# 1 The ins and outs of green budgeting at the subnational level

Green budgeting is a concrete, practical tool that subnational governments can use to integrate climate and environmental considerations throughout the budgetary process, from the initial drafting phase through to the budget vote and ex-post reporting. Integrating environmental and climate concerns fully into the budgetary process effectively complements the range of environmental and climate tools available at the subnational level. Green budgeting presents several opportunities for subnational governments, while also posing a number of challenges that need to be anticipated and addressed.

Climate change, biodiversity loss, and widespread environmental degradation are imminent threats to our planet and societies. Addressing these threats requires unprecedented co-ordination of policy action among and within all levels of government. Budget and fiscal policy can be one of the most powerful and effective tools that policy makers have at their disposal for resourcing and implementing co-ordinated policy action. Green budgeting – using the tools of budgetary policy making to achieve green objectives – can help governments to mainstream climate and environmental action within budgetary decisions and broader policy making, and to monitor progress towards achieving environmental and climate goals.

As underlined by the Paris Collaborative on Green Budgeting launched in 2017 and co-ordinated by the OECD, green budgeting is a crucial step in achieving a central objective of the Paris Agreement – making financial flows on a pathway towards low greenhouse gas emissions and climate-resilient development – as well as of the Aichi Biodiversity Targets and the United Nations' Sustainable Development Goals (OECD, 2020[1]; UNFCCC, 2015[2]).

Green budgeting is a priority-based budgeting approach that centres on using the tools of budgetary policy making to help achieve environmental and climate objectives (OECD, 2021[3]). Green budgeting can be considered as a component of public financial management (PFM), and more specifically the emerging area of green public financial management. PFM refers to the institutional and practical arrangements that facilitate the design and implementation of fiscal policies, while green PFM refers to the adaptation of existing PFM practices to support climate and environmentally-sensitive fiscal policies (Gonguet et al., 2021[4]).

The interest is growing and has been recently reinforced by the strong international push towards a green recovery. Many European countries are poised to adopt green budgeting approaches due to requirements set out by the European Commission in its Recovery and Resilience Facility (RRF). At the subnational level in the European Union (EU), the European Committee of the Regions recently started a discussion within its Commission for the Environment, Climate Change and Energy to prepare an opinion on "the implementation of green budgets at local and regional levels" to be adopted by the committee in June 2022 (European Committee of the Regions, 2022[5]).

This also applies at the subnational level, given the critical role that subnational governments play in the global response to climate change and the transition to a carbon-neutral economy. This involvement is increasingly being acknowledged globally, with the 2015 Paris Agreement and the latest COP agreement, the Glasgow Pact (UNFCCC, 2015[2]; 2021[6]). In fact, regional and local governments often have jurisdiction over key policy areas relevant to the transition such as housing development, land-use planning, transportation, wastewater treatment, and waste management. Regional and local governments can act proactively to mitigate and adapt to the negative impacts of a changing climate through their local regulations and policies. This includes developing environmental protection policies, and more generally, mainstreaming environmental and climate considerations throughout the entire subnational policy framework and policy decision-making processes. This also includes making *regional and local* financial flows consistent with a pathway towards low greenhouse gas emissions, which can be done by the development of fiscal policies and tools that are consistent with environmental and climate objectives (OECD, 2019[7])

Subnational governments play an important role through their budget, accounting for, on average, 37% of all public spending, 55% of all public investment and 32% of all tax revenue in the OECD in 2020 (OECD, 2022[8]). Subnational governments, through their spending, investment and revenue capabilities, have thus a powerful tool they can leverage to achieve a carbon-neutral, climate-resilient future. The expenditure, investment, and revenue decisions made by subnational governments have an environmental and climate impact, be it positive neutral or negative. Subnational governments can also be key funders of climate action within their jurisdictions, in particular key investors in sustainable infrastructures.

This role is however difficult to measure both at the macro and micro levels, that of the national accounts and that of individual regional and local budgets. There are still many unknowns, first on the amount of expenditure and investment targeted at environmental and climate actions, but beyond, on the direct and

indirect impacts of subnational government revenues and expenditure on the environment. This makes it difficult to track the progress subnational governments are making in their efforts to support environmental and climate action, and take corrective policies to accelerate the green transition.

To help bridge this data and information gap as well as provide some tools to better align fiscal policies with environmental and climate objectives, the OECD and the European Commission have joined forces and carried out a project on Measuring and Enhancing Subnational Government Finance for Environment and Climate Action in OECD and EU Countries. Subnational green budgeting is one of the three pillars of this project, besides more macro-level pillars on tracking climate-significant expenditure and climate revenue tracking. The third pillar on subnational green budgeting provides a more granular analysis of subnational government climate expenditure and revenue using individual budgets. The objective of a green budgeting approach is to use the tools of budgetary policy making to align government budgets, both the revenue and expenditure sides, with climate and environmental objectives (Box 1.1).

