- Andrija Krešić u svom i našem vremenu
- Ка бољој демографској будућности Србије
- Ka evropskom društvu ograničenja i perspektive
- Multiculturalism in Public Policies
- Dug i (ne)razvoj
- Traditional and Non-Traditional Religiosity
- Xenophobia, Identity and New Forms of Nationalism
- Филозофија кризе и отпора: Мисао и дело Љубомира Тадића
- Contemporary Issues and Perspectives on Gender Research
- Different Forms of Religiosity and the Modern World
- Contemporary Religious Changes: From Desecularization to Postsecularization
- Strategic Streams 2019: European Elections and The Future of Europe
- Србија: род, политике, становништво
- Promišljanja aktuelnih društvenih izazova: Regionalni i globalni kontekst
- Ksenija Atanasijević: O meni će govoriti moja dela
- Izazovi održivog razvoja u Srbiji i Evropskoj uniji
- Political and Economic Self-Constitution: Media, Political Culture and Democracy
- Resetting the Left in Europe: Challenges, Attempts and Obstacles
- Kulturna autonomija nacionalnih manjina u svetlu činienica
- Друштвене и хуманистичке науке у Србији
- Život za ideju: Misao i delo Đura Šušnjića
- Religion and Identity in the Time of Global Crises
- Klimatske promene Pravni i društveni izazovi
- Monitoring Minority Rights: Twenty-five Years of Implementation of the Framework Convention for the Protection of National Minorities
- Governance of Environmental Challenges in Post-Pandemic Era

Governance of Environmental Challenges in Post-Pandemic Era discusses major changes in governance caused by recent turmoil due to the pandemic. The pandemic crisis was turbulent with high levels of uncertainties making planning and coordination hard to perform. Since a turbulent environment continues to exist after the pandemic, countries have to deal with them in the coming period, which makes the collection of papers relevant and useful.

Prof. Aleksandar Jovović

The authors of the collection of papers used quantitative and qualitative research methods that resulted in firm conclusions. The issue of "new governance" in a turbulent environment characterized by uncertainty and high volatility will be even more relevant in the coming period, which is marked as an era of "policrisis". The publication would be useful to both scientists and policymakers since the topics explored are scientifically relevant and contemporary.

Prof. Željko Požega

The results of the scientific research presented in the publication can serve as a guide for policymakers in their efforts to improve the governance of sustainable development. The authors' recommendations provide a significant contribution to the design of regulations required for sustainable development. The publication is focused on topics that are scientifically based, innovative and internationally relevant.

Prof. Marija Topuzovska Latkovikj

CHALLENGES IN POST-PANDEMIC ERA **ENVIRONMENTAL** Ч GOVERNANCE

EDITORS: PREDRAG JOVANOVIĆ, NATAŠA DRVENKAR, BOJANA NAUMOVSKA

GOVERNANCE OF

www.idn.org.rs





The collection of papers Governance of Environmental Challenges in Post-Pandemic Era deals with changes in governance caused by new conditions created in the pandemic era. Postpandemic recovery period was marked by the emergence of new types of crises, such as the war in Ukraine and in the Middle East. To have successful environmental and more broadly sustainable development policies, countries need to adapt their governance models to the "new reality" marked by sudden pattern changes, high variability and unpredictability. The publication is divided into nine chapters. The authors of the papers analyze modern governance challenges and responses comprehensively, including both vertical and horizontal (sectorial) perspectives. In a constantly and rapidly changing environment where the only certainty is uncertainty, the publication provides a new and fresh perspective on governance in turbulent, post-pandemic conditions. It could be useful to scientists as a basis for further research of "polycrisis" circumstances as well as to policy-makers in designing new, more appropriate and more efficient governance models.

> Predrag Jovanović Nataša Drvenkar Bojana Naumovska

ENVIRONMENTAL CHALLENGES **IN POST-PANDEMIC ERA**

GOVERNANCE OF ENVIRONMENTAL CHALLENGES IN POST-PANDEMIC ERA

PUBLISHED BY

Institute of Social Sciences, Belgrade Faculty of Economics, University "J. J. Strossmayer", Osijek Institute for Sociological, Political and Juridical Research, University "Ss. Ciryl and Methodius", Skopje

PUBLISHER

Goran Bašić

REVIEWERS

Prof. Aleksandar Jovović Prof. Željko Požega Prof. Marija Topuzovska Latkovikj

SERIES

Edited Volumes

SERIES EDITOR

Veselin Mitrović

Belgrade 2023

ISBN 978-86-7093-272-2

GOVERNANCE OF ENVIRONMENTAL CHALLENGES IN POST-PANDEMIC ERA

EDITORS

Predrag Jovanović Nataša Drvenkar Bojana Naumovska







CONTENTS

Predrag Jovanović, Nataša Drvenkar, Bojana Naumovska FOREWORD

7

14

Đorđe Mitrović, Dejan Molnar, Svetozar Tanasković ECONOMIC DEVELOPMENT AND CARBON INTENSITY: EVIDENCE FROM THE EU

34

Aljaž Kuničič, Marjan Svetličič SUSTAINABLE DEVELOPMENT IN THE WESTERN BALKANS

80

Predrag Jovanović, Ivana Ostojić, Ivan Nikolić GREEN GROWTH OF SMART CITIES – GOVERNANCE CHALLENGES

106

Mikhail Lobanov, Jelena Zvezdanović Lobanova, Milan Zvezdanović INVESTMENT IN NATURAL CAPITAL AS A FACTOR FOR SUSTAINABLE POST-COVID 19 RECOVERY

128

Lyubov Belyaevskaya-Plotnik METHODOLOGY OF ECONOMIC SECURITY ANALYSIS WHEN PASSING TO GREEN ENTREPRENEURSHIP FOR THE PURPOSE OF SUSTAINABLE DEVELOPMENT

152

Matija Kovačić, Maja Mutavdžija, Vedran Milojica THE IMPORTANCE OF CIRCULAR ECONOMY IN THE SUPPLY-CHAIN-BIBLIOMETRIC ANALYSIS

198

Biljana Pesalj

TRANSFORMATIVE ROLE OF HIGHER EDUCATION IN SUSTAINABLE DEVELOPMENT

240

Darko Lacmanović, Andrej Raspor SUSTAINABLE TOURIST DESTINATION IN A STRATEGIC MARKETING CONTEXT (MONTENEGRO)

