NATIONAL REPORT ON URBAN DEVELOPMENT – HABITAT III

Publication data

Published by: Ministry of the Environment and Spatial Planning, Spatial Planning, Construction and Housing Directorate

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Ljubljana, September 2016

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Preface

At the global and European level, most of the population, economic activities, social and cultural interactions, environmental and social problems are nowadays concentrated in cities. Therefore, greater emphasis is put on the appropriate development of cities to achieve sustainable development, reduce impacts on the environment and achieve welfare for all.

To respond appropriately to the challenges posed by cities, we must initially identify these challenges. Slovenia has some characteristics – a low level of urbanisation and the small size of cities compared to other countries – which should be given special consideration in the process of leading urban development. The present report provides a review of urban development in Slovenia in the last two decades; it determines the key characteristics and challenges of Slovenian cities, developmental trends of urban areas and emphasises best practice cases.

The preparation of this report was motivated by the coming Habitat III – United Nations Conference on Housing and Sustainable Urban Development (Quito, October 2016). The main purpose of the conference is to reinvigorate the global commitment to sustainable urbanisation and to agree on a new development document, the so-called »New Urban Agenda«. The agenda's key emphases are to eliminate poverty, guarantee equal opportunities for all, provide a good-quality living and working environment in cities, to stimulate smart economic growth and adapt to climate change.

The report is Slovenia's contribution to Habitat III Conference, and it will be used as a basis for designing and managing urban policy on the national level in the future.

Barbara Radovan
Director General
of Directorate of Spatial Planning, Construction and Housing

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List of most commonly used abbreviations

ARSO	Slovenian Environment Agency
EC	European Commission
EU	European Union
GI	Green Infrastructure
LUR	Ljubljana Urban Region
MOL	Urban Municipality of Ljubljana
MOP	Ministry of the Environment and Spatial Planning
NUTS	Nomenclature of Territorial Units for Statistics
OECD	Organisation for Economic Cooperation and Development
PRS	Spatial Order of Slovenia
ReNSP	National Housing Programme Resolution of the Republic of Slovenia
RS	Republic of Slovenia
SPRS	Spatial Planning Strategy of Slovenia
SRST	Slovenian Tourism Development Strategy
SSPS	Slovenia's Smart Specialisation Strategy
SUMP	Sustainable Urban Mobility Plan
SURS	Statistical Office of the Republic of Slovenia
TUS	Sustainable Urban Strategy
UIRS	Urban Planning Institute of the Republic of Slovenia
UM	Urban Municipality (sl. MO - mestna občina)

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1 INTRODUCTION

At the global level, urbanisation is one of the main phenomena of the 21st century, because it is estimated that 70% of people will live in cities by 2040; however, the situation in Slovenia is slightly different. Differing from other countries, where fast urbanisation is in process, suburbanisation and a comparatively low urbanisation rate are typical of Slovenia, because the share of people who live in cities has not exceeded 50% since the 1980s. Recent United Nations forecasts show that the level of urbanisation will increase to only 61% until 2050 (UN, 2014: 23). Typical spatial dispersion and the sparse population of Slovenian territory are important starting points for discussing urban development in the country. Some 81% of Slovenian municipalities are in thinly populated areas, while only Ljubljana and Maribor are considered densely populated; the remaining 18% of municipalities are categorised as intermediate density areas. More than 80% of the population live in Ljubljana, Maribor and intermediate density areas (Spatial typologies, 2011).

The second, equally important feature is the distinctive small size of Slovenian towns. 95% of settlements have less than 1000 inhabitants, 47% of settlements have less than 100 inhabitants and 59 settlements have no inhabitants. This situation is also reflected in how differently cities, towns or urban settlements[1] are considered in Slovenia and the European Union. Eurostat found that there are only two cities in Slovenia: Ljubljana as a medium-large city and Maribor as a small city. Only the Central Slovenian region is categorised as »predominantly urban«, according to the Urban-rural typology of the EU (2011). The ESPON 1.1.1 project categorises Ljubljana as the country's capital among 23 functionally weakest metropolitan areas (small, less competitive, predominantly peripheral, with a smaller scope of human capital) (Nordregio et al., 2005: 117). On the other hand, according to the Statistical Office of the Republic of Slovenia (SURS) there are 156 urban settlements and settlements in urban areas in Slovenia.

From the management and planning aspect, Slovenia has 11 urban municipalities, the administrative borders of which do not follow the urban dimension of space, but in most cases, besides the central city, include numerous other, frequently non-urban settlements and extensive rural areas, which has a great impact on statistical data. However, areas that are encompassed by urban municipalities for administrative purposes do not reflect the borders of the functional commuting area. The result of this situation is that urban areas that are considered within the scope of different spatial development documents are frequently marked differently, which is quite evident from Sustainable Urban Strategies (TUS) which were drafted by all Slovenian urban municipalities by the end of 2015.

This report outlines the current situation and future challenges of regulating urban space in Slovenia. Although Slovenian urban centres and other urban settlements are small, medium and large on the global scale, the intertwining of planning and management is also typical for them; this is partly due to the horizontal complexity of individual aspects of urban spatial planning (so-called sectors), and partly due to the vertical structure of spatial management and the intertwining of competences among various participants.

A consideration of urban development in Slovenia is also somewhat hindered by unclear or different definitions of »urban space« and the issues of direct connection between various thematic contents and challenges, as well as urban development aspects. Many challenges are

[1] Slovenian language does not differ between terms city and town; term 'mesto' is used for both and is mainly translated as 'city' in this document.

very important aspects for guiding and improving urban development; however, they have a more systemic and general character and do not directly or exclusively refer to urban space as such. These challenges cannot be tackled only within the consideration of urban areas. For instance, all challenges are connected with legislation and policy changes, and administrative and political organisation, as well as planning approaches for improving the integrity, mutual harmonisation and collaboration of sectors and local self-government. Most environmental challenges also have regional character.

The report especially emphasises the most relevant factors that essentially determine urbanised space in Slovenia and presents its key developmental challenges and opportunities, with a final and main goal of maintaining and increasing the quality of life and economic performance in urban centres. The main emphasis is on challenges and best practices of such centres, and not on planning at the national level. The description of the general situation in individual fields is followed by a description of the key challenges or guidelines for future regulation; the report also presents practical cases or relevant approaches that can contribute to successfully addressing the challenges revealed.

The first part focuses on demographic trends that will significantly influence life in Slovenian cities, their functioning and spatial structure in the near future. Major changes are envisaged in connection with population ageing, thus demanding new organisational and spatial solutions, such as providing alternative forms of elderly care and measures for active ageing. At the same time, it is emphasised that this issue is directly connected with issues of the active inclusion of young people in the decision making process about the future of cities, especially with regard to ensuring conditions for their systemic and equal inclusion in social sub-systems (employment policy, housing problems), which can significantly contribute to the future vitality of Slovenian cities. In this regard, challenges are also connected with issues of accessing public services, public buildings and enforcing the »Design for All« principle, as well as with the importance of renewing and revitalising city centres to boost the attractiveness of cities as places to live in. The consideration of demographic trends in urban planning is a very important challenge connected to spatial development, and the polycentric structure, typical of Slovenia, with suburbanisation processes that greatly affect internal commuting patterns, relate to sustainable mobility issues and the quality of life as well as the modified distribution of employment centres.

Within the scope of the set of topics »Planning of spatial development of cities« the focused topics are »sustainable mobility«, »urban renewal« and »green infrastructure«, which are especially significant for ensuring the vitality and quality of life in urbanised areas, and are directly connected with environmental challenges addressed in Chapter 2.3 and the challenges of the quality of the living environment addressed in Chapter 2.6. The importance of improving planning approaches for ensuring integrity and intersectoral collaboration, as well as the inclusion of new developmental paradigms, methods and tools for ensuring the sustainable urban development, the resilience of cities and use of sustainable solutions, as well as the quality of the living environment has been emphasised among the challenges of all focus topics.

One of the main challenges in urban spatial planning in Slovenia is the development of sustainable forms of mobility, not only through developing supporting infrastructure and instruments for changing travelling habits, but also through the integrated and harmonised planning of urban structure and traffic flows.

Although challenges are defined under individual thematic sections, many are interrelated in reality. For instance, the challenges connected to providing equal access to public services, jobs, knowledge and the quality of life, the preparation of urban green infrastructure strategies as a linking system of ecosystemic services for environmental quality, the mitigation of influences and consequences of climate change on the one hand and the aspects of ensuring the attractiveness of space for walking and cycling, as well as living in wider urban areas on the other hand, are linked with aspects of polycentric urban development, along with sustainable mobility aspects (which include the development of alternative means of public transport adapted to low population density, and strengthening the potential for cycling as a form of daily commuting in settlements and on larger distances). This set also includes the following challenge: encouraging collaboration between municipalities to achieve goals by exceeding their narrow territorial aspects and reducing the motivation for mutual competitiveness, since competitiveness as such can reduce individual urban economic development and the economic development of the country as a whole.

The historical development of Slovenian towns and cities has considerably influenced their present spatial structure, thus conditioning the main trends in the planning of spatial development of cities. Most urban settlements have preserved historical centres, surrounded with post-war manufacturing and housing areas. The historical centres of cities have only been partially revitalised; a further urban planning challenge includes the comprehensive renewal of residential areas dating to the post-war socialist residential construction period and the renewal of degraded urban areas, the number of which hugely increased when the socio-economic system changed in the 1990s.

The relative smallness of Slovenian cities and towns has contributed to the preservation of an immediate connection between them and their green hinterland, which today is a developmental advantage or potential (e.g. supply of cities from the immediate hinterland, connection of urbanised areas with the green hinterland via green systems, establishing green infrastructure). In planning documents determined for intended use, green areas are significantly supplemented structurally by areas of forest, agricultural land and waters, which together create an important backbone for establishing green infrastructure in cities and the wider areas. As a system, green areas have an important impact on mitigating extreme climate changes, water management, biodiversity and also the general resilience of cities as well as the quality of life in them. Aspects of urban food production are also becoming very important in urban development. Slovenia's capital Ljubljana proves that green areas have an important effect on the quality of the urban environment in Slovenia, because it was declared the European Green Capital of 2016.

The quality of urban life is directly dependent on the state of the environment. Although the right to a healthy living environment in Slovenia is stipulated in the constitution, urban settlements and settlements with predominant employment, production and logistics activities often encounter the challenge of ensuring appropriate environmental standards. This report mostly emphasises the challenges connected to improving air quality in smaller urban settlements that require various measures, including the preparation of comprehensive transport strategies, comprehensive planning of energy use in local communities and land restoration of former industrial areas. Climate change puts great pressure on the quality of the urban environment, since it can contribute to increasing the fluctuation in drinking water supplies, while at the same time intensive precipitation increases the risk of flooding, especially for exposed settlements and

parts of settlements (settlements in narrow valleys, parts of settlements along watercourses). The improvement of water management is an important challenge with respect to reducing water losses in public water pipelines and encouraging users to economically reuse water. The expected climate changes require adaptations and measures in various areas that must be comprehensively integrated into planning and managing urban environments.

Major change will also be required in spatial management to ensure the rational development and use of resources. Currently, the dispersed administration at the local level on the one hand and the centralisation of competences on the national level on the other hand does not contribute to optimal development. Although the current legislation envisages various types of collaboration between dispersed local communities to rationally and jointly implement tasks, this is rarely executed in practice. An action plan that contributes to greater cooperation and at the same time recognises the special role of cities in the system is required. We should also emphasise that cities are specific spatial and functional forms of spatial organisation that have special characteristics and developmental needs that must be considered, not only in terms of emphasising the development of their urban character, but also because of their role in the polycentric settlement system in Slovenia. Current suburbanisation additionally highlights this need. Therefore, the issues of financing cities and developing their urban character and functions must also be regulated. To achieve the high-quality development of Slovenian cities and towns, it is essential to upgrade the current system of formalised participation in urban planning with active forms of including knowledge and skills and also with the readiness of the local population to plan and manage the local environment. The real power of a local community and its contribution to the development of Slovenian cities is currently unexploited potential. This approach, in connection with the development of the creative sector and the development of new economic formats based on local knowledge and resources, can give Slovenian citiesan important comparative advantage.

The entire issue of the urban economy, which has not been introduced in Slovenia as a profession that could actually influence developmental decisions and orientations, is a special challenge for the Slovenian urban development. The fact that 45% of all urban municipalities are financially dependent on the state also shows that changes are needed in this area, since this fact questions their ability to independently promote, orientate and support local urban economic development. Besides the situation and trends, as well as the strategic framework for stimulating the economic development of cities and towns in Slovenia, the report also emphasises the issue of stimulating the development and spatial integration of commercial zones, which has been quite significant in the past fifteen years and was included in various national and local strategic documents as a measure to stimulate the economic development of urban municipalities. Other phenomena and processes relevant to the urban economy and connected to the development of smart cities, creative industries and urban circular and informal economies are in their initial phase in Slovenia and most appear in national and local strategic developments in the form of statements of intent, but there is a lack of detailed research and knowledge with regard to which challenges and developmental possibilities are actually important for the economic development of Slovenian cities and towns. As with the other issues considered, this one also includes the important challenge of improving the integrity of the approach, and the mutual harmonisation and connection of various sectoral strategies, such as the connection of the Smart Specialisation Strategy with the Spatial Planning Strategy of Slovenia (hereinafter referred to as SPRS).

The housing issue, where several aspects of urban spatial planning merge, is also shown in the Slovenian urban context. A comprehensive and thoughtful approach to regulating the housing issue must therefore remain a key task of the future development of Slovenian urban settlements. The (lack of) success of these efforts will have a considerable effect on the quality of life in Slovenian cities and towns in the future. From the aspect of spatial planning, we must continue to strive for high-quality improvements to residential environments (restoration of the building stock, regulation of high-quality public facilities, integration of day-care programmes in residential areas) in cooperation with the local population and economic subjects; from the administrative standpoint, we should adopt and implement a comprehensive housing policy that ensures diversity and accessibility in the housing stock to various socio-economic groups of people and that is harmonised with other policies connected to spatial planning (demographics, mobility, rational use of resources).

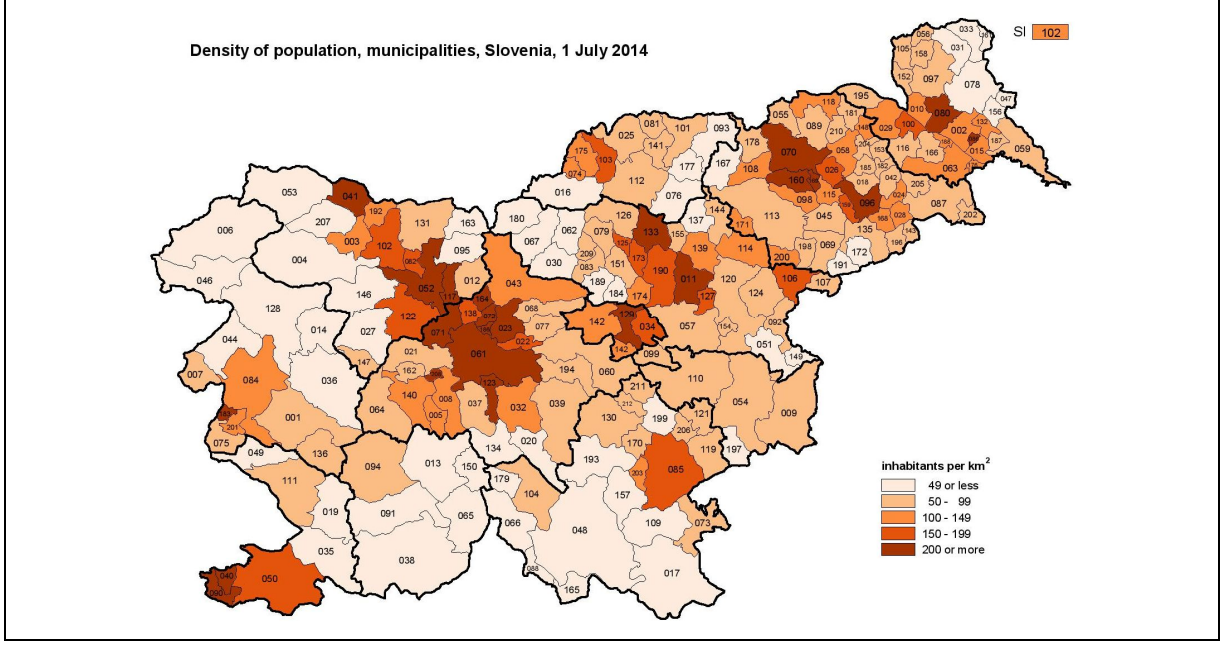
2 A REVIEW OF SLOVENIA'S URBAN DEVELOPMENT

2.1 Demographic situation and challenges

Demographic features influence population patterns and co-create spatial development and its use. Analysis and projections of demographic trends, such as the changing population number, their age and education structure, migration, household structure, form an indispensable basis for planning the rational and sustainable spatial development of cities, towns and the country. Slovenia is confronting a major phenomenon of the 20th century, the ageing of the population on the old continent. Population ageing is becoming a more significant challenge every year. The situation in Slovenia is not as alarming as in other western European countries yet; however, demographic projections and trends for Slovenia show that Slovenian cities and towns will have to deal with the consequences of demographic change in future decades, due to a decrease in the number of births, the prolongation of life expectancy and the reduction in the number of people in less developed and less accessible areas. In the next decades, Slovenian cities and towns will have to prepare the measures to mitigate the pressure on public finance and tackle the stagnation of living standards. The issue of population ageing is directly connected with young people, since the working population and young people are those who are most affected by the consequences of the ageing society. The report also summarises trends in migration. The negative consequences of demographic change can be mitigated with positive measures in this area.

The area of Slovenia is 2,027,300 ha, and has a pronounced **polycentric settlement structure**. Population density in 2014 in Slovenia was 101.7 people per km^2. Only 5.4% of Slovenia's territory is built (Ministry of Agriculture and the Environment, 2014). There are 212 municipalities in Slovenia, which cover 6,035 settlements, where 2,062,874 people live (SURS, as of 1 January 2015).

Figure 1: Density of population, municipalities, Slovenia, 2014 (source: SURS, 2016)



The capital of Slovenia is **Ljubljana,** which is also its administrative and economic centre. Some 13% of Slovenia's population live in Ljubljana. According to population density, i.e. 14,871 people per km^2, the Urban Municipality of Ljubljana stands out immensely. Ljubljana is also the major employment centre of Slovenia and encounters problems with regard to daily commuting. Suburbanisation is increasing in the region, encompassing settlements within a 25 km distance from Ljubljana. Suburban settlements near Ljubljana (Grosuplje, Kamnik, Mengeš, Vrhnika, Vnanje Gorice, Vodice, Ig, Domžale) have seen the highest population growth rates in Slovenia. **Maribor** is the second largest city in Slovenia, with a population of 112,325. Maribor is also surrounded by suburban settlements with a high population growth rate. In terms of population and size, Ljubljana and Maribor are followed by Kranj, Koper and Celje with 50,000 people, respectively, and Novo mesto and Velenje with 20,000 people, respectively. The most densely populated settlement is the coastal city of Piran, with 17,857 people (in 2015).

Globally, urbanisation is one of the main phenomena of the 21st century, because it is estimated that 70% of people will live in cities by 2040. The rate of urbanisation is quite an important factor when considering this issue in Slovenia, since here it is among the lowest in the EU, amounting to 50%. The share of people living in cities has remained the same since the 1980s. According to recent United Nations forecasts, this share will increase to 61% by 2050 (UN, 2014: 23). Differing from other countries, where fast urbanisation is in progress, suburbanisation and a low level of urbanisation are typical of Slovenia. The pronounced small size of Slovenian cities is also seen in the diversity of consideration of cities, towns or urban settlements in Slovenia and the EU. According to Eurostat, Slovenia has two cities: Ljubljana as a medium-large city and Maribor as a small city. In terms of the **rate of urbanisation,** 81% of Slovenian municipalities encompass very thinly populated areas; only Ljubljana and Maribor are considered as densely populated areas, whereas the remaining 18% of municipalities are categorised as intermediate density areas (Spatial typologies, 2011). The next feature of Slovenian settlements is spatial dispersion and low population; 95% of settlements have less than 1,000 people, 47% of settlements have less than 100 people and 59 settlements have none. More than 80% of the population live in Ljubljana and Maribor and in intermediate density areas, accounting for 19% of settlements. The relative weakness of Slovenian cities in the system of European urban centres is also further supported by the urban-rural typology of the EU, which determines three NUTS 3 categories of regions: »predominantly rural«, »intermediate« and »predominantly urban« regions (Urban-rural typology, 2011). Only the Central Slovenian region in Slovenia is categorised as »predominantly« urban. This is also reasonably connected to the findings of the ESPON 1.1.1 project, which categorised Ljubljana as the capital of Slovenia in the so-called MEGA 4 category, which was comprised of the 23 functionally weakest (small, less competitive, predominantly peripheral, with a smaller scope of human capital) metropolitan areas (Nordregio et al., 2005: 117).

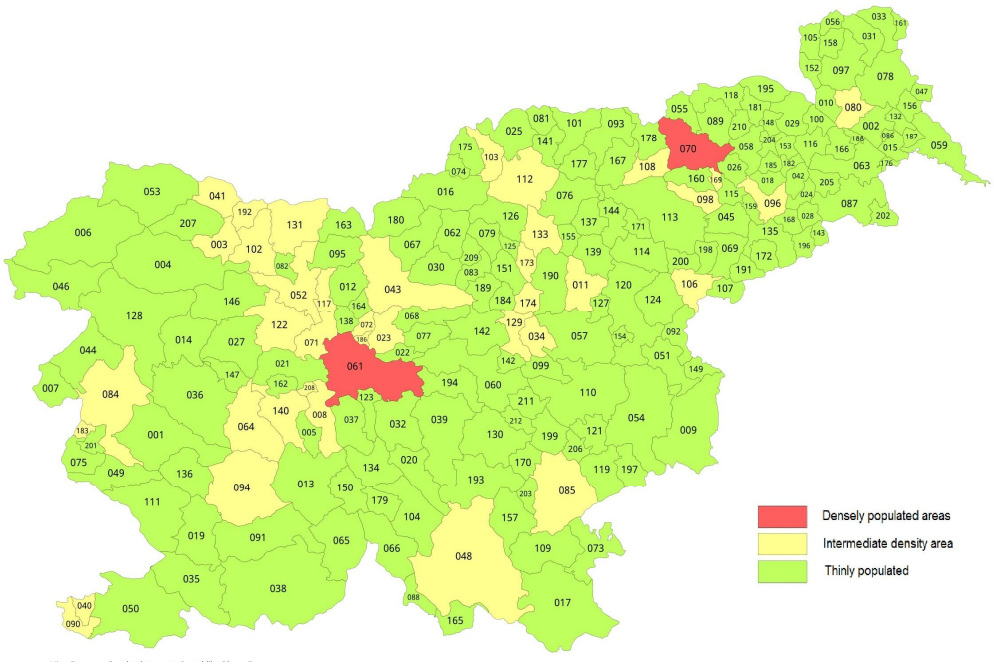
For statistical purposes, SURS defines an »urban area« as »an area where a central urban settlement is located, providing the urban area with the name and including neighbouring settlements that border the central settlement and gradually spatially integrate with this settlement and are connected with the central settlement with a continuous set of built land (buildings, streets, squares), traffic routes, public parks and other urban structure elements«. In the definition of urban settlements and settlements in urban areas, SURS used four criteria: (1) urban settlements are any settlements in Slovenia with more than 3,000 inhabitants, (2) urban settlements are also those with 2,000 to 2,999 inhabitants and a surplus of jobs exceeding the number of the working population, (3) urban settlements are municipal centres with at least 1,400 inhabitants and at the same time with a surplus of jobs exceeding the number of working population, (4) urban settlements are also settlements in urban areas defined on the basis of a combination of various criteria (SURS, 2004: 19). Based on all four criteria, in 2003 Slovenia had

156 urban settlements and settlements in urban areas (SURS, 2004: 33); 104 settlements were defined as urban settlements, and 52 were defined as settlements in urban areas. 67 settlements had the status of a city, 51 of which on the basis of a National Assembly decision, and 16 of them on the basis of a decision by the Government of the Republic of Slovenia. The Spatial Planning Strategy of Slovenia (SPRS, 2004) upgraded the statistical definition of urban settlements. According to the definition in the SPRS, two cities with 100,000 or more inhabitants are included in the categories of urban settlements as centres of urban municipalities (Ljubljana and Maribor). The medium-large urban settlements category, with 10,000 or more inhabitants, has nine settlements. It must be emphasised that cities or urban settlements in Slovenia do not have administrative functions or an independent role in the local self-government system, and these cities or urban settlements are developed within the scope of the competences of municipalities and urban municipalities. 11 out of 212 municipalities in Slovenia are urban municipalities.

