programme, categorizing them based on their impact on environmental and climate outcomes. Nine climate-vulnerable sectors were identified, and relevant departments were identified to assess the schemes contributing directly or indirectly to climate and environmental objectives. Schemes were then categorized as highly favourable (Green), moderately favourable (Yellow), neutral (Grey), or less favourable (Brown). The tagging system extended to sectors and broader domains such as climate change mitigation, adaptation, and environmental sustainability, providing a nuanced understanding of the budget's contributions to the State Action Plan on Climate Change and facilitating targeted strategies for addressing climate and environmental challenges (Government of Assam, 2023).

In the fiscal year 2023–24, Meghalaya initiated the process of climate action budgeting, led by the budget department in collaboration with various other government departments. This involved identifying activities, schemes, and programmes within the state budget to ascertain the allocation for climate action. The primary objective was to enhance the monitoring and tracking of expenses related to climate initiatives, enabling policymakers to integrate climate considerations into project design. The identified elements were categorized into climate change adaptation and mitigation activities, guiding department-wise budget allocations. Subsequently, an in-depth analysis by the finance department, aligning with Rio markers' definitions, provided insights into fund allocation and budgetary trends, facilitating a more targeted approach to climate-related expenditures (Government of Meghalaya, 2023).

#### 5. Towards a Multidimensional Model for Green Budgeting

First and foremost, green budgeting is a very powerful policy tool for mainstreaming environmental sustainability and climate action. Green budgeting can serve as a self-assessment tool not just to plan within the existing fiscal space but also to expand this resource space and plan to mobilize resources from international climate finance and other sources of green finance.

There have been many discussions on the standardization and harmonization of green budgeting approaches. While desirable to some extent, standardization should not come at the cost of flexibility to design and expand policy mandates. What is needed is a model that helps accommodate various lenses and analytical tools that aid in policy development.

Green budgeting is still an evolving policy innovation, and many methodologies are being developed and applied with the common purpose of mainstreaming the environment across various policy interventions.

This paper advocates for a multidimensional model of green budgeting to contribute to environmentally and climate-sensitive planning, resource allocation, and implementation. The key dimensions from various practices reviewed in this paper are depicted in Figure 1.

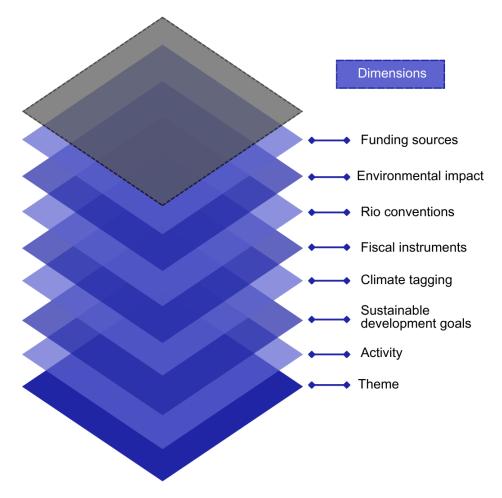


Figure 1: Multidimensional Model of Green Budgeting

This approach allows the flexibility to add other lenses while using green budgeting as a self-assessment tool. Dimensions of policy priorities and commitments can be added as and when ministries/departments are further sensitized on these dimensions. Dimensions could include international commitments, state action plans on climate change, biodiversity-based commitments, and environmental impact. For instance, the mapping of SDGs allows for outcome-based tracking when linked to SDG indicator frameworks. Tagging and tracking of budget allocation and expenditure should be a key feature. Mapping of themes allows alignment with environmental issues and action of that area/region and activities allows to ensure that the required set of policy instruments are deployed, such as programmatic implementation, technology development, and awareness. While identifying dimensions, it is key that the process of green budgeting is participatory with clear defining of green budgeting objectives along with stakeholder sensitization. In due course, supplementing the process with independent peer review and impact assessment on the ground will also be the key.