268

Snježana Đokić, Aleksandar Šobot ECOLOGICAL MARKETING AND ENVIRONMENTAL TAXES IN THE FUNCTION OF ENERGY SYSTEMS

291

ABOUT THE AUTHORS

Predrag Jovanović

Institute of Social Sciences, Centre for Economic Research, Serbia

Ivana Ostojić

Institute of Social Sciences, Centre for Economic Research, Serbia

Ivan Nikolić

Economics Institute, Centre for Economic Research, Serbia

Green Growth of Smart Cities – Governance Challenges*

Abstract

The need to overcome interlinked challenges of environmental degradation, social inequity, and economic volatility calls for a new model of economic development that is both green and inclusive, serving as an alternative way to increase human well-being while reducing environmental risks. Cities are now the hot spots of population and economic growth and are responsible for most environmental problems. "Smart city" is grasped not only in a digital context, but also in its much wider capacity to improve its citizens' living standards and upgrade the economic, social, and environmental aspects of their lives. Therefore, it is considered the most appropriate concept for urban transition to a green economy. Decentralisation and governance gaps such as objectives, administrative, policy, capacity, and market gaps are key challenges in promoting cities' green transition. Local authorities use different levers to stimulate green growth, such as programs/projects and various forms of incentives/disincentives. In the past decade, public procurement was increasingly used by governments as a smart governance instrument to promote green growth at both central and local levels. Key words: Green economy, Smart cities, Governance, Green

Introduction

Contemporary living conditions, causing an ever-increasing number of inhabitants, depletion of limited natural resources, as well as numerous ecological problems, have necessitated dealing with the issue of sustainable development. Current generations that use natural resources should allow future generations the

growth, Green public procurement

^{*} The paper was written as part of the 2023 Research Program of the Institute of Social Sciences with the support of the Ministry of Science, Technological Development and Innovation of the Republic of Serbia.

same right to reap the benefits of nature, and it is the only concept of economic development that can be considered sustainable (Ostojić, 2020). During the past decade, the adverse effects of climate change have become more visible and threatening. In 2021, floods in Northern Germany, Belgium and the Netherlands caused a record increase in river levels, putting citizens in that part of Europe at risk. Moreover, according to a study, by 2070, sea levels could be expected to rise by 50 cm, tripling the population exposed to coastal flooding and inducing a ten-fold increase in the value of assets exposed, accounting for 9% of global GDP (Nicholls et al., 2008).

Furthermore, projections suggest a rise in global temperature in the range of 1.7°–2.4° Celsius by 2050 due to global emissions of greenhouse gases (Hammer et al., 2011). That would result in more frequent heat waves, droughts, storms, and floods that cause severe damage. Increasing the availability of green and climate finance and developing clear, coherent, and supportive policies are crucial for all economies to recover quickly and continue sustainable growth and development (Ostojić, 2023).

Raising interest in a new model of economic growth that would enable us to avoid those negative scenarios led to the recent fast development of the concept of a "green economy". At the same time, the OECD and World Bank use the term "green growth" to describe how the world economy should develop in the future. One of the key factors why economic growth negatively affects the environment is a failure in the valuation of natural resources and inaccurate reflection of that value in economic activity (Nikolić & Kovačević, 2019). In other words, the current market system reflects neither the inherent value of ecosystem services and natural capital nor the true costs of their degradation. Natural capital is undervalued and consequently mismanaged (OECD, 2011b).

If the actual value of the ecosystem were reflected in the market, economic activity would be more resource-efficient and less environmentally damaging. Thus, one of the key preconditions for the green economy is the accurate valuation of natural capital that drives appropriate management of environmental resources (UNEP, 2011), which leads to green growth. As a result, the notions of the green economy and green growth are closely interlinked and frequently used interchangeably.

Literature Overview

The concept of a green economy was introduced at the end of the last century (Pearce et al., 1989). However, soon after the financial crisis of 2008, it became apparent that a new model of economic development is required. Leading international organisations, the scientific community, and environmental groups have made significant efforts to turn the concept of a green economy into a new opportunity or pathway that can overcome the crisis (Balaban, 2019).

Major international organisations active in supporting economic development worldwide, the Organisation for Economic Co-operation and Development (OECD), the World Bank and the United Nations Environment Programme (UNEP), have called for a radical transformation of development practices and transformation towards a green economy. Clark (2013) pointed out that the UN Conference on Sustainable Development 2012 (also known as the Rio+20) recognised the need to address the linked challenges of environmental degradation, social inequity, and economic volatility. Moreover, she emphasised the conference's conclusion that future economic development must be both green and inclusive, proposing the green economy as an alternative model to increase human well-being while reducing environmental challenges and risks.

UNEP defines a green economy as "the economy that results in improved well-being and social equity, while significantly reducing environmental risks and ecological scarcities" (UNEP, 2011). The European Environment Agency defines a green economy as one that "generates increasing prosperity while maintaining the natural systems that sustain us" (EEA, 2014).

At the same time, the OECD and World Bank define the term "green growth" as to mean "economic growth and development ensuring that the natural assets continue to provide the resources and the environmental services on which our well-being relies. To achieve this, it must catalyse investment and innovation which will underpin sustained growth and give rise to new economic opportunities" (OECD, 2011b). "Green growth is qualitative growth that is efficient in its use of natural resources, clean in that it minimises pollution and environmental damages and resilient in that it explains natural hazards" (World Bank, 2012). These definitions show that a green economy is an "umbrella" concept that encompasses different implications concerning growth and well-being, or efficiency and risk reduction in the use of natural resources (Loiseau et al., 2016).

The use of fossil fuels is a key generator of harmful gases that cause the greenhouse effect and lead to global climate change, which is why managing the growing global energy demand is one of the key priorities (Petrović, Nikolić & Ostojić, 2017). The concepts of green economy and green growth were elaborated in three reports from leading international organisations: UNEP's "Towards a Green Economy", the World Bank's "Inclusive Green Growth", and the OECD's "Towards Green Growth". The core assumption of the green economy concept is that environmental progress cannot be separated from economic growth. Decelerating growth or ignoring the economy will not lead to meaningful environmental improvement. This is stated explicitly in all three reports (Borel-Saladin & Turok, 2013). More specifically, "good economic policy lies at the heart of any strategy for green growth" (OECD, 2011c).

