SDG Budget Tagging:
A proposal to measure SDG Financing

by Mauricio Ruiz, Luis Palacios, Diana Quiroga and Oscar Sanchez

Sustainable Development Goal (SDG) financing is gaining global interest in the Decade of Action (2020–2030). Without an adequate assessment of the SDG financing flows, government actions can fail to accelerate SDG achievement. This document presents an SDG budget-tagging methodology to measure and strengthen countries’ SDG financing diagnostics. The methodology can be applied to (i) national and subnational budgets; (ii) international development cooperation to strengthen its monitoring; and (iii) identifying potentially eligible projects in private financing strategies. In addition to strengthening SDG financing diagnostics, when accompanied by data visualization tools, SDG budget tagging can strengthen fiscal transparency by communicating government action to the public using the 17 SDGs and inform SDG-oriented budgetary policymaking.

SDG Global Context and Financing

Increased SDG alignment in policy narrative but little evidence of SDG-oriented decisions.
Since the design of and global adherence to SDGs in 2015, countries have increased their SDG alignment in policy documents and successfully reported policy action in SDG language through voluntary national reviews (VNRs). However, despite this increased narrative alignment to SDG, there is scarce evidence of countries making SDG-oriented decisions. Most concrete SDG-oriented policymaking is conducted at a sectoral level (e.g., WASH, REDD+ and social protection, among other sectoral initiatives), leaving SDGs dependent on sectoral alignment.

Strategic role of ministries of finance (MOF).
Given the increased narrative alignment but fragmented sectoral approach to SDGs, MOFs are specially placed to monitor budgetary allocations and thus play a strategic role in measuring current government budgetary support for SDGs. The risk of SDG-washing is mitigated with adequate diagnostics of SDG financing and MOF participation in SDG governance.
mechanisms. Through the Integrated National Financing Framework (INFF) global initiative, MOFs have increasingly taken the role of measuring budgetary support for SDGs. This is the case in Colombia, where UN support through the INFF strengthened national SDG financing diagnostics. In addition to public financing, INFFs consider an integral approach to financing that includes national public flows, international development cooperation and private sector alignment to SDGs.

**SDG budget tagging is a more integrated approach than existing thematic budgetary monitoring.** Previous approaches from MOFs to thematic monitoring included specific budget tags for specific topics. The institutional experience of the Colombian government includes the implementation of five budget trackers: (i) internally displaced population (IDP); (ii) victims of armed conflict; (iii) women's equality and empowerment; (iv) resources for the 2016 Peace Accord; (v) resources for ethnic, Afro-descendant and other communities. These budget trackers, mandated by law and/or ruled by the Colombian Constitutional Court, have been gradually institutionalized in budgetary procedures since 2011 but have created substantial reporting burdens for line ministries. Additionally, the national government has not made strategic budgetary decisions using the information derived from these separated budget trackers. Given the encompassing nature of the 17 SDGs, MOFs can avoid further reporting requests to line ministries by implementing a centralized SDG budget tag. This implies reducing the burden for line ministries while enhancing SDG reporting.

The benefits of the SDG tagging methodology detailed below include: (i) as opposed to common narrative alignment or tagging where a project is assigned a single SDG, this procedure is done using multiple SDG targets for each expense line, reflecting the multi-faceted nature of public projects; (ii) it incorporates operating expenses; (iii) it can be used at any point of the budget cycle (e.g., initial appropriation, commitment or verification); (iv) it can easily be implemented across fiscal years using original financial codes used by the MOF; (v) it is applied to every expense line, thus reaching a project-level of disaggregation; (vi) it can and has been applied to subnational budgets (thus strengthening SDG localization) and other regional budgets (e.g., royalties derived from the exploitation of non-renewable resources); (vii) by focusing on how resources are aimed at the 169 SDG targets, it circumvents local statistical limitations; (viii) it is currently being used by the government to identify potentially eligible public projects for sovereign sustainability-linked bond issuance and debt-for-nature swaps.

