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## STRATEGIC CHALLENGES FOR THE CITIES. CASE STUDY: CLUJ-NAPOCA

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### Abstract

Contemporary cities are facing a series of strategic challenges, navigating between affluence and poverty, sustainability and ecological impact, tolerance and intolerance, participatory governance and the weakening of democracy. These challenges are analyzed, and the case study is targeted at Cluj-Napoca, a city included in the EU 100 Climate-Neutral and Smart Cities by 2030.

**Keywords:** cities, sustainability, climate-neutral, public policies.



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## 1. Introductory remarks

‘With cities, it is as with dreams: everything imaginable can be dreamed, but even the most unexpected dream is a rebus that conceals a desire or, its reverse, a fear’ wrote Italo Calvino (1978, p. 44) in a novel that explores the imaginary and the imaginable, in a game of space and time. The cities have been, are and will be places where the new technologies are put into practice, where public policies and services are developed, in order to respond to the problems and needs related to economic development, habitation, mobility, health care, education, environment. In fact, one of the consistent arguments in favor of the cities is precisely the existence of public services (Fujita and Thisse, 2002, p. 133). The cities are places for individual freedom and civic rights, of creativity and economic and social innovation, of tolerance and cooperation. At the same time, the cities are places where the inequalities can be seen in dramatic images, where poverty generates despair and violence, places where pollution turns life into a nightmare and discrimination pushes on the fringes of society people whose only fault is that they are different. Navigating among these contradictions, analyzed and exposed over the years by researchers from various fields, the cities have proven a remarkable resilience and their worldwide role never ceases to grow. Until the end of the 21<sup>st</sup> century, almost all of us will live in cities, hence we are today living a transition from what we could call ‘nonurban’ (even rural) to ‘urban’ (Batty, 2018, pp. 13-14). In 2018, the cities of the world housed 54% of the entire world’s population, a figure that, if the current trends are maintained, will grow to at least 68% in 2030 (in other words, an estimation of at least 5.7 billion people). The impact of such a process is a significant one on multiple levels. For instance, although they occupy only 3% of the Earth’s surface, the cities are responsible for more than 75% of the global carbon emissions (Allam, 2021, p. 61).

In this context, the cities are facing a series of strategic challenges, which can be addressed from the perspective of three contradictions that are poignantly visible in the contemporary world and to which the cities are called to respond through public policies, aimed at providing hope and dispelling fear. First of all, we are talking about ‘affluence and poverty’ (Beauregard, 2019, p. 22); second, about ‘the ecological impact of cities’ versus city sustainability (Beauregard, 2019, p. 57); third, about the way in which the public sphere is built at the local level. It is either a place for dialogue between the social partners, where the tensions are subject to negotiation and there is the reciprocal acknowledgment of the Other in his otherness (Habermas and Derrida, 2003, p. 294), a place of governance and of democratic political community construction. Or it is a space dominated by discourses that separate and discriminate, discourses of an oligarchy (real or imagined) that spread violence (of course, the symbolic violence first of all, but it creates a framework for the manifestation of physical violence) against certain groups consisting of the poorest, of the least lucky, of those who are somehow different.

The cities browse therefore among challenges that risk sinking them and there are no one size fits all solutions. There are models of good practices, there are short-term measures and long-term measures (sometimes at odds with each other) and almost always the local administrations have insufficient resources in relation to the needs.

## 2. Challenges and opportunities for cities

### 2.1. *Those who have and those who have not*

The city is the place where the differences between opulent richness and total poverty stand out very well, although, in practice, between the two there are many shades of precariousness. Of course, we are talking about a societal problem that exists outside the cities. Nevertheless, in a world that is becoming more and more urban every day, the cities are the place where we see the differences easier. On a first level, this is ‘private wealth’ and the public policy problem regarding the redistribution of wealth found mainly in the national jurisdiction and lesser in the cities’ competency (although they have the right instruments to reduce the gap between those who have and those who do not have). Despite this, when we talk about wealth in the cities it is essential to talk about the public wealth and about the fact that public wealth is a necessary condition to generate private wealth (Eisinger, 1988 *apud* Beauregard, 2019, p. 25). Quality roads and public transportation, high quality education institutions and programs for children, playgrounds and parks at hand, street cleaning, public lighting, public safety, healthcare and dedicated sports areas, affordable housing, air and water quality assurance — we all want them and we need them. Assuring these services for all the city’s citizens is a condition to reduce the gap.