One of the studies confirmed that population growth, growth of gross domestic product per capita, and energy intensity cause an increase in CO₂ emissions (Petrović, Nikolić & Ostojić, 2018). The green growth of an economy critically depends on large urban areas. The reasons are twofold. Significant shares of national GDP. employment, and consumption are generated in cities. At the same time, cities are responsible for most environmental problems due to their existing production and consumption patterns. Although urban areas occupy only 2% of the earth's land surface, they account for two-thirds of the total energy consumption and are responsible for three-quarters of carbon dioxide (CO₂) emissions from global final energy use (REN21, 2021). The climate changes are worsened by the urban heat effect (the so-called "islands of heat"), thus increasing the chances of extreme temperatures and drying that hurt both the economy and the health of those who live in cities (OECD, 2013a).

Research

Cities and Green Growth

According to the World Bank, more than 80% of global GDP is generated in urban areas (World Bank, 2020). On the other hand, cities are accountable for most energy consumption and pollution. Thus, cities have enormous potential to be pillars of green economy development. Cities' positive influence on countries' economic development is based on the following factors: human capital, infrastructure, innovation, economies of agglomeration and proximity to markets (OECD, 2012a). Cities are characterised by a concentration of highly skilled labour, which is one of the key factors of competitiveness. Locations with higher attractiveness should be able to grow more quickly than peer locations, attracting investments and trade flows (Delgado et al., 2012).

Furthermore, innovation and infrastructure are more developed in urban areas than in others, thus enabling cities' dynamic growth of knowledge-intensive and high-tech industries that are generators of economic growth and green economy (OECD, 2009; Nikolić, 2019). Economies of agglomeration may be interpreted as advantages that businesses gain in cities due to proximity to their suppliers and competitors (OECD, 2013a). The concentration of competitors from the same industry is important for businesses as it can be the fastest way to obtain information on competitors' moves. Proximity to suppliers is also paramount as it enables a business to respond to market changes quickly by upgrading its product in close cooperation with suppliers. Finally, proximity to the market reduces heavy transport and other transaction costs for manufacturers and merchants.

Due to the significant advantages offered to businesses and workers in cities, urban areas attract many of both, resulting in concentration. Cities are now the hot spots of population and economic growth, making them the engines of the global economy. Moreover, we are in the "second wave of urbanisation" which indicates that most of the projected population of 9 billion by 2050 will live in African and Asian cities where city growth rates are the highest (UNEP, 2012). The current wave occurs mainly in Africa and Asia, followed by Latin America and the Caribbean. Africa's city growth rates are the highest in the world while Asia's cities are growing by the highest absolute number of people. Although growing at slower rates than African and Asian cities, European urban areas are faced with migrations and increasing numbers of refugees as well as legal and illegal immigrants (UNEP, 2011). If not reduced, the negative impact of urban air pollution on citizens' health might become the top environmental cause of premature death worldwide (OECD, 2012b). Increasing risks for the well-being of urban populations due to pollution and negative climate changes created the need to develop "smart cities" (Urošević et al., 2020).

Smart Cities

The reality that cities have become places where most of the world's population is living and where most resource consumption takes place has generated increasing pressure to find ways to reconcile economic growth, well-being, and the sustainable use of natural resources. The main challenge is to find a way to decouple urban development and rising resource consumption rates, in other words, to make "resource decoupling" (UNEP, 2013). The decoupling will require innovations for more efficient management of resource flows and use. That could be done with active support for sustainability-oriented innovations, including reorganising governance models and institutions in cities. Since technological progress and innovation play a central role in the transition to a green economy, a "smart city" could be the most appropriate concept for urban transition to a green economy (Balaban, 2019).

"A smart city uses digital technologies to enhance performance and well-being, to reduce costs and resource consumption and to engage more effectively and actively with the citizens. Key smart sectors include transport, energy, health care, water, and waste. Interest in smart cities is motivated by major challenges, including climate change, economic restructuring, retail, and entertainment services moving online, aging populations, and pressures on public finances" (Ferrara, 2015). The broader definition of a "smart city" is a city where state-of-the-art Information Communication Technologies (ICT) are applied to the design of urban space and to the provision of major urban services to make the city more efficient, sustainable, and liveable (Balaban, 2019). A "smart city" has the following characteristics (Franchina et al., 2021):

- Uses ICT tools management and governance to improve the system's efficiency and the quality of life of its citizens.
- Uses (near) real-time information and creatively exploits both tangible (i.e. physical resources and infrastructure) and intangible resources (i.e. human capital, education, and knowledge).
- Raises citizens' awareness.
- Involves users and multiple stakeholders (with the help of public-private partnerships) connecting and empowering them.
- Is adaptable to users' needs, promoting sustainable development considering the needs of future generations.

As can be seen from its characteristics, a "smart city" is not only synonymous with digital. Instead, the "smartness" of the city lies in its ability to improve citizens' living standards, improving economic, social, and environmental aspects of their lives (Silva et al., 2018). To cover all relevant aspects of a "smart city", Giffinger and Gudrun (2010) identified the following six characteristics: smart economy, smart people, smart governance, smart mobility, smart environment, and smart living. Improvement of the characteristics mentioned above implies upgrading and mutual enhancing of economic, social, and environmental systems. Cities' increasing energy and resource efficiency, as well as product and process innovations, such as sustainable supply chain management, clean technologies, and environmental product design, require radical innovations that not only reduce quantities of resource turnover and emissions but also change the quality and structure of industrial production (De Jong, 2015).

Being aware that the transition of cities' specific sectors, such as reduction of energy consumption, low-carbon transport, "smart and green" buildings, improved waste management, etc., rely on intensive use of information technologies and innovations, "smart city" stands out as the most appropriate concept that could shape the urban transition to a green economy (Balaban, 2019).

As Balaban (2019) further points out, the conceptual foundation of a "city green economy" can be based on the idea of a "smart city".

Governance and Green Growth in Smart Cities

Governance is a critical prerequisite for successful green economy transition of cities. In this section, we will discuss major governance challenges in urban green growth such as (de)centralisation and governance gaps.

Decentralisation

In the USA and United Kingdom the process of decentralisation in public administration governance started four decades ago with the New Public Management doctrine under the neoliberal "zeitgeist" introduced by Thatcher and Reagan in the 1980s (Cvetićanin, Blagojević, 2019). The rationale was that "lowering" the decision-making process and bringing it closer to the point of service delivery would improve the quality of services that governments provide to their citizens. Moreover, decentralisation was expected to improve efficiency by reducing bureaucracy usually linked to centralised hierarchical systems.

