

***Green budgeting – literature review and the case of Slovenia***

The goal of the article is to discuss the concept of green budgeting. As the literature has been limited, it allows an in-depth analysis of the most important scientific articles and other topic related documents regarding the evolution of the concept, which has gained momentum in the recent years. The article presents a brief overview over the evolution and implementation of green budgeting across EU countries, while the study focuses particularly on the case of Slovenia and its intentions to implement the green budgeting concept in 2023. The theoretical and methodological framework constructed in this paper provides a useful tool for researchers, policymakers and other decision-makers who are in the beginning phases of incorporating systematically environmental concerns into budgetary process, namely green budgeting in developed countries in the EU, and beyond.

Keywords: green budgeting, performance budgeting, budgeting process, environment, OECD, Slovenia

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## **1. Introduction**

The transformation of the EU's economy and society, with the goal of becoming the first climate-neutral continent by 2050, and at the same time maintain economic competitiveness on the global market represents a major challenge. To achieve the goals of the Green Deal, it will be necessary to establish an effective monitoring system for all phases of operation: from planning, implementation, to measuring and reporting progress. With the Recovery and Resilience Plan prepared by the EU governments to obtain European funds from the Next Generation EU fund, of which a major part (37%) must contain investments and reforms directed towards green transition, monitoring, and measuring of the impact of budgetary policies on environmental measures will become highly relevant. Therefore, given that the budget process represents a strategic entry point in the integration of green goals into national policy programs (Hege, 2019), the implementation of the so-called *green budgeting* represents a perspective concept for the future. Budgetary decisions should not be viewed in isolation, as they are the sum of previous decisions that must be integrated into a holistic and constantly flexible "life cycle" of the budget. A successful green budgeting can only be conceptualized under such conditions (Wilkinson idr., 2008). Although the concept is not new, its implementation across countries gained momentum after the One Planet summit in 2017, when the OECD launched the international initiative "Paris Collaborative on Green Budgeting" to support governments' efforts to green fiscal policies and integrate environmental commitments into the budget and political framework. The initiative aims to exchange good practices of using the budget process to achieve environmental goals and ultimately sustainable society.

The aim of the paper is twofold, namely, to conduct a review of research and policy literature on the concept of green budgeting literature and to make a review of implementation across EU countries with a particular focus on the experience from Slovenia with an aim to ascertain the level of preparedness for implementation of the concept. Throughout the review the focus is to answer two research questions:

- What is the concept of green budgeting?
- How well is Slovenia prepared for the implementation of green budgeting?

The rest of this paper is structured as follows. Based on the limited scientific contributions obtained through Scopus and Google Scholar we present the evolution of the concept and the most important research as well as the implementation of the concept among EU countries. In Sections 3 and 4 we present the methodology used in the paper and discuss the case of Slovenia which is planning to implement the concept of green budgeting in 2023. In a final Section 5 we discuss answers to the research questions as well as provide recommendations to policy makers and researchers with possibilities for the future of the concept.

## **2. The concept of green budgeting**

One of the most fundamental functions of public budget is to control public expenditures. Therefore, input controls have been traditionally more concerned over the size and type of spending than on what it is spent upon (Shah & Shen, 2007). With the emergence of the concept of performance budgeting, which gained popularity from 1990s onwards, the initiatives have started to shift the public budgeting systems from the control of inputs to a focus on outputs with the intention to increase operational efficiency as well as promote results-oriented accountability (Aristovnik & Seljak, 2009). In other words, a shift from monitoring resources and ensuring financial regularity to assessing results and achievements of policy objectives. This shift requires changes in budget classification system as well as the resource allocation process, in the accounting of resource flows (ensuring links between actual resource allocations and performance targets) and in the legislative process (Nyikos & Gallazs, 2022).