The following report is comprised of several elements including an overview of the opportunities and challenges posed by green budgeting for regions and cities, a stocktake of existing subnational green budgeting practices in OECD and EU countries, a set of subnational green budgeting guidelines, and a self-assessment tool (SAT)[1] for regions and cities to use in developing and implementing their own green budgeting exercise.

### Box 1.1. The OECD-EC project "Measuring and Enhancing Subnational Government Finance for Environment and Climate Action in OECD and EU Countries"

Subnational green budgeting is one of three pillars of work of the joint OECD and European Commission project "Measuring and Enhancing Subnational Government Finance for Environment and Climate Action in OECD and EU Countries". The project seeks to enhance the measurement, tracking, and mobilisation of subnational public climate finance by innovatively combining three interdependent pillars of work, two at a macro-level and one at a more micro-level:

- **Climate-significant expenditure tracking** – this pillar consists of a high-level approach to tracking and measuring subnational public climate-significant finance flows using aggregate, internationally comparable data from the functional classification of the National Accounts (COFOG). To carry out this tracking, the OECD's 2018 pilot subnational government climate finance methodology was updated and used to populate a new database on subnational climate finance. The findings show that subnational governments accounted for 63% of climate-significant expenditure and 69% climate-significant investment in respectively 33 and 32 OECD and EU countries in 2019 (OECD, 2022[9]).
- **Climate revenue tracking** – this pillar complements the expenditure tracking by providing a compendium of climate-related public revenue sources (grants, loans, funds, contracts, etc.) available to subnational governments in OECD and EU countries. The results of this qualitative analysis shed light on the diversity of climate-related revenue sources available to subnational governments as well as the gaps that exist, providing evidence for recommendations on how, and at what level (state, regional, municipal, etc.), additional climate finance resources should be mobilised. The compendium is available online via an interactive dashboard.
- **Green budgeting –** this pillar zooms in from the macro-level to the micro-level to provide a more granular analysis of subnational government climate expenditure and revenue using individual budgets. The objective of a green budgeting approach is to use the tools of budgetary policy making to align government budgets, both the revenue and expenditure sides, with climate and environmental objectives. Through two case studies – one regional and one municipal – the OECD has developed a set of guidelines and a self-assessment tool for

subnational governments to use in developing and implementing their own green budgeting exercise.

The outcomes of these three pillars are available on the OECD's Subnational Government Climate Finance Hub (the Hub).

Source: OECD (2022[9]), "Subnational Government Climate Finance Tracking", OECD, Paris.

These guidelines and the SAT were also developed based on two case studies, one with the region of Brittany (France) and one with the city of Venice (Italy). The choice of case studies from one region and one municipality in differing countries was deliberate. This was done to ensure the guidelines accounted for the differences in spending, revenue raising, and climate-related competences between regional and municipal governments. Similarly, the choice of subnational governments in two different countries was made specifically to examine how differences in budgeting rules and processes impact the development of green budgeting, and to thus ensure the guidelines could be actionable by subnational governments throughout the OECD, the EU, and elsewhere.

The remainder of Chapter 1 provides an introduction to green budgeting and details the opportunities and challenges that green budgeting presents for subnational governments. The rest of the report is then structured as follows:

- Chapter 2 describes in detail commonly used green budgeting tools.
- Chapter 3 presents the stocktake of existing subnational green budgeting practices in OECD and EU countries. It is broken down by regional and municipal-level practices and focuses on the methodologies used and how individual regions and cities have adapted them.
- Chapter 4 introduces a set of subnational green budgeting guidelines for regions and cities of all sizes to use in launching their own green budgeting practice or enhancing an existing one. Each of the six guidelines is explained in detail with accompanying recommendations for the international, national and subnational levels and examples of good practices in other jurisdictions.
- Chapter 5 presents the case study with the region of Brittany (France). It highlights the green budgeting methodology used by the region in 2021, how it was developed and adapted to the region's context, and what lessons can be drawn for other regions in the OECD and EU.
- Chapter 6 presents the case study with the city of Venice (Italy). It explores in detail the city's history of integrating environmental considerations into its budgetary process and provides an analysis of the steps that could be taken for the city to launch a green budgeting exercise.