The cities are places where digital technologies explode, having the potential to be part of the solutions to everyday life problems. Places that become innovation hubs where highly qualified specialists gather, who work in the cutting-edge fields. It is best for these processes, so widely desired by the cities, to be balanced by public policies that ensure access and a place for the least lucky. The presence of some specialists, very well paid as compared to the other citizens, will fuel the prices in the city and will trigger gentrification processes. And the new technologies bring (or can bring) new forms of precariousness for those who do not benefit from the incomes that the new economy’s service contractors and high-tech workers have, although they belong to the category of those who use technology — for instance, the Uber drivers (Clark, 2020, pp. 199–200).

Furthermore, we all agree that most jobs will need some form of digital skills in the future and that Internet access is essential. Nevertheless, on average two in five Europeans aged 16–74 are lacking digital literacy (European Commission, 2020, p. 8), and these figures are higher in the poorer communities. Network access is, in most cases, a private business and not a public service (as, maybe, it should be). Because poverty nowadays is related to network access or lack of network access. Poverty is no longer defined in financial terms, but in connectivity terms, particularly in the cities, where it is essential to be connected to physical and symbolic networks alike (Bettencourt, 2021, *passim*).

The European Union had a social component from the very beginning. This social component comes from a tradition related to the trade union movement and to a wide range of political movements, including social-democracy, Christian democracy or social liberalism. After the Second World War, under the European construction circumstances, the social component was present as a major element of the proposed model. It is presented in all the European treaties, in the Social European Charter and in several other documents

(of principle or specific). In Europe, we have a document such as the European Pillar of Social Rights that deals with social security, improving working and living conditions, gender equality, and social inclusion.

It is not by mere chance that, if we look at things globally, the EU has a high social security level. Despite this, the significant differences are not gone, poor people exist in the wealthiest countries of the Union, and among the Union's countries there are still gaps that fuel phenomena such as brain drain. Of course, the European citizens must have the possibility to move freely; nevertheless, they should move of their own free will and not because they are constrained to leave their regions because of poverty and poor economic opportunities. The reduction of such gaps is a necessary condition for the sustainability of the European project.

The resources allocated to social security are important (in 2020, expenditure on social protection represented 22.0% of GDP in EU-27), but the challenges raise the question of the ability to maintain what has been gained and the promise for a better life (which, on the European construction level, represents an essential part of the social contract). The coronavirus pandemic and the measures taken have had a negative economic impact (which is expected to be a lasting one) and the most affected have been the poor ones, the vulnerable ones (Bassot and Cahen, 2022, p. 106). At the level of 2010, in UE-27, there were 103.7 million people at risk of poverty or social exclusion. The situation has improved every year until 2019, when this figure has reached 91.4 million. After 10 years of progress, in 2020, it jumped to 96.8 million, namely 5.4 million Europeans made the jump, in a single year, to a more precarious life. 15.8 million European children are living in poverty (Social Justice Ireland, 2022, p. 17).

The energy price issue raises, at the level of 2022, an additional challenge, which directly affects, also through inflation, those who do not have, worsening, at the same time, the affordable housing issue. Already in 2018, 82 million Europeans spent more than 40% of their disposable income on housing, given that the prices are increasing much faster than the incomes and the need for social housing is growing fast (Vandecasteele *et al.*, 2019, pp. 30–33).

## ***2.2. On sustainability and consumption***

The cities are organisms with an impact way beyond their administrative territory, from a political perspective (broadly speaking), an economic, social and environmental perspective. They attract and consume resources (the emphasis here is on the economic dimension), they are places where more and more people are living (the emphasis here is on the social dimension) and there is no major impact upon the environment (in a destructive sense). At the same time, the cities are places where the fight for sustainability is fought, from an environmental perspective (including here also the climate perspective). Among the three major aspects, economic, social and environmental, there is always a tension (Rosen, 2020, p. 17), each administration trying to find the balance in an ever-changing world.