Table 1: Population by settlement size classes, 2015 (source: SURS, 2016)

Population by settlement size classes	Settlements		Population	
	Number	%	Number	%
Total	**6,035**	**100.0**	**2,062,874**	**100.0**
0	59	1.0	0	0.0
1-24	738	12.2	10,089	0.5
25-49	869	14.4	32,101	1.6
50-99	1,276	21.1	92,549	4.5
100-199	1,425	23.6	201,629	9.8
200-499	1,096	18.2	332,753	16.1
500-999	351	5.8	240,100	11.6
1,000-4,999	182	3.0	357,017	17.3
5,000-9,999	23	0.4	154,335	7.5
10,000-49,999	14	0.2	267,631	13.0
50,000 +	2	0.0	374,670	18.2

Figure 2: Level of urbanisation, municipalities, Slovenia, 2014 (source: SURS, 2016)



Since 1996, Slovenia's population has been slowly ageing. Below, the report presents **projections of population and analyses of demographic trends** so far, which show that in the next decades, Slovenian cities will have to face the consequences of demographic change caused by a decrease in the number of births, the prolongation of life expectancy and reduction of the number of people in certain areas (Vodeb et al., 2014).

The change in the number and age structure of inhabitants is an essential piece of information for planning spatial development. The **rate of natural increase in population** in Slovenia was positive from 2006 to 2012, following a negative trend from 1997 to 2005; however, after 2012, the number again started decreasing.[2] The fertility rate has been slightly increasing since 2003, and since 2008 it has remained slightly above 1.5 children per woman in the fertile period. The average age of mothers at childbirth (30.5 years) and the age of mothers having a first child (29.0 years) is rising, equalling the EU average. Life expectancy is also increasing in Slovenia, which is also one of the causes of population ageing. Life expectancy in Slovenia has been increasing since 1994 (74.7 years), i.e. to 80.8 years in 2014.

[2] After 2007, SURS introduced a new population definition. Since 1 January 2008, the definition has been harmonised with the population and migration definition arising from the Regulation of the European Parliament and of the Council on statistics of the Community on migration and international protection. Data until 1995 had referred to Slovenian citizens with permanent residence in the Republic of Slovenia. The people of Slovenia are people with registered permanent and/or temporary residence in Slovenia who reside in Slovenia or intend to reside in Slovenia for one year or more and are not temporarily absent from the Republic of Slovenia for one year or more.

The **age structure** of Slovenia's population has changed since the latest Agenda Habitat II report in 1996. The share of people older than 65 years and those older than 80 years is increasing, and the share of children up to 14 years of age is decreasing.

Table 2: Large age groups, ageing index, age dependency ratio, 1999–2016, Slovenia, authors' calculation (source of data: SURS, 2016)

YEAR	0-14 years	15-64 years	65 + years	Ageing index	Youth-age dependency ratio	Old-age dependency ratio
1999	16.38	69.91	13.71	83.66	23.44	19.61
2000	16.12	70.03	13.85	85.96	23.02	19.78
2001	15.75	70.11	14.14	89.79	22.46	20.17
2002	15.38	70.15	14.47	94.08	21.93	20.63
2003	14.99	70.24	14.77	98.51	21.35	21.03
2004	14.60	70.36	15.03	102.97	20.75	21.37
2005	14.35	70.31	15.34	106.91	20.41	21.82
2006	14.14	70.25	15.62	110.47	20.13	22.23
2007	13.98	70.12	15.90	113.72	19.94	22.67
2008	13.87	69.99	16.13	116.28	19.82	23.05
2009	13.98	69.59	16.44	117.59	20.08	23.62
2010	14.03	69.44	16.53	117.75	20.21	23.80
2011	14.19	69.28	16.53	116.53	20.48	23.86
2012	14.31	68.91	16.78	117.29	20.77	24.36
2013	14.48	68.42	17.10	118.13	21.16	25.00
2014	14.61	67.92	17.47	119.62	21.50	25.72
2015	14.75	67.34	17.91	121.38	21.91	26.59
2016	14.84	66.74	18.41	124.06	22.24	27.59

As well as the ageing of the population in Slovenia, **household structure has** also changed. The number of weddings has decreased and the number of single-person households and single-parent families has increased. In nine out of ten family households, three consecutive generations live in the same household. The average size of a household is 2.47 people. The number of two-person households has increased. The number of households with three or more people is decreasing.

CHALLENGES

➔ Taking demographic trends into account in urban planning

Demographic trends that directly influence changes in the labour market, create different intergenerational relations and put pressure on public finances must be considered in urban planning.

The changing number and age structure of inhabitants must be considered in spatial planning. Cities must provide appropriate and accessible public services and adapt the planning of expenditure for long-term care, education, unemployment benefit, health care and pensions.

➔ Preserving a polycentric urban system

The polycentric urban system must be preserved in Slovenia, since it enables all people access to public services, jobs, services and knowledge.

Strengthening large and small urban centres can be a comparable advantage in terms of the quality of life, due to the intertwining of the natural and urban environments and supply from the rural hinterland.

➔ **The renewal and revitalisation of city centres of small and medium-sized cities**
Due to the relocation of services and jobs to marginal areas, city centres are becoming less attractive and are deteriorating. We should support projects and investments to maintain and establish housing and supply functions in urban centres. Ageing population trends must be considered in the renewal of urban areas.

➔ **Providing access to public buildings and services**
Providing access to public buildings and services for everyone both on the horizontal and vertical levels of spatial planning.

➔ **Introducing the »Design for All« principle into Slovenian planning practices.**
Slovenia's population can expect to have slightly more than 56 years of healthy life (OECD, 2013). Considering the insufficient capacities of long-term care institutions and the trends of home care and daily care for the elderly, Slovenia must consider the »Design for All« principle. The idea of this principle is to create a built living and working environment and offer services that are accessible to the widest circle of users, including people with disabilities. Buildings and services built and equipped according to this principle enable users and services providers simple adjustments in cases of disability and (also) due to ageing.

➔ **Access to public services**
There are still areas in Slovenia where people have significantly worse access to public services than elsewhere in the country (Pomurje, Slovenske gorice, Goriška Brda etc.). In these remote places, shops are closing and other service activities are no longer available. Older people often depend on rare public transport and on the members of the local community. Measures to revitalise remote, thinly populated places are necessary to ensure appropriate public services.

BEST PRACTICE CASES AND INTERNATIONAL PROJECTS

➔ **Bridges for Europe (Ältere bauen mit Jüngeren Brücken für Europa)**
This project aims to create dialogue with politicians in partner countries with regard to designing an appropriate framework for intergenerational collaboration. The project addresses national and local urban policies, and it also stimulates dialogue and the exchange of experience between the young people and the elderly at the vocational level and in everyday life (source: http://www.bruecken-fuer-europa.eu/).

➔ **Innovative solutions for adapting the management of public infrastructures to demographic change in shrinking regions of Central Europe (ADAPT2DC)**
Programme: EU Central Europe, 2011–2014

The ADAPT2DC project dealt with challenges or processes of demographic change in regions and cities in Central Europe. In managing and financing public infrastructure and services, state and local authorities must adapt to these processes and the situation caused by migration and population ageing. The main objective of the project was to introduce innovative sustainable infrastructure management models to mitigate the financial burden of municipal budgets in demographically endangered regions and cities. Another objective of

the project was to identify measures to improve the attractiveness of cities in order to create equal social and local development.

The Urban Planning Institute of the Republic of Slovenia prepared strategic recommendations for the rational management of municipal infrastructure for the pilot area of the Urban Municipality of Maribor, and also implemented a spatial analysis of the city centre with the identification of potential for development (source: http://www.adapt2dc.eu/).

➔ **European Rural Futures, New opportunities to secure the provision of public services in rural areas (EURUFU)**
Programme: EU Central Europe, 2011–2014

The EURUFU project worked on problems related to balanced economic growth and developed sufficient provision of public services and maintenance of social and technical infrastructure by stimulating the role of smaller places and the countryside, as well as by strengthening the labour market in the countryside. The project analysed the challenges of demographic change in the countryside and the opportunities for preserving public services and infrastructure. It emphasised the need to develop new strategies for health and social care, education, local economy, employment and mobility with the aim of supporting local and regional competitiveness. In Slovenia, the pilot area was the Gorenjska region (source: http://www.eurufu.eu).

➔ **Demographic change in the Alps (DEMOCHANGE)**
Programme: Interreg– the Alpine Space, 2009–2012

The DEMOCHANGE project was based on the assumption that demographic change is the driving force of spatial development in the Alpine region. Measures for fast and effective responses by societies with ageing populations to potentially negative consequences of demographic development were prepared, so that societies would not only mitigate the consequences, but turn them to their own advantage. These measures and guidelines were defined in adapted strategies for selected areas. At the same time, activities to raise awareness about demographic change were implemented, and recommendations were prepared for decision makers in the field of spatial planning and regional development in Alpine regions and cities (source: http://www.demochange.org/).

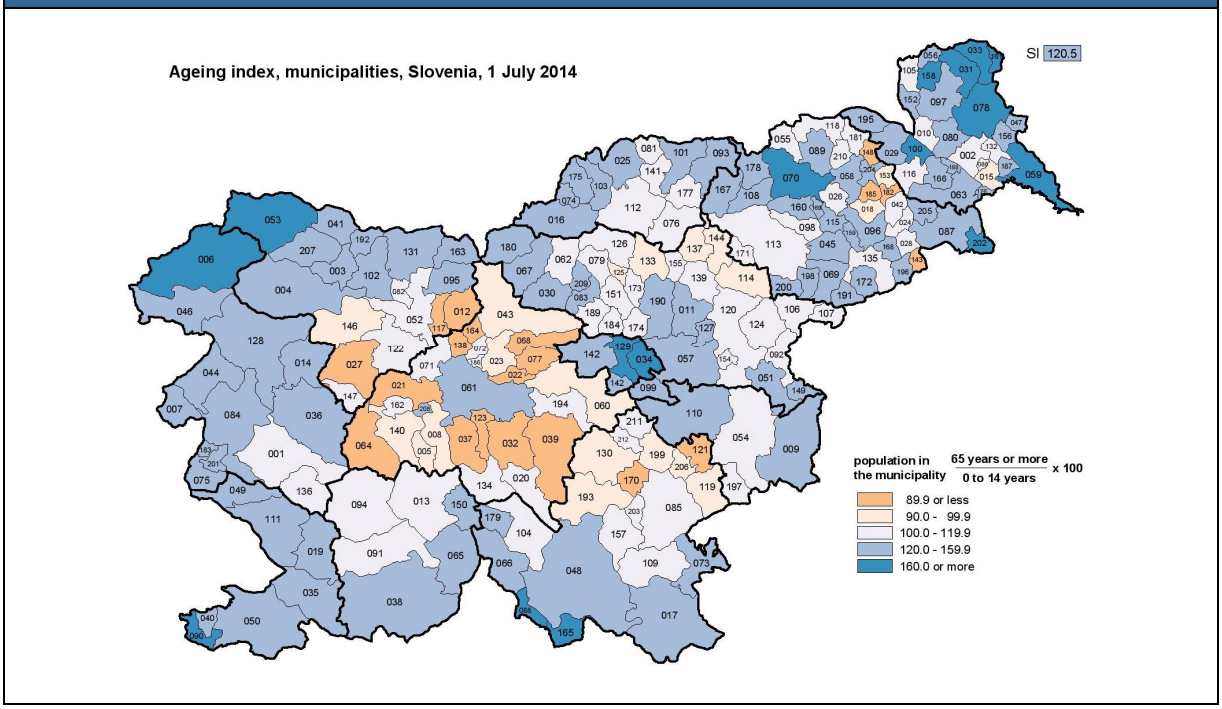
➔ **Declining, Ageing and Regional Transformation (DART)**
Programme: Interreg IVC, 2010–2012

The objective of the project was to study the challenges of declining, ageing and regional transformation in certain considered areas in Europe. Joint indicators for measuring demographic decrease and other symptoms of demographic change in European regions were determined to enable a comparison of data from various regions. In Slovenia, the analysis was performed for Kranj and the Gorenjska region. The main results of the DART project were recommendations for regional and European stakeholders for designing regional policies (source: http://www.dart-project.eu/).

I. POPULATION AGEING

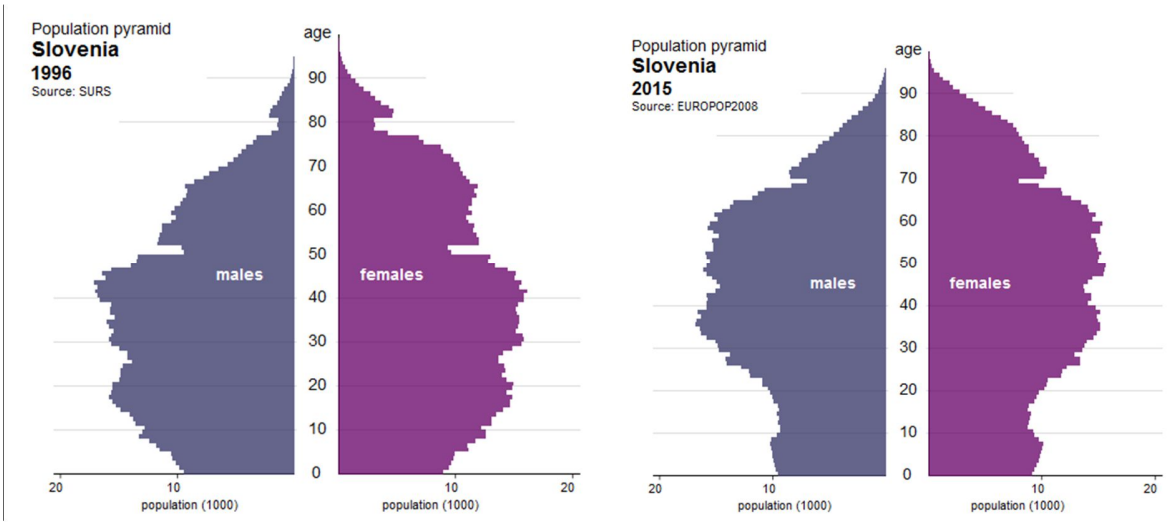
The **ageing of population** is typical of all European countries and is one of the most significant challenges in the future. The old-age dependency ratio in Slovenia in 2014 was still lower than the EU average; however, it has been increasing, and it seems that more and more children and the elderly will depend on the working age population.

Figure 3: Ageing Index, municipalities, Slovenia, 2014 (source: SURS, 2016)



Considering the demographic indicators, there is no doubt that in the next decades, Slovenian cities will have to prepare **measures to mitigate the pressure on public finances and tackle the stagnation of living standards**. The old-age dependency ratio in 2015 amounted 48.5; 21.9 children and 26.6 people older than 65 years depended on 100 working age people. The number of working-age people from 20 to 64 years has gradually been decreasing since 2012. More people are entering the elderly generation and a smaller number of people entering the working-age population.

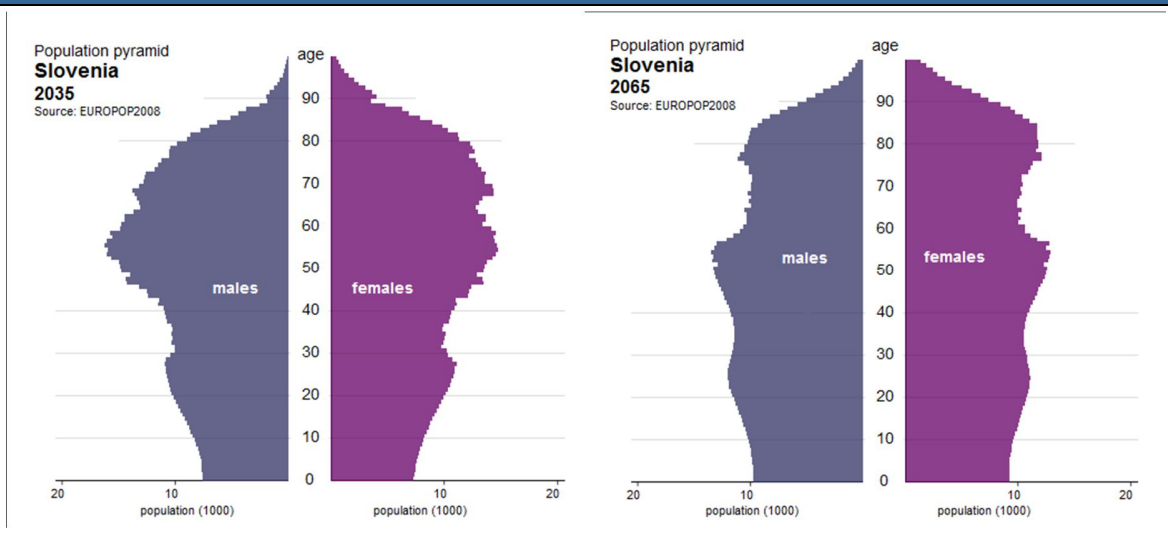
Graph 1: Age pyramids, 1996 and 2015 (source: SURS, 2016)



The fact that the number of people over 80 is increasing, also shows that Slovenia urgently needs measures to counter problems connected arising from an ageing society. In 2015, 4.8% of the population were older than 80 years.

The **Eurostat Population Projection** EUROPOP2013 envisages that 23% will be older than 65 years by 2030, and the share will increase to 28% of Slovenia's estimated population by 2060. The share of young people up to 24 years will have fallen below 25% by 2030; the share of potential working-age population will fall by 7% to 51% from 2015 (SURS, 2016). According to Kraigher and Ferk, the EUROPOP2013 projections do not apply entirely to the situation in Slovenia.

Graph 2: Age pyramids, 1935 and 2065 (source: SURS, 2016)

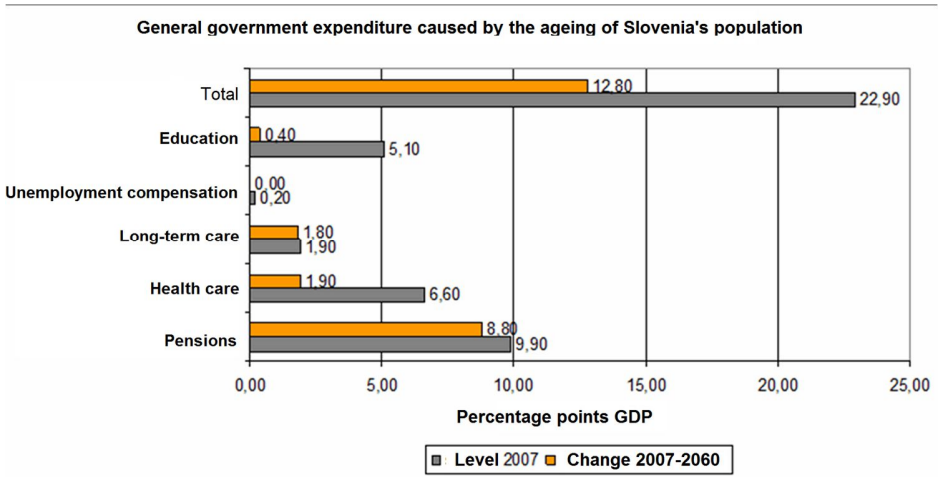


EUROPOP2013 considers high net immigration, which is not probable for Slovenia, given immigration trends up to 2011. The authors found that the mortality rate will decrease and the

fertility rate will remain at the current level, while net migration will increase by only 3,000 per year. According to this projection, the number of inhabitants will increase only until 2021; up to 2060 it will have declined to 240,000 less than in 2013 (according to Kraigher and Ferk, 2013).

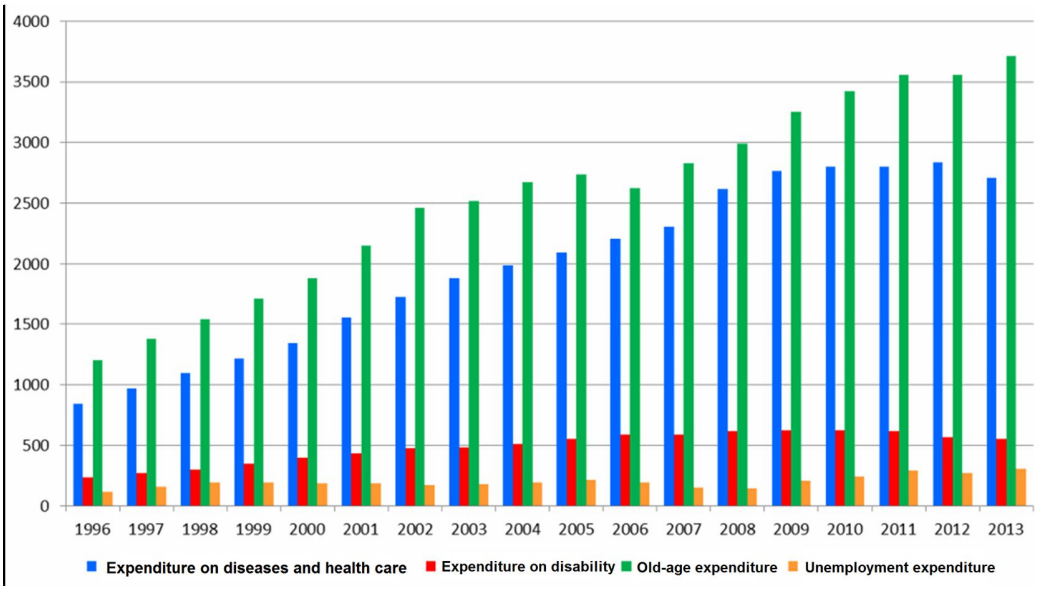
Regarding **Slovenian cities, the population ageing problem is shown in the level of ageing-related expenditure**: long-term care, education, unemployment benefit, health care and pensions.

Graph 3: General government expenditure caused by the ageing of Slovenia's population, 2007–2060 (source: ADAPT2DC, 2013)



Expenditure on health care (sickness benefits, health care and medication) and expenditure on the elderly, including mainly pensions, have increased in Slovenia since 1996. Disability and unemployment costs are not increasing to such an extent.

Graph 4: Expenditure on social benefits under social protection programmes (in million euros), 1996–2014 (source: SURS, 2016)



CHALLENGES

➔ Planning and securing alternative forms of elderly care

Slovenia should harmonise the expenditure ratio and expedite investments of public funds in developing community care, home assistance and benefits, and invest less in institutional care.

The costs of long-term care in Slovenia are increasing with the ageing population; however, in relation to GDP, expenditure is still lower than OECD average, amounting to 1.33%. According to financing sources, the share of costs of long-term social care services has increased to 32.1%. Slovenia's lag in developing long-term care at home is still increasing. More than three quarters of expenditure is allocated to long-term care in nursing homes, social care institutions and hospitals, and only one third to home care (Development Report, 2015). Capacities at nursing homes suffice to accommodate only 4.62% of the population older than 65 years.

➔ Securing daily institutional care for the elderly at day-care centres and intergenerational centres

Day-care services for the elderly at accessible locations must be appropriately located.

The Resolution on the national social assistance programme 2013–2020 envisages that the scope of day-care services will increase considerably, i.e. from the existing 350 to approximately 3,000 vacancies for people over 65 years, as well as approximately 500 vacancies for specialised forms of day care for special groups of people older than 55 years. In the entire public network, 43 nursing homes or special social care institutions provide day-care services, and a total of 390 vacancies are intended for day-care. Data on users of services are not recorded.

➔ Support for active ageing measures

Measures regarding active ageing must be considered and examined, and the conditions for their realisation must be ensured.

Slovenia has one of the lowest elderly employment rates in the age group of 55–64 years, i.e. 35.4% among EU countries (Eurostat). The pension regulations introduced in 2013 do not secure long-term public finance sustainability (Development Report, 2015).

Measures to deal with ageing population problems have been included in Slovenia's national policies, especially since 2009, when, on the basis of the European Commission's recommendation, Slovenia prepared active ageing strategies, including measures to increase the employment of the elderly and to extend the age of retirement The measures were determined in the 2009–2013 period and constitute an upgrade of the Strategy of Care for the Elderly until 2010 (solidarity, symbiosis and quality population ageing) prepared in 2006. The purpose of measures to stimulate active ageing is to improve the situation of the elderly in the labour market in Slovenia to increase the elderly employment rate. The basic objective of measures is to increase the average elderly employment rate in the 55–64 years age group in 2013 to 43.5%.

BEST PRACTICE CASES AND INTERNATIONAL PROJECTS

➔ Houses of Fruits of Society (»Hiše Sadeži Družbe«)

The Houses of Fruits of Society are intergenerational community centres set up in Murska Sobota, Vipava, Črnomelj, Žalec and Metlika. The programme has been implemented since

2006 by Slovenian Philanthropy. The intergenerational community centres known as Houses of Fruits of Society are intended for everyone. They enable the implementation of activities connecting various generations. This project encourages collaboration between primary and secondary schools and pensioners' associations, as well as other volunteering organisations and associations including the elderly is (source: http://www.filantropija.org/).

➔ **AOBIS (alternative forms of senior accommodation)**
The purpose of the AOBIS project is to identify appropriate solutions and ways to resolve the residential issues of the elderly, and indirectly resolve the residential issues of younger generations. Some 79.2% of people older than 69 years in Slovenia own the dwellings or houses in which they live. These residences are too big for the elderly, are also difficult to access and too expensive to maintain. The project seeks ways to resolve this issue, including moves to more appropriate accommodation suitable for the new status and needs of the elderly (source: http://www.zdus-zveza.si/aobis).