Consequently, Shah & Shen (2007) argue that performance budgeting brings four important advantages, namely, (i) enhanced communication between budget actors and with citizens; (ii) improved management in government agencies; (iii) more informed budgetary decision-making; and (iv) higher transparency and accountability. Despite these theoretical supportive arguments, many performance budgeting reforms have proved disappointing compared to initial expectations according to one of the recent publications from the OECD (2019), still, most of the countries continue to perform performance budgeting. Furthermore, in the context of green budgeting Blazey & Lelong (2022) argue that countries should use existing budgetary frameworks, tools, and processes such as performance budgeting when implementing the concept.

A specific form of performance budgeting is priority budgeting, where the quality of performance regarding a specific goal is assessed and promoted (Bova, 2021). The definition of the concept is *to align resources and incentives towards specific priorities, signal the political importance of these priorities, and mobilise a comprehensive response* (OECD 2019). Green budgeting is a type of priority budgeting, like related concepts such as gender-responsive budgeting or wellbeing budgeting. OECD (2020) defines green budgeting as *the use of budget policy instruments for the purpose of achieving environmental and climate goals by assessing the environmental impact of budget policy and alignment with the achievement of national and international commitments*. Furthermore, it entails a systematic approach to assess the overall coherence of the budget relative to a country's climate and environmental agenda and to mainstream an environmentally-aware approach across all policy areas and within the budget process. While it can be pursued in various ways, it is more efficient when certain conditions are met (OECD, 2021b), namely: it is inserted in a country's strategic framework on climate change and the environment; it uses budgetary policy tools that contribute to evidence-based decision-making; it relies on an institutional design with clearly-defined responsibilities and a timeline for actions; it makes use of transparent reporting and independent oversight to ensure openness and accountability. Thus, its *raison d'être* is based on a belief that wider and more intensive implementation of the concept in countries should help redirect public investments, consumption, and taxation towards green priorities and at the same time away from harmful subsidies (European Commission, 2020). The green budgeting enables further awareness of the importance of sustainable development, which is based on evidence and more tangible data. Therefore, aligning budgets with environmental goals could play a significant role in the ecological transition (Bova, 2021).

Since the launch of Paris Collaborative on Green Budgeting the concept has gained momentum concluding from the increasing number of research documents published by the OECD and European Commission from 2018 onwards, while scientific research remains scarce. By entering a search query *green\_budgeting* into Scopus database it brings only 14 results, among which only few are actually related to the content that can be labelled as green budgeting. Much more literature can be found on related topics, like gender budgeting (115 documents) or performance budgeting (177 documents).

One of a few topic related papers is the one from Wilkinson idr., (2008) in which authors describe the implementation of green budgeting throughout a five-steps budgetary "life cycle" process. Throughout the research some of the important features of green budgeting research were identified that remain highly relevant nowadays as well, namely; the great extent of the concept, little research of the topic, and a pronounced lack of transparency in most budgetary processes which actively inhibits independent, comparative research (Jacob idr., 2008). Important notion should be made at this point to make a clear distinction in terminology between concepts of *green budget* and *green budgeting* which are sometimes used interchangeably. In general, green budget refers to governments steering environmental policy objectives via fiscal measures (Russel & Benson, 2014) e.g., green taxes or green public expenditures while green budgeting is more of a systematic review, measuring and screening of environmental impact of particular budgetary element, which enables evaluation of greenness of

budgetary items. Russel & Benson (2014) for example take the first approach, despite using the term green budgeting. In general, their analysis focuses on different theoretical models which they use to explain different government policies towards allocation of fiscal resources to the environmental sector in the time after the great financial crisis when most of the countries pursued austerity measures.

### **2.1. Implementation of green budgeting**

Among the crucial elements for successful implementation of green budgeting are environmental assessments. It is important to perform the assessment of measures and policies in advance of their inclusion in the budget, *environmental impact assessment*, as well as after the implementation, *environmental evaluation*, to help understand how effective they have been in reaching the green objectives (Pojar, 2022). Ex-ante assessments can be used as guidance, to support political decision making as well as better understand the environmental risks and options in achieving green commitments of budgetary actions, while political will stands as a prerequisite. On the other hand, ex post analyses provide feedback on measurements and policies implemented in the past and their effectiveness towards green objectives. These analyses enable governments to understand how appropriate the interventions have been, the cost and efficiency of the various policies, and any unintended effects, while at the same time promote learning by doing approach (Pojar, 2022). Although, few directives at the EU level already require including environmental consideration into policy action (EIA<sup>1</sup> and SEA<sup>2</sup> directives)<sup>3</sup>, they are not necessarily linked to the regular budgeting cycle. Green budgeting calls for environmental impact assessments and evaluations of budget measures to be integrated systematically in the ordinary budgeting process.

