

IMPORTANCE OF GREEN SPACES IN PLANNING SUSTAINABLE URBAN AREAS

Abstract

For the last thirty years, sustainable development has been the dominant paradigm, which has been gradually introduced into legislation at different levels. Urban vegetation as one of significant biotic factors in the urban structure contributes to all aspects of sustainable urban development. The aim of this research is to show that European documents and activities related to sustainable development at the local level highlight the importance of green spaces in planning sustainable urban areas. For the purposes of this research, three documents related to planning at the local level were selected as well as three awards. Research shows that specific documents indirectly, and others in certain segments directly emphasize the importance of vegetation for the benefit of the whole community and comprehensive quality of life. The applications for awards given in the area of urban sustainability, in their concept highlight the importance of green spaces for the city.

Keywords: green space, European awards, European documents, local level, sustainable development

Introduction

For the last thirty years, sustainable development has been the dominant paradigm, developed from the Brundtland definition of "development that meets the needs of the present without compromising the ability of future generations to meet their own needs" (UN, 1987). Numerous interpretations and explanations have indicated the complexity of the concept. The concept of sustainable development has been gradually introduced, into legislation at different levels. At all levels, documents have been issued to encourage humanity to act in accordance with the sustainable development.

The local level is very important in the field of action related to sustainable development. Cities and towns are important players in the dynamics of changing spatial patterns, consumption and production as well as lifestyles and quality of life. This is the level where we can undertake various activities that will lead to positive or negative changes, and their synergy has a significant impact globally.

Urban vegetation (natural or artificial) as one of significant biotic factors in the urban structure contributes to all aspects of sustainability, especially environmental conditions (regulation of temperature, noise, improvement of air quality,

etc.) and social conditions of sustainable urban development.

Reflecting on the relationship between nature and the city throughout history, we can point out that already in Ancient times the natural features of space were taken into consideration in urban planning and architectural design, about which Vitruvius writes in his *The ten Books on Architecture*.

The industrial revolution brought about numerous changes in cities with particular emphasis on the orientation on financial profits. The rapid growth of cities has led them to occupy larger areas and gradually produce negative environmental effects.

At the end of the 19th century Ebenezer Howard developed Garden City Theory, which has significantly contributed to construction of new towns and city planning in general in many countries. In his book *Tomorrow: A Peaceful Path to Real Reform* (1898), the forerunner of *Garden City of Tomorrow* (1902) Howard emphasizes the necessity of building an ideal city with urban and rural advantages - the garden city¹. (Shao, 2015)

Le Corbusier in „*Plan for a City of 3 million inhabitants*“ from 1922 outlines the four basic planning principles: 1. Decongestion of city centres; 2. Increase of the density; 3. Enlargement of the means of circulation and 4. Enlargement of landscaped urban areas. Also, the plan for the implementation of the first phase of Chandigarh in India in 1952 (planned for 150,000 inhabitants) shows the importance that Le Corbusier gave to open spaces, parks and internal open spaces. (Boesiger, W. and Girsberger, H., 1999)

As the American historian and sociologist Lewis Mumford (1968) points out, maintaining a regional green space fund is of great importance for the cultural development of cities. It is emphasized that one of the basic prerequisites for the renaissance of urban life is to rediscover the qualities and forms of the natural landscape, which represent the source of balanced existence. It is important to preserve the natural environment that will accommodate small or large urban communities. It emphasizes the need to prevent the uncontrolled growth of urban tissue as well as to prevent the destruction of the green matrix and to avoid disturbance of ecological balance between urban and rural areas.

Landscape urbanism emerged as a theory of urban planning in 1990, according to which the city is constructed of interconnected and ecologically rich horizontal field conditions,

rather than the arrangement of buildings. Waldheim (2006) points out that landscape urbanism, like landscape architecture, as an interstitial design discipline, operating in the space between natural ecologies, infrastructural systems and buildings. Architect Dora Francese (2016) points out that even though vegetation plays a fundamental role in urban regeneration, there is a habit of assigning green spaces only to those spaces of the city that have remained free from other uses, and often only as the answer to the mandatory planning standards. A more sensitive approach would be to consider green spaces as a design element that enhances the overall quality of urban life.

The aim of this research is to show that documents and activities related to sustainable development at the local level highlight the importance of green spaces in planning sustainable urban areas.

2. Documents and Activities Related to Sustainable Development at Local Level

Since the end of the 20th century, there has been a series of documents on sustainable development at various levels: world, national, regional and local, brought by various international organizations. For the purposes of this research, three documents related to planning at the local level were selected: *The Aalborg Charter*, *The Aalborg Commitments* and *The Basque Declaration*. All three documents derived from the *European Conference on Sustainable Cities & Towns*.

The European Sustainable Cities & Towns Campaign was first launched in 1994 in the 1st *European Sustainable Cities & Towns Conference* held in Aalborg, Denmark. The campaign is the largest European initiative for local sustainable development and the international commitment Local Agenda 21.

In order to reward and encourage cities and towns to continue positive trends in the context of sustainability, awards have been designed. The European Commission awards *The European Green Capital Award* and *The European Green Leaf* annually. They were selected for the purpose of this research regarding their relevance to the local level. In addition, within Program ESPON 2020, co-financed by the European Regional Development Funds, in the period 2017 – 2019, the applied research *GRETA - Green infrastructure: Enhancing biodiversity and ecosystem services for territorial development*

Aspect		Urban		Peri-urban		Rural	
		R	C D	R	C D	R	C D
Environmental	Habitats	L	L	L	L	S	L
	Connectivity	L	L	M	L	S	L
	Heat Island effect	S	H	L	H	L	H
	Flood protection	S	H	S	H	S	L
	Carbon sequestration	M	H	M	H	S	L
	Water retention	M	H	M	H	S	L
	Soil Protection	L	H	M	H	S	L
Social	Air pollution reduction	S	H	S	H	M	L
	Recreation	S		S		S	
	Health and well-being	S		M		M	
	Supporting identities	S		M		M	
Economic	Opportunities for education, training and social interaction	S		S		S	
	Land and property value	M		M		M	
	Job creation	M		M		M	
	Tourism	L		M		S	
	Food production	L		M		S	

Tab. 1 - Benefits provided by Green Infrastructure at different scales. Source: GRETA - "GRGreen infrastructure: Enhancing biodiversity and ecosystem services for territorial development", 2018. (Relevance (R): Low (L), Medium (M), Strong (S); Context Dependency (CD): Low (L), High (H))

was conducted that highlights the importance of green infrastructure as the same area of land which can offer many environmental, social, cultural and economic benefits at the same time.

2.1 Documents on Sustainable Development of Cities and Towns

2.1.1 The Aalborg Charter

The Aalborg Charter resulted from the first *European Conference on Sustainable Cities & Towns* that took place in Aalborg, Denmark in 1994. It is inspired by the Rio Earth Summit's Local Agenda 21 plan and conceived to contribute to the EU Environmental Action Programme „Towards Sustainability“. Around 3000 local authorities from 46 countries have signed the Charter, which resulted in the largest European movement of its type and in the *European Sustainable Cities and Towns Campaign*, as a strong supporting structure receiving support from the European Commission.