➔ **The development of the ICT platform for informal carers for the elderly, iCarer**
There is a need in today's ageing society for specialised care for those elderly people who want to improve their quality of life at home. Within the scope of the iCarer project, a platform for so-called virtual carers who offer support to the elderly, supervise day-care activities at home and propose ways to improve these forms of care, is being developed (source: http://icarer-project.eu/).

➔ **The elderly for a higher quality of life at home**
Retired experts of the Slovenian Philanthropy and the Slovenian Federation of Pensioners' Associations started to develop a project for mutual aid among the elderly in 1995 to enable the elderly to remain in home care for as long as possible. In its current form, the programme has been in progress in some Slovenian cities since 2004. Its core idea is that elderly volunteers visit people older than 69 years in their neighbourhoods and try to organise help for them if they need it (source: http://www.zdus-zveza.si/starejsi-za-visjo-kakovost-zivljenja-doma).

➔ **Fostering Care Cooperatives in Europe by Building an Innovative Platform with ICT Based and AAL Driven Services (iCareCoops)**
European Commission Programme, AAL, 2015–2017

The project tackles the problems of the ageing society in an innovative way by developing support for the elderly who stay at home. The purpose of the project is to introduce IT support for the operations of existing and/or future cooperatives for elderly care. Greater demand for care services, the lack of resources and appropriate infrastructure as well as professional health care call for solutions that support the self-organisation of the elderly and enable them to live independently and safely at home (source: http://project.icarecoops.eu/).

➔ **Active inclusion of the elderly in urban renewal (Active A.G.E.)**
Programme: URBACT, 2008–2011

Active A.G.E. is a network in the framework of the URBACT II programme that connects cities for the purpose of creating the conditions for the active inclusion of the ageing population in projects for the urban renewal of city centres. A local support group has been founded in each of the partner cities to implement this project. By exchanging experience and with the support of EU professionals, these groups prepared local action plans

concerning population ageing. Maribor tackled the problem of elderly representation in the labour market. The Urban Municipality of Maribor faced two main challenges: how to keep elderly employees in the labour market and how to encourage the most vulnerable population groups (people older than 50 years) with training and by developing new knowledge and skills for them to re-enter the labour market (source: http://urbact.eu/active-age).

II. YOUNG PEOPLE

The population ageing issue is connected with the youth. The working population and the youth are those who are most severely affected by the consequences of the ageing society. The spatial issue in Slovenia is mainly evident in housing and, indirectly, in employment.

In 2015 in Slovenia, one fourth of the population were young people up to 29 years of age. The major share of young people was in the 25–29 age group (132,790), followed by people aged from 20 to 24 years (107,718), while the smallest age group is from 15 to 19 years old (94,991).

In the 2014/2015 academic year, 47.7% of young people were attending higher education or university courses. 21.9% of young people were attending tertiary level education courses. 74% of people with higher or university education live in cities and comprise 14% of the urban population. 99.8 % of young people were attending secondary schools. The educational level of young people is rising; however, the level of registered unemployment is not falling, and in 2014 it was 20%. The youth unemployment rate is the highest in comparison with other age groups, so they comprise one of the most vulnerable groups in the labour market.

On the basis of the EU Youth Strategy 2010–2018, the National Assembly of the Republic of Slovenia adopted the EU Youth Strategy – investing in the youth and empowering their role and position (2013). The fundamental strategic document of the state in developing the youth sector refers to education, employment and entrepreneurship, the living conditions of young people, health and well-being, young people and society, and the significance of the youth sector, culture, creativity, heritage and media. The youth-related issue is in accordance with the aforementioned strategy included in other strategies of Slovenian cities (e.g. TUS). A very important measure taken by the Government of the Republic of Slovenia in youth employment is the Youth Guarantee for the 2016–2020 period, which introduces measures to ease the transition from education to employment. The implementation plan includes all measures for long-term unemployed youth.

In the matter of housing, wherein young people are considered an especially vulnerable group, since in Slovenia 85% of the youth aged from 18 to 29 years live with their parents (Urban-rural typology, 2011), is considered in Chapter 2.6 of this report.

CHALLENGES

➔ **Enhancing youth employability**

Cities must stimulate and support youth employability. Youth unemployment accounts for most of the unemployed in Slovenia. Many best practices are being implemented and offer interesting and realisable ideas. Cities can provide land for investors who offer new jobs, stimulate corporate scholarships, support informal supplementary education for the youth, establish co-working facilities for start-ups etc.

BEST PRACTICE CASES AND INTERNATIONAL PROJECTS

➔ Youth Friendly Municipality Certificate

The Youth Friendly Municipality Certificate is awarded annually by the Youth Policy Institute in collaboration with the Association of Municipalities and Towns of Slovenia and under the honorary patronage of the President of the Republic of Slovenia. In 2016, 24 municipalities were awarded the certificate. The Youth Friendly Municipality Certificate is an acknowledgement for municipalities that successfully implement measures in vertical and horizontal youth policies, and is valid for four years. When assessing the success of implementation, special emphasis is put on the following areas: planned consideration of youth matters, participation, organisation, informing the youth, employment, education, housing policy and youth mobility (source: http://www.mladi-in-obcina.si/).

➔ The Youth Strategy of the Urban Municipality of Ljubljana 2016–2025

The Urban Municipality of Ljubljana adopted the Youth Strategy of the Urban Municipality of Ljubljana 2016–2025 in 2016. Its priority areas are the introduction of youth centre networks and youth infrastructure, enhancing employability, supporting the activities of youth organisations, resolving housing problems, arranging public areas adapted to the needs of the youth, introducing regular communication among all stakeholders in the youth sector, stimulating informal education and enhancing corporate scholarships, stimulating recreational sports among the youth, introducing independent cultural events and protecting nature. The strategy envisages scholarships, support for the Young Dragons Public Institute and district youth centres. According to the strategy programme, the municipality's plan is to financially support approximately 80 projects every year dedicated to various needs and desires of the youth (source: http://www.ljubljana.si/si/zivljenje-v-ljubljani/druzine-otroci-mladi/urad-za-mladino/).

➔ Cool Job! Project for employing hard-to-employ people

The Urban Municipality of Ljubljana, Cene Štupar Public Institute and the Employment Service of Slovenia are managing the Cool Job! project for employing hard-to-employ people. This project is a process that will enable the youth to find jobs in any of the 17 public institutes or companies run by the Urban Municipality of Ljubljana. Around 60 young people will be included in the first implementation cycle, who will be trained to occupy 26 positions. The project will be implemented in three phases: training mentors, training hard-to-employ young people and potential employment at a company (source: http://www.ljubljana.si/).

➔ My Generation At Work – Employing the youth (MyGen at Work)

Programme: URBACT II, 2013–2015

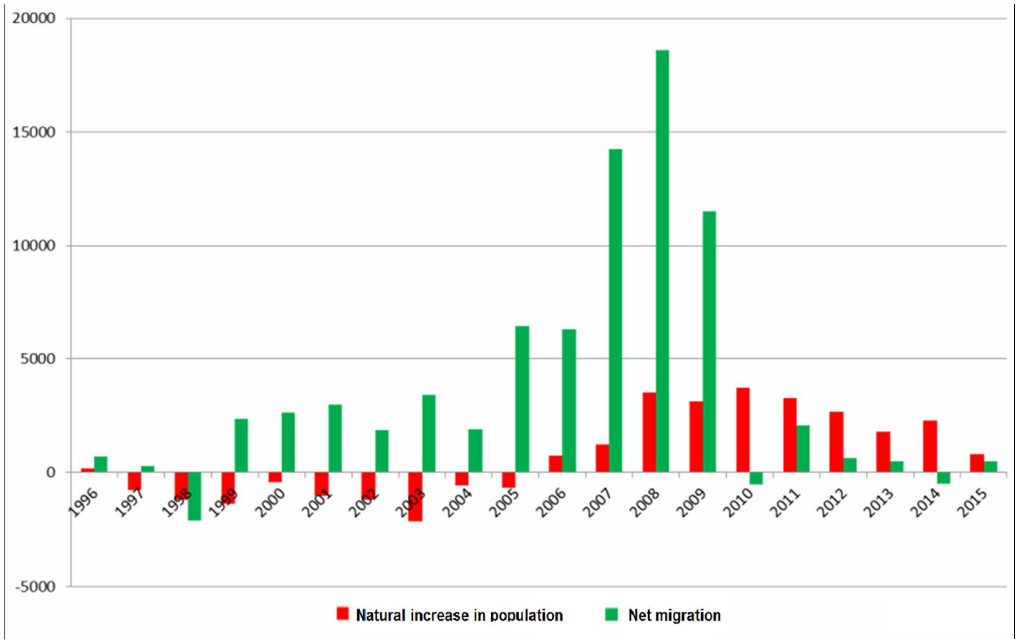
Within the scope of the Maribor – European Youth Capital project, Maribor was a partner of the My Generation at Work (MG@Work) project, which aims to stimulate and enhance youth employability in the changing labour market, where special emphasis is put on developing entrepreneurial skills, knowledge, competences, approaches and views. Due to a low employability rate, achieving independence among the youth is a very complex challenge that European cities face. They tackle this problem in various ways. The main tool recommended by European policy is so-called social innovation, which is an eclectic set of measures, such as designing policies and services in collaboration with users, introducing partnerships by including a wide spectrum of social actors etc. A number of activities were prepared in Maribor within the scope of the project, which were given the name »Go for it! –

GFI«. The municipality also introduced minor supporting actions: coworking space, M-Generation, Active Youth and Start-up Floor (source: http://urbact.eu/my-generation-work).

III. MIGRATION

Slovenia has low or even negative **net migration**. Emigration has no potential for improving the demographic structure. Most Slovenian émigrés go to Germany or Austria; most of the people who emigrate, mostly due to high unemployment, are young people between 15 and 29 years of age.

Graph 5: Population growth from 1996 to 2015 (source: SURS, 2016)



In 2015, there was 3.7% less **internal migration** in Slovenia. Education-related internal migration is most intensive in Ljubljana and Maribor. In the Ljubljana settlement, 15,005 inhabitants had migrated at least once, and in the Maribor settlement, 5,183 inhabitants had migrated at least once. Most people move to the functional region of Ljubljana, coastal municipalities and to the municipalities around Maribor and Novo mesto. The Ministry of the Environment and Spatial Planning has found that the populations of suburban and peri-urban areas near large centres are increasing, because they have very good transport connections to national and regional centres. The age structure of migrants and the population in these areas is lower than the national average. The pattern of accelerated construction of housing follows the motorway network pattern, which enables fast and effective (auto)mobility to job locations, high school and university education facilities and supply (Spatial Development Report, 2016).

Every year, the share of the working population with jobs in their municipality of residence is decreasing. In Slovenia, 58% of all employed people daily commute to other settlements for work, and 48.9% of the working population commute to work. Over 50 per cent of all jobs are located in the Central Slovenian, Podravje and Savinjska regions. The number of jobs in Central Slovenian exceeds the number of the working population living in this area by one quarter, so this region has the highest **labour commuter** index. Trzin is a city with only 3,858 residents and

is considered the most attractive city to work in. Statistical data show that it provides four times more jobs than the number of employed and self-employed people residing in this municipality.

CHALLENGES

➔ **Planning sites for jobs outside the current employment centres**
Cities must provide appropriate land and/or facilities where new jobs can be created. More than half of the working population in Slovenia commute to work on a daily basis. Regions and cities that exhibit potential and initiatives for economic development must be supported.

BEST PRACTICE CASES AND INTERNATIONAL PROJECTS

➔ **Re-Turn project (Regions benefiting from returning migrants)**
Programme: EU Central Europe, 2011–2014

The main objective of the Re-Turn project was to create the conditions for retaining the human capital and counter the brain drain from the region. The project describes the extent of returning migrants, the competences and needs of these returning migrants and specific measures to stimulate returning migration to foster knowledge development. The economically-motivated migration of people from European Union Member States to countries with high average incomes is the main factor affecting international migration in Europe. The main project activities were connected to the development and execution of services necessary to support migrants in their efforts to return and to stimulate the return of migrants for the purpose of the innovative development of entrepreneurship (source: http://www.re-migrants.eu/).

2.2 Planning of spatial development of cities

Slovenian cities have relatively well developed basic tools for spatial planning. In the past few years, most of them have prepared new spatial acts containing strategic and implementation plans for their development. Furthermore, the cities are developing other types of supporting strategies that deal with specific development areas, such as sustainable urban strategies, tourism development strategies and comprehensive transport strategies. Despite this, cities are dealing with a number of challenges in providing harmonised development of the urban parts of each city, its hinterland and the countryside and in the provision of vitality of urbanised areas. This is partly connected to problems related to planning paradigm modifications, since in urban development, sustainable development principles, being an obligatory element of strategic documents, frequently disappear from the operational documents of the municipality.

Insufficient communication between various sectors is frequently emphasised as a problem in city administrations. The guidelines for the preparation of new strategies emphasise the importance of intersectoral collaboration and the constant inclusion of various stakeholders in the process of document preparation. However, at the operative level, their collaboration is quite difficult to achieve and often very limited.

Problems also emerge with the effective inclusion of modern concepts and findings in urban planning. The transfer of concepts such as food and energy self-sufficiency, adaptation to climate change, ecosystem services, smart cities, into the Slovenian legislative and planning framework is frequently very demanding. Therefore, it is reasonable to include cities and supporting institutions in European projects, which often provide funds for pilot projects and methodology testing. Several Slovenian cities use these mechanisms. A more effective exchange of experience and knowledge acquired by cities in these projects with other cities that tackle similar challenges will have to be secured in the future.

I. SUSTAINABLE MOBILITY

A high level of motorisation is typical of Slovenia. According to SURS data, 523 personal vehicles per 1,000 residents were registered in 2015. Slovenian cities with the majority of jobs are therefore under great pressure caused by daily labour commuting which is often done by private vehicle. According to Slovenian Roads Agency data, more than 130,000 private vehicles are driven to Ljubljana every day. Therefore, in the recent period, cities have been considering limiting the use of personal vehicles in the transport system in comparison with other means of transport. Various measures that are implemented in this area are included in the aspect of sustainable mobility.

For more than 10 years, activities to achieve more systematic transport and mobility planning in cities have been implemented at the EU level. The European Commission has issued a number of directives, guidelines and other documents to encourage the development of comprehensive transport strategies or SUMPs (Sustainable Urban Mobility Plans). The concept for the preparation of these documents was developed on the basis of experience in countries like France, Great Britain, Germany, Denmark and others, which have a developed mobility planning system using separate but integrated transport strategies.

Due to various contexts, planning and specific administrative features in EU countries, a number of EU projects have been implemented in recent years supporting the development of the specific elements of SUMPs and approaches to help overcoming key obstacles that have been

reported by professionals and representatives of cities. The movement that has developed around this topic has been collecting examples of good experience for more than a decade and preparing planning guidelines also in the remaining European and other countries. Processes of exchanging experience between cities and countries and best practices transfers are also ongoing.

Despite the fact that activities have been implemented in this area in Slovenia for more than 10 years, drafting SUMPs is not formally determined nor demanded by legislation. However, the ministry competent for infrastructure is very active in this field and encourages cities to prepare these documents. It also provides funds for the preparation of documents and for the implementation of measures as envisaged in those documents.

CHALLENGES

- **Comprehensive and balanced planning that includes the use of various means of transport, from walking, cycling, public passenger transport means and motor vehicles**

  In the past few years, awareness of the importance of closer integration between spatial and transport planning has been increasing in Slovenian cities, and greater emphasis has been put on securing good conditions for accessibility by so-called sustainable transport means. Despite a principled consensus on the importance of these methods for vital and accessible cities, a number of obstacles arise in the financing and implementation of these measures.

- **Planning that enables safe and pleasant walking in settlements**

  Up until a few decades ago, walking was one of the most important aspects of daily routines in settlements. This has changed due to the increased use of private vehicles. Because emphasis has been put on providing good roads and securing large parking areas, the conditions for walking in settlements have significantly worsened. The feeling of endangerment among walkers caused by motor vehicle traffic has also increased.

- **The potential of cycling as a form of daily migration in settlements and over large distances**

  Cycling as a form of daily transport in cities was quite popular before the intensified use of private vehicles. In recent years, cycling has become quite popular again, but more as a form of recreation. Only a few cities provide an appropriate cycling network that is usable for everyday transport to work and for shopping. Recreational or long-distance cycling connections are being built very slowly and do not provide a network to appropriately serve larger numbers of cyclists.

- **The development of alternative forms of public transport adapted to a low population density**

  The provision of public transport has been deteriorating in recent decades, especially in the hinterland of cities. Connections that are not economically viable have been cut. But economic viability is quite difficult to achieve due to the dispersed population. Mostly influenced by best practices from abroad, several municipalities in the recent years have started considering alternative forms of public transport, such as transport on call, portals for agreeing on joint rides and car sharing. These are more adaptable than traditional bus line transport, so they can achieve economic sustainability also in less densely populated areas.

- **Comprehensive parking management (in the municipality, settlement, area or location area)**

  Parking is a great challenge in large and small settlements. If parking is not appropriately regulated, it occupies quality public spaces in squares and on streets. Settlements that have

just started to limit these areas are now dealing with the challenges of retaining good access to city services, since large shopping centres on the margins of the settlement offer more free car parks.

➔ **Adapting to new energy products (compressed natural gas, hybrid engines and electric vehicles) and technologies (autonomous cars, joint use of cars)**

New energy products and technological innovation in mobility demand major start-up investment, which is frequently quite a big challenge for small settlements. Technologies that are developing and which are found to be inappropriate and ineffective when introduced are especially problematic. However, the introduction of such technologies can have a positive impact on the sustainable orientation of settlements and the use of energy for mobility.

➔ **Effective management of the current infrastructure and encouraging users to use cleaner means of transport**

Municipal administrations are quite slowly becoming aware about the importance of active transport system management with clearly defined goals. Cities mainly enable transport infrastructure construction, but when the construction is finished, its management is left to local or other interests at the local level. Therefore, it is important that awareness about the connection of various influences is strengthened in the cities.

BEST PRACTICE CASES AND INTERNATIONAL PROJECTS

➔ **Comprehensive transport strategies – a tool for effective mobility planning in the cities**

The first SUMP prepared on the basis of EU guidelines in Slovenia was performed within the EU CIVITAS ELAN project examining the case of **Ljubljana** between the years 2008 and 2012. Prior to that, initiatives had started emerging which partially introduced individual sustainable mobility measures that were not harmonised or connected. Under this project and with European funds, a lot of attention was given to the process of preparation, especially to collecting opinions from various fields of expertise and the intensive inclusion of the public. Foreign experts offered a lot of support to the process. They attended events dedicated to individual issues and offered fresh views and knowledge.

However, the case of Ljubljana, a city with almost 300,000 inhabitants and a complex administrative structure, is not typical of Slovenia. European guidelines envisage the preparation of SUMPs for all urban areas with more than 100,000 inhabitants; however, we only have two such municipal areas. A typical Slovenian municipality is considerably smaller. Because this methodology proved useful, in the next phase it was tested in a smaller municipality.

A SUMP for the **Municipality of Ljutomer** was prepared in 2011 and 2012 within the scope of the national project entitled »Sustainable transport planning at the local level«. This municipality has 12,000 inhabitants, and the Ljutomer settlement has 3,400 inhabitants. According to the situation analysis, its inhabitants encounter similar challenges as those in larger cities: the transport system is developed to encourage the use of personal vehicles; walking and cycling infrastructure is insufficient or there is none; the conditions for walking to school are not good; because shops and shopping centres moved to the margins of the settlement, people need private vehicles to do their daily shopping. Public transport is rare or there is none; therefore, the elderly who do not drive, often depend on family members to drive them.

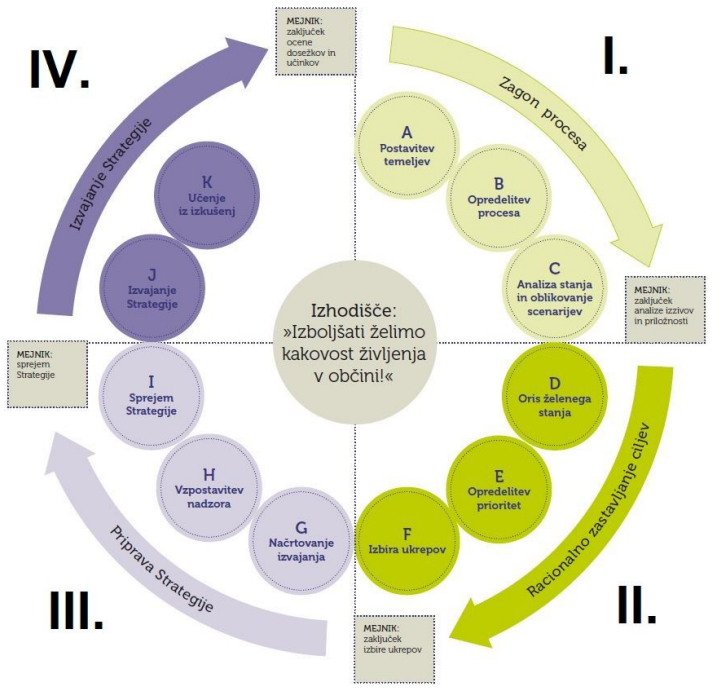
Due to the smaller administrative structure, the work on the scale of a smaller municipality has proven significantly more effective. The inclusion of political structures and stakeholders in the document preparation process was also simpler. On the other hand, it was more difficult to provide some specific knowledge and expert contributions due to the lower number of available staff. The power of a smaller municipality in communication with higher administrative structures is significantly weaker. The idea of connecting small municipalities to prepare similar strategies within intermunicipal collaboration at the level of functional regions seemed to be the reasonable next step.

An example of a similar SUMP was developed within the EU PUMAS project between 2012 and 2015. The **Nova Gorica–Gorica cross-border region** was considered. It included two urban central municipalities and their hinterland, the surrounding municipalities of Šempeter-Vrtojba, Renče-Vogrsko, Miren-Kostanjevica, Kanal ob Soči, Brda. Awareness of the need for a joint venture was already present in the municipalities. And there is also a tradition of cooperation and consultation among the municipalities on important matters. This has additionally stimulated joint ventures to acquire EU projects and funds recently.

The preparation of the SUMP was also quite demanding due to the large number of participating administrative units. Due to the cross-border planning element, two legal systems, two official languages, various planning cultures and administrative structures had to be considered. These differ among municipalities in Slovenia, and even more on each side of the border.

Working with two types of municipalities, urban and rural, presented a special challenge. Although the area operates as a functional region, i.e. daily commuting to work or school and running errands happen within this area, mostly according to a pattern that includes living in the hinterland and carrying out activities in the centre of the region, the level of readiness to take joint measures at the regional level is low.

Figure 4: SUMP preparation process scheme (source: Bührmann et al., 2012)



Elements and activities of the strategy preparation process :

I. PROCESS START
A Setup of foundations
B Process determination
C Situation analysis and scenario formation
MILESTONE: conclusion of challenges and opportunities analysis

II. RATIONAL OBJECTIVE DETERMINATION
D Description of the target situation
E Definition of priorities
F Selection of measures
MILESTONE: conclusion of the selection of measures

III. STRATEGY PREPARATION
G Implementation planning
H Introduction of supervision
I Strategy adoption
MILESTONE: Strategy adoption

IV. STRATEGY IMPLEMENTATION
J Strategy implementation
K Learning from experience
MILESTONE: conclusion of achievements and effects evaluation

Figure 5: Ljubljana objectives in the field of travel habits of the population (source: MOL Transport Policy)

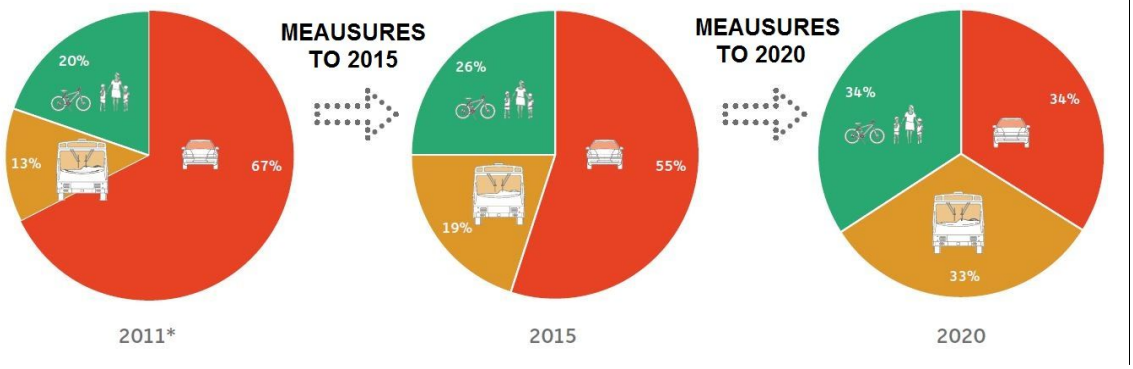


Figure 6: Challenges in small municipalities are similar to challenges in cities: the case of Ljutomer, a dangerous route to school (source: UIRS)

Figure 7: Working with stakeholders in the Municipality of Ljutomer – situation review of pedestrian movement (source: UIRS)

Figure 8: Urban-rural contrast of the Goriška region area (source: UIRS)

➔ **CIVITAS ELAN**
This project took place between 2008 and 2012 and, besides the city administration in Ljubljana, it connected more than 10 companies and institutions that implemented 17 mutually connected measures in sustainable mobility. The project showed the importance of simultaneously implementing several mutually connected activities with a joint goal, the importance of promoting activities well and the intensive inclusion of the public in the decision making process about the future of the city (source: http://www.civitasljubljana.si/).

