

GREEN BUDGET AS A FORM OF SOCIAL ACTIVATION TO IMPROVE THE URBAN ENVIRONMENT – CASE STUDY OF KATOWICE, POLAND

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³ *COST Action – CA18204 “Dynamics of placemaking and digitization in Europe’s cities (DOPMADE)”*

<https://doi.org/10.11118/978-80-7509-963-1-0142>

Abstract

Participatory Budgets as a placemaking tool involve residents in co-deciding on public expenditure. The growing number of applications for pro-environmental projects influences the creation of Green Budgets in many Polish cities. An example is Katowice where such an initiative has been operating since 2020 to support public tasks in the field of ecology and environmental protection. The study is aimed at indicating the development trends of the Katowice Green Budget based on its 4 editions (2020, 2021, 2022, 2023). During this period, residents submitted a total of 715 green projects and 347 of them were selected for implementation. The results show a growing trend in the scope of submitted green projects in the first 3 editions and stabilization in the 4th edition. The number of accepted projects is constantly growing. The largest number of projects is related to the development of greenery (new plantings, green streets, revitalization of green areas), as well as green education important for increasing public awareness of the role of pro-environmental activities in the city. This confirms that the Green Budget fills the gap in activities supporting the development of urban greenery, and is appreciated by both the city authorities and residents.

Keywords: urban green spaces, placemaking, environmental education, sustainable society, sustainable city

Introduction

The involvement and participation of citizens in making decisions about spending public funds intended for shaping urban spaces has been growing significantly in recent years and is one of the key forms of participation in the planning and development of many Polish cities. The Citizens' Budget (CB) has become a popular placemaking tool – a form of grass-roots participation that allows for a better response to local social needs and at the same time improves the potential and experience of citizens in negotiating their interests (Taylor, 2019; Smaniotto Costa et al., 2024). In recent years, more and more cities around the world have set ambitious climate and environmental goals for their activities, and the Citizens' Budget is playing an increasingly important role in the sustainable management of urban space (Sinervo et al. 2024). The share of social 'green' initiatives aimed at pro-environmental activities is growing – increasing the number of green areas and places for outdoor recreation (Maksymiuk, Kimic, 2016), building green infrastructure, increasing biodiversity, supporting retention etc. (van der Jagt et al., 2023). This approach is determined by the need to counteract the negative effects of climate change and improve living conditions in the city, which was directly influenced by, among others, the COVID-19 pandemic (Kimic et al., 2024). It also results from the need to increase access to green areas, in particular for groups at risk of exclusion, such as women (Polko, Kimic, 2022) or seniors (Kimic, Polko, 2022). Green Budgets are being created to enable communities to be involved in the process of creating sustainable and thus livable cities. Katowice is a city located in south-western Poland and the centre of the Silesian Metropolis. This area with a high concentration of industry is currently undergoing transformation towards revitalization and regeneration of the degraded urban environment. Top-down planning is gradually being replaced by dialogue with citizens as the residents of Katowice are increasingly willing to engage in the transformation process (Pudelko, 2015). The Citizens' Budget was initiated here in 2014. However, the growing interest of residents in green projects resulted in the introduction of the Katowice Green Budget in 2020 – a separate placemaking tool for

building the city's natural potential. Thanks to separate public funds, it enables the identification of residents' needs in the field of broadly understood ecology, environmental protection and improvement of the city's aesthetics by increasing the share of greenery. It implements the provisions of the 'Development Strategy of the City of Katowice 2030' (2015) based on the development of Katowice as a city that is: *green* – focused on respecting environmental and spatial resources, *smart* – focused on strengthening and introducing innovations, and *resilient* – focused on adaptability and transformation through participation in the process of preparing actions to mitigate structural changes. Public participation in the Citizens' Budget is currently carried out using online voting systems (Szczepańska et al., 2022). This is a consequence of the growing use of information and communication technologies (ICT) to increase active participation in urban initiatives (Cunha et al., 2011; Polko, Kimic, 2024), including the process of shaping urban spaces (Kimic et al., 2019; Olejniczak, Bednarska-Olejniczak, 2021).

Material and methods

The article focuses on the case study of the of Katowice Green Budget. The aim was to indicate the direction of development of this placemaking tool based on data from the 4 editions carried out so far in 2020, 2021, 2022 and 2023 (Zielony Budżet Miasta Katowice, 2024). The preliminary stage included an analysis of the number of projects submitted by residents in each edition to indicate general quantitative trends. Then, leading project types were identified and assigned to 8 categories. The projects were assessed in order to identify those whose share among the completed projects has increased in the subsequent editions of the Katowice Green Budget. The obtained results made it possible to illustrate changing trends and social needs in the field of pro-environmental initiatives in the city.

Results

In the 4 completed editions of the Katowice Green Budget in 2020, 2021, 2022 and 2023, residents submitted a total of 715 green projects for an amount exceeding PLN 10.5 million. 347 projects were selected for implementation, which constitutes 48.53% of the submitted projects. As many as 306 projects involved local initiatives implemented in 22 districts. Only 41 projects were city-wide – they concerned activities assigned to more than one district (Table 1).

Tab. 1: List of projects submitted and selected in the vote in the first four editions of the Katowice Green Budget (2020-2023).

Green Budget Edition	Number of projects submitted	Number of projects selected in the vote / % of those submitted		Projects selected for implementation	
				Citywide	District
2020 (I)	123	54	43,90%	4	50
2021 (II)	164	89	54,27%	8	81
2022 (III)	227	96	42,29%	14	83
2023 (IV)	201	108	53,73%	15	92
Total	715	347	48,53%	41	306

With regard to the number of submitted projects, an upward trend is visible in the first three editions of GBK, while a slight decline was recorded in 2023. Regardless of these changes, the number of projects selected for implementation is constantly growing, and additionally they constitute between 43.90% and 53.73% of projects submitted in individual editions.