## Green budgeting: A concrete, practical tool that presents numerous opportunities for subnational governments

In combatting climate change and environmental degradation, the budget is one of the most powerful tools that subnational governments have at their disposal. The budget is the financial expression of the implementation of responsibilities as well as the result of political choices. The process of budgeting is a complex system that requires compliance with standards and norms, to deal with financial constraints (over which local authorities do not always have leeway) and to make political trade-offs. It is during the process of drafting and voting on the budget that a region or municipality has the possibility to measure its financial commitments to the environment, to establish and resource green priorities to integrate green concerns into all budgetary processes and decisions, or put another way, to align current and capital expenditure and revenue with environmental and climate objectives. When this process is combined with other means of action, such as regulatory action, or environmental and land-use planning, it lays the foundation for

future climate and environmental action by all territorial stakeholders. Integrating environmental and climate concerns fully into the budgetary process effectively complements the range of environment and climate tools available at the subnational level. The opportunity that green budgeting offers subnational governments to make full use of their budget to achieve their green objectives provides a strong rationale for them to implement such an exercise.

Adopting a green budgeting approach presents many benefits for subnational governments, with the most salient among these being that it is a concrete, practical tool that subnational governments can use to align their expenditure and revenues with their green objectives and mainstream climate and environmental considerations throughout their budgetary decision-making processes.

Initiating a green budgeting approach **fosters "cross-functional approaches"** within a subnational government by bringing financial, climate, and environmental issues closer together. This reduces siloed thinking about climate and the environment as being only the responsibility of the Department of Environment and **helps to incite a whole-of-government approach to meeting green objectives.** Likewise, green budgetary processes can help regions and cities to take careful account of the potential impact of action in one area to spill over into other policy domains and help to identify needed accompanying decisions by social and territorial measures (OECD, 2020[10]).

Adopting a green budgeting approach helps to **instil a science-based understanding of environment and climate change issues across the administration and among elected officials**, making apparent the importance of integrating climate and environmental considerations into budgetary decisions. Green budgeting facilitates and improves the rationality of decisions that can be made on the basis of scientific assumptions, data and indicators which therefore sheds light on political trade-offs, in an area where there are often numerous unfounded beliefs, symbolism and presumptions.

The green budgeting process also contributes to **improving the evaluation of public policies**. It can assist in the re-design of objectives, timelines and means to achieve these objectives. It thus brings actions in line with intentions.

Green budgeting is **complementary and symbiotic to other priority budgeting exercises**, such as gender, SDG, or pro-poor budgeting. These priority areas are all cross-cutting and interdependent and budgeting for them relies on similar internal operational procedures such that a priority budgeting exercise in one area can enable and strengthen another.

Adopting a green budgeting approach helps subnational governments to **prioritise and select low-carbon and resilient investment and spending**. This is made all the more important in the context of the post-pandemic green recovery and the unprecedented influx of resources for "green" investment at the subnational level. Green budgeting tools such as green budget tagging, climate/environmental impact assessments, and climate/environmental cost-benefit analyses can help decision-makers to make informed decisions on where to spend and invest today to prevent carbon lock-in.

Relatedly, green budgeting **improves the identification of funding gaps** associated with achieving their green objectives and helps subnational governments to **mobilise additional sources of public and private finance** to bridge these gaps. Green budget tagging, for example, can be used to select expenditure items to be funded using green bonds and green loans as has been done by regional governments in Germany (Hessen and North Rhine-Westphalia) or Spain (Andalusia).

As an ever-growing number of regions and cities set ambitious climate and environmental targets, it is increasingly important that they **consistently and transparently communicate to their citizens, stakeholders, and partners on the progress** being made to reach these targets. Using green budgeting, subnational governments can communicate how much they are spending and investing related to climate and the environment, the impact of this expenditure on territorial progress to meeting green targets, and the overall coherency of the government's fiscal and budgetary policy with their stated green objectives. This transparency on the use of public funds helps to hold governments accountable to their citizens and

stakeholders and can contribute to restoring trust in government, a key factor for ensuring the success of the carbon-neutral transition. It thus promotes the emergence of or reinforces the dialogue between, environmental, economic and social actors, that did not always exist while these issues appear to be often interdependent.

It is important to note, however, that green budgeting is a means to an end, not an end in itself. Green budgeting will not ensure the green transition; however, it can help to achieve the transition's goals. Put plainly, green budgeting is not a silver bullet. It is one of several tools that subnational governments have at their disposal for the green transition together with other instruments, such as regulatory policies, public procurement or environmental and land-use planning tools. Green budgeting is most effective when it is used in combination and co-ordination with these other government instruments and actions.

## Developing green budgeting poses four main categories of challenges: Methodological, resource, operational and political

In advocating for the widespread adoption of green budgeting at the subnational level, it is important not to overlook the challenges that subnational governments face in launching such practices. Highlighting these challenges helps to identify research and knowledge gaps and to understand where more support, collaboration and co-ordination are needed. The challenges faced by subnational governments in adopting and maintaining a green budgeting practice can, broadly speaking, fit into four categories: **methodological challenges, resources challenges, operational challenges, and political challenges.** The difficulty that these challenges pose varies between subnational governments.