➔ **PUMAS**
The project dealt with the challenges of preparing comprehensive transport strategies. The pilot project, which included Nova Gorica, encompassed the challenge of planning beyond the administrative borders of municipalities and the state. A comprehensive transport strategy for the functional region was prepared. It encompassed Nova Gorica and five smaller hinterland municipalities, as well as the Italian city of Gorizia (source: http://www.pumasproject.eu/).

➔ **Bike To Work**
The project promotes cycling to work. The project takes place in 10 European countries, also in Slovenia. Within the scope of the one-month campaign, the participants are obliged to ride the bike for at least half of the way to work. This enables them to participate in a prize draw (source: http://www.bike2work-project.eu/; http://www.pripeljisrecovsluzbo.si/).

➔ **Push&Pull**
This EU project tackles parking management and tests the effectiveness of simultaneously implementing incentive and restrictive measures in cities, municipalities and individual locations. In Ljubljana, this project includes the case of new university buildings below Rožnik Hill. The managing bodies of faculties prepared a range of measures that at the same time limit parking at the location and improve access by other means of transport (source: http://push-pull-parking.eu/).

II. URBAN RENEWAL

A great number of medium large and small historical towns and squares is typical of the Slovenian urban network. The historical parts of cities started to lose importance due to accelerated industrialisation in the second half of the previous century. Post-war urbanisation was implemented as the physical sprawl of cities, i.e. in the form of extending industrial zones and accompanying residential neighbourhoods, and it did not dedicate special attention to the historical parts of cities.

Therefore, at the turn of the millennium, the historical parts of Slovenian cities, where the building and other cultural heritage was concentrated, needed a complete renewal. At the same time, most residential neighbourhoods, most of which were built after the war, aged after a few decades of insufficient maintenance and therefore they now need comprehensive renewal. Additionally, the economic and social changes that occurred when Slovenia became independent in 1991 quite quickly and with long-term effects impacted the use of land in cities. Because labour-intensive production migrated to third countries, causing the closure of companies in Slovenia, the intensive emergence of degraded urban areas was quite typical of Slovenia in the 1990s. The new democratically elected authorities abandoned all barracks in city

centres and moved them to the margins of settlements, which was the second major cause for degraded urban areas to emerge.

In 2004, the strategic spatial planning document of the state (SPRS) determined renewal as a priority guideline for development in Slovenian cities and settlements. The renewal should be implemented in morphologically and functionally closed areas to ensure a good quality of life by realising spatial, economic and social objectives. This fundamentally changed the concept of urban growth, whereby growth is understood in more quality and not only quantitative dimension.

The following forms of renewal occur in practice in Slovenian cities:

- the renewal of cultural and other building heritage: it is implemented in old centres of settlements and mostly encompasses the renewal of individual facilities or sets of facilities, more rarely urban compositions as a whole;
- the renewal of neighbourhoods: after decades of poor or insufficient maintenance, the building stock and built infrastructure in neighbourhoods are quite dilapidated. Comprehensive approaches to renewal are rare and mostly related to energy rehabilitation, restoration of infrastructure lines and transport regulation;
- the renewal of degraded urban areas: it is mostly implemented in areas of abandoned production and industrial activities and areas for special purposes (e.g. barracks). Due to infrastructure, relatively low pollution and the smaller number of stakeholders that must be coordinated, degraded areas are interesting for investors who want to develop new activities in urbanised areas. Despite a non-systematic approach to the renewal of degraded areas, in the past 25 years in Slovenia we have witnessed the successful renewal of many degraded areas. Such development was mostly influenced by the growth of the real property market, since the constant growth of real property prices (which lasted until the beginning of the economic and financial crisis in 2008) enabled investors to successfully overcome greater errors in the design and management of projects. The majority of degraded areas in Slovenia were regenerated as housing and commercial areas.

Most of the current approaches to renewal in Slovenian cities encompass the renewal of the physical stock, the revitalisation of open urbanspaces, functional space upgrade, improving the socio-economic and demographic characteristics of space and including the public in renewal processes. Most of the general challenges in the future are connected to the development of comprehensive approaches to renewal and to the development of methodologies adapted to the characteristics of the Slovenian area; specific challenges must also be addressed in regard to individual renewal aspects.

CHALLENGES

➔ The development of comprehensive and continuous approaches to urban renewal

The key element for long-term success is approaching urban renewal that simultaneously considers several aspects (the renewal of physical structures, improving functional design, socio-economic aspects, demographic issues, energy efficiency, economic sustainability of renewal and the financial mechanisms of renewal implementation) and also includes different essential stakeholders: experts, users and building managers. Only this will enable the long-term improvement of the quality of life in renewed areas and ensure new vitality in renewed areas. A comprehensive approach is a continuing process that includes permanent situation monitoring of the space and responding to emerging needs.

Comprehensive approaches to renewal should be strengthened methodologically by developing new methods and tools, including:

a) the introduction of an updated database enabling consistent monitoring of the issue in the field;
b) the determination of renewal standards:
   - to secure a minimum quality of life: infrastructure, technical parameters (water, sewage, heating);
   - to ensure energy efficiency;
   - to ensure seismic safety;
   - to preserve urban spatial planning and the architectural qualities of characteristic areas;
   - to preserve the protected cultural qualities of areas and architecture;
c) the development of mechanisms for the active inclusion of residents in renewal;
d) the development of instruments to encourage the renewal of the building stock by owners and tenants, including financial incentives and professional support in the planning and implementation of renewal.

➔ **Exceeding the practices of renewing individual facilities**

In current practice in Slovenia, most technical and energy renovation concerns individual facilities and includes the renewal of the building envelope, external building furnishings and heating devices. These measures achieve greater energy and economic efficiency when used with individual objects; however, due to a partial approach that only considers to an individual facility, the visible image of space frequently deteriorates. A uniform simultaneous approach for multiple facilities or complete spatial units should be introduced to preserve and upgrade the quality architectural and spatial planning features of an area, and strengthen the positive visual image of the area.

➔ **Supplementing functional space design**

The former spatial planning integration of supply and service activities in space, most commonly in settlement areas with larger density and walking access, was replaced by the market economy concept whereby some locally relevant programmes have difficulties competing with new forms of offer (such as shopping and service centres on city peripheries). Comprehensive renewal strategies must strive to re-establish or supplement the supply and service activities network, also in connection with promoting local production and the local exchange of goods, as well as sustainable mobility methods.

➔ **Open space renewal: creating a linked network for various user groups**

During the privatisation process after 1990, the ownership of some open neighbourhood areas was disputed, which has had a negative impact on the regulation and quality of open space. Due to rapid motorisation and insufficient parking regulation, the quantity of motor and stationary traffic increased significantly; the individualisation of lifestyles is additionally discouraging people from using open spaces in neighbourhoods. Renewal strategies in the future should emphasise high-quality designed public spatial networks in local urban environments, which will be well integrated into the extensive public urban area system, including the regulation of green spaces and street infrastructure. Securing areas for all user groups must be well considered, as well as users with special needs, and areas where local residents can meet must be created as an important element of social cohesion.

➔ **A systemic approach to renewing degraded urban areas throughout the entire country**

Degraded urban areas in Slovenian cities have special potential for future sustainable development; however, a systematic approach is required to achieve greater success and add value to renewing such areas. The following should be emphasised:

a) marketing of degraded urban areas with an emphasis on promoting developmental projects on brownfield areas and not on greenfield[3] areas, i.e. with tools such as tax relief (smaller public utilities charge), subsidised insurance in the case of subsequent discovery of polluted areas, and other mechanisms that stimulate investors to focus investments on degraded urban areas;

b) upgraded land register of degraded urban areas including data on pollution, permissible use, exploitation, price, infrastructure;

c) new professional profiles – to decide whether an area is degraded or not and to manage degraded urban areas in municipalities and nationally (region).

➔ **The inclusion of socio-economic and demographic aspects**

Areas that require renewal frequently have a specific social, economic and demographic image. In the future, comprehensive renewal should more intensively include specific solutions for the specific socio-economic and demographic characteristics of individual urban areas (e.g. addressing the housing problems with renewal and ensuring accessible rental dwellings in the renewed building stock). The envisaged demographic change requires a more active renewal policy in this area.

➔ **The development of participant approach**

Local residents and building managers know the problems and opportunities of their local environments well; at the same time, they frequently have specific knowledge or time that they are prepared to share to improve living conditions in neighbourhoods. The inclusion and consideration of residents and other stakeholders (e.g. owners of commercial units, providers of services) can significantly contribute to long-term success of renewal. This initiative that is usually assumed by civil initiatives in this area must be supported and specific tools and institutional support instruments must be developed.

BEST PRACTICE CASES AND INTERNATIONAL PROJECTS

➔ **The regeneration of the old part of Ljubljana and the expansion of the city centre**

The renewal of Ljubljana's city centre is an example of a comprehensive urban renewal, where several goals are simultaneously achieved with the intertwining of spatial, economic and transport policies. The first steps were connected to assessing the rich architectural heritage and promoting the unexploited qualities of the old city centre's ambience. People working in the cultural sphere and the civil society were quite important in the initial phases, because they drew attention to the potential of this area by organising cultural events and artistic interventions. The approach of the city administration was essential to the final success, because they had a clear vision of the development of activities in this area (boutique shops, tourism) and related sectoral strategies (investing in the renewal of the building stock, transport regulation, increasing the quality of the public space, tackling environmental challenges such as providing bathing waters and clean air) and they managed to improve the external image, the programme offer and the urban vitality of the

[3] A "brownfield" area is a degraded urban area
A "greenfield" area is an undeveloped area.

area. An important part of these activities is related to coordinating the stakeholders; joint and oriented operation led to a revitalised city centre. Preventing potential deviations that are shown, for instance, in the form of excessive adaptation of the offer to the needs of tourists, gentrification etc. will be required for the long-term success of the approach. At the same time, awareness will have to be strengthened, i.e. that similar processes should be implemented in the suburbs, where the majority of residents live (establishing vital local centres).

➔ **The guidelines for renewing the Savsko naselje residential neighbourhood in Ljubljana (UIRS 2004 and 2013, other participants)**

The approach to renewing the Savsko naselje residential neighbourhood is a good example of a comprehensive consideration of a well-designed urban area that needs renewal. It includes technical and construction verification of buildings, morphological characteristics of the residential neighbourhood, transport regulation, the regulation of open areas, and improving energy and economic indicators; at the same time, it also considers the demographic features of the residential neighbourhood; via workshops and surveys, it actively includes local participants in the renewal process. Activities implemented by local initiatives that strive to revive public areas and social contacts in the residential neighbourhood significantly contributed to the success of the revitalisation of Savsko naselje. Securing financial and human resources for the consistent maintenance and implementation of urban activities in residential neighbourhoods is important for long-term success.

➔ **The guidelines for renewing the Litostrojsko naselje residential neighbourhood in Ljubljana (UIRS 2013)**

The approach considers a residential neighbourhood as a characteristic urban area, and the approach to renewal is based on the identified architectural and urban spatial planning heritage. With its preservation and upgrading, it strengthens the spatial identity of the area. The emphasis is on exposing the current qualities of the area for the purpose of preserving them, and for local residents to become aware of them, thus strengthening the positive image and affiliation to the residential neighbourhood. Various communication tools, such as leaflets, newspaper publications in local newsletters and internet posts are used for residents to recognise the qualities of their residential neighbourhood, and to consider as well as upgrade them when they organise renewals by themselves. The future challenge is the actual coordination and management of renewal processes implemented by residents themselves to preserve and upgrade the qualities of space.

➔ **Participative approaches to public space renewal – the Humane Cities approach**

The Humane Cities European project approach (Creative Europe programme) encourages current practices of reviving local public spaces by self-organised groups of residents, which can eventually be transformed into various forms of formalised operation. Local initiatives can have a successful long-term influence on renewing the urban space if they know the mechanisms that enable the emergence and functioning of incentives in a specific local environment, if their members are motivated, if they can meet the organisational and financial challenges, and if they identify the potential changes that such activities can cause. The Humane Cities approach shows that successful local initiatives must be institutionally supported, e.g. with various training of members of initiatives (on team work, project management, administrative procedures etc.), with financial stimulation and simplification of legal and formal procedures for implementing their activities in the area.

Figure 9: Activities of the project Humane Cities for a participative search for potential solutions for renovating the public space of the Ruski car residential neighbourhood in Ljubljana (photo: B. Jamšek)

➔ **The approach to renewing degraded areas with EU projects**

The world economic and financial crisis in 2008 changed the conditions that enabled the relatively successful renewal of degraded areas in Slovenian cities. At least until 2015, there was a slow and constant reduction in the value of real property, major investors went bankrupt and the many important construction companies collapsed. The best locations that were the closest to city centres or other attractive sites had been regenerated by that time. Therefore, less attractive locations remained. The profits to be made on them would not compensate for all the mistakes of investors in the process of renewing such areas. The accessibility of loans for such investments greatly worsened.

For many reasons, especially due to the large number of degraded areas and limited funds for their renewal, in Europe the need for a more effective process of renewing degraded areas was evident quite some time before the economic and financial crisis. The European Commission was also well aware of this problem, since a lot of money from structural and cohesion funds was more or less spent on problem solving related to degraded areas. Slovenia is also included in these processes, because it also participates in European projects. A few fundamental projects in this field were financed in that time, such as CABERNET – Concerted Action on Brownfield and Economic Regeneration Network, CLARINET – Contaminated Land Rehabilitation Network for Environmental Technologies, CARACAS – Concerted Action for Risk Assessment for Contaminated Sites in Europe,

REVIT – Towards more effective and sustainable brownfield revitalisation policies and COBRAMAN – Manager Coordinating Brownfield Redevelopment Activities.

Although the latter two projects focus on optimising processes in the urban redevelopment in public administration, they also contain many effective tools for investors of such projects in Slovenia. The COBRAMAN project emerged as a result of findings of preliminary projects, i.e. that the revitalisation of degraded areas is a long-term and complex procedure that includes a wide range of experts, political players and various interest groups that must be effectively coordinated during the development and the implementation of the investment project. The project proposes a new profession, i.e. a degraded areas manager who manages and directs degraded areas revitalisation and enables faster, more sustainable and economically more effective project implementation.

III. GREEN INFRASTRUCTURE AND CITIES

Developing the quality of life and the related needs and expectations of people, as well as the concern for a healthy environment and balanced development of cities and settlements have evolved into very important topics in spatial planning in Slovenia. The professional finding that an improvement in the quality of living and urban environment is directly connected to comprehensive planning of green spaces is already shown in older spatial development documents at the national level, i.e. the current Spatial Planning Strategy of Slovenia (SPRS, 2004) and the Spatial Order of Slovenia (PRS, 2004). As the fundamental spatial planning act of the state, the SPRS contains good and important standpoints for securing quality regulation of green spaces in cities and settlements; it also determines the meaning of comprehensively planning green spaces in a good and in some parts in a detailed way. In the chapters on vital and regulated cities, it emphasises the importance of natural elements and the quality construction of national assets, and determines: »*Natural components and well-built public assets such as traffic surfaces, squares, markets, playgrounds, parks, green areas etc., are of key significance for the quality of living in cities, and therefore they shall be incorporated in the urban structures to the maximum possible extent. Water surfaces and waterside areas, forests, natural values and individual components of biodiversity shall be included in the green system of cities*«, which is a very good starting point for the appropriate future development of this topic.

By definition, the »Green system of cities and settlements« approach is very similar to the »Green Infrastructure« approach, i.e. as the »*integrity of landscape components within the limits of a town or settlement area. Townscape consists of natural and built media, satisfying man's special needs and significantly contributing to the town structure and to experiencing it. The green system components of a town or settlement are individual parts of open space, which differ in function, structure, and the degree of naturalness, yet are still interrelated. These components can be parks, children's playgrounds, school gardens, squares, vegetation and greenery along the streets, roads, water streams, and in residential areas, suburban meadows, suburban and urban forests, and the like.«* (SPRS, 2004). However, the document guidelines on planning green spaces only refer to public areas and are included in the chapter on the development of spatial systems, i.e. in the sub-chapter on public areas in settlements.

Slovenian cities could directly transfer experience with green system planning to »Green Infrastructure« (GI) planning, which is a new priority objective of European strategic programmes

and developmental policies for the 2014–2020 period. In COM(2013) 249 final[4] the European Commission defines it as an essential and successfully tested tool for understanding ecological, economic and social benefits through natural solutions which human society (can) obtain from the natural environment and for mobilising these benefits (ecosystem services[5]).

Although the emphases in the consideration of green infrastructure are frequently connected to aspects of regeneration and the connection of existing natural areas, the protection of biodiversity and the situation, as well as the improvement of ecosystem functioning, the understanding of its importance and role is much wider and directly connected to securing a quality living environment in cities and settlements. We must emphasise that in the context of city and settlement planning, green infrastructure can be understood as a comprehensive approach to planning, regulating and managing various aspects of landscape, urban open spaces and green spaces to achieve quality in the living environment and support sustainable mobility (a good open space encourages walking and cycling), and in cities, GI mitigates the urban heat island effect[6].

The Multifunctionality of Green Infrastructure (EC, Environment 2012) defines the basic functions and tasks of GI as:

- protecting the state of biodiversity;
- protecting the state and improving the functioning of ecosystems;
- enabling and encouraging »ecosystem services«;
- encouraging social welfare and human health;
- supporting the development of the green economy and sustainable land and water management.

In the future process of planning of cities and urban areas it is very important to recognise the positive influence of green spaces on the quality of the environment and their effectiveness in regulating climate, mitigating heat island effects and reduce the burden on the environment caused by pollution, noise and excess precipitation, which are defined as **regulating ecosystem services.** The significance and possibilities of urban food production are increasingly emphasised in connection with green infrastructure planning; from the aspect of securing the quality of life, health, satisfaction and well-being of people, the non-material benefits of ecosystems in connection with the quality of space and landscape (**cultural ecosystem services**) are also emphasised. These offer people opportunities for recreation and good-quality leisure time; they encourage walking, cycling and outdoor activities and enable the development of social relations and intergenerational connection; they offer education and

[4] Green Infrastructure (GI) in (COM(2013) 249 final.

[5] Ecosystem services (ES) in EU documents are categorised as four categories of potential benefits enabled by natural features and the quality of space:

- provisioning ES are ecosystem services that describe the material or energy outputs from ecosystems. They include food, water, raw materials and medicinal resources;
- supporting ES, which are process-related benefits that indirectly enable the exploitation of natural resources, e.g. primary production or pollination;
- regulating ES, which are natural mechanism-related benefits that provide for climate regulation and the mitigation of extremes, the mitigation of environmental effects, water and nutrient circulation, the regulation of water, the prevention of flooding, heat islands in urban areas etc.;
- cultural ES, which are benefits that people obtain from the natural environment to satisfy their social, recreational, cultural, spiritual and other needs connected to satisfaction, health and well-being.

[6] The urban heat island (UHI) is a micro-climate phenomenon that occurs in urban areas –it consists in a significant increasing of the temperature in the urban area in respect to the surrounding peri-urban and rural neighbourhoods.(source: http://eu-uhi.eu/si/).

learning, as well as cultural experience, intellectual and spiritual inspiration for the development of values and relations; they improve the quality of ambience and experience; they support the development of a positive identity and image of a place; they encourage the inclusion and responsibility of residents as a community and individuals, as well as healthy habits and lifestyle, satisfaction and well-being.

From the spatial view, important green infrastructure elements in principle include all open space areas with particular natural features: from natural to semi-natural areas and reproduced/rehabilitated natural areas and designed green spaces, as well as other open spaces that are important for the quality of life and the condition of the environment. These include ecological corridors, agricultural and forest areas and urban green spaces, as well as green roofs and walls. The importance of collaboration and securing the multifunctionality of such spaces and the development of nature-based solutions is also emphasised. The green infrastructure planning approach connects various sectoral approaches and policies, and enables partial problem solving to be overcome, and at the same time, it clearly deviates from the planning practice of determining the intended use of spaces.

In general, Slovenian cities have good potential for regulating green spaces, especially with regard to available space and existing natural and landscape qualities of forests, water areas and agricultural land. These are frequently part of the urban substance of urban municipalities and settlements in Slovenia, and they are very important parts of their ecosystem and potentially recreational hinterland.

From the planning and developmental aspects, forest areas in many Slovenian cities and towns are recognised as important parts of urban open space, and are usually defined as »special purpose forests« or urban forests. Their role and importance are defined by a wide spectrum of different forest functions; at the same time, the areas are managed within the forestry sector. As such, they are not connected to urban development from the planning and management aspects. The Urban Municipality of Celje is a good example of recognising the importance and consideration of urban forests. The municipality purchases private forests with the purpose of establishing a public urban forest with emphasised social functions (Šuklje Erjavec and Erjavec, 2006).

Aspects of urban food production are also becoming very important in urban development. These include urban agriculture, which currently in Slovenian cities comprises mostly agricultural use of space within the urban and suburban structure of cities, as well as through various forms of urban gardening. Growing vegetables for partial or complete self-supply in Slovenia is traditionally already quite important and is reflected in the traditionally emphasised culture of urban hobby gardening as well as in the housing stock structure, with mostly two- and single-dwelling houses with gardens. Even the construction of multi-dwelling buildings in residential areas in the past considered this need. The residential area built in the 1970s in the small urban settlement of Tolmin is an example of such an approach. Its planning included the idea that each dwelling would also have a land plot for gardening, measuring around 30 m^2. Evidently, such an approach was very suitable for the existing environment, because the residents in dwellings still use those gardens in the same way (Figure 10).

Figure 10: Tolmin 2012 (photo: Ina Šuklje Erjavec)

When land was transferred from social to private ownership, hobby gardening in cities in Slovenia temporarily decreased and space was frequently used illegally; in the past few years, hobby gardening has become a very popular leisure activity of urban residents. Today, besides traditional hobby gardening where every user rents a specific land plot intended for gardening, new forms of urban gardens are emerging in many cities and they have more emphasised social functions involving mutual collaboration of local communities, education and raising awareness of the public, such as community, student, roof and school gardens etc. (Urban Hobby Gardening, 2016).

CHALLENGES

➔ **The preparation of green infrastructure strategies in cities and wider urban areas**

According to the EU's Green Infrastructure Strategy, green infrastructure can contribute to numerous EU policies, the aims of which can be attained with nature-based solutions, and the strategy sets the use of green infrastructure in the framework of the Europe 2020 growth strategy; the EU's strategy is also intended to become a part of spatial development all over the EU. In the near future, Slovenian cities will have to prepare comprehensive strategies for green infrastructure development which will upgrade and supplement the existing documentation on planning urban green spaces and urban open spaces, especially for securing their accessibility and connecting their multifunctionality, comprehensive management and the inclusion of nature-based solutions for enhancing the resilience of cities and the quality of life in them.

➔ **The transfer of green infrastructure planning and green infrastructure introduction in urban environments of smaller scale**

Better open spaces and green spaces in Slovenia are so far only evident in the centres of large cities or in the context of renovations of historical centres. The situation is much worse in local urban areas outside urban centres, in residential neighbourhoods and in small urban settlements in general. Therefore, it is a great challenge to increase the general awareness of the fact that the inclusion of »green infrastructure« approaches and measures can significantly contribute to the quality and integrity of planning new interventions and regulations and to rehabilitate current problems on the local scale and in the smaller towns and settlements typical of Slovenia. The equal provision of appropriately regulated, accessible and diverse urban green spaces and open spaces must be introduced in wider areas and local communities. Such activities should be rationally connected with urban renewal, the introduction of vital local centres and wider green infrastructure at the regional level. It is very important to secure planning approaches that transfer the decisions made at the strategic level into practice.

➔ **Urban forests are part of green infrastructure**

Urban forests in Slovenian cities are important parts of the potential for introducing green infrastructure. From the sectoral aspect, the forest as an intended use of space already has an effectively established and developed system of planning and managing areas that have many different functions besides the economic ones: ecological, protective, recreational and social functions. In urban areas, forests are mostly categorised as »special purpose forests« or »urban forests« with recreational and social functions being emphasised; in accordance with international trends, the functions of forests to mitigate climate change, for sustainable water management, landslide protection and for ensuring various ecosystem services are also identified. In urban forestry, the sector encounters many problems connected to the specific features of urban use of green spaces, such as mass visits and intensive as well as diverse everyday use, the diversity of expectations and perception of visitors with regard to safety and accessibility etc.; all of this greatly increases the vulnerability of urban forest and creates conflicts in these areas between nature protection and use. Exceeding the otherwise very developed sectoral and sustainably oriented approach of forestry is quite an important challenge, and urban forest topics should be included in green infrastructure planning and management.