**Methodology for manual SDG tagging**

The first step in developing the SDG budget tag is defining the criteria to be used in associating budget items with each one of the SDG targets. The criteria should be defined and agreed on locally with the budget authorities following the intention and indicators of each SDG target. The criteria should also determine which budget expenditures may have a direct relationship with SDGs and which may not. It is important to define exclusion criteria to determine which topics, themes or expenses do not have a direct impact on SDGs.
Box 1. Defined criteria for the Colombian SDG budget tagging

The first requirement for SDG budget tagging is to define the criteria for the association between budget lines and SDG targets. This association should consider the theory of change of each expense, illustrating how certain activities can produce the desired outcome(s) that will contribute to achieving the expected policy objective. For the Colombian case, the first step was to define exclusionary criteria for expenditures not aligned directly with the SDGs. Table 1 summarizes the exclusionary criteria.

Table 1. Exclusionary criteria for expenditures not aligned with SDGs

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Definition</th>
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<tbody>
<tr>
<td>Administrative fees</td>
<td>Include fees for compulsory licenses and other administrative fees related to the sale of services.</td>
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<tr>
<td>Fines and financial penalties</td>
<td>Compulsory transfers imposed on public institutions by courts of law or quasi-judicial bodies due to the violation of laws or administrative rules.</td>
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<tr>
<td>Monetary contributions to international organizations with narrow scope in terms of SDGs</td>
<td>Transfers made by government units to international organizations as membership fees or for purposes other than memberships. To identify whether this spending has any impact on SDGs, it must be determined whether the international organization is engaging in activities that close SDG gaps and/or actions that support the government in achieving these goals.</td>
</tr>
<tr>
<td>Taxes</td>
<td>Mandatory payments to be made by government institutions at different levels of public administration without any compensation.</td>
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<tr>
<td>Rulings and conciliations</td>
<td>Includes transfers made by public institutions as a result of compliance with a judicial ruling, an executive order, judicially recognized credits, arbitration awards or conciliation with a competent authority in which compensation rights are awarded to third parties.</td>
</tr>
<tr>
<td>Civil servant–related expenditures (e.g., social security contributions, individual loans, etc.)</td>
<td>Civil servants are not considered a vulnerable population and, therefore, some expenses particularly aimed at this specific group of people are not contributing directly to closing gaps.</td>
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<tr>
<td>Sports-related expenditures</td>
<td>Even though sport is related to the well-being of society, there are no sports-related SDG targets. In this regard, expenses earmarked for professional sports activities will not be aligned with SDGs, in contrast to expenses associated with sportive infrastructure, which can be aligned given their impact on community well-being.</td>
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<tr>
<td>Security schemes for civil servants</td>
<td>Personal protection services to guarantee the safety of public servants. These expenditures are not directly aimed at serving a vulnerable population, and, therefore, do not contribute to closing gaps in SDGs.</td>
</tr>
<tr>
<td>Improvement of public buildings</td>
<td>Determining whether this type of expenditure contributes to achieving the SDGs requires consideration of whether the entity benefiting from the improvements has ongoing customer service, in which case it could be strengthening the state’s services. Otherwise, such expenses do not have a direct impact on achieving the SDGs.</td>
</tr>
<tr>
<td>Environmentally unsustainable activities</td>
<td>Expenses related to activities that, although they might have positive collateral effects on employment and economic activities, have a direct negative impact on environmental sustainability. In this regard, expenses aimed at encouraging the expansion of mining and fossil-fuel-related activities are excluded from the SDG alignment. However, expenses aimed at transforming existing industries into more sustainable activities are aligned with SDGs.</td>
</tr>
</tbody>
</table>

Once the exclusionary criteria have been defined, expenditures with a direct impact on SDG targets must be identified. For the Colombia case, the relationship between each budget line and the SDG targets is determined based mainly on the policy action to which the spending is directed and the beneficiary population. For the complete 169 global SDG targets’ taxonomy as adapted for Colombia, please visit https://bit.ly/SDG_taxonomy.
Aside from the data preparation process (explained in the figure below), the main input for Colombia was the entire annual national budget, a spreadsheet with an average of 3,450 rows (projects) per fiscal year. Expenses related to debt service were excluded, given that they had already impacted SDGs in previous fiscal years (i.e., when the resources arrived). Several SDG targets were assigned to each budget line, and a main SDG target and up to three secondary SDG targets were selected, using the process detailed in Figure 1. This manual thematic SDG alignment of each budget line was followed by a financial SDG alignment, where the expense is distributed 75 percent for the main SDG target and the remaining 25 percent of the budget line is distributed amongst the secondary SDG targets.9