Higher responsibilities of local governments have led to increased expectations to deliver better quality of services more guickly and in needed guantity using limited resources. At the same time, the central government retains crucial responsibilities relevant to the local self-government operations, including those concerning green policy. Decades-long guests for improving efficiency in local governance are now even more complex due to additional ecological targets and goals.

The need for delegation of authority and decentralisation comes from differences in roles in practically every operation process in the public sector. It is possible to recognise who is responsible for a certain process, who is entrusted to implement it, and who has the benefit of its execution (Jovanović et al., 2022). General responsibility for operations and tasks usually falls on politicians entrusted to fulfil general strategic goals they promised to citizens who elected them. However, they must rely on lower hierarchical

levels to implement more specific goals and tasks that form part of broader objectives. That requires the top-level officials to delegate narrower, more specific responsibilities to lower-level officials. Since the highest levels of government feel accountable for achieving strategic goals, they tend to keep lower-level authorities under control as much as possible, resulting in decision-making centralisation (Jovanović, 2020). That leads to the establishment of a formal hierarchical structure with centralised decision-making to keep those who execute tasks at a lower level under control. Besides those who are accountable and responsible, there is a third category – those who benefit from certain activities. That could be a citizen, or some other end user of a service provided by the government.

The difference between accountability for a task and the expected benefit from its execution is an indicator of focus on goals. The large gap between accountability and benefit can lead to organisational decoupling (Meyer & Rowan, 1977). In such a situation, organisations symbolically adopt a policy, but the implementation of that policy is only superficial. The practice is known as policy-practice decoupling. The organisational facade visible to external institutions and participants differs significantly from what the organisation is doing.

Recent research has developed another concept of "meansends" decoupling, where an organisation complies with a policy but fails to achieve the envisaged goals intended by that policy (Jovanović et al., 2022). If accountability is not expected to lead to benefits, a rational question can be posed: Why should a responsible person bother to achieve anything more than the mandatory? The difference between the work invested and the expected benefits is an indicator of motivation. A significant gap between the level of engagement and expected benefits will lead to demotivated employees. Similarly, as in the previous case, if those engaged in "production of service" do not perceive benefits, they will have no motivation to increase performance and service quality, including reduction of environmental impact.

Governance Gaps

Governments around the world face major challenges, such as climate change, pandemics, etc., that are complex and require a broad, multi-sectorial approach to addressing them. The new approach requires cooperation not just among different government sectors, but between different levels of government, both central and local ones (Charbit & Michalun, 2009). A strict hierarchical approach with superior authority "commanding" the lower-level administration is no longer efficient for coping with modern crises and sustainable growth challenges. The need to better mobilise local resources and raise their motivation to participate in solving problems led to the increasing application of the "place-based" approach. It became clear that "going green" or "going inclusive" requires "going local" first (Charbit, 2020).

The need to efficiently coordinate operations within different sectors of the government in a more decentralised way raised an issue of multi-level governance (MLG) (OECD, 2019). MLG must address substantial governance gaps that limit achieving strategic government goals, including sustainable green growth at the local self-government level. Major governance gaps that public authorities should overcome are as follows (Charbit, 2011):

- The objective gap arises when goals and targets of different levels of public administration or among ministries/agencies at the same horizontal level diverge or contradict each other.
- An administrative gap refers to a mismatch between the green growth challenge and administrative boundaries that create policy constraints. Administrative boundaries (at the municipal, regional, and state levels) rarely match environmental challenges, resulting in further mismatches at the sub-national level, hindering policy coherence (Moss, 2007).
- Policy gap means sectorial fragmentation of policy making across ministries and public agencies within the national government administration or across departments within sub-national government administrations (this is also referred to as a "silo approach" to policy making).

- Information gap arises when there is uneven dissemination of information between and across different levels of government in designing, implementing, and delivering public policies. It also refers to situations when information on implementation on the ground is not shared with higher authorities.
- A capacity gap means insufficient technical expertise, infrastructure, or other resources to achieve planned objectives.
- Market gap refers to the misalignment between policy-making goals defined by authorities and the ability of private sector stakeholders to deliver what is expected from them.

In the next section, we will discuss how authorities can close the abovementioned governance gaps and what additional levers a government could use to stimulate green growth in cities.

Discussion

Closing Governance Gaps

Closing governance gaps described above requires authorities to deal with two network patterns. The first network refers to the interdependency of multiple issues of green growth, such as biodiversity, livelihoods, and markets. Those issues are tackled by various governance stakeholders with different roles, interests, and capacities such as local administration, ministries, agencies, and companies that create a collaborative network of actors managing the issues. Both interdependent and collaborative networks should be considered in the pursuit to bridge governance gaps (Bergsten et al, 2019).

The government's failure to address the intersection of collaboration among different actors with interdependencies increases the risks of the inefficiency of governance response and its adverse consequences (Bodin & Nohrstedt, 2016). In other words, governance gaps emerge when those responsible fail to recognise how multiple issues and actors are interlinked (Bergsten et al., 2019). Thus, in proposing how governance gaps should be overcome, the intersection of the two network patterns should be kept in mind.

Closing the objectives gap requires harmonisation of longterm "green" goals set by a central government with short-term goals related to local communities. National strategies and action plans seek to coordinate different levels of government – national, regional, and local. Moreover, there is a need to harmonise government objectives with the objectives and interests of the private sector and citizens in local communities. Otherwise, local businesses may relocate their production to avoid new requirements being imposed on them. Complementarity of goals should be based on a clear understanding of all relevant stakeholders, what they must change, and how they will benefit from such a change.

The capacity gap related to green growth in cities exists in all countries, including the most advanced ones. Generally, administrative capacities are more limited at the local level than at the national level. However, the capacities of ministries and other central government bodies are uneven, too. Thus, one of the key goals of the capacity-building process is to build "green growth personnel" who understand inter-sectorial linkages and trade-offs between short-term economic imperatives and long-term sustainability goals (OECD, 2013a). Moreover, the staff should have room to apply a new innovative approach instead of being tightly constrained by unnecessary bureaucracy ("red tape") (Jovanović et al., 2022).

Identifying "bottlenecks" in government capacities and ways to overcome them should be a primary concern of national strategic documents. When preparing strategies and action plans, particular attention should be paid to making sure that existing, as well as projected capacity growth, match planned goals and activities. In many cases, capacities lag behind overoptimistic objectives and targets. Gaps between capacities and goals are common causes of failure during the implementation phase. Disappointed local communities raising doubts about the feasibility of green growth have become an additional limiting factor.