➔ **Urban agriculture development**

At the European level, urban agriculture has been recognised as a special form of agriculture determined by its location and the all limitations, problems, potentials and opportunities arising from this type of agriculture. In this view, it is important to warn that urban agriculture areas, similarly to urban forest areas, are important parts of urban green systems/green infrastructure, so they need to be developed to ensure various functions and public accessibility for urban residents. New trends have been recognised in Slovenia; however, they remain only within the profession. The consideration of related issues focuses on the meaning and potential of urban green spaces for local food production and self-supply, as well as ensuring multifunctionality on flood safety areas; agriculture as a planned intended use of space is currently considered merely at the sectoral level, regardless of location. Therefore, a design-oriented determination of areas of urban agricultural land as areas of green infrastructure and the orientation of their development in multifunctionality and co-use are special challenges for the future.

➔ **Intersectoral collaboration to develop natural solutions and the synergy of benefits and positive effects**

Recent practice has shown that preserving the separation of intended uses of areas relating to green spaces' character will greatly limit the possibilities for developing comprehensive green infrastructure and its effective implementation at a specific level of spatial development. To go beyond this situation, we must ensure that various sectoral approaches are effectively connected into a comprehensive and integral plan based on the green infrastructure concept. Therefore, for instance, we urgently need to appropriately plan and regulate as well as simultaneously plan and implement sustainable mobility and energy efficiency in green spaces and other open spaces that will in reality actually ensure the conditions and stimulating environment for realising the envisaged changes. Awareness must be enhanced, i.e. that intersectoral planning and linking of measures into a broader framework rationalise investments, and with multifunctional regulations, benefits are strengthened and a synergy of positive effects of interventions is achieved. This is especially important for small-scale environments typical of Slovenian cities, because it strengthens the efficiency of support for achieving the desired goals.

➔ **The appropriate inclusion of green infrastructure and related concepts (green spaces, ecosystem services, sustainable solutions) into new spatial planning legislation**

The planning, development and management of green spaces and open spaces in settlements is considered in Slovenian spatial planning legislation in a rather marginal and dispersed way[7] and does not represent a good starting point for drafting appropriate spatial planning or other developmental documents for developing green strategies for urban and interurban areas. Clear definitions of terms with regard to green spaces in general, as well as determinations and guidelines within the scope of planning and management are missing. Individual sectoral laws, rules and spatial planning acts are also not harmonised. The definition of the term »green space« in the Spatial Order of Slovenia (PRS, 2004, Article 5: »*The green spaces of a settlement are all areas that exhibit a particular level of naturalness, regardless of ownership, function or position in space*«) is professionally appropriate, since it defines green spaces by their spatial occurrence, not by intended use; however, the definition is not clearly related to the guidelines within the document nor to current spatial planning legislation. This situation will have to be corrected to improve green infrastructure planning for the purpose of transferring from the strategic level to lower planning levels and for implementation in practice. Green infrastructure does not refer to green spaces in terms of intended use, ownership or public accessibility, but from the aspect of their ecological value and importance for the general improvement of the quality of the urban environment and life in it.

BEST PRACTICE CASES AND INTERNATIONAL PROJECTS

➔ **Ljubljana – European Green Capital 2016**

The »European Green Capital« is a title awarded on the incentive of the European Commission. Starting in 2010, one European city is selected each year on the basis of achieving high environmental standards and being committed to ongoing and ambitious goals for further environmental improvement and sustainable development. The award is intended to recognise and award local efforts for improving the environment, the economy

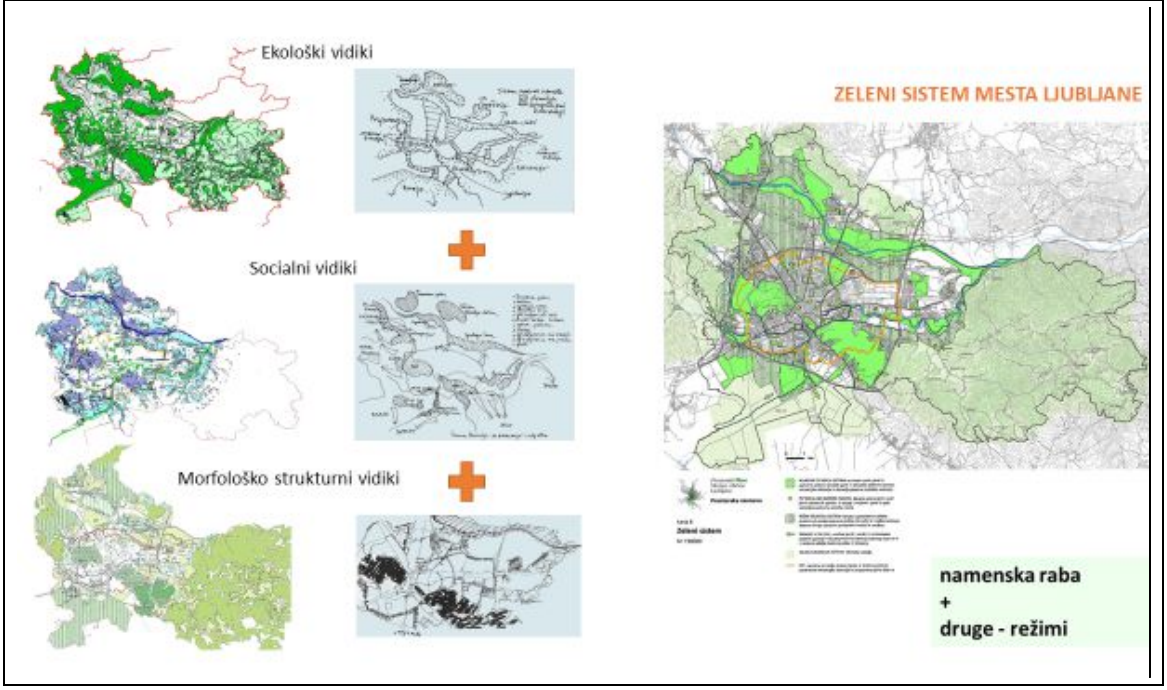
[7] E.g. Spatial Management Act (ZUreP-1), Official Gazette of the Republic of Slovenia [Uradni list RS], No. 110/02 with amendments; Construction Act (ZGO-1-UPB1). Official Gazette of the Republic of Slovenia [Uradni list RS], No. 102/04 with amendments.

and the quality of life in cities. Ljubljana has been awarded this title for the sustainable progress made in the past 10 to 15 years for twelve different factors, including comprehensive planning, the preservation and protection of green spaces typical of Ljubljana, and increasing the quality of public space in the city centre (source: http://www.zelenaljubljana.si/).

➔ Urban green system planning in Slovenia

In the past, a few Slovenian cities approached systematic planning of green spaces by designing green spaces in the framework of their spatial planning acts and independent documents on designing urban green systems. Some applied approaches to urban green system planning are comparable with the European green infrastructure concept according to the complexity and the introduction of the multifunctionality concept. One example is the urban green system planning of Ljubljana (Šuklje Erjavec et al., 2001), which was included as an important starting point, and the content of spatial development documents of the city. All current green spaces, including their potential, were considered, regardless of their intended use as determined in the plans, i.e. from three basic aspects: socio-functional, ecological and morphological, which were linked together into a comprehensive urban green system concept. Agricultural land, water and riparian areas, forests and many other areas which are otherwise »hidden« within other intended uses were included in the green spaces that created the green system. Protective and developmental green system regimes intended to guide the protection and development of green spaces that were not included in the »green space« intended use were defined for all those areas.

Figure 11: Illustration of various aspects of planning the green system of the City Municipality of Ljubljana (source: UIRS, material for presentation)



➔ **GREENKEYS – Urban Green as a Key to Sustainable Cities**
Interreg IIIB Cadses EU project, http://www.greenkeys-project.net

The main topics of the GreenKeys project included the importance and role of urban green spaces for improving the quality of life in cities, the issues with regard to the efficiency of planning and regulating green spaces for sustainable urban development, and the development and preparation of methods, concepts and instruments for designing urban green strategies. Twelve partner cities cooperated on the project and the 15 pilot projects for improving and regulating small urban green spaces. With the assistance of the GreenKeys project experts, the cities also verified, improved or prepared drafts for urban green space planning strategies. Another very important part of the project is the development and preparation of methods, concepts and instruments for drafting green strategies. Nova Gorica cooperated on the project and UIRS provided expert, research and scientific support to cities for developing and designing various criteria, tools, concepts and guidelines for drafting urban green strategies.

➔ **TURAS – Transitioning towards Urban Resilience and Sustainability**
The seventh EU framework programme, http://www.turas-cities.org/

The goal of the project was to design new strategies for resilience and the sustainable development of European cities in order to reduce their urban ecological footprint. The key project challenges were to develop measures to mitigate climate change, the lack of natural resources and uncontrolled urban sprawl. The Ljubljana Urban Region (Regional Development Agency of the LUR) and the University of Ljubljana (Faculty of Civil and Geodetic Engineering) were included in the project and actively cooperated on the work package that dealt with the spatial planning of cities, infrastructure and the systems for improving resilience and responsiveness to climate change, specifically by adapting to flood risk and sustainable transport infrastructure. The Slovenian partners focused on developing multifunctional, sustainable natural anti-flooding regulation within the framework of the Podutik anti-flood water reservoir in Ljubljana.

➔ **GREENSURGE – Green Infrastructure and Urban Biodiversity for Sustainable Urban Development and the Green Economy**
The seventh EU framework programme, http://greensurge.eu

Models for inclusive planning and urban green infrastructure implementation were developed within the scope of this project. The urban learning laboratory pilot project was introduced in the Livada area in Ljubljana, where the emphasis was on including youth in urban green spaces regulation via hobby gardening activities.

2.3 Environment and urban development

Environment quality is an important factor for the quality of life and the health of residents. In Slovenia, the right to a healthy living environment is guaranteed by the Constitution of the Republic of Slovenia, which also obliges the country to provide it. The basic law covering this field is the environmental protection act, which also stipulates the obligations of local communities (municipalities).

The elements of the environment most frequently considered in recent developmental documents of urban municipalities are air, water and soil, as well as issues related to environmental noise and light pollution. We discuss in greater detail below the quality of air and soil pollution in former industrial areas.

In Slovenia, local communities constitute a very important factor from the aspect of managing environmental impacts and the use of resources. They operate within the scope of mandatory municipal public utilities services and are responsible for drinking water supply, the disposal and purification of municipal and waste rainwater, as well as the collection, processing and disposal of municipal waste. They are also competent for planning efficient use and energy efficiency measures and for using renewable energy resources.

Each field, e.g. water supply, waste management and energy, is regulated by national regulations and strategic and operative documents. Local communities prepare and execute the plans contained in appropriate documents such as water supply programmes and local energy concepts. We present the latter, since this is an important tool used by local communities to reduce environmental impacts and use resources more efficiently.

With regard to both aspects of responding to climate change, i. e. mitigation and adaptation, Slovenian local communities prioritise the reduction of greenhouse gas emission, i.e. the mitigation of climate change. This statement can be illustrated by the fact that recent local energy concepts and environmental protection programmes of municipalities also contain assessments and goals related to greenhouse gas emissions. This is at least partly the consequence of the fact that at the national level, activities have been focused for a long time primarily on mitigating climate change.

Urban settlements in Slovenia are generally less threatened by natural disasters, with the exception of floods, which have caused immense damage in the last decade. This may be partly due to the more frequent occurrence and greater intensity of floods, but also to the expansion of population and activities in areas with flood risk, as well as inappropriate or insufficient water management measures and regulation.

The protection and rescue system has proved appropriately responsive in cases of natural disasters; however, there is a lack of preventive activities, especially comprehensive spatial planning, adjustments between sectors and cooperation between actors. The territorial approach, in functional regions or river areas, for example, and new forms of cooperation between actors are especially important given the expected intensification of climate change effects and the appearance of new threats, e. g. long hot spells or sea flooding due to rising sea levels.

I. AIR IN CITIES

In the past two decades, the air quality issue in Slovenian cities has been present all the time; however, the main causes of pollution and their detection as well as responding to them changed. In the 1990s, the pollution of air with sulphur dioxide was quite worrying; the most important pollutants were thermal energy and industrial plants and traffic. By modifying regulations and implementing measures in the energy sector and in industry and by introducing fuels with low sulphur content, sulphur dioxide emissions significantly dropped. In this field, Slovenia meets its international obligations: sulphur dioxide pollution in cities is low.

In the past few years, air pollution with PM_{10} particles, ozone and nitrogen oxides has been greater. The main source of particles is fuel combustion in households – in 2013, small heating units in Slovenia contributed 62% to total PM_{10} emissions; this was followed by industrial boiler rooms and urban traffic. Since the permissible number of daily limit values for PM_{10} was repeatedly exceeded, plans for ambient air quality were prepared for nine municipalities, six of which were urban municipalities. The Government of the Republic of Slovenia cooperated with the local communities on preparing plans adopted in 2013 and 2014. The measures to reduce pollution refer to modifying methods of heating buildings and the replacement of energy-generating products, incentives for households, including education and consulting, and the stimulation of sustainable means of transport. The measures are being carried out by the state, municipalities and other stakeholders in the public and private sectors. The Slovenian Environmental Fund and the Climate Change Fund are co-financing the implementation of the measures in accordance with regulations.

Slovenian urban municipalities are based on the provisions of the environmental protection act, obliged to prepare municipal programmes for environmental protection and operative programmes; other municipalities have the option to do this. Air quality is usually included in programmes from the aspect of analysis and measures. We have also noticed successful intersectoral cooperation and integration, because the documents of different sectors contain measures to improve air quality, such as energy use and transport, which exacerbate this environmental problem. The environmental protection programme for the Urban Municipality of Ljubljana for the 2014–2020 period is mentioned as an example. The programme provides an analysis of air quality; transport policy and the local energy concept for the municipality contain further measures.

CHALLENGES

➔ **Improving air quality in small urban settlements**

The pressure on air quality and pollution with particles is not typical only of cities – where plans to improve ambient air quality have been prepared and adopted – but also typical of other urban settlements. Measures, especially those demanding fewer financial and human resources, as well as incentives, could also be useful in these settlements. The harmonisation of different policies is particularly important: from the aspect of boosting the use of renewable resources and reducing emissions of greenhouse gases; many municipalities are planning to encourage the use of wood for heating; however, on the other hand this can increase emissions of particles and the deterioration of air quality.

➔ **Preparing comprehensive transport strategies for the functional urban hinterland**

Transport by private vehicle is as a source of pollutants (particles, nitrogen oxides, volatile hydrocarbons) and noise one of the main factors causing pressure on the environment and worsening the quality of life in cities. Considering the acceleration of sub-urbanisation and

the fact that urban settlements remain service-, employment- and education-oriented centres, mobility will remain important for residents in the functional hinterland of these centres. Strategies, programmes and measures in transport should in principle include the functional urban hinterland; this involves more municipalities from the spatial planning and administrative aspect. It would be rational to prepare comprehensive spatial planning strategies as instruments for long-term planning, guidance and management at a higher, e.g. regional, level, and special attention should be dedicated to the effects on air quality.

BEST PRACTICE CASE

➔ **Remote heating in the Šaleška dolina valley**

The well-developed remote heating system in the Šaleška dolina valley and urban settlements of Velenje and Šoštanj is a good example from the aspect of air pollution caused by particles. This is the second largest heating system in Slovenia and one of two that also enable remote cooling. Heat energy is provided by the Šoštanj Thermal Power Plant, and the system produces electricity and heat. Enterprise Komunalno podjetje Velenje is the distributor, and households, business and industrial enterprises are the consumers. With meteorological conditions comparable to other urban areas of continental Slovenia where air pollution is monitored, the permissible number of daily limit values of PM_{10} particles in 2014 was not exceeded only at the measurement sites in Šoštanj and Velenje (Air Quality, ARSO, 2014).

II. SOIL POLLUTION IN FORMER INDUSTRIAL AREAS

Urban development in Slovenia during industrialisation was frequently connected to the excavation and processing of ore and, subsequently, with the development of the chemical industry. In the last two decades, the companies in these industries have been partly transformed, and in many cases they were wound up. This is especially typical of small cities. The consequence of such long-term commercial activities is frequently serious **soil pollution** in former industrial areas and in the wider environment; in some cases, soil and water are also polluted, mainly with heavy metals.

Abandoned industrial areas can be spatial capital and offer an opportunity for development, especially since they are located within or on the margins of settlements. On the other hand, reuse is hindered by many factors, such as the shortage of human and financial resources in municipalities, insufficient data about soil pollution and the complexity of measures required for environment rehabilitation.

CHALLENGES

➔ **Introducing a support system for cities for environmental rehabilitation and the reuse of former industrial areas**

Activating the potential of former industrial areas is a major professional, planning and financial challenge for small towns and municipalities. Especially in cases where there is a high level and/or complex soil pollution and impacts on other environmental elements (air, water), this is a task exceeding the capacities and competences of local communities. Procedures, measures and tools to support efforts for environmental rehabilitation and the reuse of such areas should be determined and realised based on the collaboration of stakeholders at national and local level.

III. ENERGY CONSUMPTION PLANNING IN LOCAL COMMUNITIES

Energy concepts have been prepared in municipalities for a long period; the first were drafted around the year 2000, and more extensively after 2005 and 2009, respectively. Slovenia's energy policy has developed in the past twenty years. This has been evident in the supplementing of legal bases and in strategic as well as implementing documents and instruments for policy implementation. The structure of local energy concepts has also been upgraded. This policy, harmonised with the current regulations, is a programme of energy management in a local community in a ten-year period, which is the basis for planning the development of local energy public utility services, efficient energy use and saving, the use of renewable energy resources and improving air quality at the level of the local community. The connection between the economic and spatial development of municipalities is also emphasised. The preparation of energy concepts is obligatory for all Slovenian municipalities.

In this way, local communities obtain a review of energy use and the consumption of energy products by users (e.g. residential buildings, public buildings, public lighting, industry, transport), carbon dioxide emissions and other pollutants, the energy supply system and the potential for the efficient use of energy and renewable resources. The concepts also define the objectives of energy planning that must be harmonised with the objectives of the state and which mostly refer to reducing greenhouse gas emissions, increasing the use of energy from renewable resources and improving the efficiency of energy consumption. The objectives of municipalities can be more demanding than objectives at the state level.

The key content of local energy concepts contains action plans with measures that must be specifically determined with regard to expected results, duration and value. The implementation of action plans supports a complex system of measures and instruments at the state level.

Awareness of the importance of a sustainable energy in municipalities is relatively high, which is also seen in the collaboration in the local and regional communities' movement in the European Union, the Covenant of Mayors for Climate and Energy[8]. Local communities are obliged to prepare a basic register of emissions, an assessment of risks and vulnerabilities for climate change; within two years of signing the covenant, they must prepare an action plan for sustainable energy and climate change, as well as report on the progress of implementation every two years. Almost one tenth of Slovenian municipalities have signed the covenant.

CHALLENGES

➔ **Connecting sectors to achieve the sustainable development of local communities**
The preparation and implementation of local energy concepts in municipalities are progressing well and are supported by a national system of instruments and measures. The energy act contains a provision requiring that spatial and commercial development of the local community to be planned on the basis of the local energy concept; the document is compulsory expert basis for the preparation of spatial plans. The relations between local energy concepts and other developmental and steering documents of municipalities must be further determined from the legal and implementation aspect, since the connection of sectors and harmonisation are essential for the sustainable development of local communities.

[8] The movement began in 2008 with the support of the European Commission, and more than 6500 municipalities had signed the covenant by March 2016. By signing the covenant, communities are obliged to contribute to realising EU objectives in the fields of climate change and energy.

➔ **Harmonising the conflicts between economic and environmental interests and objectives in local communities**

We should warn about potential conflicts of interests caused by the regulation of the local energy sector. Providers of public utility services owned by municipalities can implement public utilities services in the energy sector in municipalities, and are operating as enterprises. Measures for efficient energy use, such as the energy rehabilitation of public buildings, reduce demand for energy for heating and thus have reduce enterprises' profitability. More generally, there is a conflict between commercial and environmental interests and objectives, which can lead to reduced efforts to use resources more efficiently. Such conflicts are unavoidable, so any adverse effects on other parts of the system must be considered when planning objectives and measures to save resources and, if necessary, appropriate responses must be considered.

BEST PRACTICE CASE

➔ **Local energy agencies**

Local energy agencies operate with multiple municipalities or regions. They support stakeholders in the public sector and their activities are partly focused on households and other energy users. They implement an extensive range of tasks such as the preparation of local energy concepts of municipalities, energy management and consulting, support with applications to public tenders in the energy sector, and they advise municipalities in public procurement procedures. Agencies collaborate in international projects co-financed by the EU, and they also support local communities that sign the Covenant of Mayors for Climate and Energy. Since 2007, local energy agencies have been merging into a national consortium. Many comparable data show the importance and success of the work of agencies, i.e. that municipalities that collaborate with agencies are more successful in implementing local energy concepts and obtaining projects and funds in comparison with other municipalities.

IV. LOSS OF DRINKING WATER AND EFFICIENT USE

Due to heavy precipitation, Slovenia is rich in waters. Surface waters are rather unequally distributed from the aspect of time and space and groundwater storage also changes. Climate change also causes additional pressure, which is seen in modified drainage regimes and drought. There are areas in Slovenia, where providing a reliable supply of good drinking water is quite demanding.

Several laws regulate the water supply in Slovenia (on environmental protection, waters, public utilities services), as well as regulations (e.g. on drinking water supply), EU directives and other legal instruments. Supplying the population with drinking water falls under the jurisdiction of municipalities and is a mandatory municipal public utility service for environmental protection. The national framework for providing a supply of drinking water is stipulated in operational programmes. The 2006–2013 operational programme determines the priority fields of managing and renewing water pipeline systems, improving drinking water supply standards and the quality of water and guaranteeing drinking water in spite of climate change.

In 2012, 87% of Slovenians were supplied with drinking water from public pipelines, and also a greater share of people was supplied from public pipelines in urban settlements. In comparison with 2005, the share increased by 4%. The quantity of drinking water used per inhabitant per year amounted 56.8 m^3 in 2014. In the past decade, the quantity of pumped water and

household consumption decreased. Regarding the use of resources, data on water losses from the distribution network are quite important, since the losses amounted 22 to 29% from 2004 to 2014, with a rising trend.

The reduction of water losses from public water pipelines was defined as an objective in the 2006–2013 operational programme and in the new 2015–2020 programme. The latter defines supervision-oriented measures, the optimisation of operations and the rehabilitation of the public water pipeline. The new programme also introduces a goal of encouraging the efficient consumption of drinking water. According to estimates, 80% of drinking water supplied to the public sector is returned to the environment as waste water. Measures to reduce consumption relate to the reuse of greywater, the collection and use of waste rainwater and the use of water-saving and effective devices in households (Operational programme for the supply of drinking water 2015-2020).

CHALLENGES

➔ **Reducing water losses from public water pipelines**
The operational programme for the supply of drinking water 2015–2020 makes the implementation of measures to reduce water losses from public water pipelines a task of municipalities and providers of drinking water supply services. This concerns providing sufficient funds and human resources, as well as knowledge. It is essential that the water loss issue is recognised as a problem and that all stakeholders both in local communities and central government are included in resolving it. National instruments are also urgently needed, for instance IT and organisational support, to stimulate the implementation of measures.

➔ **Models and pilot projects for drinking water reuse**
The operational programme determines that building owners play an essential role in measures concerning the efficient use of drinking water. State institutions and local communities could start preparing and implementing measures in public sector buildings. Models for greywater use and collection as well as waste rainwater use can be prepared for new residential areas, which could be implemented as pilot projects within the scope of activities of national and municipal housing funds.

➔ **Encouraging users to consume drinking water efficiently**
With regard to the use of efficient devices in households and efficient use of drinking water in general, providers of public utilities services have conveyed information to users, i.e. by publishing them on their websites or through informative publications. Awareness-raising activities are implemented by professional associations and NGOs, as well as in schools. These activities, which are quite dispersed, could be connected in order to achieve more target audiences and strengthen the effects of incentives.

V. REACTING TO CLIMATE CHANGE – MITIGATION

As a signatory to the Kyoto Protocol, in 2000 the Republic of Slovenia adopted a strategy and short-term action plan to reduce greenhouse gas emissions, which was followed by operational programmes to reduce emissions until 2012 and 2020. The major share of emissions in the sectors included in the operational programmes is caused by transport. In 2013, this share was 50%; in the 2005–2013 period the share increased by 23%. Both facts can to a certain extent be connected to the characteristics of the settlement system in Slovenia and development processes in this period.

Unequal and dispersed population, a high level of commuting and the fact that services of general importance are located in major urban centres contribute to the great need for mobility. The densification of the urban system, mostly along spatial and developmental axes on motorways and patterns of internal migration oriented towards smaller settlements in the hinterland of the most important urban centres have additionally increased the scope of mobility, mainly by private vehicle, and also the increase in the use of energy in transport and emissions.

The planning of new residential areas in small municipalities in the hinterland of urban centres is not usually connected with the planning of public passenger transport. Planners and decision makers in local communities that were targeted by immigration generally overlooked the connections between the development of settlements, especially in residential areas, supply activities and the use of private vehicles and the impact on air pollution caused by greenhouse gases.