Figure 1: The 5-Step Methodology for an SDG Budget Tag (Based on its application to the National Budget and Development Cooperation projects)

1. Setup
- Budget information at investment - project level.
- Choose a stage in the budget cycle.
- The list of 169 global SDG targets.
- Catalog of deliverables for each investment project.

2. Definition of rules and manual thematic alignment
- Projects’ thematic alignment: choose main and secondary SDG targets.
- Select topics and expenses that do not have a direct impact on SDGs (exclusion criteria).

3. Manual tagging for investment and operational expenses with specific destination
- Budget line resources are distributed according to the preferred %s for main vs. secondary targets.
- Adjust %s based on sectoral knowledge of local budgetary authorities.

4. Alignment of operational expenses at the entity level
- Tabulate the percentage distribution of investment (by SDG target) at the entity level.
- Distribute the entity’s operational expenditure to the 169 global SDG targets following the distribution of investment.

5. Final validation with stakeholders, reporting and visualization
- Final validation with budgetary authorities.
- Adjust if necessary.
- Report detailing current SDG financing.
- Interactive visualization.

Results

This methodology was applied to the 2020, 2021, 2022 and 2023 national budgets, and the results were validated by Colombian budget authorities.10 For 2023, total national financing for SDG was estimated at US$60.3 billion, which is 86 percent of the available national budget (excluding debt service) or 17.5 percent of GDP.11 Figure 2 illustrates the SDG budget tag for 2023.
The highest financial contributions to the SDGs in the national budget are in SDGs 3 (Health), 4 (Education), 10 (Inequality) and 16 (Peace, Justice, and Strong Institutions). Additionally, there are important contributions to SDGs 1 (Poverty), 9 (Industry, Innovation, and Infrastructure) and 11 (Sustainable Cities). It should be noted that budget alignment does not necessarily reflect policy priorities since project cost structures differ and are hardly comparable in relation to their impact. For instance, road construction can be costly, thus taking a more significant proportion of the budget, but that does not reflect a higher policy priority than social programmes. Overall, the SDG budget tag implemented from 2020 to 2022 shows that SDG budget alignment in Colombia hovers around 87 percent of the national budget, depending on budget stage.

Additional applications of the SDG budget-tagging methodology

The SDGs are not solely a financial effort by national governments. Centralized monitoring of all development flows strengthens a joint approach to the SDGs, emphasizing the three financing pillars of the SDGs and their linkages; public (national) financing, international development cooperation and private sector SDG alignment. The SDG budget tag methodology presented here can be applied to other flows for development, including incoming development cooperation projects and regional or subnational budgets. Figure 3 shows the SDG budget tag for incoming non-reimbursable development cooperation (grants and technical assistance) from all development partners.

Source: UNDP-INFF based on Colombian national budget data and the 169 SDG targets
Development cooperation was strongly aligned with SDGs 10 and 16, with projects focused on mitigating the social impact of the pandemic, supporting the victims of natural disasters, implementation of targeted assistance for migrants and implementing peace agreements. These results highlight the complementary nature of development cooperation in addressing both urgent socio-economic issues and the long-term impact infrastructure and large-scale projects that are also needed to achieve SDGs. An additional recent application has been the implementation of SDG budget tags to calculate SDG financing in specific cities within Colombia. These subnational SDG budget tags substantially contribute to SDG localization.

In terms of the possibility and/or feasibility of automating the process, the alternatives for an SDG budget tag are along three lines of work: text analysis, machine learning or an AI chatbot (e.g., ChatGPT). These automated alternatives are still under exploration for their use in reading budgets. However, initial conclusions of this exploration show that the technological tool should be trained using the specific matching criteria derived from the analysis of local contexts and the agreement with budget authorities. In other words, these tools will not replace the first approximation of the SDG budget tagging but will be useful to accelerate the process and keep the results updated across different fiscal years.