Charter consist of three parts. First part is a consensus declaration of European sustainable cities and towns towards sustainability. Second part relates to the creation of the European Sustainable Cities & Towns Campaign. Third part is declaration of intent that local governments will seek to engage in Local Agenda 21 processes.

The consensus declaration (Part 1) focuses on 14 topics: The Role of European Cities and Towns, The Notion and Principles of Sustainability, Local Strategies Towards Sustainability, Sustainability as a Creative, Local, Balance-Seeking Process, Resolving Problems by Negotiating Outwards, Urban Economy Towards Sustainability, Sustainable Land-Use Patterns, Sustainable Urban Mobility Patterns, Responsibility for the Global Climate, Prevention of Ecosystems Toxification, Local Self-Governance as a Pre-Condition, Citizens as Key Actors and the Involvement of the Community, and Instruments and Tools for Urban Management Towards Sustainability. The document points out that sustainable local communities significantly contribute to sustainable human life. Local government could contribute to the environmental problems solving and shares responsibility with governments at all levels for the well-being of humankind and nature.

The standard of living should be based on the on the carrying capacity of nature, while seeking to achieve social justice, sustainable economies, and environmental sustainability. Environmental sustainability is primarily focused on maintaining the natural capital, and that the rate of emitted pollutants does not exceed the capacity of the air, water, and soil to absorb and process them. Further the maintenance of biodiversity is important, as

well as human health, air, water, and soil qualities.

As each city or town is different, individual ways towards sustainability should be found through locally appropriate strategies. Problems or imbalances within the city or town should be brought towards balance at their own level or absorbed by some larger entity at the regional or national level.

Natural assets (atmosphere, soil, water and forests) became the limiting factor for economic development of cities and towns, and should be invested in this capital. It requires investments in conserving the remaining natural assets (e.g. groundwater stocks, soil, habitats for rare species); encouraging the growth of natural capital by reducing the level of current exploitation (e.g. non-renewable energy); investments to relieve pressure on natural assets stocks by expanding cultivated natural capital (parks for inner-city recreation to relieve pressure on natural forests); and increasing the end-use efficiency of products (energy-efficient buildings, environmentally friendly urban transport).

In urban renewal programmes for urban areas and for new suburbs a mix of functions should be conceived. The flows between city and countryside should be balanced based on the notions of equitable regional interdependency. In the context of global warming it is important to protect global biomass resources (forests and phytoplankton) which play an essential role in the earth's carbon cycle. There is a need for co-operation between all actors involved. All citizens and interested groups should be able to have access to information and to participate in local decision-making processes. Available political and technical instruments and tools for an ecosystem approach to urban management should be applied. New environmental budgeting systems should be established for the economic management of the natural resources as well as artificial one. Cities and towns with existing ecological base, should integrate policies and activities into the governance process for managing local urban economies through a comprehensive sustainability process.

2.1.2 The Aalborg Commitments – Aalborg + 10 Inspiring Future

In 2004, following the UN Rio+10 Summit in Johannesburg, the 4th European Conference on Sustainable Cities & Towns was held in Aalborg. The main purpose of the event was to develop a common understanding of sustainability and to make a framework for better articulation of sustainability in different sectors at local level. The result was the Aalborg Commitments which were agreed on by consensus of event participants². Over 700 cities and towns have signed the commitments so far. It encompass a list of qualitative objectives which are organised in 10 themes: Governance, Local Management towards Sustainability, Natural Common Goods, Responsible Consumption and Lifestyle Choices, Planning and Design, Better Mobility, Less Traffic, Local Action for Health, Vibrant and Sustainable Local Economy, Social Equity and Justice and Local to Global.

The document points out that it presents a significant step forward, from Agenda to strategic and co-ordinated Action. The common vision for sustainable urban futures should be translated into tangible sustainability targets and action at local level.

Equitable access to natural common goods should be protected, preserved, and ensured. In this context the primary energy consumption should be reduced, and the share of renewable energies should be increased; water quality should be improved, water should be saved and used more efficiently; biodiversity should be promoted and increased, and designated nature areas and green spaces should be extended and taken care of; soil quality should be improved, ecologically productive land preserved and sustainable agriculture and forestry promoted; while air quality should be improved.

A strategic role for urban planning and design in document's addressing environmental, social, economic, health and cultural issues for the benefit of all should be pointed out. Urban sprawl should be avoided by planning appropriate urban densities, and brownfield sites should be prioritised over greenfield site development.

There is an interdependence of environment, health and transport, so the promotion of sustainable mobility choices is very important in order to reduce the impact of transport on the environment and public health.

The promotion of the health and wellbeing of citizens is very important, as raising awareness and acting on the wider determinants of health, promoting city health development planning, mobilising urban planners to integrate health considerations in planning strategies and initiatives, etc.

Global responsibility for peace, justice, equity, sustainable development and climate protection should be assumed, as developing and following a strategic and integrated approach to mitigate climate change, mainstreaming climate protection policy into specific policies (energy, transport, procurement, waste, agriculture, and forestry), strengthening the international cooperation of towns and cities and developing local responses to global problems etc.

2.1.3 The Basque Declaration

In 2016 *The 8th European Conference on Sustainable Cities & Towns* took place in Bilbao, which resulted in *The Basque Declaration* as an important step following *The Aalborg Charter* (1994) and *The Aalborg Commitments* (2004). The declaration highlights new pathways for European cities and towns to be productive, sustainable and resilient cities for a liveable and inclusive Europe. It aims to give the impetus to socio-cultural, socio-economic and technological transformation in order to meet economic, environmental and social challenges. The Declaration acknowledges the need for transformation in order to decarbonise energy systems, create sustainable urban mobility patterns, protect and enhance biodiversity and ecosystem services, reduce the use of greenfield land and natural space, protect water resources and air quality, adapt to climate change,

improve public space, provide adequate housing, guarantee social inclusion, and strengthen local economies.

The 15 pathways are: developing a "culture of sustainability", actively involve citizens, re-thinking the boundaries, promoting social innovation, social enterprises and civic engagement, nurturing the "sharing economy" (The Socio-Cultural Transformation); turning challenges into opportunities for local economies, creating and closing local value chains, applying innovative approaches to financing, purchasing products and services with high environmental performance, pursuing development towards a circular economy to reduce the need for natural resource consumption and production of waste (The Socio-Economic Transformation); wisely selecting and applying new and smart technologies, using public procurement as an

Sustainability, the Basque Country, and the City of Aalborg (Denmark) and supported by the European Committee of the Regions and the European Investment Bank.

The actions taken are local or regional contributions to the implementation of the Sustainable Development Goals and the Paris Climate Agreement.