CHALLENGES

➔ **Including aspects of energy efficiency and the reduction of greenhouse gas emissions in spatial planning**

The Spatial Planning Strategy of Slovenia does not mention climate change or responses to climate change; however, some guidelines and measures are harmonised with efforts to limit greenhouse gas emissions caused by mobility and connected to the distribution of dwellings and activities in space. In the renewal of the strategy, which is currently in progress, it would be rational to emphasise these connections and envisage measures for spatial development focused on increasing energy efficiency and reducing greenhouse gas emissions.

➔ **Planning a system of settlements at the regional level for the transition to a carbon-free society**

The development of space in the past has shown weak points of the spatial planning system only at the level of municipalities and the state. Harmonisation at the regional level and the consideration of aspects of becoming a carbon-free society are urgently needed in planning the development of settlements. Upgraded spatial development and simulation models could be applied at the regional level.

BEST PRACTICE CASE

➔ **MORECO – Mobility and Residential Costs**

Transnational cooperation programme for Alpine Space

Within the scope of this project, tools were prepared for three target groups – households deciding on the purchase of a new residence, spatial planners and decision makers in local communities – raising awareness of the connections between mobility and the consumption of energy, as well as costs and greenhouse gas emissions. The online tool for households enables the comparison of costs of the purchase of residences and mobility at various locations. Comparisons frequently show that the lower costs of purchasing residences in less central areas are completely wiped out by higher mobility costs and the longer time required to commute to jobs and schools, and access services etc. The tool for spatial planners provides transparent information on the characteristics of residential areas, as well as possible scenarios of impacts with regard to available transport means, and it enables comparison of locations. An online presentation on the relationship between mobility, dwellings and costs, as well as on future trends and possible development scenarios in

these areas as support for designing and making spatial development decisions at the municipal and inter-municipal level, was prepared for decision makers in local communities. South-east Slovenia was used as a pilot region, where the majority of activities were implemented in the Urban Municipality of Novo mesto (source: http://www.moreco-project.eu/ and http://moreco.uirs.si/).

VI. REACTING TO CLIMATE CHANGE – ADAPTATION

The preparation of the strategy for adapting Slovenian agriculture and forestry to climate change began in 2004. The National Assembly adopted the document in 2008, and the strategy was implemented until 2013.

Adaptation to climate change was comprehensively considered in drafts of the strategy for Slovenia's transition to a low-carbon society. The document was prepared from 2010 to 2012, i.e. in two drafts. Subsequently, due to political instability and the worsening economic crisis, the process was terminated.

A long-term strategic document on adaptation to climate change is being currently prepared. The awareness-raising process and activities in this field have evolved at individual ministries and agencies (in addition to the field of agriculture and forestry; e.g. also for water management, protection against natural disasters) and on the initiative of NGOs, civil society and the expert public. The Slovenian Environment Agency collects and publishes climate and climate change data.

So far, local communities have planned for adaptation to climate change in environmental protection programmes. They focus only on a limited range of impacts, and most of the measures are connected with the planning of green spaces. A problem was noticed in the separation of activities or measures focused on mitigating climate change and activities or measures focused on adaptation.

From the aspect of adapting to climate change, green infrastructure and the consideration of needs for adaptation in planning and regulating blue and grey infrastructure[9], the renewal of buildings, neighbourhoods and city districts and the planning of new residential, service and production areas are very important. It is necessary to design measures to raise the awareness of residents and to support vulnerable groups.

CHALLENGES

➔ **Including adaptation to climate change in the planning processes and documents**
Adaptation to climate change was quite a marginal topic in planning and the management of local communities. We can envisage that it will increase in importance in the future. Connecting adaptation with established processes and documents, i.e. in spatial planning and environmental protection, is one of the challenges. It would be rational to integrate activities and not duplicate them.

[9] Blue infrastructure comprises elements of surface water and groundwater, the networks in which they are connected, and the functions that are executed in urban areas or at other spatial levels. Grey infrastructure includes all elements and public utilities services infrastructure network, e.g. transport infrastructure, electricity supply infrastructure and waste management infrastructure.

➔ **Providing support to local communities and stimulating the transfer of knowledge and cooperation**

Local communities need appropriate bases for planning and implementing adaptation measures – data on climate, scenarios and effects of climate change, vulnerability evaluations and other tools, training, incentives – an optimal, comprehensive system to support national institutions and other stakeholders involved in responding to climate change. We should emphasise the importance of the regional level, inter-municipal and cross-border cooperation and the fact that in EU countries there are many examples of best practice, information, methods and tools that can be used.

BEST PRACTICE CASE

➔ **Urban heat island (UHI)**

Central Europe programme

In the 2011–2014 period, the Urban Municipality of Ljubljana was included in a transnational cooperation project entitled the Urban Heat Island. Measurements of air quality were taken in Ljubljana, and the dimensions and condition of the heat island were determined. Data were inserted into the web atlas of urban heat islands, which contains a database for Central Europe. Several pilot actions were implemented, including the re-establishment of a water surface in front of the Slovenian Ethnographic Museum, and areas for play, work and rest were regulated; a prototype house for physical exercise with a green roof was built at a renewed children's playground; four streets and one square in Ljubljana acquired pocket parks – parks that cover the surface of one car park and partially relieve the heat effect in a densely built up area of the city centre (Environmental Report, MOL, 2014).

2.4 Management of cities and legal framework

Many local communities (212 in 2016), making up the total number of 2.06 million inhabitants, is typical of Slovenia (SURS, 2016). Prior to 1995, there were 63 municipalities; after the local self-government reform, their number gradually increased.

Municipalities are competent for all local matters affecting their inhabitants. The tasks of municipalities are legally determined, and all municipalities are obliged to undertake them. This primarily involves spatial planning, land servicing, local commercial and non-commercial public services, local public roads and non-profit dwellings.

Eleven municipalities are urban municipalities, which have the same tasks as other municipalities; laws allow them to also assume the implementation of tasks related to the development of cities which are otherwise implemented by the state. Ljubljana's status as the capital of Slovenia is regulated by a special law.

The second level of local self-government at the level of provinces or regions that is determined in the constitution has not been established in Slovenia yet.

A strategic document for developing local self-government in the Republic of Slovenia is now being prepared; it includes guidelines on understanding the content of tasks and implementing local authorities' tasks, the development of financial autonomy, the urban and regional identity of municipalities, the development of local democracy and inter-institutional dialogue.

I. DECENTRALISATION AND STRENGTHENING LOCAL COMMUNITIES

The professional public in Slovenia is quite critical of the current local self-government system. Slovenia is therefore one of the most centralised countries in Europe, since only one level of local self-government out of two as defined in the constitution has been established so far, i.e. municipalities. Local government is dispersed, while the role and impact of the state are expanding.

The large number of small municipalities is the main problem. More than 52% of municipalities have fewer than 5,000 inhabitants, thus not fulfilling the criteria of the minimum number of inhabitants as determined in the act on local self-government. This number was also the starting point for determining the scope and types of tasks and competences of municipalities, thus ensuring the effective implementation of tasks. Many municipalities do not have enough of their own human or financial resources to perform all tasks, meaning that they receive financial aid from the state. The state's incentives to merge municipalities have so far proven unsuccessful.

Size imbalance and the large number of weak municipalities are typical of the current condition of the first level of local self-government. This situation and the absence of a second local self-government level are also the main obstacles to further decentralisation and strengthening local communities. We should mention that this issue is highly politicised, disabling the dialogue and the search for suitable solutions. Recent attempts to establish provinces have been unsuccessful so far due to the lack of political consent. The major disagreements are over the number and seats of provinces.

CHALLENGES

➔ **Connecting municipalities to implement tasks more effectively**
In accordance with the relevant legislation, local authorities have various possibilities and tools for the joint implementation of tasks, e.g. the establishment of associations of municipalities, merging funds, joint municipal administrations, public institutions and companies; however, they have not used these to any great extent so far. The proposal of the Strategy of local self-government development in the Republic of Slovenia includes guidelines on this area, which should be upgraded with an action plan.

➔ **Extended dialogue on the content and importance of local self-government**
Due to the degree of politicisation of the first and second levels of local self-government, knowledge about this topic among the wider public and various social groups should be improved. More knowledge about the content and importance of local self-government and the formation of new »players« are essential to overcome the current situation.

II. SITUATION OF CITIES

Slovenian cities – settlements in the spatial framework – are not considered as a special category in administrative or political terms. Even Ljubljana, as the largest and capital city of Slovenia, is part of an urban municipality which includes almost 40 small non-urban settlements. Two tendencies can be seen concerning the special status and administrative organisation of cities:

- an emphasis on the developmental function of cities in the broader spatial framework and the need for a close connection with functional hinterlands, and
- efforts to treat urban settlements as units with special features and needs.

The latter is the basis of efforts connected with the Urban Agenda for the EU and with sustainable strategies of cities.

The position and role of cities in Slovenia are not unambiguously determined. There are 67 towns/cities, but only eleven urban municipalities. Not all towns/cities have seats of administrative units, and several settlements where the seats are located do not have the status of a town/city. Administrative and political organisation is not harmonised with the concept of the polycentric development of Slovenia.

CHALLENGES

➔ **The need for comprehensive solutions in the field of administrative and political organisation**
The proposal of the Strategy for developing local self-government in the Republic of Slovenia emphasises that administrative and political organisation must be adapted to the policy of the spatial development of Slovenia and that, along with the change of status of urban municipalities, the current concept of local self-government should be transformed. This is a complex and long-term process, which requires the cooperation of a wide range of stakeholders from the political, administrative, professional and public spheres.

➔ **The relationship between public administration and local self-government**
The determination of types and competences of municipalities, the role of provinces and potentially cities is also connected with the issue of relationships between the public administration and local self-government systems. The state's intention is to establish administrative districts, which could implement their public administrative functions alone. There is a possibility that this level would at least temporarily assume some competences which the state could transfer to provinces as the second level of local self-government.

➔ **Establishing a connection between the role and functions of cities in the polycentric settlement system and the spatial aspects of local self-government and public administration systems**
Several levels of centres and their functions are defined in the current Spatial Planning Strategy of Slovenia in connection with designing a polycentric settlement system. In the preparation of the renewed strategy, this system should be supplemented particularly from the aspect of the functions of centres at an individual level, and measures supporting the execution of such functions. The network or system of centres must be reviewed and harmonised with the plans for renewing public administration; the spatial planning sector can also significantly contribute to efforts to establish the second level of local self-government, i.e. provinces and regions.

III. THE FINANCIAL (IN)DEPENDENCE OF MUNICIPALITIES

Financing Slovenian urban municipalities is important from the aspect of the economic development of cities. The financing of cities is not envisaged in the legal system; however, the financing of urban municipalities is. Data about the number or share of municipalities in Slovenia which use their own financial resources to fund the execution of legally determined tasks and competences is very important in connection with promoting the economic development of cities or urban municipalities. The review of the income of municipalities to cover adequate spending in 2015 (data of the Ministry of Finance, 2016) showed that out of 212 municipalities only 14 did not receive so-called financial equalisation, i.e. funds in an individual budget year that are allocated from the national budget to municipalities which cannot finance adequate spending with income as stipulated by the law. Some small municipalities that are successfully financed from their own resources were also included in this group, along with the urban municipalities of Ljubljana, Maribor, Celje, Velenje and Kranj.

CHALLENGE

➔ **Most municipalities and most urban municipalities in Slovenia are financially dependent**
Only 6.6% of all municipalities and 45% of urban municipalities in Slovenia in 2015 were able to finance adequate spending from their own financial resources without state aid. The question remains as to whether municipalities that are financially dependent on the state are able to actively and independently stimulate, guide and support the economic development of local (urban) areas. Does this situation in financing not lead to a continuation or even increase the differences in regional development and to a spatial concentration of economically propulsive activities in some urban municipalities, especially Ljubljana? The possibilities for reducing the current number of municipalities and the changes in financing should be studied from this aspect.

IV. LOCAL DEMOCRACY AND THE INCLUSION OF THE PUBLIC

Legal provisions regulate the cooperation of inhabitants in the preparation of decisions at the local level in Slovenia. Furthermore, the methods of cooperation and access to public information are defined. Cooperation is adequately defined in law; however, there are some weaknesses in implementation. The shortage of modern and less formal forms of cooperation of inhabitants at the local level of decision making is quite noticeable.

A recent empirical analysis of the realisation of some principles of good administration in municipalities has shown that the principles of accessibility and responsiveness are almost entirely realised at the inclusion of public. The weaknesses are in the realisation of the principle of openness, the provision of information about procedures, possible methods of making complaints, the preparation of reports on including the public and the analysis of regulations' effects. Municipalities have an ambiguous attitude to the greater inclusion of the public: on the one hand, an opinion has been expressed that more inclusion would improve the quality and acceptability of decrees; on the other hand, it has been shown that the level of inclusion is sufficient (Rakar et al., 2014).

CHALLENGES

➔ **Developing the culture of including the public**

The inclusion of the public is not merely a question of legal and formal regulation. Local communities in Slovenia have some reservations about increased cooperation; on the other hand, the public is dispersed and acts in a number of initiatives and forms of organisations. The processes for including the public are demanding from the planning and implementation aspects, and they also need to be reasonably included in decision-making processes. This requires local administration staff to have appropriate information and knowledge, as well as the development of various forms of mutual cooperation of various stakeholders.

BEST PRACTICE CASE

➔ **The 3D Urbanism of the Urban Municipality of Ljubljana**

The Urban Municipality of Ljubljana presents the city in a 3D format and shows all planned projects, the planned intended use of space and the existing situation in space. The online platform enables people in Ljubljana to interactively review projects that are integrated among the 3D objects of the current situation in the municipality. The platform also displays detailed municipal spatial plans. The general public can cooperate in discussions on the spatial development of Ljubljana and provide comments on all presented plans. The 3D Urbanism of the Urban Municipality of Ljubljana is executed by the Urban Planning Institute of the Republic of Slovenia for the Urban Municipality of Ljubljana (source: http://www.ljubljana.si/si/mol/mestna-uprava/oddelki/urejanje-prostora/).

2.5 Urban economy

The urban economy is not a professionally developed area in Slovenia. It is an issue that for quite some time has been pointed out by the expert, research and planning public in the field of spatial development. There is almost no detailed research or studies about the issue of developing the urban economy in Slovenia. The urban economy is also not a clearly defined term in Europe and internationally, and it frequently overlaps with definitions of the regional economy. Besides theoretical and methodological guidelines, experts mostly consider specifically the local, regional, national and broader situation.

Besides the situation and trends, as well as the strategic framework for stimulating the economic development of cities (urban municipalities) in Slovenia, this chapter particularly discusses the issue of stimulating the development and spatial integration of commercial zones. We decided to discuss commercial zones, because they have been an issue of concern for the past 15 years. As a way to stimulate the economic development of the country and (urban) municipalities, commercial zones have been mentioned in various national and local strategic documents.

This framework could in principle also contain a consideration of some other contemporary and intertwined phenomena and processes, such as the smart city and related creative industries, the urban circular economy, urban informal economy and others. The phenomena and processes connected to the development of the aforementioned topics are in their initial phase in Slovenia. They usually occur in national and local strategic documents as statements of principle, while efforts in these areas are quite limited in current economic and social practice.

CHALLENGES

➔ **The urban economy in Slovenia is underdeveloped as a scientific and expert discipline**

When preparing new strategic developmental documents in Slovenia, it would be reasonable to think about the possibility of recognising the most important cities in Slovenia as the key promoters of economic development and applying appropriate legal amendments, also in the field of local self-government, to ensure them the levers to manage an economic policy as independently possible. The issue of the role of the urban economy emerges in connection with the aforementioned facts.

The urban economy can be defined a branch of economy that includes the urban space in its methodological and theoretical framework as a factor in economic development. Urban space is a dynamic functional link between available traditional production factors (ground/soil, labour force, capital), which through the co-existence of various variables (size, structure, density, location) and in connection with other cities and settlements in the broader territorial framework (region, state) and accessibility to these settlements creates the conditions for: (1) the development of new, modern production factors (the creation and dissemination of knowledge and entrepreneurship), (2) an increase in economic competitiveness, (3) the stimulation of economic growth, (4) sustainable economic development, (5) an increase in welfare and the quality of life of residents of the city and the broader urban influence area.

I. SITUATION AND TRENDS IN THE ECONOMIC URBAN DEVELOPMENT

Strong pressures to allow the domination of a neoliberal paradigm of development are occurring in economic and other social systems at the global level. Believers in neoliberalism are striving to reduce or eliminate all systemic obstacles that distort the optimal functioning of the market. Systemic obstacles usually mean the regulatory role of the state, which is implemented with legislation, the tax system and various economic transfers.

The new urban policy is closely connected to the neoliberal economic policy which is marked by deregulation, privatisation, the »flexibilisation« of the labour market and spatial decentralisation. Typical features of the new urban policy are the movement from a social to an economic policy, new state entrepreneurship, the foundation of urban developmental coalitions, urban marketing and territorially-oriented social policy. Policy-makers plan and realise urban developmental projects, in which they develop public-private partnerships, as well as real property and locally-delimited flagship projects (Swyngedouw et al., 2002; 2014).

The indicated global economic trends and related urban spatial planning policies, programmes and projects have until now not been completely transferred to the space of Slovenian cities. The reasons for this »delay« can be found on the one hand in the consequences of an ongoing economic crisis, and on the other hand in the poor global recognition and the marginality of Slovenia. Despite this, urban settlements (156) – regardless of their size and significance in the settlement system – in their municipalities and urban municipalities (11) in Slovenia are encountering the challenges of globalisation (global economic integration), further enforcement of the so-called neoliberal paradigm of economic development and the deterioration of the regulative and developmental role of the state. These processes compel the authorities of (urban) municipalities and their administrations to seek innovative ways and solutions to improve the competitive conditions for developing the local economy, improving transport and economic infrastructure, innovation, entrepreneurship and marketing. The adaptation of the economies of cities (urban municipalities) to developmental challenges, despite the state's active regional policy which strives to reduce differences in the living standards of the population between regions, lead to even more unequal patterns of local and regional spatial development. Some cities or urban regions (e.g. Ljubljana and LUR) are becoming relative »winners« of the economic restructuring process, while others (e.g. Maribor and the Podravje region, Hrastnik, Trbovlje, Zagorje and the Zasavje region) are becoming relative »losers«.

We must mention the specific features of the relationship between economic development and urbanisation in Slovenia. Despite the general view that processes of economic development and urbanisation are closely connected or that they encourage each other, and despite the fact that the level of urbanisation in most countries with high per capita incomes is above 70%, the situation in Slovenia is quite different. Slovenia has a low level of urbanisation (50%) and medium high income per capita (EUR 18,700). Numerous, mostly eastern European countries, have a significantly higher level of urbanisation and lower income per capita in comparison to Slovenia.

The sub-urbanisation and de-urbanisation processes that are partially connected to the de-industrialisation of the most important Slovenian cities and towns are accompanied by the rapid economic (mostly industrial) development of small urban and other rural settlements. Due to the lower costs of land, municipal equipment and labour, development is often connected to direct

domestic and foreign investment. This affects the acceleration of the »urbanisation« of the countryside, particularly in the regulation of space and construction of modern public utility infrastructure according to »urban criteria« and by adopting urban cultural patterns and developing a (sub)urban lifestyle, habits and values.

CHALLENGES

➔ **Differences in the perception of urban development between the EU and Slovenia**
From the »outsider's view«, as recorded by various European institutions (Eurostat, GD Regio), networks (ESPON) and projects (EDORA), Slovenia is recognised – to make a generalisation – as a predominantly rural area within the EU, with only two relatively weak urban centres (Ljubljana and Maribor). The »insider's view«, however, recognises 156 urban settlements and settlements in urban areas with two large cities (Ljubljana and Maribor) and nine medium-large cities.

➔ **Further densification of urban development in Ljubljana and the Ljubljana urban region**
We can expect the continued »metropolisation« of Ljubljana and the Ljubljana urban region, as well as lagging and deterioration of the remaining part of Slovenia, especially traditionally industrial (e.g. Maribor, Hrastnik, Trbovlje, Zagorje, Jesenice and their wider urban areas), marginal (e.g. Kočevje), hilly and mountainous rural areas (e.g. settlements in the Pohorje mountain range) and coastal areas (e.g. settlements in the Obkolpje region). Appropriate policies and measures to enable easier and more »equal« adaptation of (economies of) all cities to the neoliberal economic situation should be determined at the national level.

➔ **Taking a critical standpoint by understanding the current situation and developmental processes that influence the development of Slovenian cities**
New economic and social conditions demand that decision-makers at all levels critically rethink and realistically assess the situation and processes in society, the economy, the environment and space, as well as the reasons for these conditions and seek new, innovative and urban environment-adapted solutions.

II. THE STRATEGIC FRAMEWORK FOR BOOSTING THE ECONOMIC DEVELOPMENT OF MUNICIPALITIES

Professional views on the connection between the economic development of cities and central government are not in agreement. Some authors claim that cities are sources of economic growth (Jacobs, 1969, Jacobs, 1984, Duranton, 2000, Quigley, 1998, Fujita and Thisse, 2002, State of the world's cities, 2013), but other opinions relativise this cause and effect relationship (Polese, 2005). That both factors and processes are significantly connected is generally agreed.

We provide below a review of the definitions of cities as sources and promoters of economic development in the relevant strategic documents both at national and local levels: the Spatial Planning Strategy of Slovenia (SPRS,2004), Slovenia's Smart Specialisation Strategy – S4 (SSPS, 2015), the Slovenian Tourism Development Strategy (SRST, 2012) and the sustainable urban strategies of urban municipalities (TUS).

The Spatial Planning Strategy of Slovenia contains some important guidelines that emphasise the connection between cities and economic development: the centres of national and regional importance are ... the most important economic areas ... (SPRS, 2004: 11), increasing the

location-related attractiveness of cities, enabling economic development (SPRS, 2004: 13), settlement development is planned in accordance with spatial possibilities and limitations to ... create possibilities for economic development ... (SPRS, 2004: 20), the internal development of settlements and rational land use is realised by changing the use of existing facilities and land, by the densification of extensively used settlement spaces, with renovation, renewal, re-urbanisation, reconstruction and the rehabilitation of degraded areas, where the possibilities for economic development are considered besides spatial goals (SPRS, 2004: 21), renewal is a form of urban planning of settlement that includes the possibilities for economic development along with spatial planning goals ... (SPRS, 2004: 21).

Slovenia's Smart Specialisation Strategy »is a platform for focusing developmental investment on areas where Slovenia has a critical mass of knowledge, capacities and competences with innovation potential for positioning in global markets and strengthening its recognition« (SSPS, 2015: 4). The importance of cities as »economic centres« is shown in the SWOT analysis, in which the threats contain a warning about the »domination of neighbouring economic and knowledge centres (Graz, Udine, Zagreb ...)«, and where the opportunities define »cross-border complementary linkages with the specialisation of neighbouring economic and knowledge centres that can create synergies for mutual benefit« (SSPS, 2015: 6). The priority sub-area »smart cities and communities« is considered in general terms; cities or communities where the programme should be implemented are not determined, and the connection with cities as important stakeholders in horizontal linkage processes is also not envisaged (SSPS, 2015: 10-11).

The Slovenian Tourism Development Strategy 2012–2016 should also be included among the current national strategic documents that consider individual aspects of economic development and which can significantly influence the economic urban development. The importance of historical Slovenian cities (Idrija, Koper, Kranj, Novo mesto, Piran, Ptuj, Radovljica, Slovenske Konjice, Škofja Loka and Tržič founded the Association of Historical Cities of Slovenia in 2001) is also emphasised as one of the fundamental guidelines for the tourist offer. The »CITIES« tourist product aims to boost recognition of historical cities in the domestic tourist market and the markets of neighbouring countries, to prolong stays in cities for more than just a few hours or one day, and to organise, and achieve transparency in the sale of, tourist programmes connected to historical Slovenian cities (SRST, 2012: 52).

Sustainable urban strategies are new instruments for developmental urban planning. The Republic of Slovenia determined urban settlements and settlements in urban areas in urban municipalities as areas of sustainable urban development that are eligible for funds from the European Regional Development Fund, i.e. in the Partnership Agreement and in the Operational Programme for the implementation of the European cohesion policy in the 2014–2020 period. Eleven sustainable urban strategies were prepared in Slovenia, most of which have been adopted. The documents are based on the current spatial, economic and other sectoral documents of municipalities, regions and the state, and they mainly summarise and link ideas, guidelines and proposals concerning measures/projects for urban areas.

CHALLENGES

➔ **Specifically determine the links between urban (spatial) and economic development**
The cause and effect relationships between urban development (urban centres) and the economic development of the country must be emphasised as clearly as possible.

➔ **Determining the starting situation and goals in stimulating the economic urban development**

The preparation of the new spatial development strategy of Slovenia should determine the starting situation of the spatial and urban dimensions of the economic development of cities and the country at least for centres of national and regional importance, as well as guidelines, anticipated long- and medium-term results and instruments to stimulate the realisation of guidelines.