Cities are playing an important role in the mitigation and adaptation to climate change and they become increasingly aware of this role and, consequently, they coagulate in

governance structures that help them formulate and carry out actual action plans. Such a structure is the C40, which is a network of mayors of nearly 100 world cities collaborating to deliver the action needed to confront climate change. An analysis of the C40 activity between 2005 and 2017 (Gordon, 2020, pp. 94–98) shows that at the beginning many cities had a small scale approach, namely that of the formal presence within the association, but without a real and strong action plan, without clear actions regarding the emission reduction target or the emissions inventory, or they had a limited ambition presence because there was a target and an emission inventory, but the actual actions were few and they were focused only on particular aspects. But, as the years passed by, things changed significantly, in spite of the fact that the cities act in different national legislative contexts. Most of the cities have oriented towards the other two approaches. One of active engagement, with target, inventory, with action plan, but still an engagement that stays limited, this limitation being, for instance, the result of the constraints imposed on higher governmental and local level or of the lack of administrative capacity. And, respectively, one that includes climate change in processes of urban development and spatial planning, in the proposals regarding mobility, seen as an essential element of the public policies developed at the city level. Where there is a political will, the concrete actions and their results become visible.

It is worth mentioning that, following the C40 model, the EU also wants to build a European urban governance field, to support its cities to adopt a set of rules and practices that could lead to climate change results. The main action in this regard is the EU Mission for climate-neutral and smart cities by 2030. The mission's objectives are related to the reach of climate neutrality, but this main objective is seen in the healthcare context and citizen welfare, in the context of air quality and last, but not least, of creating jobs, and thus the objectives also have an economic component and a social one. The 100 cities selected will represent models for all the 377 cities that have submitted their candidacy and for any city that wants to be sustainable. The cities will sign Climate City Contracts, which will include action plans in the fields connected to climate neutrality, such as energy and energy efficiency (in constructions, lighting, etc.), mobility and public transport, waste management, etc.

Another European initiative that goes in the same direction is the New European Bauhaus, which aims at connecting the European Green Deal with the spaces in which people live, for a sustainable and aesthetic future at the same time (Triollet, 2022, p. 19).

It is quite significant that in the European approaches regarding climate change, as in the 100 City Mission, there is always an economic component and a social one. In substance, this approach is one that trusts innovation, technological progress and education. Because the balance between environmental, economic and social components is possible only if we accept that an increase in human capital (innovation, creativity, knowledge, skills, labor) can compensate for the reduction of natural capital (the stock of natural resources of our planet) from this perspective of sustainability (Rosen, 2020, pp. 21–22).

Cities have always been centers of human creativity because they have proximity and multidisciplinary interaction conditions that favor this aspect. But nowadays the cities of Europe are encouraged to develop themselves as innovation hubs in order to become more

sustainable. Each year, the European Commission gives the ‘iCapital award’ (Vandecasteele *et al.*, 2019, p. 106) to a city that proves it is capable of capitalizing on innovation in order to improve people’s lives and increase its resilience.

The new technologies and the digital revolution have generated solutions to the problems related to energy efficiency, citizen participation, and urban mobility. In the last years, the limits of the mobility paradigm based on the automobile have become more evident not just in Western Europe, but also in the ex-communist countries. This does not mean the disappearance of the automobile, but the shifting of the focus towards an efficient public transportation from the environmental point of view and economically efficient, towards alternative means (bicycles), and towards sharing mobility services. The development of applications based on smartphones, Internet and GPS in particular, and the development of information technology, in general, have allowed the offering of new sharing mobility services at ever lower prices, which made the connection between consumption and private property become weaker for the mobility (Smorto and Vinci, 2020, p. 2).

But the new technologies are not a silver bullet. In order to change the way in which urban mobility is perceived, a change of mentality is necessary, which is a much more difficult process than creating an application. The change is a process in which the citizens and the (public or private) transport operators must be involved, together with the authorities. For instance, installing a sensor system that tells you where you can find available parking places is a very useful thing for urban drivers. But it is, at the same time, a tool that could increase the use of the personal automobile (Barber, 2013, p. 246), which contradicts the reduction of pollution and the reduction of the carbon footprint. And then, we must think if we want this thing. Substantially, the question we have to answer is simple: what kind of city we want to live in?