The Municipality of Lousada in Portugal was a winner of a Transformative Action Award 2019, which implements an innovative way of education for sustainability. Environmental education is being informally embedded in many different actions across the whole society, so the good environmental practices become natural. It is pointed out that impacts of actions are both social and environmental. Regarding environmental impact, the change is already visible, and municipality is greener and less carbonized³.

Document	The Aalborg Charter	The Aalborg Commitments	The Basque Declaration
Year	1994	2004	2016
Conference	1 st Conference on Sustainable Cities & Towns	4 th Conference on Sustainable Cities & Towns	8 th Conference on Sustainable Cities & Towns
City, State	Aalborg, Denmark	Aalborg, Denmark	Bilbao, Spain
Main purpose	Inspired by the Rio Earth Summit's Local Agenda 21 plan and developed to contribute to the European Union's Environmental Action Programme "Towards Sustainability"	Designed to strengthen the ongoing local effort on sustainability and revitalise Local Agenda 21, as well as to raise awareness and highlight the need for Europe's local governments to act in an integrated way to address sustainability challenges.	Outlines new pathways for European cities and towns to create productive, sustainable and resilient cities for a liveable and inclusive Europe; aiming to support and accelerate socio-cultural, socio-economic and technological transformation.
Number of signatories	More than 3000 local authorities from more than 40 countries have signed	More than 700 cities and towns have signed	
Focus	Focus on why local authorities have to pursue sustainable development	Focus on what needs to be done to achieve sustainable development	Focus on how this transformation can be implemented

Tab. 2 - Basic elements of selected European Documents on Sustainable Development of Cities and Towns (Source: <http://www.sustainablecities.eu/sustainable-cities-platform/>)

instrument to accelerate the market, addressing the digital divide in our local societies, supporting open data standards, preparing our policies, our public management and governance systems (The Technological Transformation).

The intention of the declaration is to inspire local communities to develop and create their own local transformative actions.

2.2 European Awards to Cities and Towns on the Path to Sustainability

2.2.1 Transformative Action Award

The Transformative Action Award is a European sustainability award, which is given to a city, region or civil society that implements 15 pathways outlined in the Basque Declaration (2016) to bring about the socio-cultural, socio-economic and technological transformation of their community. The actions presented should be inspired by the Basque Declaration, which translates the global sustainable frameworks into 10 local agendas. The award is co-organised by ICLEI – Local Governments for

2.2.2 The European Green Capital Award

The European Green Capital Award was launched in 2008 as an award for European city based on its environmental record.

Improvement of the environment is an important challenge for local authorities, which was recognised by the European Commission. The Award was conceived in order to promote and award these efforts. The city that has consequent record in high environmental standards, is committed to goals for further environmental improvement and sustainable development, can be presented as a role model and promotes best practice, is awarded by the European Green Capital Award. All candidate cities should have at least 100,000 inhabitants and have to be a city within a member states of EU, EU Candidate Countries, Iceland, Liechtenstein, Norway and Switzerland. The evaluation of cities is made on the basis of 12 selected indicators: local contribution to global climate change, transport, green urban areas, noise, waste production and management, nature and biodiversity, air, water consumption, waste water treatment,

eco-innovation and sustainable employment, environmental management of the local authority, and energy performance. The award highlights that cities have a key role in mitigation of the climate change. Green infrastructure forms one of the very important part of an overall climate strategy⁴ and has positive effects regarding environment issues (e.g. reducing the carbon footprint of transport and energy provision, mitigate the negative effects of land uptake and fragmentation, disaster risk mitigation and boosting opportunities to better integrate land use, ecosystem and biodiversity concerns into policy and planning).

The local contribution to global climate change indicator stresses out three focal points: improvement of the living environment by using green infrastructure and green urban areas; Limiting, mitigating⁵ or compensating the effects of urban sprawl and enhancement of urban gardening.

Green infrastructure as strategically planned network of natural and semi-natural areas incorporates green spaces (parks, sports facilities and gardens, green rooftops, vertical gardens, areas allocated for urban farming, high-quality business parks and public spaces, communal gardens rich in biodiversity, green belts, metropolitan park systems, sustainable urban drainage systems etc.).

There is a wide range of benefits of green urban areas or green infrastructure pointed out in the process of city evaluation: improvement of the living environment (adaptation to the effects of extreme weather), purification of air and water or noise reduction, public health provision, place of social interaction. So, the design of green urban areas, distribution within the urban structure and their accessibility are important evaluation factors.

Strategic urban planning is important for achieving a sustainable land use concept that contribute to good living conditions in cities and reduction of environmental impact. In new developments it is important to provide the appropriate portion of green fields, natural and semi-natural areas.

Furthermore, the interest in urban farming has been increasingly important especially when is closely linked to nature and biodiversity activities.

City should have an action plan to promote local biodiversity, that is closely linked to the action on climate change (The Europe 2020 Strategy). EU 2020 Biodiversity Strategy proposes that *'ecosystems and their services are maintained and enhanced by establishing green infrastructure and restoring at least 15% of degraded ecosystems'*.

The indicators point out the importance of education about natural values and raising public awareness of city's biodiversity including reference to the Natura 2000 network.

2.2.3 The European Green Leaf

In 2015 the European Commission has launched a new pilot initiative - *The European Green Leaf* in order to provide recognition of effort and commitment in the area of

sustainability and environment in smaller cities. Candidates can be local communities with between 20,000 and 100,000 inhabitants. The main objectives of the award are that the recognised city demonstrates a good environmental record and commitment to generate green growth, to encourage cities to actively develop citizens' environmental awareness and involvement; and to be a "green ambassador".

The technical assessment for biodiversity explores how much information city holds on its natural spaces and biodiversity, actions about protection, monitoring and management of these assets, future management plans and engagement of citizens and stakeholders in improving biodiversity. It is pointed out that it can be enhanced by increasing the size of natural areas or improving management. The technical assessment of sustainable land use emphasizes three focal points: Improving the living environment using green infrastructure and green urban areas; Limiting urban sprawl and creating an urban environment suitable for a sustainable lifestyle; Limiting, mitigating or compensating soil sealing, preferably with nature-based solutions. The indicators stress the importance of bringing brownfield sites into use and thus saving greenfield sites from development.

year	<i>The European Green Capital Award</i> winning cities	<i>The European Green Leaf</i> winning cities
2010	Stockholm (Sweden)	-
2011	Hamburg (Germany)	-
2012	Victoria-Gasteiz (Spain)	-
2013	Nantes (France)	-
2014	Copenhagen (Denmark)	-
2015	Bristol (UK)	Mollet del Vallès (Spain) and Torres Vedras (Portugal)
2016	Ljubljana (Slovenia)	-
2017	Essen (Germany)	Galway (Ireland)
2018	Nijmegen (Netherlands)	Leuven (Belgium) and Växjö (Sweden)
2019	Oslo (Norway)	Cornellà de Llobregat (Spain) and Horst aan de Maas (Netherlands)
2020	Lisbon (Portugal)	Limerick (Ireland) and Mechelen (Belgium)
2021	Lahti (Finland)	