Why is green budgeting difficult to implement? Modest implementation of the concept across countries thus far can be explained by different arguments. In general, arguments can be grouped into three main categories, namely:

- Need for political and public will - a collaborative approach and, not least, political support are key success factors. Environmental ministries have been traditionally less important in the process of setting budgetary expenditures. Environmental policy instruments tend to be more regulatory rather than expenditure-based, which rests on a logic of “polluter pays principle” (Wilkinson idr., 2008)
- Administrative framework - it involves taking steps that cut across policy sectors and levels implying that a comprehensively developed framework presents a great challenge for the administration.
- Time, knowledge, and resources - it requires introducing new methodologies and procedures as well as novel expertise within the national budgetary process, which is often limited<sup>4</sup>.

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<sup>1</sup> For *individual projects* (e.g., dam, motorway, airport), a country should perform environmental assessments based on the ‘Environmental Impact Assessment’ (EIA) Directive

<sup>2</sup> For certain *public plans or programmes* (e.g., land use, transport, energy, waste management, agriculture), assessments should be conducted under the ‘Strategic Environmental Assessment’ (SEA) Directive

<sup>3</sup> While the SEA does not apply to financial or budget plans and programmes any government can decide to conduct assessments under the SEA for the whole budget or specific budgetary policies.

<sup>4</sup> More in next section.

The labelling methods currently used in practice vary from country to country and they are therefore difficult to compare. The EU GBRF<sup>5</sup> can serve as a reference for the Commission to monitor Member States' practices and, if necessary, to develop regulatory solutions for the next period (Nyikos & Gallazs, 2022). While the objective is not to have a 'one-size-fits-all' model for green budgeting in the EU, some convergence of approaches across Member States would be desirable and the GBRF could provide the necessary point of reference (European Commission, 2022).

## **2.2. Review of implementation of green budgeting across EU countries**

Historical data on green budgeting implementation processes across countries has been limited. According to our research, prior to Paris Collaborative on Green Budgeting (PCGB) there has been no comprehensive review of green budgeting performance across countries e.g., evaluating environmental impacts of budgetary and fiscal policies and assessing their coherence towards the delivery of national and international commitments. However, that does not mean that some governments did not perform activities of green budgeting. Wilkinson idr. (2008) argue that Brundtland Report and UN's Agenda 21 were antecedents of green budgeting process as they already included proposals that coherence among sectoral, economic, social and environmental policies, plans and policy instruments, including fiscal measures and the budget should be pursued by countries. Norway was among the first countries to respond to Brundtland Report by introducing the Environmental Profile of the State Budget (EPSB) in 1989. Although the EPSB has been gradually modified and subsequently became less comprehensive (Ruud, 2009), in its formation it required from all ministries, not just environmental one, to set out the main environmental challenges, targets and initiatives associated with their activities during the coming fiscal year as well as provide an overview of their environmentally related expenditure (Jacob idr., 2008).

Besides Norway and UK, the Netherlands and Denmark were the only EU countries that applied the concept in 1990s. Although the Dutch government implemented the measure only on experimental basis while Denmark applied the instrument temporarily but dropped it in 2001 (Jacob idr., 2008) they still belong to only few EU countries that perform environmental impact assessment according to the 2021 European Commission survey on green budgeting (European Commission, 2021b). Following the responses from the survey on Member States' green budgeting practices and plans for future improvements, 10 out of the 27 EU Member States are concluded to have meaningful evidence of national measures in practice in the areas identified at the EU GBRF<sup>6</sup> (Nyikos & Gallazs, 2022). Six of the other reporting countries had plans to introduce GB in the future<sup>7</sup> while the rest had no plans nor intentions to implement the concept. The list of the countries regarding their level of green budgeting adaptation is presented in Table 1.