One of the elements that can be seen as a critical assessment of the sustainable development promise, of balance among environmental, economic and social components, is the effort for more green spaces (Putkowska-Smoter, 2020, p. 332). For 25 years, the greenness of European cities has increased by 38% (Vandecasteele *et al.*, 2019, p. 94). And this trend is not just European, because today nature is considered not only relevant, but even necessary for the city. The Sustainable Development Goals were set up in 2015 by the UN General Assembly and are intended to be achieved by 2030, and SDG 11 — Sustainable cities and communities has planned to ‘provide universal access to safe, inclusive and accessible, green and public spaces, in particular for women and children, older persons and persons with disabilities’. There is also a specific term — ‘biophilic cities’ — for the cities that share a vision ‘that puts nature at the center of design and planning’ (McDonald and Beatley, 2021, pp. 57–63). Even without such a broad commitment, urban planning must consider that there are several studies that show the benefits of green spaces from the environmental perspective (pollution, carbon print, reducing the urban heat islands, etc.), from the people’s health perspective, the increase of quality of life perspective.

### ***2.3. Participatory governance and tolerance***

People living in the cities have several opportunities to engage in various forms of governance and thus to participate and to influence public policies that affect their daily existence directly and this is a common practice in democracies, but it is not a condition for the existence of the cities and not even a short-term development (they can develop in dictatorships also). Most of the people are interested in improving their neighborhoods, in the facilities for their children or they are simply willing to offer mutual support. Nevertheless, the emergence of a form of participatory governance is not mandatory, even under the circumstances in which there are free choices, the possibility for a small group of people to concentrate power appears and thus the democracy is weakened (Beauregard, 2019, pp. 87–90). In such cases, the public discourse is disproportional from the institution towards the citizens, classic mass media and new media are substantially resonance chambers of power (because they have relinquished control exclusively to the market forces or because they are the property of power) and even if there are critical voices, their impact in the public space is reduced, the debates are limited. The control over the publicly transmitted messages is a source of power. It is not a public service delivery problem, but a political culture one and changing it can only be done over relatively long periods of time.

But the existence of a local governance system is not just a matter of relating to the cultural models, but it is also one of the factors that actively support the development of efficient public policies and is accepted by the citizens. This is particularly important when it comes to building trust based on the environmental-related measures (Putkowska-Smoter, 2020, pp. 331–332) and innovation in urban mobility (Vinci, 2020, p. 48).

Even if the conflicts between economic interests or between values are present in the cities, in particular in the post-communist cities (Mihaylov, 2020, p. 243), one of the cities' characteristics is the existence of urban marginality, 'both in its 'positive' and in its 'negative' senses' (Park, 1928 *apud* Szelenyi, 1996, p. 302). This means that in the cities we can expect that the differences in race, ethnicity, language, sexual orientation, religious beliefs, and political affiliation are accepted (or ignored). However, tolerance and intolerance cohabit in the cities (Beauregard, 2019, p. 121). People very different from one another arrive in a spatial proximity and it is important the way in which each of them sees the other because many times they only know each other from representations sent to the public space under various forms, representations that can be marked by intolerance and stereotypes. When people live separated, the possibilities for not understanding the other increase. When direct contact lacks, the image of the other is, to a large extent, a communicational construction, created through classical mass media and more recently, through the Internet, which 'is a new arena for contention and a new public sphere' (Pasotti, 2020, p. 15). This is why it is important for the spatial planning to favor direct encounters, to create urbanity through the neighborhoods with mixed utilities of retail, transit stops, city center markets, parks located on the waterfront, attractive stores, restaurants, sports arenas and auditoriums, places where people can be and can act together (Beauregard, 2019, p. 146). It is well-known that the city comes to life in the pedestrian areas where the traffic was removed (Gehl, 2011, p. 33).

The new technologies have the potential to create new forms of collaboration and participation among citizens, but in spite of some successes that have become classical and comprised in numerous studies, overall, they haven't fulfilled the hopes expressed when they appeared. The main reason is that technology is nothing more than a tool and the way in which it is used is the reflection of certain values and a form of exercising power. The way in which the video cameras are used in the cities can help ease the traffic flow and the police will consider them an efficient means to prevent criminality. At the same time, some citizens could see in them a permanent surveillance tool resembling Foucault's Panopticon (Barber, 2013, pp. 244–248). As Foucault shows us (1975, pp. 199–201), the exile of the leper and the stopping of the pestilence are backed by political dreams — the dream of a pure community, the dream of a disciplined community respectively. These visions are presented in the contemporary political discourse, are backed by a long career, and probably have a promising future. The easiest to identify is the discourse against poor people, against emigrants, etc., but these are not the only examples. That is why, when we set the rules for using technology, it is important to think about the values that define us.