Closing the information gap by sharing relevant information on green growth is essential to not only upgrade coordination among different stakeholders, but also to strengthen their feeling of "ownership of the process", and their true commitment. Information sharing can be seen as a test of "partnership trustworthiness" and quality of coordination within the government. If local authorities are poorly informed from the top and are given predominantly commanding instructions, then the chances for decoupling that we discussed earlier are high. In other words, if local stakeholders are expected to understand and remain committed to long-term goals which require sacrifice in the short run, they need reliable and timely information. Otherwise, they will abandon the green policy (although they formally will remain "on track" due to fears of openly opposing a higher authority) and turn to standard, short-term economic goals anew. At the same time, if a higher-level authority has no proper feedback from the implementation side, creating a successful and sustainable green policy can become nearly impossible.

Closing the policy gap refers to the need for governments to overcome traditional policy fragmentation, i.e. the tendency to work in "policy-making silos" (OECD, 2013a). In Serbia, for example, policy in the area of public-private partnership (PPP), which is an important instrument for promoting green growth in cities, is led by the Ministry of Economy. At the same time, the Ministry of Finance has certain authorities in the implementation phase thus using PPP for implementation of its sectorial policy. Moreover, there is a governmental body – the Commission for Public-Private Partnership – acting in the same field, while cities, especially bigger cities like Belgrade, design PPPs according to their policies.

Policy differences between the central and local levels of administration or among their parts (ministries, agencies, etc.) could be overcome by setting up a single governmental entity entrusted to create a policy and coordinate its implementation. The alternative solution for closing policy gaps may be "networked governance" that will include all relevant stakeholders for a specific issue, such are public sector agencies, private companies, and NGOs. Moreover, interdependencies among different aspects of green growth should also be considered. Although the "network" approach requires more meetings and negotiations compared to the "institutional" one, it brings some significant benefits, such as more robust and enduring policy implementation that can outlast political cycles and achieve multi-sectorial objectives which are particularly needed in areas of climate change and green growth (OECD, 2013a). The practice of Stockholm – Citybanan (a railway tunnel through Stockholm) and the Stockholm Agreement on future transport infrastructure in the region, demonstrate the advantages of "networked governance" (OECD, 2013b).

The solution for overcoming policy gaps largely depends on the public administration structure and its tradition. In countries with a highly centralised hierarchical structure of governance in the public sector and strict formalism, the "institutional" solution, with its prioritisation of simplicity over the possible "analysis-paralysis" caused by an abundance of choice (Blagojević, 2019) would be more efficient than the "network" solution. However, in countries with a more decentralised decision-making process and where the form is less weighted against final results, "networked governance" would be a more appropriate choice.

Closing the market gap means harmonisation between government and private sector objectives. The private sector has multiple roles in green growth. Companies are the government's key partners in implementing green policy as they provide "green" goods and services through innovation and operational shifts.

In closing the market gap, aligning short-term and long-term objectives is particularly demanding. If the government is not consistent in the long run and after some time makes a turnaround regarding taxing pollution, for example, it may dissuade businesses from investing in green growth. However, with the implementation of CBAM in the EU, this becomes urgent and not a matter of choice (Nikolić, 2023). Furthermore, the government should take into account the cost structure of private companies in the green economy. For example, solar/wind/hydroelectric power has a high capital cost that must be covered upfront but, in turn, incurs low operating costs. Thus, any subsequent change in government policy that would neglect the dynamics of "environmental costs" would dissuade companies from implementing green policies. Understanding private sector specifics is a precondition for closing the objectives gap between the two crucial stakeholders in the green economy – the government and the business sector.

Government Instruments for Supporting Cities' Green Growth

In countries championing green growth, such as Denmark, the Netherlands, Austria, and Slovenia, the green economy transition was goal-oriented, with visions and goals of the state-guided public actors guiding the strategic decisions of private actors (Kemp & Rotmans, 2004). Loorbach & Romans (2006) suggest that the transition to a green economy is a non-linear process with different phases, shifting from one dynamic equilibrium to the other. They recognise the following four phases, each with a distinctive role of the government:

- A *pre-development phase* where there is very little visible change at the systems level but a great deal of experimentation at the individual level. The government assists companies by providing them with consultation and expertise needed for the proper selection of opportunities and for assessing comparative advantages to make the most favourable choice. There is no direct interference from the government in this phase.
- A *take-off phase* is where the process of change starts to build up, and the system begins to transform due to reinforcing innovations. The government supports projects with a potentially high impact on green growth. Moreover, the government mobilises and assists in the coordination of key stakeholders such as academic and research institutions, companies, investors, and NGOs.
- An *acceleration phase* is characterised by structural changes in economic, ecological, and institutional domains. Instead of directly controlling the vigorous processes, an authority tries to coordinate them and "nudge" participants in the desired direction and pace.
- A *stabilisation phase* begins when the speed of changes starts to decrease, and a new dynamic equilibrium is reached. The role of a government is primarily to monitor and evaluate the process and its outcomes, and promote best practices. The regulatory framework is set in full compliance

with legislation in environmental, fiscal, and other interrelated areas.

Green growth in large cities may be more demanding and complex than that on a national level since it requires the involvement of local authorities national authorities. In meeting green growth objectives at the local level, national and local authorities have rules and regulations at their disposal as direct methods of influence. Regulatory instruments are the easiest to create and, being legally binding, have significant potential for a change.

The key weakness of using regulation to stimulate green growth in cities lies in its rigidity and difficult implementation. Since regulation relies on formality and hierarchical structure, there is a risk of inefficiency. Moreover, regulation usually comes from the top (national) level and requires raising awareness of activities at the local level and comprehensive information on causes and benefits it is expected to bring to a local community. Otherwise, city authorities will formally accept new legislation (because they have no choice), but implementing the new "green" regulation will be only superficial. Such practice is known as policy-practice decoupling.

Furthermore, monitoring and enforcement costs of regulatory instruments are usually high due to the complexity of defining environmental standards and ambient quality (Cohen, 1999). Besides, regulatory measures provide poor incentives for exceeding targets once the minimum threshold is met, even if their implementation is cost-effective. To overcome the abovementioned weaknesses of regulatory instruments, incentives/disincentives and enabling levers are introduced. They do not directly influence the decision-making process of businesses and citizens; rather, they indirectly internalise environmental externalities. In other words, pollution costs are attributed to those who generate them, e.g., charges or fees on units of gas emissions are introduced for manufacturers, affecting their decisions regarding operations.