**Table 1:** Implementation of green budgeting across EU countries (2021 data)

<b>Performing environmental assessment</b>	<b>Light green tagging<sup>8</sup></b>	<b>Planning to implement</b>	<b>No green budgeting</b>
BG	AT	CY	BE
DK	FI	EL	CZ
NL	FR	ES	DE
SE	IE	LT	EE

<sup>5</sup> EU Green Budgeting Reference Framework

<sup>6</sup> Four of them conducting environmental impact assessment of budgetary measures/policies; six performing light-tagging e.g. identifying a list of green and/or brown measures/policies.

<sup>7</sup> Slovenia and Spain already in 2023.

<sup>8</sup> Light tagging: Identifying a list of budget measures/policies in accordance to their positive or negative environmental impact. Compared to budgetary tagging, the scope of light tagging is much narrower as it only identifies specific items and not the entirety of the budget.

	IT	PL	HR
	LU	SI	HU
			LV
			MT
			PT
			RO

Source: European commission (2022), own elaboration.

Following the results of the survey, the European Commission developed an EU Green Budgeting Reference Framework - GBRF (European Commission, 2022) to serve as a toolkit for Member States striving to introduce or upgrade green budgeting practices. Namely, results of the survey showed that most of the EU member state countries do not apply green budgeting due to (i) lack of a modern budgetary government framework; (ii) lack of relevant knowledge or technical expertise; or (iii) lack of methodologies (i.e., methodologies for assessing environmental effects).

**Table 2:** Implementation of green budgeting across EU countries (2021 data)

<b>Key challenges to green budgeting</b>	<b>Countries assessed</b>
Need of political will	CZ, EE, LT, LV, RO
Need of administrative leadership	CZ, SI
Need of a modern budgetary government framework, i.e., existence of strong links between planning and budgeting and programme budgeting.	BE, CY, CZ, HU, PL, PT
Need of relevant knowledge or technical expertise	BE, CY, EE, EL, ES, HR, HU, LT, MT
Need of time	MT
Need of staff	BE, EL, LT, PT, SI
Need of adequate information and communications technology (ICT)	CY, EL, ES, LV, PT
Need of methodologies (i.e., methodologies for assessing environmental effects)	EE, ES, HR, HU, LV, MT, PL, SI
Need of capacity across government	HR, PL
Other	DE

Source: European commission, own elaboration.

To further stimulate the implementation and harmonization of the concept across countries, development of the reference framework seems to be a logical answer from the European Commission. The GBRF includes elements that are considered key for implementing green budgeting at country level. These elements are as follows: (i) the coverage of environmental objectives, of budgetary items and of public sector entities; (ii) the methodology used to assess consistency of budgetary policies with environmental goals; (iii) the deliverables; (iv) the governance, setting responsibilities for each player; (v) and the transparency and accountability of the process (European Commission, 2022).

- Coverage: a comprehensive framework should encompass all environmental objectives and the entirety of budgetary elements and public sector entities.
- Methodology: initially, the methodology could imply identifying those budgetary items whose net impacts are broadly favourable or unfavourable to the environment, followed by a more comprehensive approach that identifies the green and brown content of the budget as a whole, eventually complemented by impact assessments.

- Deliverables: a national legal provision or administrative document on green budgeting should detail the content and calendar for green budgeting deliverables; these should be part of annual and multiannual budgetary plans and execution reports.
- Governance: the roles and responsibilities of the different stakeholders should be clearly defined, together with the timeline for action and deliverables. Initially, a temporary dedicated task-force could be put in place until a permanent structure is established with close involvement of line ministries.
- Transparency and accountability: all deliverables should be public and the methodology should be subject to an independent expert assessment. At a later stage, practices should include independent evaluations of the reports, parliamentary scrutiny and regular ex-post reviews of the methodology used.