### **3. Case study: Cluj-Napoca. Public policies and good practices**

#### ***3.1. No one is forgotten, no one is abandoned: achievements and limitations***

Cluj-Napoca is a city in Romania, and it has faced during the last 32 years the issues of transition and development, just like most of the cities from the former communist countries. It is today an academic, economic, cultural, and civic center and, according to a study by the World Bank, it is the most attractive secondary city in Romania, based on indicators that takes into consideration the total stable population, the number of students, the companies' turnover per capita, average salary, investments per capita, distance from Bucharest (Cristea *et al.*, 2017, pp. 108–109). At the same time, the transition wasn't just for winners and the municipality has developed in the last 18 years a series of programs and public policies in the field of social security addressed to people who deal with the risk of poverty, housing, education or occupation exclusion. The most important ongoing actions are:

- Social vouchers granted within the 'Food' program. Among the beneficiaries, there are also people with severe and accentuated disabilities, persecuted people, retired people with small pensions, indemnified and un-indemnified unemployed, as well as social allowance beneficiaries;
- The aid scheme for the rent payment for single people/ socially marginalized people or dealing with social marginalization and exclusion;
- The social housing construction scheme;
- The dental care scheme for the low-income inhabitants of Cluj;
- The home care scheme for the elderly;
- The financial support of the associations and foundations accredited as social service providers or active in the social field;



- The social aid canteen (with people benefiting from free meals or with the payment of a contribution of only 30%);
- The aid for home heating scheme during the cold season;
- Services provided by the Center for the prevention and fighting domestic violence, where the violence victims, both adults and children, receive psychological, legal and social counseling services;
- Monthly allowances for the disabled people;
- Information and advisory services for labor market integration through the Social Inclusion Center (*Centrul de Incluziune Socială*);
- The support scheme for the foreign citizens or the stateless persons who find themselves in special situations, coming from the armed conflict area of Ukraine;
- Free stationery for the low-income family pupils;
- The after-school program (remedial education activities);
- The dedicated transport schemes (for the pupils belonging to disadvantaged families and for the pupils with special needs);
- The program for the children belonging to disadvantaged families for the Day Care Center ‘Țara Minunilor’;
- Holiday presents for the children belonging to disadvantaged families; and
- Social and psychological services within the Resource Center for Parents and Children (*Centrul de Resurse pentru Părinți și Copii*), a project initiated together with UNICEF.

These are supplemented by a series of European projects that are in progress, and which implement actions for: the socio-professional integration of young people who leave the special protection system when they turn 18; the mobility of young people with Down syndrome; services offered in a timely manner to children facing the family separation risk; training/ perfecting the specialists in changing the behaviors of the family aggressors; food and hygiene products support for the disadvantaged families; and Pata 2 project, a project financed from Norwegian funds for buying social housing for those who live in the informal settlement at Pata Rât. Many of the above-mentioned programs have as main beneficiaries the members of the Pata Rât community, where, in spite of the systemic efforts carried out, it is still a social marginalization problem. It is worth mentioning that the municipality set out to solve this issue by 2030, according to the Integrated Urban Development Strategy.

Likewise, the ongoing actions are limited also by socio-economic realities that the authorities do not have the capacity to regulate. For instance, the scheme for the rent payment dedicated to the single people/ socially marginalized families or to those dealing with the social marginalization and exclusion has helped hundreds of people, but the number of the applicants is smaller than the number of those who need it, because the rental market in Romania, including the one in Cluj-Napoca, is mainly informal. This causes some people in a precarious situation to lack the documents necessary to obtain the support.

The systematic investments in public healthcare are also worth mentioning, both through the financing of the city’s hospitals, but also through the municipal network of

school medical practices and dentist offices, the beneficiaries of which are the children of Cluj-Napoca, a network extended and equipped in the last years.

Being connected is one of the conditions that can help to tackle poverty, not only if we talk about the connections with other people, but also if we talk about technology. Referring to technology, certain categories either don't have access to it — don't have hardware, don't have Internet, or they lack the skills needed due to poverty or old age (Bassot and Cahen, 2022, p. 109) and need help.