➔ **Cities (urban municipalities, urban settlements) should become the subjects and users economic development stimulation**

In the recent period, despite the lack of an appropriate supporting legal and managerial framework, many Slovenian cities have proven themselves, and use projects to effectively realise their entrepreneurial and economic potential (e.g. Ljubljana, Koper, Novo mesto). The current legal and regulatory framework should be supplemented to enable cities in the future to use all their spatial, social, environmental and natural resources for the economic development of urban and functional areas, as well as the country as a whole.

➔ **Connecting the smart specialisation strategy with the spatial planning strategy of Slovenia**

The lack of linkages between strategic documents and the exclusion of Slovenian cities (urban settlements) from the preparation and implementation of the SSPS is very problematic. Cities are »living laboratories«, where inventions evolve into innovations. The latter further develop, are upgraded, expanded and realised in the framework of these laboratories. At the same time, cities as local communities and authorities play a key role in the development of smart cities in the EU (European Innovation Partnership, 2013).

➔ **To comprehensively recognise the importance of tourism for the economic development of cities**

In the SRST, the future development of tourism is not unambiguously focused on Slovenian large (e.g. Ljubljana, Maribor, Koper) and small cities (e.g. Bled, Piran/Portorož, Postojna) as key destinations. The importance and role of urban tourism or a tourist city as an area which, with its historical, architectural and artistic features, cultural specialties, opportunities for engaging in organised and random events, enables tourists to be included in urban life (La Rocca, 2013: 202) must be recognised, and valid strategic documents must be appropriately upgraded.

➔ **The collaboration of urban municipalities to achieve goals**

Many goals, guidelines and measures in the sustainable urban strategies of cities are similar, such as the circular economy, smart cities and low-carbon municipalities. Collaboration between (at least neighbouring) urban municipalities and wider urban areas would be reasonable for the purposes of synergetic operations for achieving goals.

➔ **Further analysing the consideration of economic development aspects in sustainable urban strategies**

In most TUS, the broader developmental context (framework) is not considered. The programme and content framework of current European, state, regional and municipal documents is considered as the context. Such contextual linkage is necessary and beneficial, but is not sufficient.

➔ **Sustainable urban strategies can stimulate competition among municipalities**
Considering the characteristics of TUS, a fairly narrow territorial view and the absence of proposals for project linkage with other cities and their urban areas, the questions arise of how to create an appropriate legal and regulatory framework to stimulate the economic development of cities (and wider urban environments) by exploiting developmental potential, and how to mitigate the tendency to increase competition, which can reduce economic development and the economic development of the country as a whole.

III. BOOSTING DEVELOPMENT AND INTEGRATING COMMERCIAL ZONES INTO THE ENVIRONMENT

Commercial zones as ways to stimulate economic development in Slovenian municipalities were quite interesting at the beginning of the previous decade, and appeared simultaneously with the opening of the Slovenian economy to European and global markets. Many municipalities saw an opportunity in commercial zones to boost local development by attracting (mainly) foreign investors and by creating new jobs. In other cases, especially in small municipalities, zones were intended for local traders and entrepreneurs in order to keep them in the municipalities, enable them to expand activities by providing spatial capacity, and at the same time provide for the environmentally friendly conduct of business. The zones were included in the spatial planning documents of municipalities as developmental measures and as intended use areas. Municipalities frequently sited commercial zones both in areas of abandoned industrial areas and in completely new areas.

In the early period of establishing commercial zones, the process evolved spontaneously and incoherently. This resulted in a huge number of areas, incoherent marketing; many locations proved unattractive to investors, and in some cases the prices of land were too high.

In 2006 the Public Agency for Entrepreneurship, Internationalization, Foreign Investments and Technology – SPIRIT Slovenia procured a project entitled Business Zones on the Internet, which contained a definition of commercial zone, a proposal to categorise commercial zones, and the location criteria for integration in space, as well as a proposal for an interactive GIS system displaying the current offer of commercial zones in Slovenia – INVEST SLOVENIA. The website is active, and various domestic and foreign stakeholders regard it is a useful instrument for recognising the suitability of Slovenia and individual urban and locations for direct domestic and foreign investments.

Business, industrial and craft-entrepreneurial zones are developmental factors included in the sustainable urban strategies of all Slovenian urban municipalities as a problem and challenge, or as a priority area, goal, measure and indicator with local and regional characteristics. It is important that numerous strategies define the clear intention that commercial zones should develop mainly in degraded industrial areas that have been environmentally rehabilitated and have communal infrastructure. Some urban municipalities have taken a step further and are planning to construct eco-industrial zones (TUS Ptuj, 2015: 59) and low-carbon commercial zones (TUS MOL, 2015: 49).

In this context, we must emphasise that the Spatial Development Report (2016), which does not directly deal with the issue of promoting commercial zones or their connection with the development of cities, considers the influence of the economy on regional spatial development and proposes a range of indicators to monitor this influence (Spatial Development Report, 2016: 71).

CHALLENGES

➔ The planning and development of commercial zones in Slovenia does not evolve in accordance with the guidelines of the Spatial Planning Strategy of Slovenia

The SPRS does not explicitly determine the areas for the priority development of commercial zones at the national level, except perhaps in the case of centres of international importance (Ljubljana, Maribor and Koper); the spatial criteria and guidelines create a broader basis for domestic and foreign commercial entities when deciding where and how to distribute potential commercial zones. An important challenge is the fact that the state does not dispose of appropriate systemic conditions and managerial practice which could be used to overcome the predominant dispersed development scenario, whereby urban and other municipalities strive to integrate commercial zones in their area only in accordance with their interests and needs and regardless of the potential for a wider spatial and functional connection within urban regions and the nationally.

BEST PRACTICE CASE

➔ Commercial zones on the Internet

A proposal to distribute commercial zones into categories was devised in the project and the location criteria for spatial integration were submitted. The categories are commercial zones of national, regional and sub-regional importance; the criteria for distribution follow the SPRS. Table 3 shows the categories and location criteria for the development of commercial zones of national importance. The categories and location criteria were also defined for commercial zones of regional and sub-regional importance.

Table 3: Commercial zones in the area of centres of national importance (Gulič and Bizjak, 2007–2012)

Location criteria	
Functional importance	International, national, regional
Size	min. 90 ha (several physical or functionally linked commercial zones, each of which is at least 30 ha in area)
Possibility of spatial expansion	Additional area that is approx. 1/3–1/2 of the size of the functional surface reserved for the potential expansion of an individual sector
Proximity of existing commercial zones	Vicinity and accessibility of existing commercial zones within the accessible radius are important for linking internal companies (cooperation and division of functions)
Proximity of large centres	Centre of international or national importance
Gravitation hinterland	100,000 residents
Investor's origin	Foreign and domestic
Content	Multicultural (industry, production craft, craft, business activities, trade, repair, storage and service activities etc.)
Determination of intended use of space	Area of production activities
Spatial structure	Large structure, building quadrants (e.g. net raster: 250 x 120 m or 60 x 120 m), Mixed structure (architectural and urban spatial planning typological partiality)
Vicinity of a traffic hub	Vicinity of the most important national, important national or regionally important traffic hub merging the traffic infrastructure of various transport sub-systems and which is located at/near a centre of national importance
Linkage to road infrastructure	Motorways, expressways, main roads of classes I and II
Linkage to railway infrastructure	Main roads of classes I and II directly or via the industrial sidings
Linkage to air transport	Public airport/heliport for international air transport (of a lower category) and

infrastructure	domestic air transport
Linkage to public passenger transport infrastructure	Passenger terminal for managing public passenger transport of international of national importance
Linkage to combined transport infrastructure	Transport terminal for combined transport of national importance
Linkage to municipal, energy and communication infrastructure	Electric power network, optical cable network, telephone, cable TV, gas pipeline, hot-water pipeline, industrial heating, water pipeline, sewage, purification plant (immediate vicinity), landfill (immediate vicinity), waste management centre (immediate vicinity)
Rehabilitation of abandoned areas	Priority use and renewal of abandoned industrial, municipal, transport and similar areas and their reuse

Commercial zones of national importance are zones used by the centres of national importance and Slovenia as a whole to attract direct foreign investment and acquire: inclusion in international economic flows, adaptation to modern market economy standards, assistance with marketing presentations abroad, the dispersal of trade and investment in several countries, the export of knowledge and own brands, greater emphasis on developing quality, new jobs, increasing exports, new technologies and new knowledge. Therefore, such zones must be in a suitable macro location, they must be appropriately dimensioned and have the opportunity for further expansion and an optimal connection to the highest categories of all types of transport infrastructure.

Commercial zones of regional importance are zones used to optimise spatial, infrastructural and other conditions for the operations of large economic systems that in terms of business greatly exceed regional and partially national frameworks. Such zones are located at centres of regional importance and have a large gravitation hinterland (50,000 residents); they are connected to high categories of all types of current and/or planned transport infrastructure.

Commercial zones of sub-regional importance exceed local frameworks and create spatial and infrastructural conditions for the functional integration of existing and planned commercial capacities within the scope of inter-municipal centres that also have appropriate economic potential besides the important functions of supplying the population with public functions, and goods and service activities in the immediate hinterland.

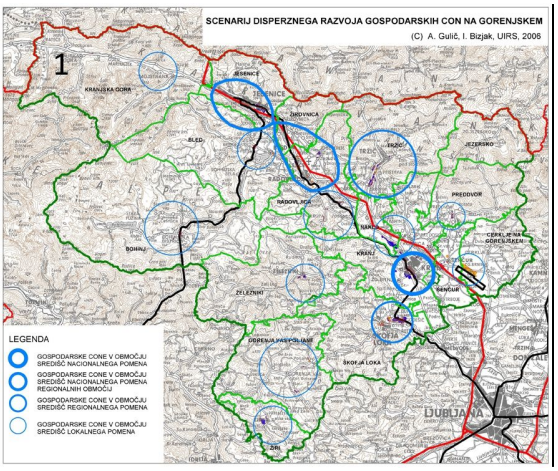
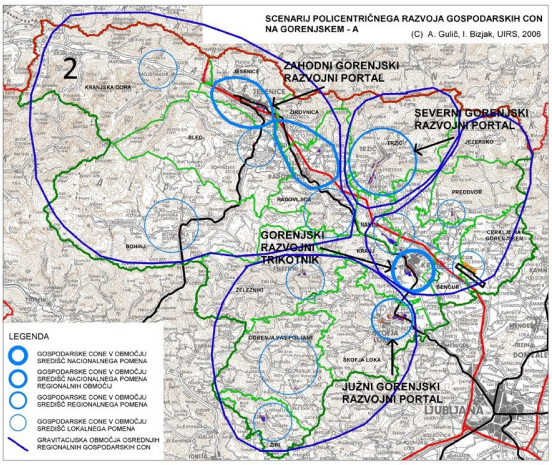
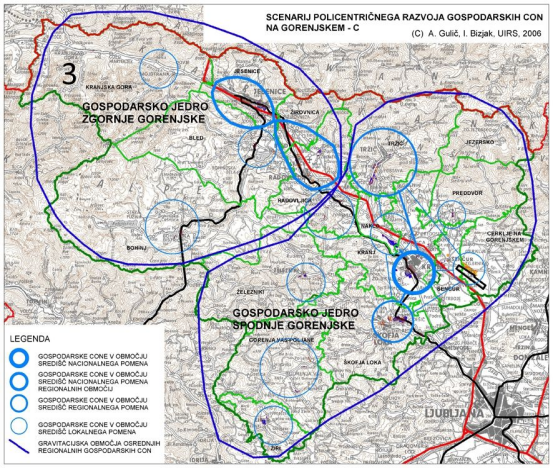
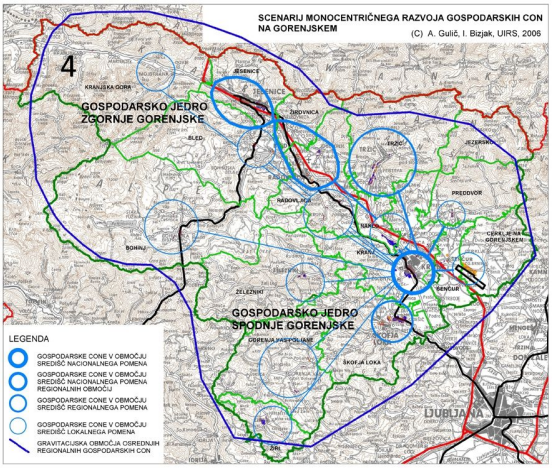
➔ **Professional bases for the management and spatial development of commercial zones in the Gorenjska region**

Various scenarios for the development of commercial zones in the Gorenjska region were prepared in the project. Here, the criteria for the spatial allocation of commercial zones determined in the project entitled Business Zones on the Internet were considered. Figure 12 presents the possible scenarios for developing commercial zones in the Gorenjska region.

The scenarios show various possibilities of development, linkage and the management of existing and planned commercial zones in the region. The key developmental stakeholders in the region decided to realise the so-called monocentrically managed development scenario. This scenario upgrades the dispersed development scenario and polycentric development scenarios for commercial zones in the Gorenjska region, i.e. to establish the Economic Centre of the Gorenjska Region as a uniform business system that is organisationally, institutionally and logistically connected and this system markets all commercial zones with importance beyond the local level. Furthermore, this scenario also

envisages the inclusion of all other commercial zones of local importance that are interested in such business collaboration. The target guidelines of the selected scenario have not been realised in practice, where today the so-called dispersed development scenario is, and where all municipalities in the region strive to have a commercial zone integrated on their territory, which will be harmonised with the interests and needs of a specific municipality without searching for the possibilities of a broader spatial and functional collaboration in the region.

Figure 12: Scenarios for developing commercial zones in the Gorenjska region (source: Gulič and Bizjak, 2006)

THE SCENARIO OF DISPERSED DEVELOPMENT OF COMMERCIAL ZONES IN THE GORENJSKA REGION	THE SCENARIO OF POLYCENTRIC DEVELOPMENT OF COMMERCIAL ZONES IN THE GORENJSKA REGION - A
	
THE SCENARIO OF POLYCENTRIC DEVELOPMENT OF COMMERCIAL ZONES IN THE GORENJSKA REGION - C	THE SCENARIO OF MONOCENTRIC DEVELOPMENT OF COMMERCIAL ZONES IN THE GORENJSKA REGION
	

LEGENDS:
- o commercial zones in the area of centres of national importance
- o commercial zones in the area of centres of national importance in regional areas
- o commercial zones in the area of centres of regional importance
- o commercial zones in the area of centres of local importance
- / gravitational areas of central regional commercial zones

2.6 Housing and services in urban areas

General information about the housing stock

According to information from the Statistical Office of the Republic of Slovenia, on 1 January 2015, the Housing Fund of the Republic of Slovenia comprised 845,400 dwellings, of which 508,700 (60%) were located in one- or two-dwelling buildings; their average functional surface was 97.1 m^2. Some 336,700 dwellings (40%) were located in three- or multi-dwelling and other buildings, and their average surface was 55.2 m^2. Almost half of the entire Slovenian housing stock is located in the five largest cities: 29% in Ljubljana, 11% in Maribor, 4% in Celje, 3% in Kranj and 3% in Koper. The share of owner-occupied dwellings in Slovenia is among the highest in Europe, and accounts for 91% (SURS, 2016).

According to the same source of data, 674,500 of dwellings are occupied and account for 80% of the entire housing stock. More than 80% of occupied dwellings (547,800) are owner-occupied, where 83% of inhabitants live, i.e. in 653,300 private households. The second highest share of occupied dwellings, i.e. 71,500 (11%), are so-called user dwellings. These are dwellings where none of the residents is an owner and the dwelling is not a rental dwelling. The other 55,200 occupied dwellings (9%) are registered as rental dwellings.

Although 14,500 new dwellings were built in the period following the registry census in 2011, SURS found that the size of the housing fund had barely changed up until 2015. This can be explained by the improved regulation of data on real property in the real property register, since owners were informed about informational real property tax calculations in 2014. Due to the aforementioned activities, around 5,000 dwellings in old, usually single-dwelling buildings were eliminated from the housing fund, and around 10,000 dwellings were categorised in the real property register as »uninhabitable«. These dwellings are usually old or not fully built, so they are no longer included in the housing stock.

In the past few decades, the fact that the offer of dwellings with regard to quantity and quality is inadequate is now the case in Slovenia. A major shortage has been noted in the rental dwellings sector. Prior to the privatisation of public rental dwellings at the beginning of the 1990s, the ratio between owned and rental dwellings in Slovenia was 67% to 33%. Since the end of the privatisation of dwellings in 1993, this ratio has significantly changed in favour of owner-occupied dwellings, the share of which has increased to 89%. According to recent SURS data, the share of owner-occupied dwellings is 91%; there are only 6% rental dwellings; the remaining 3% are categorised as »dwellings owned by another legal entity« (SURS, 2016). The demand for rental dwellings is higher in cities and urban centres, due to the greater number of job opportunities, education and better transport connections. On the other hand, municipalities are dealing with a high demand for land to construct individual dwellings, resulting in low-density areas.

The key document for resolving the current housing issue in Slovenia is the National Housing Programme Resolution 2015–2025, which was adopted by the Government of the Republic of Slovenia in November 2015. This document dedicates special attention to the housing problems of young people, the elderly and vulnerable groups of residents, as well to increasing the offer of rental dwellings.

The National Housing Programme Resolution (ReNSP) determines that the current situation in Slovenia is as follows:

- there is a shortage of dwellings in locations where there is most demand;
- there is a shortage of rental dwellings, especially those that could help the most vulnerable groups of people overcome their housing problems;
- the share of private dwellings is very high, affecting the physical condition of the housing stock;
- the housing stock is ageing – it does not fulfil the energy or functional standards of modern society and increases the costs of living;
- investors have no interest in investing in constructing buildings in the public interest;
- the current legislation does not support the development of the rental market – tax and housing legislation do not enable balanced measures to establish an effective housing supply system;
- population mobility is low – this means that people are not prepared to change their dwelling on the basis of their needs in specific periods of life.

I. HOUSING STANDARD AND THE QUALITY OF THE LIVING ENVIRONMENT

The current forms of residential construction are mostly characterised by two features. On the one hand, a fairly high number of residents is concentrated in social dwellings, while on the other hand, individual single-storey single-family houses with low density, irrational use of land, insufficient transport, municipal and general supply, are being built without appropriate regulation. This duality is quite typical of Slovenia, since on the one hand, we encounter the problem of housing overcrowding (Sendi, 2013), and on the other hand, many residents live in dwellings and houses that are too big for their needs and maintenance abilities. With regard to the quality of housing and living standards, the first category, i.e. multi-dwelling construction, is quite insufficient.

The key indicators for assessing the quality of the housing standard include the average usable dwelling surface, the average number of rooms in the dwelling, the average number of persons living in the dwelling, the average number of persons in the household and the average usable surface per person. When considered cumulatively, these assessment factors determine the most important indicator of the area-related housing standard, i.e. population density, which was adopted by the OECD Council in 1980 as the key indicator of the housing standard (OECD, 1980).

A detailed analysis of statistical data and analysis of comparisons with the developed EU countries show that on average Slovenia has a low housing standard and that most residents live in dwellings that can be deemed overcrowded by international standards. This specifically refers to the unsuitability of surface-related housing norms that have a direct effect on the quality of the housing standard. The quality of most of the existing housing stock is poor. The average size of dwellings is much smaller than the average size in developed EU countries. The density of dwelling occupancy is also higher in Slovenia. The analysis shows that the existing housing stock has a surplus of smaller dwelling units, while there is a shortage of approximately 30% in the availability of four- and multi-member households. Population density is 20–30 m^2 per

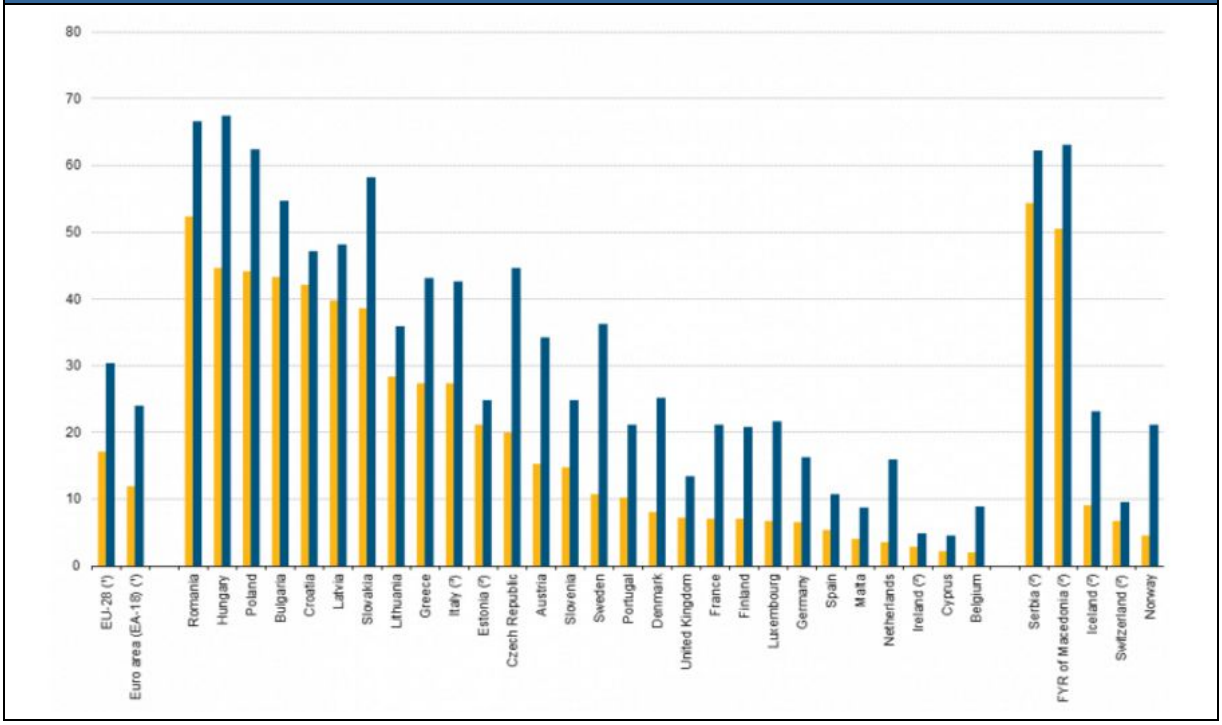
person. The key finding here is that almost 70% of all residents live in dwellings where each person has less than 30 m^2 of functional surface (the average for developed EU countries is 36.5 m^2 of usable surface per person) (Sendi, 2013).

Table 4: Occupancy status of dwellings –useful floor space per person in 2011 (source: SURS)

Density standard (average useful floor sopaceper occupant)	Occupied dwellings		Occupants	
	Number	%	Number	%
Less than 10 m^2	23,698	4	131,985	7
10 or less than 15 m^2	63,883	9	288,889	14
15 or less than 20 m^2	94,179	14	371,792	19
20 or less than 30 m^2	178,148	27	593,157	30
30 or less than 40 m^2	114,901	17	293,720	15
40 or less than 60 m^2	111,041	17	203,362	10
60 or less than 80 m^2	48,633	7	65,384	3
80 or more m^2	35,644	5	41,052	2
Total	**670,127**	**100**	**1,989,341**	**100**

According to Eurostat data, in 2014 Slovenia was in the upper half of EU countries with the highest overcrowding rate.

Graph 6: Overcrowding rate in EU countries (source: Housing Statistics, Eurostat, November 2015)



CHALLENGES

➔ Improving the housing standard

A suitable dwelling in Slovenia is defined as a »dwelling in a single- or multi-dwelling building built in accordance with the minimum technical conditions that apply to the construction of residential buildings and dwellings. This dwelling must have separate sleeping and living areas (except in the case of bed-sits) and must satisfy the housing needs of the owner or tenant and immediate family members who live with the owner or tenant in a common household« (Housing Issues in the Republic of Slovenia, 2012). The definition of suitability is an important foundation for developing a concept of dwelling quality; however, a systematic approach to securing and maintaining a suitable housing standard must be taken to improve the quality of life. We should achieve the level of quality of a dwelling that satisfies the needs of households for living with regard to size and ground plan, the functionality of rooms, the equipment in the dwelling, comfort, which is not overcrowded.

➔ Comprehensive renovation of the housing stock

An important challenge regarding the housing standard and the quality of the living environment is to comprehensively renovate the housing stock. The latter is obsolete and needs renovation. Most single-dwelling buildings were built in the 1970s and 1980s (40% of single-dwelling buildings), and more than 70% of the total housing stock is over 30 years old. Some 33% of all households in Slovenia live in dwellings that have at least one of the following deficiencies: leaking roof, damp walls, foundations or floor, rotten window frames or floor. Here we can mention the second indicator of the housing standard quality based on Eurostat data of the »*severe housing deprivation rate*«. According to Eurostat data and with regard to this housing quality indicator, Slovenia is ranked low on the scale of EU countries, i.e. it is categorised among the countries with a low standard.

This situation shows the extremely poor quality of quite an extensive portion of the housing stock in Slovenia, the low living standard of the residents and the fact that measures for housing renovation must be prepared and implemented. Housing renovation also has great potential for the development of the building sector in the future. At this point, we must emphasise investments in the energy and anti-earthquake rehabilitation of the building stock. The goals of housing renovation relate to goals concerning climate change (20-20-20 Targets) and to the prevention of energy poverty of households.