The GBRF outlines three levels of development, featuring varying degrees of ambition and comprehensiveness across the five above-mentioned key elements. Specifically, level 1 corresponds to an ‘essential’ green budgeting framework, which includes must-have features for any country committed to using green budgeting; level 2 corresponds to a ‘developed framework; and level 3 presents an ‘advanced’ framework. Nyikos & Gallazs (2022) made a review of countries according to this classification (Table 3).

**Table 3:** Summary of the green budgeting indicators across EU countries

	Elements	LEVEL 1 - Essential	LEVEL 2 - Developed	LEVEL 3 - Advanced
Coverage	Enviromental objectives	DK, IE, NL	AT, SE	BG, FI, FR, IT, LU
	Budgetary lines	AT, DK, IE, IT, LU, NL	BG	FI, FR, SE
	General government	BG, DK, FI, IE, IT, LU, NL, SE	AT	FR
Methodology		AT	FR, IT, IE, LU	FI, SE, NL, DK, BG
Deliverables		AT, FR, IE, SE, NL	IT, FI, LU	
Governance			AT, BG	DK, FI, FR, IE, IT, LU, NL
Transparency & Accountability		AT, BG	FI, FR, IT, LU, SE	DK, IE, NL

Source: authors, data European Commission Green Budgeting Survey 2021

Source: Nyikos & Gallazs (2022).

### 3. Methodology

We built the research methodology to answer the first research question on a limited number of research papers, document reviews from OECD and EC, and datasets that include estimates of green budgeting implementation across EU countries. Therefore, we presented the evolution of the concept, its *raison d'être*, as well as challenges and prerequisites for successful implementation. To answer our second questions, *how well is Slovenia prepared for the implementation of green budgeting*, we have evaluated elements that we considered crucial for implementing green budgeting at a country level, namely, (i) need for political and public will, (ii) administrative framework and (iii) time, knowledge,

and resources. Therefore, we focused on analyzing the existing literature and national policy/strategic documents with the intention to provide support in a form of past practices and documents for the implementation of the concept which is planned to take place in 2023. The analysis can also serve as a review of the evolution of budget practices in Slovenia that include environmental component.

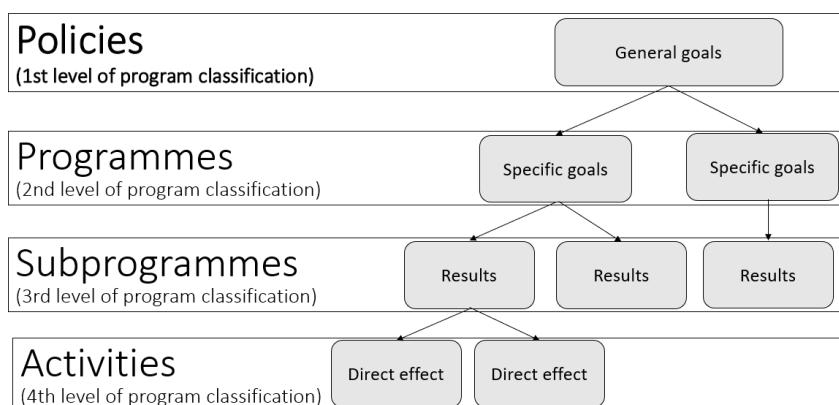
#### 4. Green budgeting – the case of Slovenia

In the years following the independence in 1991, Slovenia started to determine rules of budget implementation, the classification of revenues and public expenditures, setting the amount of acceptable public debt, as well as introducing the external control of budget expenditures. The most important changes in Slovenian budgeting process started in 1999, when it began to adapt its budget system to EU rules, introducing a program classification serving also as a basis for results-oriented budgeting or performance budgeting (Stanimirović & Klun, 2021). The next milestone in the implementation of performance budgeting was achieved in the preparation of the budget proposals for 2011 and 2012, when the program structure of public expenditures was updated to facilitate the setting of goals and efficiency indicators of the state budget. For the first time, budget users formulated substantive measures in their financial plans, which was also used for the distribution of labor costs, material costs and the costs of investment activities according to substantive programs - more precisely, according to projects or measures as fundamental budget units. At the same time, it also started to determine general and specific goals more systematically in individual areas, which ensured the interlinkage between goals from the highest to the lowest level as well as their direct effects. By introducing goals and indicators into state budget it enabled to provide answers the following questions (Ministry of Finance, 2018a):