Governments can use a wide range of economic instruments such as charges, subsidies, grants, taxes, tax concessions, etc., to stimulate behavioural change (Rasul, 2013). For example, a shift towards broad adoption of renewable energy technologies in Germany, particularly photovoltaic panels, was based on widespread subsidies between 2000 and 2008 in the form of low-interest loans offered to investors (Jacobsson & Lauber, 2006; Frondel et al., 2008).

Cities use different types of levers depending on ownership and control over their assets. If a city has a high level of ownership and control, it will be more prone to use public procurement to promote green growth than other instruments, such as incentives, for example. A study of green growth in 66 large cities across the world indicates that cities relied mainly on programs and projects (68%) as well as public procurement (22%) in stimulating green transformation, while incentives/disincentives (5%) and policies (5%) represented only one-tenth of total levers used (C40 & ARUP, 2015).

The role of the public procurement lever is expected to rise in the future due to its high potential to promote green growth. This instrument could be used to influence both the demand and supply sides within local markets. A shift towards green standards and criteria in local government procurements encourages manufacturers to adapt to new requirements to get contracts with the government, thus generating more profound changes in the local economy. Furthermore, new ecological requirements in public procurement increase awareness in local communities and urge changes in their consumption patterns. By purchasing environmental-neutral products and services local governments promote sustainable green growth in a credible manner that citizens and businesses should follow.

The EU legal framework provides plenty of opportunities for the application of "green public procurement" (GPP), including the evaluation of the impact of purchased subjects on the environment during the entire period of their exploitation when selecting the most favourable bid (Directive 2014/24/EU). However, in practice, the use of GPP is uneven and far from satisfactory (Badell & Rosell, 2021). Recent research indicated that factors such as organisational model, control of corruption, human resource capacities, motivation and awareness have a more decisive influence on public procurement performance than legislation (Čudanov et al., 2018). Considering that the strengthening of procurement's "green" aspect is a feature of its upgraded performance, it is clear which factors, besides legislation, should be improved to achieve the goal of higher GPP uptake in the future.

Conclusions

Negative climate changes, economic crises a decade ago and the present pandemic require changes in the model of economic development that would allow the economic growth to be both "green" and inclusive. The main challenge of transition to a green economy is to find a way to decouple economic development and rising resource consumption rates, i.e. achieve "resource decoupling". In the second wave of urbanisation, cities plays an increasingly important role in both production and consumption of resources that affect the environment. Therefore, "going green" or "going inclusive" means "going local" first.

Since technological progress and innovations play a central role in "resource decoupling", the concept of a "smart city" could be the most appropriate for urban transition to a green economy. "Smart city" is not only synonymous with digital; instead, the "smartness" of a city lies in the reduction of resource turnover and emissions, a change in production and consumption quality and structure and transformations of governance models and institutions.

Decentralisation and governance gaps are key governance challenges in encouraging green growth in cities. To successfully remove these two potential constraints, the interdependency of multiple issues of green growth and the collaboration of different stakeholders participating in the process, such as ministries, local authorities, and businesses, should be considered.

Governments can use different levers, such as regulatory instruments, incentives/disincentives, and enabling policies, to spark green growth in cities. Empirical evidence of the green transformation of 66 large cities on a global scale proved that governments preferred direct instruments such as projects/programs and public procurement compared to indirect ones (incentives and enabling policies). Since public procurement accounts for around 19% of the EU GDP, its potential to stimulate green growth is clear.

More comprehensive application of green public procurement requires more decentralised and flexible organisation and decision-making models, curbed corruption, developed administrative capacities, adequate competencies of those who manage

99

procurement processes, and motivation mechanisms based on incentives rather than sanctions.

REFERENCES

- Badell, D. & Rosell, J. (2021). Are EU Institutions Still Green Actors? An Empirical Study of Green Public Procurement. *Journal of Common Market Studies*, 59(6), 1555–1572. https://doi.org/10.1111/jcms.13204.
- Balaban, O. (2019). Smart cities as drivers of a green economy. In: S. Acar & E. Yeldan (Eds.), *Handbook of Green Economics*. (pp. 69–92). https://doi.org/10.1016/B978-0-12-816635-2.00005-5
- Bergsten, A., Jiren, T. S., Leventon, J., Dorresteijn, I., Schultner, J. & Fischer, J. (2019). Identifying governance gaps among interlinked sustainability challenges. *Environmental Science & Policy*, 91, 27–38. https://doi.org/10.1016/j.envsci.2018.10.007
- Blagojević, M. (2019). Faith, ideology and the information age: the universal spirituality of generation Y. In: M. Blagojević & Z. Matić (Eds.) *Different forms of religiosity and the modern world* (pp. 41–55). Belgrade: Institute of Social Sciences, Požarevac: Department of Education and Culture, Serbian Orthodox Diocese of Braničevo.
- Bodin, O. & Nohrstedt, D. (2016). Formation and performance of collaborative disaster management networks: Evidence from a Swedish wildfire response. *Global Environmental Change*, 41, 183–194. https://doi.org/10.1016/j.gloenvcha.2016.10.004
- Borel-Saladin, J. M. & Turok, I.N. (2013). The Green Economy: Incremental Change or Transformation? *Environmental Policy and Governance*, 23(4), 209–220. https://doi.org/10.1002/EET.1614
- Bouwer, M., Jonk, M., Berman, T., Bersani, R., Lusser, H., Nappa, V., Nissinen, A., Parikka, K., Szuppinger, P. & Viganò, C. (2006). Green public procurement in Europe 2006 – conclusions and recommendations. Haarlem: Virage Milieu & Management. https://ec.europa.eu/ environment/gpp/pdf/take_5.pdf
- C40 & ARUP (2015). Climate Action in Megacities 3.0. http://www.cam3. c40.org/images/C40ClimateActionInMegacities3.pdf (accessed 2 Sept 2021).
- Clark, H. (2013). What Does Rio+20 Mean for Sustainable Development? Development 56, 16–23. https://doi.org/10.1057/dev.2013.13