Tab. 3 - *The European Green Capital Award* and *The European Green Leaf* winning cities (Source: <https://ec.europa.eu/environment/europeangreencapital/winning-cities/>)

3. Discussion and Conclusion

At the European level, in the context of sustainability, special attention is given to cities and towns, as evidenced by numerous documents, and various initiatives at local level that support sustainable development. As one of the selected documents, *The Aalborg Charter*, especially emphasizes that city or town is both the largest unit capable of initially addressing

many urban, architectural, social, economic, political, natural resource and environmental imbalances, as well as the smallest scale at which problems can be meaningfully resolved in an integrated, holistic and sustainable manner. Three selected documents represent unique sequence in which we can follow the continuous thinking from idea to realization with basic questions why local authorities have to pursue sustainable development, what needs to be done to achieve sustainable development and finally how this transformation can be implemented.

In the first phase, the focus was on environmental issues and participatory planning. The second phase provides a clear reference framework, including goal setting and measurement. The focus was on implementation mechanisms, resource efficiency and the processes. In the third phase, a database of transformative actions, which represent good practice is created.

Focusing on green infrastructure or green areas and their benefits to the space in which they are located, it can be seen how important they are for sustainability aspects, with particular emphasis on the environmental and social aspects. Putting the importance of green spaces and certain aspects of sustainability in correlation, it can be said that specific documents indirectly, and others in certain segments directly emphasize the importance of vegetation for the benefit of the whole community and comprehensive quality of life. Applications for awards given in the area of urban sustainability, notably *The European Green Capital Award* and *The European Green Leaf*, in their concept the application highlight the importance of green spaces for the city. The importance of green spaces in the city, their distribution, design and accessibility, whether in natural or semi-natural spaces, is emphasized. Green spaces are a basic element that connects many important topics such as climate change, sustainable land use concept, biodiversity etc. Encouraging brownfield development instead of the greenfield development indicates awareness of the need to give greater importance to the natural components of the environment. The European program ESPON 2020 also produced applied research related to the topic of green infrastructure - *Enhancing biodiversity and ecosystem services for territorial development*, indicating the relevance of the topic and emphasizing not only the importance for the city area but also for connections and networking with the wider region.

As in history, green spaces today represent an important element in urban and regional planning, as indicated by landscape-based planning theories.

With all other roles that green spaces play in urban areas, we would like to conclude by emphasizing their role in creating a healthy and sustainable living environment for citizens, which has also been mainstreamed through European initiatives and documents promoting sustainable development of cities and towns.

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- [13] <https://www.espon.eu/green-infrastructure>
- [14] <https://www.interreg-central.eu/Content.Node/Definitions.html>
- [15] <http://www.sustainablecities.eu/transformativ e-action-award/>

NOTES

1. Howard's model of an ideal city consists of two parts - the city (1,000 acres) and the country (5,000 acres) - cultivated land, the fruit farm, the agricultural college and the sanatorium. The garden city is planned for 32,000 inhabitants, of which 30,000 live in the city and the remaining 2,000 in the country. The centre of circular city layout is defined by 145 acres park. Based on his theory, activities on establishment of the first garden city Letchworth (56 km from London) began in 1903 and the second garden city Welwyn (36 km northwest of London) in 1920. Activities related to the construction of garden cities in England have prompted many other European countries to take similar actions.
2. Including organisations such as Association of Cities and Regions for Recycling (ACRR), Climate Alliance -Klima-Bündnis -Alianza del Clima, Council of European Municipalities & Regions (CEMR), Energie Cités, EURO CITIES, ICLEI - Local

- Governments for Sustainability, Medcities, Union of Baltic Cities (UBC) and the World Health Organisation (WHO) - Healthy Cities.
3. See *Lousada: Integrated Education For Sustainability* http://www.sustainablecities.eu/transformativ e-actions-database/?c=search&action_id=66u1tvha
 4. See *EU Strategy on Adaptation to Climate Change*.
 5. Mitigating options may preferably be nature-based solutions.

ZNAČAJ ZELENIH PROSTORA U PLANIRANJU ODRŽIVIH URBANIH PODRUČJA

Sažetak

Posljednjih trideset godina održivi razvoj predstavlja dominantnu paradigmu koja se postupno uvodila u zakonodavstvo na različitim razinama. Urbana vegetacija kao jedan od značajnih biotskih čimbenika urbane strukture doprinosi svim aspektima održivog urbanog razvoja. Cilj ovog istraživanja je pokazati da europski dokumenti i aktivnosti vezane uz održivi razvoj na lokalnoj razini ističu važnost zelenih površina u planiranju održivih urbanih područja. Za potrebe ovog istraživanja odabrana su tri dokumenta koji se odnose na planiranje na lokalnoj razini, te tri nagrade. Istraživanje pokazuje da pojedini dokumenti neizravno, a drugi u određenim segmentima izravno, naglašavaju važnost vegetacije za dobrobit cijele zajednice i sveobuhvatnu kvalitetu života. Prijave za nagrade dodijeljene na području urbane održivosti u svom konceptu ističu važnost zelenih površina za grad.

Ključne riječi: zeleni prostor, europske nagrade, europski dokumenti, lokalna razina, održivi razvoj

1. Uvod

Posljednjih trideset godina održivi razvoj, razvijen iz *Brundtlandske* definicije "razvoj koji zadovoljava potrebe sadašnjosti bez ugrožavanja sposobnosti budućih generacija da zadovolje vlastite potrebe" (UN, 1987), predstavlja dominantnu paradigmu čije brojne interpretacije i objašnjenja ukazuju na složenost koncepta. Koncept održivog razvoja postupno se uvodio u zakonodavstvo na različitim razinama, pri čemu su na svim razinama doneseni dokumenti kojima se čovječanstvo potiče na djelovanje u skladu s održivim razvojem.

Lokalna razina vrlo je važna u području djelovanja koje se odnosi na održivi razvoj. Gradovi i mjesta važni su akteri u dinamici mijenjanja prostornih obrazaca, potrošnje i proizvodnje, kao i životnog stila i kvalitete života. Na lokalnoj razini mogu se poduzeti razne aktivnosti koje će dovesti do pozitivnih ili negativnih promjena, a njihova sinergija imat će značajan utjecaj na globalnoj razini.

Urbana vegetacija (prirodna ili umjetna) kao jedan od značajnih biotskih čimbenika urbane strukture doprinosi svim aspektima održivosti, posebice okolišnim uvjetima (regulaciji temperature, buke, poboljšanju kvalitete zraka itd.) i socijalnim uvjetima održivog urbanog razvoja.