For the Internet connection, the municipality has developed a free Wi-Fi network in the main points of the city and in 2020 it has installed a Wi-Fi network that covers the communities in the Pata Rât area (persons from socially marginalized groups or at risk of being socially marginalized or excluded). For the pupils of Cluj who come from families who do not own a computer, laptop or tablets, 2,098 tablets have been purchased in the pandemic period, in order to help them attend the educational activities that were performed online.

As for the development of the basic digital skills, two programs have been carried out, one through which the teachers have benefited from vouchers to attend specific courses, and '*Seniorii Digitali*' ('Digital Seniors') respectively, which was addressed to the elderly and implemented with the support of the organized civil society and of a private company. Likewise, in collaboration with the civil society, programs are prepared for the children coming from disadvantaged families and for vulnerable people — those benefiting from the social allowance, parents from single-parent families, etc.

One of the transition effects noticed at the level of the entire Europe was the 'brain drain' phenomenon. Substantially, it is essential to continue the integration at the EU level, to ensure economic, social and territorial cohesion (and here the actions are mainly on national and European levels). However, local and regional authorities can analyze the specific needs and find answers to them. In Cluj-Napoca, the municipality has supported the development of an innovation ecosystem, connecting the institutions of knowledge, the economic environment and civil society; and, up to a certain point, the universities of Cluj can address the issue of 'brain drain' in terms of 'brain circulation' via mobility fellowships and exchange programs in the context of the EU.

The city has developed a set of public policies and practices for child care and access to education programs on multiple levels: preschool level (investing in nursery and kindergarten infrastructure); school and high school level (modernizing and equipping the pre-university education units, free public transport for students, introducing special routes for school buses, granting scholarships for all the students who meet the conditions — over 16,000 scholarships each semester, prizes and public recognition for students with special results and for their teachers); university level (collaboration to solve the problem of related infrastructure, ensuring the connection between the economic environment and universities in order to adapt the curricula with the demands on the labor market, free public transport for students); postgraduate level — 'Young Researchers in Science and Engineering Prize'. 'Young Researchers in Science and Engineering Prize' aims to reward young researchers (up to 35 years old) who have demonstrated their excellence and made

significant contributions through their work, and it is considered a model of good practice at the European level (Boc, 2020, pp. 35–37).

It would also be worth mentioning that, at the level of Cluj-Napoca City Hall, the management positions are equally divided between women and men, and the representation of women is not just a social issue, but a sustainability issue in a broad sense.

### ***3.2. The quest for sustainability***

Romania works based on an administrative reform done in 1968, more than 50 years ago (Mihăilescu, 2022, p. 7), and its cities can no longer wait for the indecisions of the politicians for a reform necessary and always delayed, but they must get to the next level of development and collaboration through actual achievements, from the ground up. And the 100 City Mission, neutral cities from the climate point of view, is an important opportunity for Cluj-Napoca and for all the post-communist cities, which now have the possibility to catch up on the historical gaps. By participating in the Mission, Cluj undertook to continue the quest for sustainability. For many years, the city has started to change its approaches, starting to be interested in energy efficiency, green spaces, and sustainable mobility and it has made major investments in this regard. Currently, the Climate City Contract is being prepared and some great directions already outlined from the perspective of a sustainable approach will need to be looked at in greater depth: mobility, green spaces, energy, digitalization, and waste management.

Sustainable urban mobility is one of the great challenges a developing city is facing. It has become obvious that the problems can no longer be approached within the administrative limit terms, but in terms of functional urban area (which, to a large extent, overlaps the metropolitan area) and there is a Sustainable Urban Mobility Plan that provides a strategic perspective and creates a connection between the public transport planning and the land-use planning (Vinci, 2020, p. 47).

The public transport has been in operation on the metropolitan area level for the past 10 years, although it needs to be improved and a few major projects will bring significant changes, such as the metropolitan bypass (includes a bike track), the underground and the metropolitan train.

There are projects in progress related to mobility corridors in the city, being worth mentioning, in particular, the setting up of green-blue corridors (sustainable mobility along water courses), both in the city and on the metropolitan level (pedestrian corridors and cycle paths).