Concluding remarks

The SDG tagging methodology presented here is a tool to strengthen national and local diagnostics of public financial support for SDG achievement. The proposed SDG alignment methodology also provides a suggested template for reporting sustainable financing in private sector actions, programmes and portfolios. Each project or financial flow can have SDG alignment along the lines of the proposed methodology. The guidelines presented cover the different themes of the SDGs, and this thematic diversity allows the creation of local SDG taxonomies that can aid in quantifying current sustainable financing, thus reducing the risk of SDG washing in policy narratives.

Global interest in sustainable financing has led governments to introduce SDG-aligned narratives in their planning instruments. In some cases, the narrative alignment has been followed up with SDG financing diagnostics. However, diagnostics of current SDG financing are more effective when governments go beyond mapping and towards SDG-oriented budgetary decision-making.
Endnotes

1 Mauricio Ruiz is the Finance for SIDS Coordinator at UN DESA and former INFF Coordinator at UNDP-Colombia, email: carlos.ruizvega@un.org; Luis Palacios is a development specialist at UNDP’s INFF team; Diana Quiroga is the coordinator for Tax-for-SDGs at UNDP; Oscar Sanchez was a consultant to UNDP-Colombia. Acknowledgements: The authors would like to thank Nergis Gulasan at UNDP’s Panama Hub, Suren Poghosyan at UNDP’s Istanbul Hub and Vishwas Vidyaranya of Ambire Global, who provided external peer review and offered helpful comments.

2 The OECD recently estimated that about 75 percent of national development plans have some degree of SDG integration (OECD 2021).


4 As it is, this methodology cannot be applied to revenues since it is designed to consider the possible impact of a real public intervention materialized through its budget. Much of the revenue is collected for general purposes and budgets are the instruments for allocating revenues to specific policies. However, other initiatives are addressing SDG alignment of revenues (e.g., Tax-for-SDGs initiative).

5 An additional practical benefit for the MOF has been to use SDG tagging to streamline budgetary requests received from civil society and development partners, simply filtering the themes of interest in the tagged budget by the corresponding SDG.

6 Although some expenses do not have a direct impact on SDG, they can still have second-order impacts. For instance, expenses related to Olympic committees or local sports bodies can have second-order impacts on SDG target 3.4.

7 The complete list of excluded expenditures is a choice of the final user and is determined by local preferences.

8 In the Colombian case, there is an exception for protection schemes that are provided by the state to general citizens, especially social leaders in vulnerable situations, through the National Protection Unit (UNP).

9 Although the percent of the expense line was distributed equally amongst the secondary SDG targets at an initial stage, the government leaned towards a tailored approach for each of the 30 budgetary sectors, creating multiple ways to distribute the 25 percent for the secondary SDG targets (equally distributed and step-wise decreasing distribution, among other options, depending on the sector).

10 Validation and involvement of the Ministry of Finance and National Planning department included providing capacity development sessions on SDGs, after which the results were fine-tuned through the knowledge that mid-level officials had on specific expense lines. UNDP-Colombia validated and adjusted results with budgetary government officials, including different sectoral percentage distributions of resources to the main SDG for projects. Overall, more than nine sessions with different sectoral experts within the MOF and the planning department led to the results presented here.

11 It is important to note that, in the case of Colombia, the average SDG financing from the national budget remains at around 85 percent across fiscal years. Most changes from one year to another occur within SDG targets (and are hard to see when presented at the 17-SDG level), thus showing a similar picture for SDG financing across fiscal years.

12 On the other hand, multilateral loans (reimbursable cooperation) were more aligned with SDGs 6 and 11, financing water supply, sanitation, transportation systems and other infrastructure projects.

13 For more information on automated alternatives, see Guariso, Guerrero, and Castañeda (2023), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4379856, who have used the manual SDG tag presented here to compare the benefits and limitations of alternative computational methods of reading budgets.