Osvrćući se na odnos prirode i grada kroz povijest, možemo istaknuti da su već u antičko doba prirodne značajke prostora predstavljale bitan element urbanističkog planiranja i arhitektonskog projektiranja, o čemu piše Vitruvije u *Deset knjiga o arhitekturi*.

Industrijska revolucija donijela je brojne promjene u gradovima s naglaskom na stjecanje financijske dobiti. Ubrzani rast gradova doveo je do zauzimanja sve većih površina što je postupno rezultiralo negativnim učincima na okoliš. Krajem 19. stoljeća Ebenezer Howard razvija teoriju *Garden City-a*, koja je značajno pridonijela izgradnji novih gradova i općenito urbanističkom planiranju u brojnim zemljama. U svojoj knjizi *Sutra: Miran put do stvarne reforme (1898.)*, koja predstavlja preteču knjizi *Vrtni gradovi sutrašnjice (1902.)* Howard naglašava

nužnost izgradnje idealnog grada s urbanim i ruralnim obilježjima¹. (Shao, 2015.)

Le Corbusier u „Planu za grad od 3 milijuna stanovnika“ iz 1922. godine ističe četiri osnovna načela planiranja: 1. Smanjenje zagušenja gradskih središta; 2. Povećanje gustoće; 3. Razvojni prometnih sustava i 4. Povećanje pejzažno uređenih urbanih područja. Također, plan za provedbu prve faze izgradnje grada Chandigarha u Indiji 1952. (planiranog za 150.000 stanovnika) ukazuje na važnost koju je Le Corbusier dao otvorenim prostorima, parkovima i unutarnjim otvorenim prostorima. (Boesiger, W. i Girsberger, H., 1999.)

Kao što američki povjesničar i sociolog Lewis Mumford (1968.) ističe, održavanje kulturnog fonda za zeleni prostor od velike je važnosti za kulturni razvoj gradova. Naglašava da je jedan od osnovnih preduvjeta za renesansu gradskog života ponovno otkrivanje kvaliteta i oblika prirodnog krajolika koji predstavlja izvor uravnotežene egzistencije, te da je važno očuvati prirodni okoliš koji će prihvatiti male ili velike urbane zajednice. Naglašava potrebu za sprječavanjem nekontroliranog rasta gradskog tkiva kao i sprječavanja uništavanja zelene matrice i izbjegavanja narušavanja ekološke ravnoteže između urbanih i ruralnih područja.

Pejzažni urbanizam nastao je kao teorija urbanog planiranja 1990. godine prema kojoj osnovu grada čine međusobno povezani i ekološki raznovrsni neizgrađeni prostori, a ne izgrađeno urbano tkivo. Waldheim (2006.) ističe da je pejzažni urbanizam, poput pejzažne arhitekture, međuprostorna projektantska disciplina, koja djeluje u prostoru između prirodnih ekoloških, infrastrukturnih sustava i izgradnje.

Arhitektica Dora Francese (2016.) ističe da iako vegetacija igra temeljnu ulogu u obnovi grada, zelene površine se najčešće formiraju na prostorima bez druge namjene, često samo kao odgovor na obvezne standarde planiranja. Osjetljiviji pristup bilo bi planiranje zelenih površina kao elementa koji poboljšava opću kvalitetu gradskog života. Cilj ovog istraživanja je pokazati da dokumenti i aktivnosti vezane uz održivi razvoj na lokalnoj razini ističu važnost zelenih površina u planiranju održivih urbanih područja.

2. Dokumenti i aktivnosti vezane uz održivi razvoj na lokalnoj razini

Od kraja 20. stoljeća doneseni su niz dokumenata o održivom razvoju na različitim razinama (svjetskoj, nacionalnoj, regionalnoj i lokalnoj) od strane različitih međunarodnih organizacija. Za potrebe ovog istraživanja odabrana su tri dokumenta koji se odnose na planiranje na lokalnoj razini: Aalborška povelja, Aalborške obveze i Baskijska deklaracija. Sva tri dokumenta proizašla su iz Europske konferencije o održivim gradovima i mjestima.

Europska kampanja za održive gradove i mjesta prvi je put pokrenuta 1994. godine na Prvoj europskoj konferenciji o održivim gradovima i mjestima održanoj u Aalborgu u Danskoj. Kampanja predstavlja najveću europsku inicijativu za lokalni održivi razvoj i međunarodnu predanost Lokalnoj Agendi 21.

Kako bi se nagradilo i ohrabrilo gradove i mjesta da nastave pozitivne trendove u kontekstu održivosti, osmišljene su nagrade. Europska komisija dodjeljuje godišnju nagradu Europska zelena prijestolnica i Europski zeleni list, koje su odabrane za potrebe ovog istraživanja obzirom na njihovu relevantnost za lokalnu razinu.

Osim toga, u okviru programa ESPON 2020, sufinanciranog iz Europskih fondova za regionalni razvoj, u razdoblju 2017. - 2019. provedeno je primijenjeno istraživanje GRETA - Zelena infrastruktura: Poboljšanje biološke raznolikosti i usluga ekosustava za teritorijalni razvoj, koje naglašava važnost zelene infrastrukture kao područja koje istovremeno može ponuditi mnoge okolišne, društvene, kulturne i ekonomske koristi.