Cluj-Napoca has the largest electric bus fleet in Romania, it has made investments of more than 100 million euros in the past few years for electric public transport means (buses, trolleys and trams), it has projects prepared for at least the same amount of money (targeting European funds) and its goal is to turn the entire public transport fleet into an electric one until 2028. The creation of dedicated lanes for the public transport is an ongoing process and it is complementary to optimizing the access to the main objectives: public transport stations, schools, kindergartens, nurseries, parks, sports facilities, healthcare units, etc. The dedicated transport programs for the pupils and gratuities regarding public

transport for the retired people, the pupils, and the students and free public transport on Fridays (for the citizens, of course, because it is sustained by the municipality) also contribute to mobility objectives.

A power grid for electric automobiles, bicycles and trotters has been developed and the major street modernization projects also take into consideration this necessity.

A bike sharing public system has been put into operation, comprising also part of the metropolitan area and each year the cycle paths' network is extended (the progress is slower than what the cyclists would like, but it is continuous).

There have been projects started for the set-up of 'walkable city' pedestrian corridors and a new neighborhood (Sopor) is designed so that its main objectives: public transport stations, green spaces, schools, stores, etc. to be within a 15 minutes' walk. Where the pedestrian space quality is improved, it also triggers the improvement of life quality (Gehl, 2011, *passim*).

Another major action direction is represented by the increase in the 'green spaces' area. 190 ha of new and expanded 'green spaces' are included in ongoing projects. In this case, we talk about projects of various types, some of them focusing on the mitigation of the urban heat islands, and others that are focused on creating a state of well-being (McDonald and Beatley, 2021, p. 42). For instance, East Park, the largest park in the city, with a 54-hectare area, is in the design phase at the end of 2022, after an international contest, and it will highlight a wilderness area; it will be different from a park built on degraded land. The area of green spaces will increase by at least 15% until 2030 at the metropolitan level.

As for the energy sector, the local energy company has launched an ambitious program for the use of renewable energies (photovoltaic panels) and modernization and digitalization of the local power stations and heating networks, and the municipality has stipulated a strategic partnership with the Technical University for energy management.

Energy efficiency has become a mandatory condition for any rehabilitation or extension or new public building (types of works, recycling systems, materials). Programs for the rehabilitation of private apartment buildings have been implemented, financed from European funds, and they will be continued. As in other countries, the neighborhoods built during communism consist of buildings that started to degrade (Szelenyi, 1996, pp. 304-305), and their thermal rehabilitation is important for the reduction of carbon print. Also, the municipality has developed a policy for private 'green buildings' — tax reduction for buildings that have an official certification recognized worldwide (LEED, BREEAM or DGNB) as 'green building' (A class).

Public lighting is subject to an ongoing process of passage to LED technology and by 2030, at the latest, this process will be completed.

Waste management has made significant progress; in 2020, the quantity of recyclable waste collected has grown 6.2 times compared to 2017, but there is still room for improving the situation. A few projects have already been implemented partially, which will bring long-term benefits: underground platforms for waste collection, solar-powered smart collection bins, building materials waste disposal points, and electronic waste disposal points.

These are supplemented by information and education campaigns for sustainable waste management.

As for digitalization, Cluj-Napoca is the leader in Romania, in terms of public service digitization over 300 administrative processes provide the possibility to be completed online. The city was a runner-up City for the European Capital of Innovation in 2020 (iCapital Award).

And when it comes to the reduction of the ecological footprint, each detail matters. For instance, just like in other cities (Beauregard, 2019, pp. 82-83), farmers' markets are also organized here, to encourage the households to buy fruits, vegetables and other foods directly from nearby producers, one of the effects being the diminished distance covered by the foods from producer to consumer.

### ***3.3. Building a structured dialogue***

'To build an ecosystem' could be the driving slogan with which the city is trying to build its own participatory governance system, to which are invited to participate, together with the public administration, the universities, the private economic sector, organized civil society (NGOs) and citizens, each social actor and every citizen being considered as having the capacity to define and to find solutions to public problems and as having the right to participate in decision making (Boc, 2018, p. 62). This does not mean that there aren't different points of view expressed in the public space. Cluj is probably the most civically active city in Romania, with a strong organized civil society and with citizens interested in how public money is spent.

What the City Hall does is to build a structured dialogue among all social stakeholders (Boc, 2020, p. 35) and thus to build trust among them, even when it is hard to find a common ground because of divergent interests.