The key **methodological challenge** related to green budgeting at the subnational level is the lack of proven methodologies adapted to the specific budgeting contexts of subnational governments. Regions and municipalities do not have the same expenditure and revenue competences as national governments, nor as each other, and there is considerable variation in these competences between countries. As a result, it is not always possible for subnational governments to simply adopt an existing national-level green budgeting methodology; to get started they need to invest time and resources in adapting this methodology, or another, to their own budgetary contexts. Relatedly, there is also a lack of climate and environmental indicators available at regional and local levels that are commonly agreed upon and that can be used for the green budget assessment as well as for monitoring progress made towards achieving subnational environmental and climate objectives. Another challenge is to combine climate objectives with other environmental objectives, which may not always be aligned. For example, some climate mitigation and adaptation measures may be harmful to biodiversity e.g. the development of renewable energy installations or public transport infrastructure that consume large amounts of land, and have a negative impact on biodiversity (OECD, 2020[11]). Other methodological challenges relate to adapting existing accounting and reporting tools and ensuring the methodology is transparent and dynamic, such that it can adapt to changing scientific evidence over time.

**Resource challenges** can be further categorised into human resource challenges and financial resource challenges. One challenge is to instil a climate and environmental awareness throughout the local government, including elected representatives and administrative staff from all departments, as green budgeting should mobilise the entire organisation to be effective. In addition, subnational governments, particularly small municipalities, might not have staff with the necessary climate change and environmental expertise needed to implement green budgeting. Similarly, the development and implementation of green budgeting can require a large investment of time and human resources upfront, which can cause an unsustainable increase in workloads for existing staff. Both of these aspects can be exacerbated by a lack of financial resources for subnational governments to hire and train new or existing staff and to invest in their green budgeting practice, for example, through upgrades to existing information management systems.

Potential **operational challenges** that subnational governments may face in implementing a green budgeting practice include establishing a dedicated organisational structure based on horizontal co-ordination amongst departments and associating key public and private stakeholders from outside the subnational government in the process. Depending on existing co-ordination structures within an administration, setting up a dedicated organisational structure and fostering horizontal co-ordination may pose less of a challenge for some subnational governments than others. Another difficulty can arise from the need to implement internal and external auditing procedures, which may be difficult because this in turn implies having the tools and skills necessary for this kind of control. However, implementing such auditing procedures reinforces the robustness and credibility of the green budgeting exercise among both internal and external stakeholders, and limits the risk of being accused of greenwashing. In addition, depending on the scope of a green budgeting practice, it can require an evolution of the budgetary procedures and reporting systems, an overhaul of the subnational government's relations with third parties, and possibly, an adaptation of IT systems to capture the new data necessary for the process.

The fourth category of challenges are **political challenges**. A notable challenge of this category is ensuring sustained, high-level support for green budgeting from both administrative and elected officials. Green budgeting necessitates fundamental changes in the functioning of the regional or municipal government and in the relationships of the government with its territorial stakeholders (citizens, businesses, partners, etc.). Such changes cannot take place without the support of government officials, who at the same time can resist these changes if they are too burdensome, uncoordinated, and politically risky. Support from elected officials is key because even if government budgets are largely drafted by civil servants, the budget is above all a prerogative of elected officials as it is an outward reflection of their political choices and negotiations. Increasing the importance of climate and environmental considerations within the budget construction and arbitration process is therefore a project that must be spearheaded by elected officials and internalised by administrative officials in their working practices. It involves changing mentalities and working methods and accepting possibly imperfect results since the process may take time to produce visible results. Another key political challenge relates to reconciling social and green objectives. Policies and financing mechanisms designed to address climate change can have important distributional impacts, disproportionately affecting low-income populations. This is particularly the case with financing tools that effectively put a price on carbon, such as carbon taxes or congestion charges. Green budgeting should then also make the case for applying an inclusion lens and identifies some of the trade-offs and opportunities between green objectives and inclusive growth objectives, and offer the potential for achieving both climate and inclusion objectives (OECD, 2019[7]).

Finally, there is also a challenge that is overarching and linked to all of the challenges described previously, and that is **the need for a green budgeting practice to continue over time and not become a one-off exercise.** The true benefit of green budgeting comes from identifying trends over time in the alignment of expenditure and investment with green objectives and for this to occur the practice needs to be continuous. The practice must be adapted to the concrete results achieved in terms of climate and environment. It should be viewed as a step-by-step process that needs to find the right balance between feasibility and comprehensiveness.

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## Note

[1] The self-assessment tool is available on the OECD's Subnational Government Climate Finance Hub as a downloadable Excel file. The self-assessment tool was developed based on the findings of the stocktake and case studies, and is directly linked to the guidelines. An overview is provided in Annex A.