\*\*\*\*\*

#### References

- Bova, E. (2021). Green Budgeting Practices in the EU: A First Review. European Economy Discussion Paper 140
- EU-IMF-OECD (European Commission, International Monetary Fund and Organisation for Economic Cooperation and Development). (2021). *Green Budgeting: Towards Common Principles*. Luxembourg: European Union.
- European Investment Bank (2022). *Joint Methodology for Tracking Climate Change Adaptation Finance*. Luxembourg: European Investment Bank.
- European Union. (2022). European Union Green Budgeting Reference Framework. European Commission.
- Government of Assam. (2023). Green Budget 2023-24. Department of Finance, Assam.
- GOB (Government of Bihar). (2020). Green Budget 2020-21. Department of Finance, Government of Bihar.
- GOB (Government of Bihar). (2021). Green Budget 2021-22. Department of Finance, Government of Bihar.
- GOB (Government of Bihar). (2022). Green Budget 2022-23. Department of Finance, Government of Bihar.
- GOB (Government of Bihar). (2023). Green Budget 2023-24. Department of Finance, Government of Bihar.
- Gonguet, F., et al. (2021). Climate-Sensitive Management of Public Finances Green PFM, International Monetary Fund. https://www.imf.org/en/Publications/staff-climate-notes/Issues/2021/08/10/Climate-Sensitive-Management-of-Public-Finances-Green-PFM-460635
- Government of Meghalaya. (2023). Climate Action Budget FY 2023-24. Meghalaya: Department of Finance.
- GOO (Government of Odisha). (2020). *Child Budget 2020-21*. Finance Department, Government of Odisha (GOO).
- GOO (Government of Odisha). (2021). SDG Budget. Department of Finance, Government of Odisha.
- Government of Philippines. (2021). *Climate Change Expenditure Tagging for Local Government*. Roxas: Government of Philippines.
- GOP (Government of Puducherry). (2023). Puducherry Green Budget 2023-24. Puducherry: GOP.
- Halil, K. (2022). Green budgeting: France and Italy practices. *International Journal of Social, Political and Financial Research*. 2(2): 102–115.
- Ministry of Finance of the Republic of Indonesia. (2020). *The Contribution of Subnational Governments in the Implementation of NDC in Indonesia*. http://www.id.undp.org.
- OECD. (2020). *Paris Collaborative on Green Budgeting*. Paris: OECD Publishing. Details available at http://www.oecd.org/environment/green-budgeting/
- OECD. (2023). A Primer on Green Budgeting: International, National and Subnational Perspectives. Details available at https://www.oecd-ilibrary.org/sites/63d6c30a-en/index.html?itemId=/content/component/63d6c30a-en
- Petrie, M. (2021). The Evolution of Green Budgeting. In *Environmental Governance and Greening Fiscal Policy*. Palgrave Studies in Impact Finance. Palgrave Macmillan, Cham.
- PSCST-TERI. (2014). Action Plan for Green Budgeting in Punjab: Concepts, Rationale and Ways Forward. The Energy and Resources Institute (TERI) and Punjab State Council for Science and Technology (PSCST). Supported by Department of Science, Technology and Environment, Government of Punjab.
- Russel, D., & Benson, D. (2014). *Green budgeting in an age of austerity: a transatlantic comparative perspective*. Environmental Politics, 23(2), 243-262.
- Sinha, KAP, Jerath, N, Kedia, S, Ladhar, SS, Jain, R and Vadivelu, GA. (2015). *Action Plan for Green Budgeting in Punjab, India*. The International Journal on Green Growth and Development, 1(2): 121-124.
- TERI and ADRI (2022), *A Primer on Green Budgeting*, The Energy and Resources Institute (TERI) and Asian Development Research Institute (ADRI).

- TERI. (2020). *Green Budgeting for the State of Bihar*. New Delhi: The Energy and Resources Institute (TERI). Details available at https://www.teriin.org/project/green-budgeting-state-bihar; last accessed on 30 March 2022.
- UNDP. (2022). *Uzbekistan Introduces Green Budgeting and SDG Budgeting*. Details available at https://www.undp.org/uzbekistan/news/uzbekistan-introduces-green-budgeting-and-sdg-budgeting
- Wilkinson, D., D. Benson and A. Jordan. (2008). Green budgeting. In *Innovation in Environmental Policy? Integrating the Environment for Sustainability* (Editors: Andrew J. Jordan and Andrea Lenschow), Edward Elgar, Cheltenham, UK and Northampton, MA, USA, pp 70-92.
- Zakhartchouk. A. (2019). Green Budgeting in France. Ministry of Economy and Finance, France.

\*\*\*\*\*

#### **World Sustainable Development Summit**

The World Sustainable Development Summit (WSDS) is the annual flagship Track II initiative organized by The Energy and Resources Institute (TERI). Instituted in 2001, the Summit series has a legacy of over two decades for making 'sustainable development' a globally shared goal. The only independently convened international Summit on sustainable development and environment, based in the Global South, WSDS strives to provide long-term solutions for the benefit of global communities by assembling the world's most enlightened leaders and thinkers on a single platform. Over the years, the Summit series has witnessed the participation of 54 Heads of State and Government, 103 Ministers, 13 Nobel Laureates, 1888 Business Leaders, 2745 Speakers, and 38,280 Delegates.

#### Act4Earth

Act4Earth initiative was launched at the valedictory session of WSDS 2022. Building on the discussions of WSDS, this initiative seeks to continuously engage with stakeholders through research and dialogue. Act4Earth initiative has two components: **COP Compass** and **SDG Charter**. The COP Compass will seek to inspire and mobilize leadership at all levels, for inclusive transitions through ambitious and informed policies and measures, which will enable paradigm shifts towards meeting the UNFCCC and Paris goals through mitigation, adaptation, and means of implementation. The SDG Charter will seek to identify gaps and suggest ways for strengthening and mainstreaming sustainable development in policy agendas for enhanced environmental, social, and economic outcomes.



# Advancing Environmental and Climate Goals through a Multidimensional Model of Green Budgeting

While environmental regulation is the principal responsibility of environmental ministries, their locus standi in terms of implementation is limited as much of the implementation lies with other line ministries/departments and public agencies. Hence it is essential that environment is mainstreamed across ministries, departments, and sectors. A growing body of literature views 'green budgeting' as a mainstreaming tool for environmental sustainability measures. Annual budget processes offer a high level of periodicity since budget-related planning is not only done annually but also throughout the year. Through review of existing practices, the primary goal of the policy brief is to sensitize stakeholders on green budgeting as a policy tool that can be used across the world. Green budgeting is still an evolving policy innovation, and many methodologies are being developed and applied with a common purpose of mainstreaming environment across various policy interventions. This paper advocates for a multidimensional model of green budgeting to contribute to environmentally and climate-sensitive planning, resource allocation, and implementation. This approach allows the flexibility to add other lenses while using green budgeting as a selfassessment tool.