- Charbit, C. (2020). From 'de jure' to 'de facto' decentralised public policies: The multi-level governance approach. *The British Journal of Politics and International Relations*, 22(4), 809–819. https://doi:10.1177/1369148120937624
- Charbit, C. (2011). Governance of Public Policies in Decentralised Contexts: The Multi-level Approach. Paris: OECD Publishing (OECD Regional Development Working Papers 2011/04) https://doi:10.1787/5kg883pkxkhc-en
- Charbit, C. & Michalun, M. V. (2009). Mind the gaps: Managing mutual dependence in relations among levels of government. Paris: OECD Publishing (OECD Working Papers on Public Governance, No. 14). https://www.oecd.org/gov/43832931.pdf
- Cohen, M. A. (1999). Monitoring and enforcement of environmental policy.
 In: T. Tietenberg & H. Folmer (Eds.) *International yearbook of environmental and resource economics,* volume 3. Cheltenham: Edward Elgar Publishers. https://www.researchgate.net/publication/281594872_
 Monitoring_and_enforcement_of_environmental_policy_in_
 International_Yearbook_of_Environmental_and_Resource_Economics
- Cvetićanin, N. & Blagojević, M. (2019). Unutrašnji konflikti i spoljna politika SAD između intervencionizma i izolacionizma. *Srpska politička misao*, 65(3), 43–62. https://doi.org/10.22182/spm.6532019.2
- Čudanov, M., Jovanović, P. & Jasko, O. (2018). Influence of the Public Procurement Procedure Type on the Duration of Public Procurement. *Lex localis – Journal of Local Self-Government* 16(2), 361–378. https://doi.org/10.4335/16.2.361-378
- De Jong, M., Joss, A., Schraven, D., Zhan, C. & Weijnen, M. (2015). Sustainable-smart-resilient-low carbon-eco-knowledge cities; making sense of a multitude of concepts promoting sustainable urbanization. *Journal of Cleaner Production*, 109, 25–38. https://doi.org/10.1016/j.jclepro.2015.02.004
- Delgado, M., Ketels, C., Porter, M. E. & Stern, S. (2012). The Determinants of National Competitiveness. Cambridge, MA: National Bureau of Economic Research (Working Paper 18249). http://www.nber.org/ papers/w18249 (accessed 9 Sept 2021).
- Directive 2014/24/EU. On public procurement and repealing Directive 2004/18/EC. European Paliament, Council of the European Union. https://eur-lex.europa.eu/legal-content/EN/TXT/ PDF/?uri=CELEX:32014L0024
- EEA (2014). Resource-efficient green economy and EU policies. European Environment Agency. http://www.eea.europa.eu/themes/economy/

- Loiseau, E., Saikku, L., Antikainen, R., Droste, N., Hansjürgens, B., Pitkänen, K., Leskinen, P., Kuikman, P. & Thomsen, M. (2016). Green economy and related concepts: an overview. *Journal of Cleaner Production*, 139, 361–371. https://10.1016/j.jclepro.2016.08.024
- Ferrara, R. (2015). The Smart City and the Green Economy in Europe: A Critical Approach. *Energies*, 8, 4724–4734. https://doi:10.3390/ en8064724
- Franchina, L., Calabrese, A., Inzerilli, G., Scatto, E., Brutti, G. & Bonanni, M.V. (2021). Thinking green: The role of smart technologies in transforming cities' waste and supply Chain's flow. *Cleaner Engineering and Technology*, 2, 100077. https://doi.org/10.1016/j.clet.2021.100077
- Frondel, M., Ritter, N. & Schmidt, C. M. (2008). Germany's solar cell promotion: dark clouds on the horizon. *Energy policy* 36(11), 4198–4204. https://doi.org/10.1016/j.enpol.2008.07.026
- Giffinger, R. & Gudrun, H. (2010). Smart cities ranking: an effective instrument for the positioning of cities? *ACE: Architecture, City and Environment*, 4(12), 7e25. https://core.ac.uk/download/pdf/301204045.pdf
- Hammer, S. et al. (2011). Cities and Green Growth: A Conceptual Framework. OECD Publishing (OECD Regional Development Working Papers 2011/08). http://dx.doi.org/10.1787/5kg0tflmzx34-en
- Jacobsson, S. & Lauber, V. (2006). The politics and policy of energy system transformation-explaining the German diffusion of renewable energy technology. *Energy Policy* 34(3), 256–276. https://doi.org/10.1016/j.enpol.2004.08.029
- Jovanović, P., Delibasic, B. & Čudanov, M. (2022) Organizational Archetypes in Public Procurement. *Lex localis – Journal of Local Self-Government*, 20(1), 101–127. https://doi.org/10.4335/20.1.101-127
- Jovanović, P. (2020). Challenges of management and motivation in public sector in Serbia. In: P. Jovanovic & S. Stojkovic-Zlatanovic (Eds.) *Challenges of Sustainable Development in Serbia and European Union* (pp. 118–139). Belgrade: Institute of Social Sciences.
- Kemp, R. & Rotmans, J. (2004). Managing the transition to a sustainable mobility. In: B. Elzen, F. Geels & K. Green (Eds.) System Innovation and the Transition to Sustainability: Theory, Evidence and Policy (pp. 137–167). Cheltenham: Edgar Elgar.
- Loorbach, D. & Rotmans, J. (2006). Managing Transitions for Sustainable Development. In: *Understanding Industrial Transformation* (187–206). Dordrecht: Springer. https://doi:10.1007/1-4020-4418-6_10

- McCormick, K., Anderberg, S. & Neij, L. (2013). Sustainable urban transformation and the green urban economy. In: R. Simpson, M. Zimmermann (Eds.) *The Economy of Green Cities: A World Compendium on the Green Urban Economy* (pp. 33–43). Heidelberg, New York, London: Springer. https://doi:10.1007/978-94-007-1969-9_5
- Melon, L. (2020. More than a nudge? Arguments and tools for mandating green public procurement in the EU. *Sustainability* 12(3), 988. https://doi.org/10.3390/su12030988
- Meyer, J. W. & Rowan, B. (1977) Institutionalised organisations: Formal structure as myth and ceremony, American Journal of Sociology, 83(2), 340–63, http://www.jstor.org/stable/2778293
- Moss, T. (2003). Solving Problems of 'Fit' at the Expense of Problems of 'Interplay'? The Spatial Reorganisation of Water Management Following the EU Water Framework Directive. In P. P. Mollinga, A. Dixit & K. Athukorala (Eds.) *Integrated Water Resources Management: Global Theory, Emerging Practice and Local Needs* (pp. 85–121). New Delhi: Sage Publications, London: Thousand Oaks.
- Nicholls, R. J. et al. (2008). Ranking Port Cities with High Exposure and Vulnerability to Climate Extremes: Exposure Estimates. OECD Publishing (OECD Environment Working Papers No. 1). https://doi.org/10.1787/011766488208 (accessed 8 Sept 2021).
- Nikolić, I. (2019). *Stanogradnja u Srbiji razvojni potencijali i ograničenja*. Beograd: Ekonomski institut.
- Nikolić, I. (2023). *Ekonomija Srbije praćena optikom MAT-a u period 2020– 2023*. Beograd: Ekonomski institut. doi:10.5281/zenodo.8286348.
- Nikolić, I. & Kovačević, M. (2019). Prospects and limits to growth: The importance of investment efficiency? *Ekonomika preduzeća*, 67(5–6), 298–318, doi: 10.5937/EKOPRE1906297N.
- Nissinen, A., Parikka-Alholaa, K. & Ritab, H. (2009). Environmental criteria in the public purchases above the EU threshold values by three Nordic countries: 2003 and 2005. *Ecological Economics* 68, 1838–1849. https://doi.org/10.1016/j.ecolecon.2008.12.005
- OECD (2019). Making Decentralisation Work: A Handbook for Policy-Makers. Paris: OECD Publishing (OECD Multi-level Governance Studies). https://doi.org/10.1787/g2g9faa7-en (accessed 7 Sept 2021).
- OECD (2013a). Green Growth in Cities. OECD Green Growth Studies, OECD Publishing. http://dx.doi.org/10.1787/9789264195325-en (accessed 15 Sept 2021).