- How the funds are spent - the interlinkage between sources, activities, and public products or services.
- In which areas the funds are spent - what are the expected consequences of the program.
- Who and where the funds are spent – who are the target groups and stakeholders of the programs.

Furthermore, individual categories of goals can be linked to certain levels of program classification of the budget. Table 4 presents the hierarchy in which each direct effect contributes to maximum one result, each result to maximum one specific goal, and each specific goal to maximum one general goal.

**Table 4:** Division of policies and general goals.



Source: Ministry of Finance (2018), own elaboration.

#### 4.1. Basis for implementation of green budgeting



In the same period as the budgeting process advanced towards becoming more performance oriented, Umanotera<sup>9</sup> published a document called *Green Budget Reform in Slovenia: responding to the crisis with a sustainable vision* (Umanotera, 2013), which was a pioneering work in terms of estimating the amount of harmful subsidies as well as potential revenue increases from expanding green taxes – a process that would already fit the definition of Green budget tagging<sup>10</sup>. It was published in a time after the double deep recession following the world's great financial crisis, accompanied by structural budget deficit and unemployment, when green budget reforms (including ecological tax reforms) were proposed in Slovenia to enable sustainable development in terms of financial consolidation as well as mitigating the impacts of climate change. The strategy was intended to abolish environmentally harmful subsidies and invest in green activities on the expenditure side, while raise more environmental taxes and excise duties on the revenue side. Especially, the policy of harmful subsidies was recognized as the central problem of budget sustainability, which was in conflict with widely accepted *polluter pays principle* (Umanotera, 2013). It was estimated that the amount of harmful subsidies exceeded 500 million euros in 2011, which was the first time to attach a price tag to subsidies (Umanotera, 2013). On the revenue side, the environmental taxes were estimated to be high enough, not to require any action in terms of introducing new taxes or expanding the existing ones. Indeed, Slovenian share of environmental taxes as a percent of GDP has been traditionally among the highest in EU, among which energy taxes accounted for more than 80% of total. Although, high figure of environmental taxes is a consequence of relatively high purchases and consumption of energy, which is related not only to extensive transit traffic and the strong transport sector in Slovenia, but also to dispersed settlement and the poorly developed public transport infrastructure (Institute of Macroeconomic Analysis and Development, 2022).

In the following period, the government recognized the potential of “greening public budget” as it introduced the Government strategic development project P3 – Green budget reform (2014-2018). At the time, coalition agreement formed the project group in order to find a way and timeline to gradually abolish harmful subsidies and make a review of environmental taxations. The final result of the project group was a document *Green budget reform in Slovenia – Environmental and public finance aspects of incentives* published by the Ministry of Finance (2018b), which includes an overview of incentives by individual ministries, including classification of which incentives have negative and which positive environmental effects, as well as the possibilities of improving or replacing incentives that do not contribute to reducing environmental burden with more environmentally appropriate measures. To estimate the value of incentives and their impact on selected environmental indicator, the unified form was developed which was filled in by various ministries<sup>11</sup>. Besides their value, incentives were classified into three groups, according to their predominant influence on a single environmental indicator, namely (Ministry of Finance, 2018b):

– impact on the air and reduction of greenhouse gases, whereby the incentive affects the reduced or increased emission of greenhouse gases or solid particles in the air, etc.;

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<sup>9</sup> In the report of Umanotera (The Slovenian Foundation for Sustainable Development has been the leading NGO in the field of sustainable development in Slovenia) a detailed analysis of policy actions including environmentally harmful subsidies across sectors (Energy, Agriculture, and Traffic) was done.