2.1 Dokumenti o održivom razvoju gradova i mjesta

2.1.1 Aalborška povelja

Aalborška povelja je rezultat Prve europske konferencije o održivim gradovima i mjestima koja se održala u Aalborgu u Danskoj 1994. godine. Inspirirana je planom Lokalne Agende 21 Rio Earth summita te osmišljena na način da doprinese Akcijskom programu zaštite okoliša Europske unije „Prema održivosti“. Oko 3.000 lokalnih vlasti iz 46 zemalja potpisalo je Povelju, što je rezultiralo najvećim europskim pokretom te vrste i Europskom kampanjom za održive gradove i mjesta, kao snažnom potpornom strukturom koja je dobila podršku Europske komisije. Povelja se sastoji od tri dijela. Prvi dio je konsenzusna deklaracija europskih održivih gradova i mjesta prema održivosti. Drugi dio se odnosi na stvaranje Europske kampanje za održive gradove i mjesta, dok je treći dio deklaracija o namjeri da će se lokalne samouprave nastojati uključiti u procese Lokalne Agende 21. Deklaracija o konsenzusu (1. dio) usredotočena je na četrnaest tema: Uloga europskih gradova i mjesta, Pojam i načela održivosti, Lokalne strategije prema održivosti, Održivost kao kreativan, lokalni, proces traženja ravnoteže, Rješavanje problema pregovaranjem prema van, Urbano gospodarstvo prema održivosti, Održivi obrasci korištenja zemljišta, Održivi obrasci urbane mobilnosti, Odgovornost za globalnu klimu, Sprečavanje toksifikacije ekosustava, Lokalna samouprava kao preduvjet, Građani kao ključni akteri i uključivanje zajednica i Instrumenti i alati za urbano upravljanje prema održivosti. U dokumentu se ističe da održive lokalne zajednice značajno doprinose održivom životu. Lokalna uprava može pridonijeti rješavanju problema zaštite okoliša te dijeli odgovornost s upravama na svim razinama za dobiti čovječanstva i prirode. Životni standard trebao bi se temeljiti na nosivosti prirode, istovremeno težeći socijalnoj pravednosti, održivim ekonomijama i okolišnoj održivosti. Okolišna održivost primarno je usmjerena na održavanje prirodnog bogatstva, te na brigu da količina emitiranih onečišćujućih tvari ne prelazi kapacitet zraka, vode i tla koje ih apsorbiraju i prerađuju. Daljnje održavanje biološke raznolikosti važno je, kao i zdravlje ljudi, zraka, vode i tla. Budući da je svaki grad ili mjesto različito, treba pronaći individualne načine za održivo lokalno prikladnim strategijama. Probleme ili neravnoteže u gradu ili mjestu treba uravnotežiti na njihovoj razini ili ih treba uključiti u viši entitet na regionalnoj ili nacionalnoj razini. Prirodna dobra (atmosfera, tlo, voda i šume) postali su ograničavajući faktor ekonomskog razvoja gradova i mjesta, zbog čega bi trebalo ulagati u taj kapital. To zahtijeva ulaganja u očuvanje preostalih prirodnih dobara (npr. zaliha podzemne vode, tla, staništa za rijetke vrste); poticanje rasta prirodnog kapitala smanjenjem razine trenutne eksploatacije (npr. neobnovljive energije); ulaganja za ublažavanje pritiska na zalihe prirodnih dobara širenjem kultiviranog prirodnog kapitala (parkovi za rekreaciju u gradu kako bi se olakšao pritisak na prirodne šume) i povećanje učinkovitosti krajnje upotrebe proizvoda (energetski učinkovite zgrade, ekološki prihvatljiv gradski prijevoz). U programima urbane obnove gradskih područja i za nova predgrađa treba osmisliti kombinaciju funkcija. Tokove između grada i sela treba uravnotežiti na temelju pojmova nepristrane regionalne međuovisnosti. U kontekstu globalnog zagrijavanja važno je zaštititi globalne resurse biomase (šume i fitoplankton) koji imaju ključnu ulogu u kruženju ugljika u prirodi. Potrebna je suradnja svih uključenih aktera te da svi građani i zainteresirane skupine imaju pristup informacijama i sudjeluju u lokalnim procesima donošenja odluka.

Treba primijeniti dostupne političke i tehničke instrumente te provedbene alate za ekološki pristup urbanom upravljanju, pri čemu treba uspostaviti nove sustave proračuna za zaštitu okoliša radi gospodarskog upravljanja prirodnim i artificijelnim resursima. Gradovi i mjesta s postojećom ekološkom bazom trebali bi integrirati politike i aktivnosti na upravljanju lokalnim urbanim ekonomijama kroz sveobuhvatni proces održivog planiranja.

2.1.2 Aalborške obveze - Aalborg + 10 nadahnjujuća budućnost

Nakon UN Rio + 10 summita u Johannesburgu 2004. godine, u Aalborgu je održana Četvrta europska konferencija o održivim gradovima i mjestima. Glavna svrha događaja bila je razvijanje zajedničkog razumijevanja održivosti te stvaranje okvira za bolju artikulaciju održivosti u različitim sektorima na lokalnoj razini. Konsenzusom sudionika događaja² dogovorene su Aalborške obveze, koje je do sada preuzelo preko 700 gradova. One sadrže popis kvalitativnih ciljeva strukturiranih u deset tema: Upravljanje, Lokalno upravljanje prema održivosti, Prirodna zajednička dobra, Odgovorna potrošnja i način života, Planiranje i projektiranje, Bolja mobilnost, Manje prometa, Lokalna akcija za zdravlje, Živahno i održivo lokalno gospodarstvo, Socijalna jednakost i pravda te Od lokalnog prema globalnom. Dokument predstavlja značajan iskorak od Agende 20 strateške i koordinirane akcije, pri čemu bi se zajednička vizija održive urbane budućnosti trebala prevesti u konkretne ciljeve održivosti i djelovanje na lokalnoj razini. Pravedan pristup prirodnim zajedničkim dobrima treba zaštititi, sačuvati i osigurati. U tom kontekstu treba smanjiti primarnu potrošnju energije i povećati udio obnovljivih izvora energije; treba poboljšati kvalitetu vode, štediti vodu i učinkovitije je koristiti; treba promovirati i povećavati biološku raznolikost, a određena prirodna područja i zelene površine treba proširiti i o njima se brinuti; treba poboljšati kvalitetu tla, očuvati ekološki produktivno zemljište i promovirati održivu poljoprivredu i šumarstvo; treba poboljšati kvalitetu zraka. U dokumentu koji se bavi ekološkim, socijalnim, ekonomskim, zdravstvenim i kulturnim pitanjima, radi osiguranja opće dobrobiti, treba istaknuti stratešku ulogu urbanog planiranja i projektiranja, pri čemu treba spriječiti nekontrolirano širenje urbanih područja planiranjem odgovarajućih urbanih gustoća, te prioritarnim razvojem brownfield područja u odnosu na razvoj greenfield-a. Obzirom na međuovisnost okoliša, zdravlja i prometa, promocija održive mobilnosti vrlo je važna za smanjenje utjecaja prometa na okoliš i ljudsko zdravlje. Promicanje zdravlja i dobrobiti građana vrlo je važno, kao i podizanje svijesti te djelovanje na šire odrednice zdravlja kao što su promicanje planiranja razvoja zdravog grada, uključivanje zdravstvenih promišljanja u strategije i inicijative urbanističkog planiranja i dr. Potrebno je zalaganje za globalnu odgovornost za mir, pravdu, jednakost, održivi razvoj i zaštitu klime, razvojem i praćenjem strateškog i integriranog pristupa za ublažavanje klimatskih promjena, integriranjem politike zaštite klime u posebne politike (energija, transport, nabava, otpad, poljoprivreda, i šumarstvo), jačanjem međunarodne suradnje mjesta i gradova, razvijanjem lokalnih odgovora na globalne probleme i sl.

2.1.3 Baskijska deklaracija

Osma europska konferencija o održivim gradovima i mjestima održana je 2016. godine u Bilbau. Na konferenciji je donesena Baskijska deklaracija kao važan korak nakon Aalborške povelje (1994.) i Aalborških obveza (2004.). Deklaracija ističe nove smjernice u cilju stvaranja produktivnih, održivih i otpornih europskih gradova i mjesta, pri čemu je cilj

deklaracije dati poticaj socio-kulturnoj, socio-ekonomskoj i tehnološkoj transformaciji radi suočavanja s ekonomskim, okolišnim i socijalnim izazovima.