Probably the most important tool of participatory governance is the Civic Creativity and Innovation Center (CCIC). CCIC is a debate space and an idea laboratory — used both on the collaboration level with independent experts and on the public debate level with all those interested — where the most important and innovative projects proposed by the municipality are brought, even if they are still at an early stage. Often, the projects proposed by the City Hall are subject to critical judgment — either in their essence or in their nuances — various interests and values present in the city thus having the possibility to be expressed and taken into consideration. The public spaces set up following such a process have a better quality, because the public administration and the designers have to confront their ideas and proposals with other experts and with the citizens who are directly affected by the proposals. In 2022, CCIC has integrated the Urban Innovation Division (*Divizia de Inovare Urbana / DIU*), an important NGO activating in the cultural field (Cluj Cultural Center / *Centrul Cultural Clujean*) and has appointed a board consisting of organized civil society representatives, of the university environment and business environment representatives.

Two other tools of participatory governance are the online participatory budgeting processes, one for small infrastructure works and one for the youth, focused on event

financing. Also, for young people, there is an Advisory Council that brings together the representatives of the most important related organizations.

Last but not least, the municipality has established an Advisory Board for Entrepreneurship and Innovation in IT, attended by the representatives of the two IT clusters in the city, the industry that is today one of the local developing engines, a body that has been essential in the development of the local innovation ecosystem.

What happens through the use of such tools is not the disappearance of the critical voices, who have always had their role in maintaining the administration anchored in the empirical reality, but the formation of urban innovation networks (Clark, 2020, p. 126), which have the capacity to get involved in the urban planning and development policies. A few outcome examples of these networks are the solution contests, the formation of partnerships for the participation in innovative European projects, and the fund for innovation and experiment.

In the past few years, contests have been organized for no less than 10 major projects of infrastructure, parks, historical monuments, a new neighborhood, and a big high school, hence establishing a good practice and a model for other cities in Romania.

The most important European project unfolded by means of a co-management process with the Cluj Cultural Center (*Centrul Cultural Clujean*) is 'Cluj Future of Work' (FoW), the first one of its kind in Eastern Europe, financed through the European Commission's Urban Innovative Actions (UIA) Plan (possibilities are studied and tested regarding the city's preparation for the challenges that the future will bring on the labor market).

Last but not least, the Fund for innovation and experiment is the result of the Cluj innovation ecosystem co-design process and it is one of the projects meant to encourage and develop the city's human resources in the entrepreneurship field, financing local talents and turning them into entrepreneurs.

The most important aspect learned at the municipality level, following the interactions in the governance system, is that in order to implement sustainable public policies, the trust of the citizens is necessary, along with the participation of all the social stakeholders. The process through which these things are obtained are long-term processes and they are mutual learning processes. The cities are not companies, and the citizens are not customers (Clark, 2020, p. 211).

#### **4. Conclusions**

More and more people will live in cities and the way in which we design our future has to consider this reality and has to find solutions that can ensure sustainability in terms of balance among three components: economic, social, and environmental. At the European level, one key challenge will be how to deal with inequalities (Gros *et al.*, 2018, p. 134), especially taking into consideration the symbolic social contract that provides economic and social rights. Poverty, under all its forms, financial, energy, educational, etc., threatens the European construction.

The innovation, the creativity and the new technologies (informational and energetic) are the resources on which the cities are based in order to be able to increase their role in ensuring sustainability and countering climate change. More and more cities undertake such a role (Allam, 2021, p. 62) at the national, European, and global levels. In Cluj-Napoca, there is an ambitious program consisting of multiple components: mobility, green spaces, energy, digitalization, waste management, etc. and the city is among the 100 cities selected within the EU Mission for climate-neutral and smart cities by 2030 (which does not feature only a major component related to climate change, but also an economic and social one). At the same time, Cluj-Napoca has consistent social programs dedicated to the disadvantaged categories and makes massive investments in education.

The cities need to encourage the participation of their citizens in the public life, support tolerance and discourage discrimination and intolerance. And these things need to be clearly expressed also within the public discourse, during urban planning, in the way in which public spaces are built and public services are provided.

In Cluj-Napoca, the municipality has developed a participatory governance system attended by the universities, the private economic sector, organized civil society (NGOs), and citizens. Within this system, urban innovation networks have been developed, which are involved in urban planning processes, and have built the foundation of many projects that develop the city now and in the years to come.

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