<sup>10</sup> A tool involves assessing each individual budget measure and giving it a “tag” according to whether it is helpful or harmful to green objectives (OECD, 2021a)

<sup>11</sup> Ministry of the Environment; Ministry of Agriculture, Forestry and Food; Ministry of Infrastructure; Ministry of Finance; Ministry of Economic Development and Technology

- impact on the soil, whereby the incentive affects the quality of the soil, biochemical properties of the soil, greater or lesser generation of waste, use of space, etc.;
- impact on water, whereby the stimulus influences or changes the ecological state of inland waters and seas and their associated ecosystems, the chemical state of inland waters and seas, etc.

In total, 45 incentives were identified as having environmental impact on one or more environmental indicators. Furthermore, incentives were also classified according to their impact on the environment, namely: incentives that contribute to reducing environmental load, incentives that can contribute to reducing environmental load, and incentives that do not contribute to reducing environmental load. Unfortunately, no price tags were added to individual incentives only its classification regarding reducing environmental load. Despite not including value estimates of environmental impact, we could argue that the practise described above already included some elements of green budgeting and could serve as an initial point of developing the concept more comprehensively.

Another milestone in terms of systematically addressing environmental issues in the budgeting process was the preparation of *Recovery and Resilience Plan (SVRK, 2021)* which had served as a prerequisite for obtaining funds from the NEXT Generation EU. In general, Slovenian RRP was divided into four development areas: Green transition; Digital transformation; Smart, sustainable and inclusive growth; Healthcare and social security. Each of these areas includes detailed description of planned projects within different components. What is important from the green budgeting concept perspective that each component, not only the green transition, includes also a part labelled “green dimension of component”. Therefore, planned reforms and investments were also assessed regarding their contribution towards environmental goals. Note, that estimations were in percentage, not in absolute value terms.

#### **4.2. Implementation**

Despite being quite slow in the development of the performance based budgeting, as well as the fact that program budgets still do not link the allocated funds with results in total (Klun, 2019), Slovenia was standing among EU countries that were above the average of OECD’s index of performance budgeting practices (Sapala, 2018). Rigidity of budgetary process was found among the main reasons for not upgrading implementation further, as according to estimates around 90% of the budget is “fixed” (Klun, 2019). However, one could argue that current classification, with its policies, programs, subprograms, and goals already presents sufficient prerequisite for implementing green budgeting.

Political and public will is among the most important factors necessary for implementation of green budgeting. Gender budgeting perspective in performance measurement for example was very poor in Slovenia due to lack of political consensus and insufficient effort (Stanimirović & Klun, 2021). Still, that does not imply that there is high gender inequality in Slovenia, quite the opposite, gender equality is above the EU average with the relatively small gender pay gap, while the latter may even present the main impediment for the improvements in this area. A similar situation can be attributed to the environmental area, whereas political and public consensus has not been an issue. Namely, Slovenia has been traditionally striving to be perceived as a green country, developing its first nature (not environmental) protection programme already back in 1920 when direct detrimental effects on environment were far from being felt yet (Polajnar Horvat idr., 2014). Soon after the independence the first Slovenian environmental protection act was adopted in 1993, which was based on a standpoint that preventive action is required as well as careful deliberation in decision-making about causing new environmental impacts and exploitation of natural resources. Furthermore, it included the rule of integrity that environmental protection cannot be successfully implemented only partially, without consensus and cooperation (Špes, 2008). These elements have much in common with prerequisites for implementation of green budgeting. After joining the EU, Slovenia committed itself

to systematically integrate environmental principles into politics, economy and everyday life enabling environmental issues to become a subject of public policies and public debates, while concerns about environment became a positive value (Polajnar Horvat idr., 2014). Environmental awareness accompanied by the large share of protected areas, high forest cover and moderate intensity of farming contributes significantly to relatively good performance on main environmental indicators. Namely, Slovenia managed to achieve and even exceed 2020 targets for emission and energy use while the target for the share of renewables in total energy consumption was not achieved. On average, soil and water are still relatively well-preserved natural resources, while air quality, measured by the content of the finest dust particles, is more problematic, due to the inadequate combustion of wood biomass in individual heating systems and extensive road transport (Institute of Macroeconomic Analysis and Development, 2022).