Deklaracija potvrđuje potrebu za transformacijom kako bi se dekarbonizirali energetski sustavi, stvorili održivi obrasci urbane mobilnosti, zaštitila i poboljšala bioraznolikost i usluge ekosustava, smanjila uporaba greenfield zemljišta i prirodnog prostora, zaštitili vodeni resursi i kvaliteta zraka, poboljšala prilagodba klimatskim promjenama, unaprijedili javni prostori, osiguralo odgovarajuće stanovanje, zajamčila socijalna uključenoost i ojačala lokalne ekonomije. Petnaest novih putova jesu: razvijanje „kulture održivosti“, aktivno uključivanje građana, promišljanje granica, promicanje društvenih inovacija i poduzeća te građanskog angažmana, njegovanje „ekonomije dijeljenja“ (socio-kulturna transformacija); pretvaranje izazova u prilike za lokalna ekonomije, stvaranje i zatvaranje lokalnih vrijednosnih lanaca, primjena inovativnih pristupa financiranju, kupovina proizvoda i usluga s visokim ekološkim performansama, slijediti razvoj prema kružnom gospodarstvu radi smanjenja potreba za potrošnjom prirodnih resursa i proizvodnjom otpada (socio-ekonomska transformacija); mudri odabiri i primjena novih i pametnih tehnologija, primjena javne nabave kao instrumenta ubrzanja tržišta, rješavanje digitalnih razlika u lokalnim društvima, podržavanje standarda otvorenih podataka, priprema politika, javnog upravljanja i sustava upravljanja (tehnološka transformacija). Namjena deklaracije je potaknuti lokalne zajednice na razvoj i stvaranje vlastitih lokalnih transformativnih akcija.

2.2 Europske nagrade gradovima i mjestima na putu prema održivosti

2.2.1 Nagrada Transformativna akcija

Nagrada Transformativna akcija europska je nagrada za održivost koja se dodjeljuje gradu, regiji ili civilnom društvu koje provodi petnaest putova zacrtanih u Baskijskoj deklaraciji (2016.) kako bi ostvarili socio-kulturnu, socio-ekonomsku i tehnološku transformaciju svoje zajednice. Predstavljene akcije trebaju biti inspirirane Baskijskom deklaracijom koja globalni održivi okvir provodi u deset lokalnih programa. Nagradu su suorganizirali ICLEI - Lokalne vlasti za održivost, Baskija i Grad Aalborg (Danska), a podržali su ih Europski odbor regija i Europska investicijska banka. Poduzete akcije predstavljaju lokalni ili regionalni doprinos provedbi ciljeva održivog razvoja i Pariškog sporazuma o klimatskim promjenama. Općina Lousada u Portugalu dobitnica je Nagrade Transformativna akcija 2019. koja implementira inovativan način obrazovanja za održivost. Edukacija o okolišu neformalno je ugrađena u različite akcije u cijelom društvu na način da se afirmiraju dobre ekološke prakse. Ističe se da su učinci akcija socijalni i okolišni. Što se tiče utjecaja na okoliš, promjene su već vidljive, a općina je zelenija i ima smanjenu emisiju CO₂.

2.2.2 Nagrada Europska zelena prijestolnica

Nagrada Europska zelena prijestolnica pokrenuta je 2008. godine kao nagrada za europski grad na temelju njegovih ekoloških podataka. Unaprijeđenje okoliša kao važan izazov za lokalne vlasti prepoznala je i Europska komisija te je nagrada zamišljena u svrhu promicanja i nagrađivanja takvih nastojanja. Gradu s kontinuirano visokim ekološkim standardima, predanom ciljevima daljnje poboljšanja okoliša i održivog razvoja, koji je uzor i promotor najbolje prakse, dodjeljuje se nagrada Europska zelena prijestolnica. Svi gradovi kandidati trebaju imati najmanje 100.000 stanovnika te moraju biti grad u državama članicama EU, zemljama kandidatima za članstvo u EU, Islandu, Lihtenštajnu, Norveškoj i Švicarskoj.

Vrednovanje gradova provedeno je temeljem dvanaest odabranih pokazatelja: lokalni doprinos globalnim klimatskim promjenama, promet, zelena urbana područja, buka, proizvodnja i upravljanje otpadom, priroda i biološka raznolikost, kvaliteta zraka, potrošnja vode, pročišćavanje otpadnih voda, ekološke inovacije i održivo zapošljavanje, lokalno upravljanje okolišem i energetske performanse.

Nagrada ističe da gradovi imaju ključnu ulogu u ublažavanju klimatskih promjena. Zelena infrastruktura čini jedan od važnih dijelova cjelokupne klimatske strategije⁴ te ima pozitivne učinke na zaštitu okoliša (primjerice za smanjenje ugljičnog otiska u prometu i opskrbi energijom, ublažavanje negativnih učinaka zauzimanja i fragmentacije zemljišta, ublažavanje rizika od katastrofa i povećanje mogućnosti za bolje uključivanje pitanja korištenja zemljišta, ekosustava i biološke raznolikosti u politiku i planiranje).

Pokazatelj Lokalni doprinos globalnim klimatskim promjenama naglašava tri ključna elementa: poboljšanje životnog okoliša korištenjem zelene infrastrukture i zelenih urbanih područja; ograničavanje, ublažavanje⁵ ili kompenzaciju učinaka urbanog širenja te poboljšanje urbanog vrtlarstva. Zelena infrastruktura kao strateški planirana mreža prirodnih i poluprirodnih područja uključuje zelene površine (parkove, sportske sadržaje, vrtove, zelene krovove, vertikalne vrtove, područja namijenjena urbanoj poljoprivredi, visokokvalitetne poslovne parkove i javne prostore, komunalne vrtove bogate biološkom raznolikošću, zelene pojaseve, sustave metropolitanskih parkova, održive sustave gradske odvodnje i dr.).

U procesu ocjene grada razmatra se široki spektar prednosti zelenih urbanih područja ili zelene infrastrukture: poboljšanje životnog okruženja (prilagodavanje utjecajima ekstremnih vremenskih prilika), pročišćavanje zraka i vode ili smanjenje buke, osiguravanje javnog zdravstva, stvaranje prostora socijalne interakcije. Dakle, oblikovanje zelenih urbanih područja, distribucija unutar urbane strukture i njihova dostupnost predstavljaju važne čimbenike vrednovanja.

Strateško urbano planiranje važno je za ostvarenje koncepta održivog korištenja zemljišta koji pridonosi dobrim životnim uvjetima u gradovima i smanjenju utjecaja na okoliš. U sklopu nove izgradnje važno je osigurati odgovarajući udio zelenih prostora, prirodnih i poluprirodnih područja, pri čemu raste interes za urbanu poljoprivredu, posebice ako je usko povezana s prirodom i biološkom raznolikošću.