A detailed analysis of the projects selected in the vote allowed them to be assigned to 8 main categories: *new plantings*, *street greenery*, *new green areas*, *revitalization of green spaces*, *maintenance of greenery*, *water retention*, *small animals care*, and *environmental education* (Table 2).

Tab. 2: Projects selected in the vote and assigned to individual categories in the Katowice Green Budget.

Green Budget Edition	New plantings	Street greenery	Maintenance of greenery	Environmental education	New green areas	Revitalization of green spaces	Water retention	Small animals care
2020 (I)	14	12	1	4	8	8	4	3
2021 (II)	34	3	10	7	9	16	4	6
2022 (III)	27	11	8	23	11	11	1	4
2023 (IV)	27	4	12	36	5	13	4	7
Total	102	30	31	70	33	48	13	20

The results obtained show that in the four completed editions of the Katowice Green Budget, the majority of completed projects belonged to the new *plantings* category (102). This group included those related to a more comprehensive introduction of greenery creating extensive structures composed of trees, shrubs and perennials, but also planting several trees in urban space, and introducing greenery in playground and recreation areas, as well as individual elements (flower meadows, flower beds, green stops), plants in pots, or small thematic gardens and community utility gardens. Second in order is the *environmental education* category with 70 projects implemented over four years. They included a series of educational activities for children carried out in schools, as well as ecological workshops (focused on recycling, a sustainable approach in everyday life, environmental protection etc.) and plant cultivation classes for adults. Projects classified into the following categories: *revitalization of green spaces* (48), *new green areas* (33), *maintenance of greenery* (31) and *street greenery* (30) were at an average level. They included social initiatives aimed at increasing the number of green areas in the city (mainly small squares), improving the attractiveness of existing green areas and city streets, and the quality of green areas by intensifying care treatments. The remaining two categories included only a few projects in each Green Budget edition. A total of 20 projects were selected in the *small animal care* category, which included the installation of nesting boxes for birds and insect houses. Only 13 projects were selected in the *water retention* category, included the creation of small rain gardens and the cleaning of water features in green areas.

Within individual categories, certain trends can be noticed regarding the changing share of projects selected for implementation. The number of those in the most popular *new plantings* category remains at a constantly high level – in the last three editions they covered 27 and 34 projects, respectively. The greatest increase takes place in the *environmental education* category, where in 2023 the number of projects selected in the vote was as many as 36 – the highest among all categories in all editions. This proves the social need to raise awareness and expand knowledge to support activities to improve the functioning of the urban environment. At the same time, the small number of projects in the *water retention* category indicates the need to increase education about the possibilities of rational use of water to shape a more sustainable city, even through activities on a local scale.

Discussion and conclusions

The success of the Katowice Green Budget is manifested not only by the increase in the number of projects submitted in the first three editions and the stabilization of their high number in the fourth edition, but above all by a constant increase in the number of projects selected for implementation. This confirms the advisability of separating the Green Budget from the city's basic Citizens' Budget, and at the same time the growing interest of residents in strengthening natural capital and the urban climate resilience (Sobol, 2019). This is consistent with general trends observed in most Polish cities, including voivodeship capitals (Maksymiuk, Kimic, 2016; Bernaciak et al., 2017; Jamontt et al., 2017; Szczepańska et al., 2022). The Green Budget is a valuable supplement to the basic Citizens' Budget of Katowice and fills the gap in existing

activities aimed at developing and maintaining urban greenery, including improving the quality and access to outdoor recreation areas. This is confirmed not only by the growing number of submitted and implemented green projects, but also by their diversity in terms of scale and subject matter. A positive phenomenon is the growing social awareness of the importance of pro-environmental activities for improving living conditions in the city, including the desire and even the need to expand knowledge by organizing and participating in educational campaigns (Bernaciak et al., 2017). It should therefore be recognized that the experience so far related to only a few editions of the Katowice Green Budget is positive and promising. Recognizing the activities carried out using this tool provides knowledge and a better understanding of the current social expectations, allowing to more effectively involve residents in deciding on the sustainable development of Katowice. This knowledge is also the basis for the process of forecasting and planning pro-environmental activities in the city, including decisions to increase funds for subsequent editions of the Green Budget.

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Acknowledgement

Part of this work was supported by the COST Action - 18204 “The Dynamics of Placemaking”.

Souhrn

Participativní rozpočty jako nástroj tvorby míst zapojují obyvatele do spolurozhodování o veřejných výdajích. Rostoucí počet žádostí o proenvironmentální projekty ovlivňuje tvorbu zelených rozpočtů v mnoha polských městech. Příkladem jsou Katowice, kde taková iniciativa funguje od roku 2020 a podporuje veřejné úkoly v oblasti ekologie a ochrany životního prostředí. Cílem studie je naznačit vývojové trendy Zeleného rozpočtu Katovic na základě jeho 4 vydání (2020, 2021, 2022, 2023). V tomto období obyvatelé předložili celkem 715 zelených projektů a 347 z nich bylo vybráno k realizaci. Výsledky ukazují rostoucí trend v rozsahu předložených zelených projektů v prvních 3 vydáních a stabilizaci ve 4. vydání. Počet přijatých projektů neustále roste. Největší počet projektů se týká rozvoje zeleně (nové výsadby, zelené ulice, revitalizace zelených ploch) a také zelené osvěty důležité pro zvýšení povědomí veřejnosti o roli proenvironmentálních aktivit ve městě. To potvrzuje, že zelený rozpočet vyplňuje mezeru v aktivitách podporujících rozvoj městské zeleně a je oceňován jak orgány města, tak jeho obyvateli.

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