Anyhow, from the budgeting perspective, it can be argued that since 2014 and the implementation of green budget reform, which coincides with the period when EU started to more actively promote “the greening of policies”, Slovenia gained momentum to systematically incorporate green budgeting elements into the budgeting process although none of the governments that followed did succeed with the implementation yet. Consequently, as discussed in Section 2, Slovenia is among 16 EU countries that did not systematically perform environmental impact assessment, nor green budget tagging, while it is planning to implement the concept in 2023 according to the EC survey on green budgeting (European Commission, 2021a). According to the results, it will implement budget tagging and it will identifying the green and brown components of the budget. The plan is that the Ministry of Finance develops and applies a methodology for assessing the impact of individual budget lines on environmental objectives (climate tagging) in line with the taxonomy and the ‘do no significant harm’ principle in Technical Guidance (2021/C58/01). The methodology shall be adopted, published, and entered into application and shall allow monitoring green budget expenditure and the assessment of environmental and climate impact of fiscal policy while experience gained from conducting the RRP will serve as guidelines (European Commission, 2021a).

#### **4.3. Discussion**

Among the reasons for not implementing green budgeting yet, Slovenian officials exposed the need of administrative leadership, need of methodologies (for assessing environmental effects), and need of staff (European Commission, 2021a). Thus far, one can argue that Slovenia gained some experiences in conducting environmental impact assessments throughout preparation of *Green budget reform* and *Recovery and Resilience plan* including development of common methodology that enabled easier coordination among ministries. Also, the Ministry of Finance is responsible for coordination of budget users financial plans each year when preparing the budget for the next two years. Furthermore, as Slovenia’s state budget consists of a general and a special part, the latter includes programs of budgetary expenditures and also financial plans that include long- and short-term goals, and indicators (Stanimirović & Klun, 2021). These are based on clearly defined categories, such as institutional units, economic purposes of expenditures, programmes and projects, sources of revenue, etc. The classifications make it possible to plan and monitor spending throughout the cycle, i.e. from budget preparation to its implementation and reporting both during the budget period and at the end thereof (Ministry of Finance, 2023). This process of performance budgeting increases transparency and enables easier incorporation of environmental component to particular goal. The need of political and public will were not among reasons against implementation confirming the stance that Slovenia has been traditionally supportive towards environmental issues.

#### **5. Conclusion**

With the adoption of the European Green Deal before the crisis and particularly with the introduction of Next Generation EU fund and confirmation of the new multi-annual financial framework 2021-2027, the EU bases its economic recovery and future growth largely on green investments directed towards climate change mitigation and environmental degradation, thus continuing to promote itself as an environmental leader on the international stage (Burns *idr.*, 2020). Wider implementation of green budgeting concept across countries would make environmental impact assessments and environmental evaluations a common practice in governmental budgetary process. As argued by Bova (2021) quantification of policy actions from the environmental perspective and alignment with budgeting process can make a step forward towards ecological transition.

Our qualitative research reveals that Slovenia has been well prepared for the implementation of the concept. Analysis of budgetary process in Slovenia, political and public environmental consensus, legislative framework as well as past experiences gained from the preparation of Recovery and Resilience Plan and green budget reform documents suggest that prerequisites for successful implementation are met. Furthermore, guidelines and recommendations from the EU GBRF should be followed to overcome the methodological and administrative issue. At the same time, in the initial period of implementation it should pay attention to avoid the concept becoming excessive administrative burden for the stakeholders.

As far as we know, this research paper is a pioneer attempt to comprehensively assess one country green budgeting approach and prerequisites for implementation, thus provides a starting point for future evaluations. With environmental concerns being among priorities of EU we believe that further research of the concept will follow.

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