Grad bi trebao imati akcijski plan za promicanje lokalne biološke raznolikosti, usko povezan s djelovanjem na klimatske promjene (Strategija Europa 2020). Strategija biološke raznolikosti EU 2020 predlaže da se „ekosustavi i njihove usluge održavaju i poboljšavaju uspostavljanjem zelene infrastrukture i obnavljanjem najmanje 15% degradiranih ekosustava“.

Pokazatelj ističu važnost obrazovanja o prirodnim vrijednostima i podizanja svijesti javnosti o biološkoj raznolikosti grada, uključujući mrežu Natura 2000.

2.2.3 Europski zeleni list

Godine 2015. Europska komisija pokrenula je novu pilot inicijativu - Europski zeleni list radi prepoznavanja napora i predanosti na području održivosti i okoliša u manjim gradovima (kandidati mogu biti lokalne zajednice koje imaju između 20.000 i 100.000 stanovnika), a glavni ciljevi nagrade su da gradovi pokažu dobre ekološke podatke i predanost zelenom rastu, da aktivno potiču razvoj okolišne svijesti i uključivost građana te da budu "zeleni ambasadori".

Tehnička procjena biološke raznolikosti istražuje koliko pojedini grad raspolaže informacijama o svojim prirodnim prostorima i biološkoj raznolikosti, aktivnostima na zaštiti, nadzoru i upravljanju tim

dobrima, budućim planovima upravljanja te angažiranju građana i dionika na poboljšanju biološke raznolikosti, pri čemu je istaknuto da se isto može poboljšati povećanjem veličine prirodnih područja ili poboljšanjem upravljanja.

Tehnička procjena održivog korištenja zemljišta naglašava tri ključna elementa: Poboljšanje životnog okruženja korištenjem zelene infrastrukture i zelenih urbanih područja; Ograničavanje širenja urbanog prostora i stvaranje urbanog okruženja pogodnog za održivi način života; Ograničavanje, ublažavanje ili nadoknađivanje nepropusnosti tla, ukoliko je moguće, prirodnim rješenjima.

Pokazatelj naglašavaju važnost upotrebe brownfield područja i time sprečavanja širenja na greenfield područja.

3. Rasprava i zaključak

Na europskoj se razini, u kontekstu održivosti, posebna pozornost pridaje gradovima i mjestima, o čemu svjedoče brojni dokumenti i razne inicijative na lokalnoj razini koje podržavaju održivi razvoj. Kao jedan od odabranih dokumenata, Aalborgska povelja posebno ističe da je grad ili mjesto ujedno najveća jedinica koja je sposobna inicijalno rješavati mnoge urbane, arhitektonske, socijalne, ekonomske, političke, prirodne resurse i ekološke neravnoteže, kao i najmanje mjerilo gdje se problemi mogu smisleno riješiti na integrirani, holistički i održivi način. Tri odabrana dokumenta predstavljaju jedinstveni slijed u kojem možemo pratiti kontinuirano razmišljanje od ideje do realizacije s osnovnim pitanjima zašto lokalne vlasti moraju težiti održivom razvoju, što treba učiniti da bi se postigao održivi razvoj i na kraju kako se ta transformacija može provesti.

U prvoj je fazi fokus bio na pitanjima zaštite okoliša i participativnom planiranju, dok druga faza pruža jasan referentni okvir, uključujući postavljanje ciljeva i mjerenje, pri čemu je fokus na mehanizmima za provedbu, učinkovitosti resursa i procesima. U trećoj fazi stvara se baza transformativnih akcija koje predstavljaju dobru praksu.

Ako se fokusiramo na zelenu infrastrukturu ili zelene površine i njihove prednosti za prostor u kojem se nalaze, može se vidjeti njihov značaj za aspekte održivosti, posebice za okolišni i društveni aspekt. Dovođenjem važnosti zelenih površina i određenih aspekata održivosti u korelaciju, može se reći da pojedini dokumenti neizravno, a drugi u određenim segmentima izravno, naglašavaju važnost vegetacije za dobrobit cijele zajednice i sveobuhvatne kvalitete života.

Prijave za nagrade dodijeljene na području urbane održivosti, posebice nagrada Europska zelena prijestolnica i Europski zeleni list, u svom konceptu ističu važnost zelenih površina za grad. Naglašava se važnost zelenih površina u gradu, njihova distribucija, oblikovanje i dostupnost, bilo u prirodnim ili poluprirodnim prostorima. Zeleni prostori osnovni su element koji povezuje mnoge važne teme poput klimatskih promjena, koncepta održivog korištenja zemljišta, biološke raznolikosti itd. Poticanje razvoja brownfield područja umjesto greenfield razvoja ukazuje na svijest o potrebi davanja veće važnosti prirodnim komponentama okoliša.

Europski program ESPON 2020 također je proveo primijenjena istraživanja vezana za temu Zelene infrastrukture: Poboljšanje biološke raznolikosti i usluga ekosustava za teritorijalni razvoj, što ukazuje na važnost ove teme za gradsko područje, ali i za povezanost i umrežavanje šire regije. Kao i u povijesti, zeleni prostori i danas predstavljaju važan element u urbanom i regionalnom planiranju, na što ukazuju teorije planiranja utemeljene na pejzažu. Sa svim ostalim ulogama koje zeleni prostori imaju u urbanim područjima, željeli bismo zaključiti naglašavanjem njihove uloge u stvaranju zdravog i održivog životnog okruženja za građane, što je također

uvršteno u europske inicijative i dokumente koji promiču održivi razvoj gradova i mjesta.

NOTES

1. Howardov model idealnog grada sastoji se od dva elementa - grada (1.000 hektara) i sela (5.000 hektara) - obrađene zemlje, voćne farme, poljoprivrednog učilišta i sanatorija. Vrtni grad planiran je za 32.000 stanovnika, od čega 30.000 živi u gradu, a preostalih 2.000 na selu. U središtu grada kružnog tlocrta nalazi se park od 145 hektara. Na temelju njegove teorije, 1903. započele su aktivnosti na izgradnji prvog vrtnog grada Letchworth-a (56 km od Londona), a 1920. drugog vrtnog grada Welwyn-a (36 km sjeverozapadno od Londona). Izgradnja vrtnih gradova u Engleskoj potaknula je mnoge druge europske zemlje na slične aktivnosti.
2. Osim gradova i mjesta sudionici su bile organizacije kao npr. Udruženje gradova i regija za recikliranje (ACRR), Klimatski savez -Klima-Bündnis -Alianza del Climae.V, Vijeća europskih općina i regija (CEMR), Energie Cités, EUROCIITIES, ICLEI - Lokalna uprava za održivost, Medcities, Unija baltičkih gradova (UBC) i Svjetska zdravstvena organizacija (WHO) - zdravi gradovi.
3. Pogledajte Lousada: Integrirano obrazovanje za održivost http://www.sustainablecities.eu/transformation-action-database/?c=search&action_id=66u1tvha
4. Vidjeti EU Strategy on Adaptation to Climate Change.
5. Mogućnosti ublažavanja mogu biti rješenja zasnovana na prirodi.