- OECD (2013b). Green Growth in Stockholm, Sweden. OECD Green Growth Studies, OECD Publishing. https://doi.org/10.1787/9789264195158-en (accessed 3 Sept 2021).
- OECD (2012a). Promoting Growth in All Regions. Paris: OECD Publishing. https://doi.org/10.1787/9789264174634-en (accessed 1 Sept 2021).
- OECD (2012b). OECD Environmental Outlook to 2050: The Consequences of Inaction. Paris: OECD Publishing. https://doi:10.1787/9789264122246-en (accessed 9 Sept 2021).
- OECD (2011a). OECD Regional Outlook 2011: Building Resilient Regions for Stronger Economies. Paris: OECD Publishing. https://doi:10.1787/9789264120983-en (accessed 2 Sept 2021).
- OECD (2011b). Towards Green Growth: Monitoring Progress. OECD Indicators, OECD Green Growth Studies, OECD Publishing, Paris. https://doi.org/10.1787/9789264111318-en
- OECD (2009). How Regions Grow: Trends and Analysis. Paris: OECD Publishing. https://doi.org/10.1787/9789264039469-en (accessed 8 Sept 2021).
- Ostojić, I. (2020). Institucionalna komponenta održivog razvoja Srbije. In P. Jovanović & S. Stojković Zlatanović (Eds.) *Izazovi održivog razvoja u Srbiji i Evropskoj uniji* (pp. 100–117). Beograd: Institut društvenih nauka.
- Ostojić, I. (2023). Zeleno finansiranje, klimatske finansije i koncept zelene ekonomije. In S. Nikolić Popadić & M. Milenković (Eds.) *Klimatske promene – pravni i društveni izazovi* (pp. 196–213). Beograd: Institut društvenih nauka.
- Pearce, D. W., Markandya, A. & Barbier, E. B. (1989). *Blueprint for a Green Economy.* London: Earthscan.
- Petrović, P., Nikolić, G. & Ostojić, I. (2017). Demografske determinante energetske potrošnje u Evropskoj uniji: rezultati ekonometrijske analize. *Stanovništvo*, 55(1), 1–20. https://doi.org/10.2298/ STNV170606003P
- Petrović, P., Nikolić, G. & Ostojić, I. (2018). Emisija CO₂ u Evropskoj uniji: empirijska analiza demografskih, ekonomskih i tehnoloških faktora. *Stanovništvo*, LVI(1), 63–82. https://doi.org/10.2298/ STNV180614005P
- Pilipczuk, O. (2020). Sustainable Smart Cities and Energy Management: The Labor Market Perspective. *Energies,* 13, 6084. https://doi:10.3390/ en13226084

- Rasul, G. (2013). Policy Instruments for Promoting a Green Urban Economy: The Changing Role of the State. In: R. Simpson & M. Zimmermann (Eds.) *The Economy of Green Cities* (pp. 161–174). Heidelberg: Springer. https://doi:10.1007/978-94-007-1969-9
- REN21 (2021). Renewables in Cities 2021: Global Status Report. Paris: REN21 Secretariat. https://www.ren21.net/wp-content/uploads/2019/05/ REC_2021_full-report_en.pdf (accessed 1 Sept 2021).
- Silva, B. N., Khan, M. & Han, K. (2018). Towards sustainable smart cities: a review of trends, architectures, components, and open challenges in smart cities. *Sustainable Cities and Society*, 38, 697–713. https://doi.org/10.1016/j.scs.2018.01.053
- Simpson, R. (2013). Introduction: a green economy for green cities. In: R. Simpson, M. Zimmermann (Eds.) *The Economy of Green Cities:* A World Compendium on the Green Urban Economy (pp. 13–16). Heidelberg, New York, London: Springer.
- UNEP (2013). City-Level Decoupling: Urban resource flows and the governance of infrastructure transitions. United Nations Environment Programme (A Report of the Working Group on Cities of the International Resource Panel). https://www.resourcepanel.org/reports/ city-level-decoupling
- UNEP (2012). Sustainable, resource-efficient cities Making it happen! United Nations Environment Programme. https://sustainabledevelopment.un.org/content/documents/1124S ustainableResourceEfficientCities.pdf
- UNEP (2011). Towards a Green Economy: Pathways to Sustainable Development and Poverty Eradication: A Synthesis for Policy Makers. Nairobi: United Nations Environment Programme. https://wedocs.unep. org/20.500.11822/32245
- Uroševic, V., Jovanović, P. & Ostojić, I. (2020). Predicting of Citizens' Well-Being in Large Cities. In: D. Starcevic & S. Marinković (Eds.) *Proceedings of the XVII International Symposium: Business and Artificial Intelligence* (pp. 114–122). Belgrade: University of Belgrade Faculty of Organizational Sciences.
- World Bank (2020). Urban development. Washington, DC: The World Bank. https://www.worldbank.org/en/topic/urbandevelopment/overview (accessed 2 Sept 2021).
- World Bank (2012). Inclusive Green Growth: The Pathway to Sustainable Development. Washington, DC: The World Bank.
 https://openknowledge.worldbank.org/handle/10986/6058, p. 171. (accessed 6 Sept 2021).