➔ Improving the quality of residential areas

A major problem with regard to the quality of residential areas is the inappropriate consideration and regulation of all types of transport in residential areas and good access to these areas. When commuting on a daily level, most residents rely on private vehicles due to the high level of motorisation, the uncompetitive public transport system and poor cycling infrastructure. The number of vehicles per household often equals the number of adults in the household, meaning that stationary traffic puts great pressure on public space in densely populated housing areas.

Incentives to construct car parks to provide additional parking space for residents are emerging in some neighbourhoods. However, such expensive investments are only rarely implemented. The construction of new car parks also encourages the use of cars in residential areas and the residents are further motivated to own a larger number of cars. Best practice examples in developed countries comprise solutions for the comprehensive regulation of all means of transport in the neighbourhood, especially in parking

management, i.e. where parking is provided for one vehicle per dwelling unit, and additional vehicles can be parked only if enough space is available and under less cost-effective conditions. We must also emphasise the provision of areas easily accessible by bicycle or on foot, through effective public transport system, enabling residents to do their daily chores without using a car. Residential neighbourhoods and urban areas that have limits on cars (car reduced areas) or are even car free can be planned in such a manner, such as the Vauban residential neighbourhood in Freiburg, Germany.

The second problem related to improving the quality of housing areas refers to the regulation of green areas and other outdoor places, such as children's playgrounds and other recreational areas. The maintenance of outdoor areas in some residential neighbourhoods is difficult due to (still) unresolved rights with regard to the ownership of functional areas. This problem arises from the fact that after the privatisation of the social stock, residents became owners of individual dwelling units but not the owners of land plots on which the buildings stood. Regardless of these legal and formal conflicts, a comprehensive plan for the renewal of green and other outdoor areas must be prepared, including a financial plan for regulation and maintenance.

Recently, other forms of settlement have been emerging in Slovenia which differ conceptually from earlier predominant forms of, on the one hand, a high-density social housing construction and on the other hand uncontrollable building of individual single-family houses. Efforts to create more suitable living conditions can be noticed in some of the new forms of settlement. Improving the quality of residential areas and improving the quality of the housing stock must remain a priority task.

BEST PRACTICE CASES

➔ Planina Kranj

The Urban Municipality of Kranj will for the first time systematically tackle the renewal of existing residential neighbourhoods. The comprehensive revitalisation pilot area will encompass the Planina neighbourhood, which has 52 ha of open space and more than 140 multi-dwelling buildings, as well as 12,500 residents, and is therefore one of the largest urban neighbourhoods in a Slovenian city. This neighbourhood is categorised as a functionally degraded urban area of Kranj, since it faces multi-layered challenges (stationary traffic, intervention areas, social conflicts, multi-ethnicity, potential for social entrepreneurship, areas for recreation and socialisation, energy inefficiency, safety of passageways and cyclists, public transport, urban equipment etc.).

The purpose of the activity is to consider new approaches to comprehensive renovation and to include the residents, as well as to contribute to improving the quality of life in the area of the Planina neighbourhood. New concepts for internal collaboration within the neighbourhood, the regulation of stationary traffic and sustainable mobility, the regulation of open play, sport and socialisation areas customised for residents, including urban gardens, dog walking areas and the activation of the community centre within the neighbourhood will be considered. This project has also launched a comprehensive energy renewal of multi-dwelling buildings for the purpose of achieving »low-carbon neighbourhoods«, where owners show an interest in this (source: TUS MOK, http://www.kranj.si/KRANJ_SI,,tus.htm).

➔ **Including non-governmental organisations in the development of the issue – Mreža za prostor (Network for Space)**
A working group for residential policy was founded within the Mreža za prostor project for the purpose of developing sustainable ways of life that increase the share of non-profit rental dwellings and urban renewal, which has been actively included in the discussion on the preparation of the new housing policy and the Housing Development Programme of Slovenia. The strategic goals of the work of this group include »increasing the share of non-profit rental dwellings in Slovenia by establishing housing cooperatives«, »increasing the scope of urban renewal of housing areas« and »modernising housing and standards of living on the basis of sustainable development values and social collaboration, taking into consideration modern ways of living« (source: http://mrezaprostor.si/).

➔ **Housing funds**
The realisation of development programmes of housing funds along with the improvement of accessibility to dwellings for vulnerable groups of residents, the increase in renting dwellings and the regulation of processes related to rental significantly contribute to enhancing expectations with regard to the quality of the broader living environment. The introduction of comprehensive criteria for assessing the quality of the criteria that apply to public procurement procedures for residential neighbourhoods is particularly important. These criteria cover all aspects of the quality of dwellings and housing areas; they also include technical aspects of quality, i.e. technical suitability (where emphasis is on sustainability and energy efficiency), economic eligibility for quality urban spatial planning of the area, architectural design of buildings and landscape design of the open space, as well as the functional suitability, accessibility and quality of dwellings.

II. ACCESS TO HOUSING

Access to housing is the ability of residents to have functionally suitable dwellings adapted to their needs. This primarily refers to the price-related accessibility of dwellings for different groups of residents and accessibility to offers of good-quality dwellings for various needs (ReNSP, 2015). Since the housing reform in 1991, access to housing has gradually become difficult. The key problem of access to housing is the high prices of dwellings, which have risen significantly throughout the entire transition period. The trend of rising prices stopped when the global economic crisis began in 2008.

The shortage of rental dwellings (only 8% of all dwellings) also considerably reduces access to housing. The majority of rental dwellings are in public ownership. The private rental housing market in Slovenia is quite weak, since there are estimate that almost one quarter of rental dwellings are rented illegally. This significantly worsens the situation of lessees. The reasons for this situation originate from unregulated rental relations, which cause a lack of trust between the lessors and lessees (ReNSP, 2015).

A great deal of attention must also be dedicated to young people when resolving the problem of access to housing. This group of people seeking accommodation is very limited, especially with regard to time, because when they are starting families, they have little money, because they are at the start of their careers. Another important demographic group are the elderly, who have difficulties covering housing costs and need various forms of help.

CHALLENGES

➔ Activating the existing housing stock

The scope of actually available dwellings is smaller in some areas of Slovenia, mostly because of existing but an unoccupied housing stock. According to the registry population census data from 2011, approximately 20% of the housing stock in Slovenia is unoccupied. Most of these unoccupied dwellings are in urban municipalities, where prices and demand for dwellings are highest. It must be emphasised that the status of an unoccupied dwelling does not necessarily mean that the dwelling is actually empty. Dwellings in areas of high demand are frequently rented on the black market; they are leased legally, but nobody is registered as living there; they are used occasionally; or they are uninhabitable or actually empty (because of an inappropriate location or the owner is not interested in renting). Dwellings that are actually empty (and not rented), further decrease the offer of dwellings in the market, thus raising rents for those dwellings that are actually rented (ReNSP, 2015).

A key measure to improve access to housing is to activate the existing but unoccupied housing stock. This could immediately affect the availability of usable dwellings.

➔ Improving access to dwellings for young people

With regard to housing, young people are considered as a very vulnerable group of people in Slovenia as well as in Europe. High real property prices and difficult access to financing make access to owning a dwelling, moving away from parents and becoming independent as well as creating households and families quite difficult. According to Eurostat data, almost one half of people from 24 to 35 in Slovenia live with their parents (44.1%) because they cannot afford an independent life.

Due to the shortage of rental dwellings, the most common way in Slovenia for young people to obtain dwellings is to buy; however, they usually have lower incomes and most of them are employed for fixed periods. Therefore, resolving the housing issue among young people and young families remains one of the key challenges of the state's housing and social policy. Special mechanisms for securing dwellings for young families and individuals should be introduced in the form of long-term lease, purchase or first dwelling purchase.

➔ Improving access to dwellings for the elderly

The Slovenian population is ageing; the share of elderly over 65 exceeded 15% in 2004 and the share of elderly over 80 is also increasing. Population projections in Slovenia show that in 2060, more than 30% of the population will be older than 65 years (around 650,000 people). Therefore, when securing access to housing, special attention must be dedicated to the elderly. The fact that the residential needs of the elderly are specific and connected to their social situation and health must be observed. The elderly, especially women living in single-occupancy households, are particularly exposed to poverty.

Architectural and functional demands, as well as the principles of energy efficiency (the reduction of costs of dwelling units) must be considered when designing housing intended for elderly care. It is very important to encourage the renovation of the existing housing stock to meet the needs of the elderly. The National Housing Programme Resolution supports the objectives of the national social policy on elderly care and at the same time seeks possibilities of additional residential solutions that could be offered to the elderly.

➔ Improving housing mobility

Housing mobility is one of the main deficiencies of the Slovenian housing market. According to recent OECD analyses, the housing mobility of Slovenians is relatively low (2–4%), and according to SURS data this rate is 6.2%. Due to the lack of mobility (which is mostly due to the shortage of accommodation), the housing market in Slovenia remains quite static. »Filtering«, which has been an important mechanism for allocating dwellings in the free market in countries with market economies, is almost non-existent in Slovenia. Many dwellings (rented or owned) remain occupied by fewer people even after children grow up and leave home. In many cases, elderly people (usually retired) occupy large dwellings where they have difficulties covering all the costs. Some even need state subsidies so to cover costs. When tackling housing mobility, special attention must be dedicated to young people seeking accommodation. Young people are often unable to purchase dwellings, because they are very expensive, and because of the financial risk in buying and long-term indebtedness. Buying accommodation also reduces mobility and increases costs when housing needs change (after marriage, having children etc.).

The recently adopted National Housing Programme Resolution is intended to secure a sufficient number of dwellings and increased access to quality dwellings; at the same time, as a measure for achieving greater mobility, the resolution emphasises the need to raise the awareness of the population on changing housing habits and encouraging housing mobility.

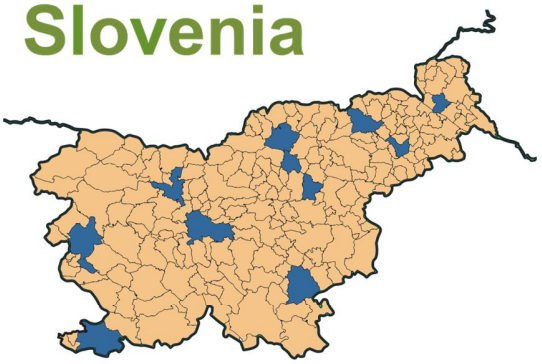
BEST PRACTICE CASES

➔ Special purpose rental dwellings for young people

Within the scope of housing policy for young people, the Urban Municipality of Ljubljana has prepared rules on allocating special purpose rental dwellings for young people from 18 to 29 years. This provides a legal basis for implementing a tender in 2017, which will be published by the Urban Municipality of Ljubljana to provide 30 special purpose rental dwellings for young people (source: http://www.jssmol.si).

3 REVIEW OF SELECTED URBAN DEVELOPMENT INDICATORS

Slovenia



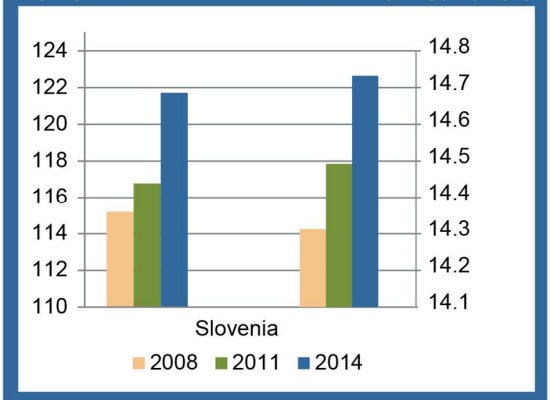
20. 273 km^2

2. 060 000 residents

212 municipalities

11 urban municipalities

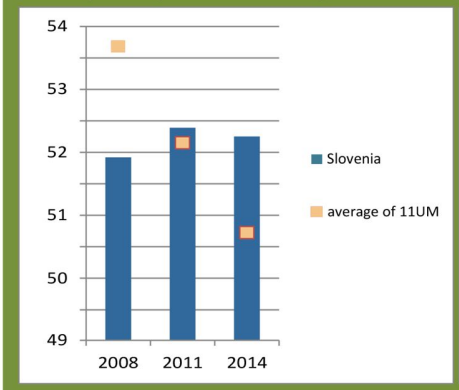
DEMOGRAPHY
Ageing of population



source: SURS

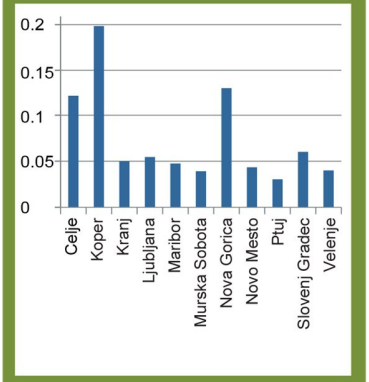
SPATIAL DEVELOPMENT PLANNING
Sustainable mobility

Passenger cars [cars/100 residents]



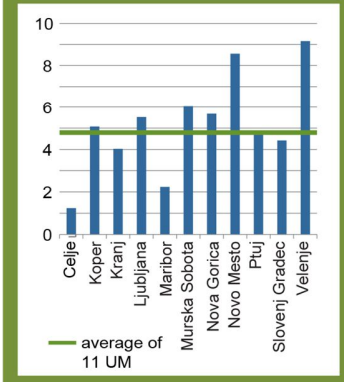
source: SURS

Brownfields inside urban settelments



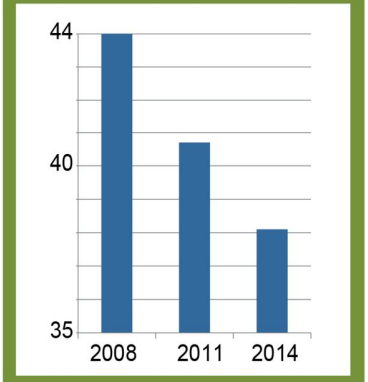
source: DUO (FA)
*data for urban settelments

Green areas by allocation of land, planned land use [%]



source: planned land use
*data for urban settelments

Water consumption of households [m^3/resident]

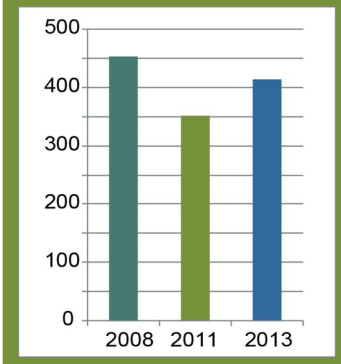


source: SURS

Spatial dveleopment planning

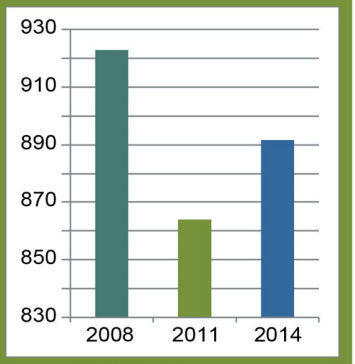
Municipal waste

Collected municipal waste per resident [kg/resident]



source: EUROSTAT

Collected municipal waste [t]

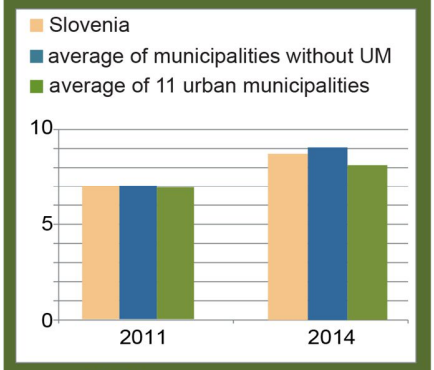


source: EUROSTAT

URBAN ECONOMY

Share of unemployed young people

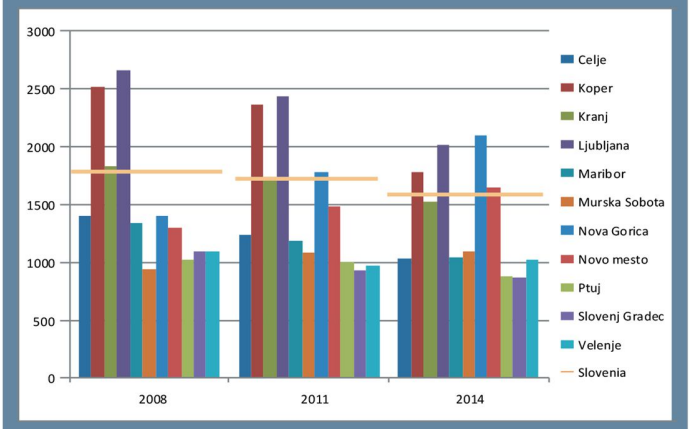
Registered unemployment rate (15-29 years) [%]



source: SURS

HOUSING AND SERVICES

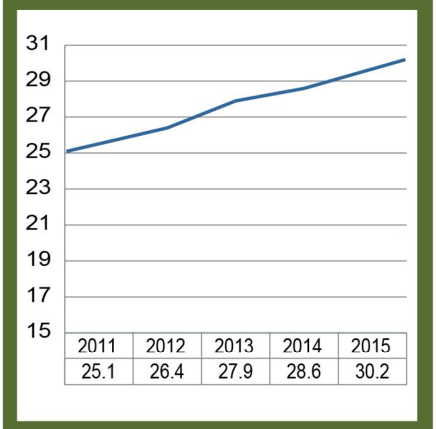
Value of resale flats [€/m²]



source: GURS

Education

Share of residents with tertiray education [%]



2011	2012	2013	2014	2015
25.1	26.4	27.9	28.6	30.2

source: EUROSTAT

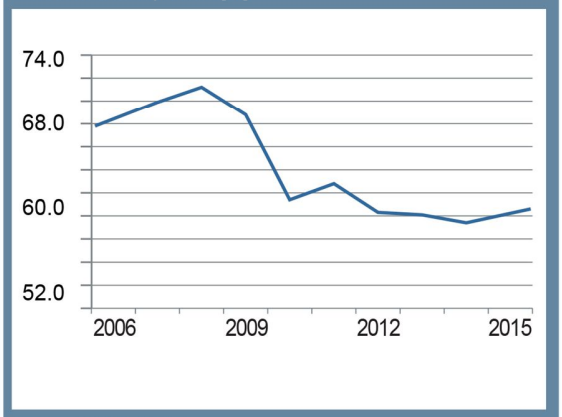
Housing

Share of overcrowding [%]

source: SURS

Young people

Young people aged 25 - 29, who live in the same houshold with parents [%]



source: EUROSTAT

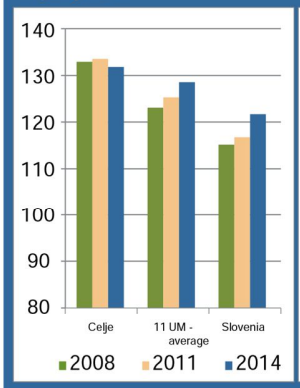
Urban municipality CELJE

- 48. 868 residents
- 95 km²
- 21. 909 households

DEMOGRAPHY

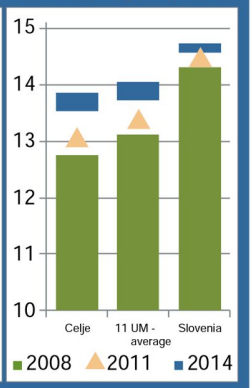
Ageing of population

Ageing index



source: SURS

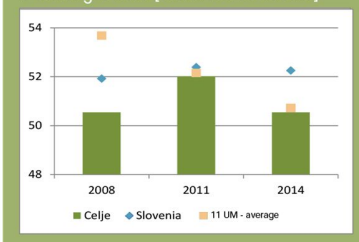
Share of young people [%]



source: SURS

SPATIAL DEVELOPMENT PLANNING

Passenger cars [cars/100 residents]

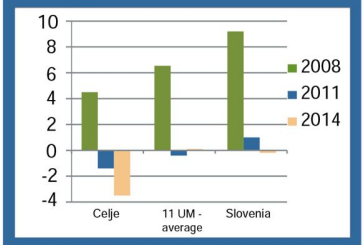


source: SURS

- Brownfields inside urban settelments **12,2 %**
  source: DUO (FA)
- Green areas by allocation of land,planned and use [%] **1,2%**
  * source: planned land use

Migration

Net migration



source: SURS

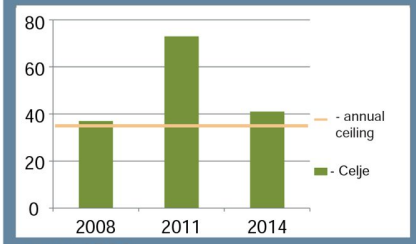
ENVIRONMENT AND URBAN DEVELOPMENT

- Collected municipal waste: **416 kg/resident**
- Water consumption in household: **46,40 m³/resident**

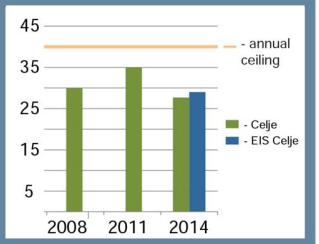
source: SURS

Quality of air

Number of days with exceeded limit concentratiron of PM10 50 µg/m³



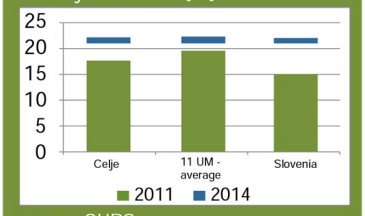
Average annual concentration PM10



source: ARSO

URBAN ECONOMY

Share of residents with tertiray education [%]



source: SURS

Young people

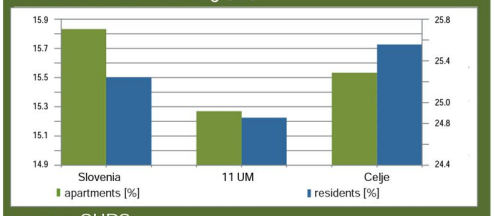
Young people aged 25 - 29, who live in the same houshold with parents [%]

12 %

source: SURS

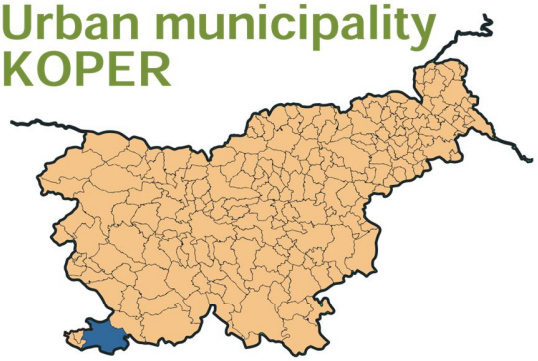
HOUSING AND SERVICES

Share of overcrowding [%]



source: SURS

Urban municipality KOPER

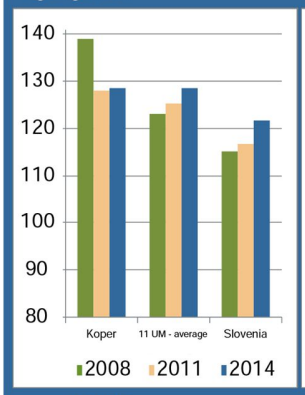


- 54.421residents
- 303 km^2
- 20.109 households

DEMOGRAPHY

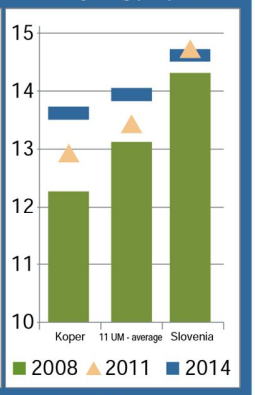
Ageing of population

Ageing index



source: SURS

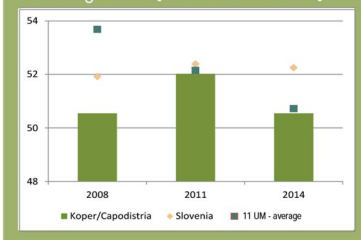
Share of young people [%]



source: SURS

SPATIAL DEVELOPMENT PLANNING

Passenger cars [cars/100 residents]

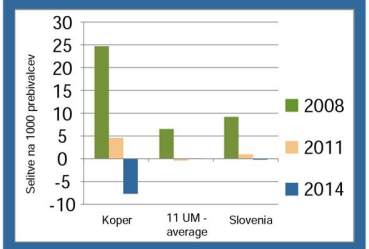


source: SURS

- Brownfields inside urban settelments **18,85 %**
  source: DUO (FA)
- Green areas by allocation of land,planned and use [%] **5 %**
  source: planned land use

Migration

Net migration



source: SURS

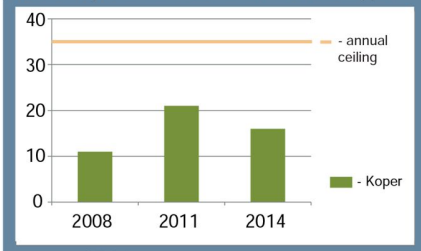
ENVIRONMENT AND URBAN DEVELOPMENT

- Collected municipal waste: **390 kg/resident**
- Water consumption in household: **40,14 m^3/resident**

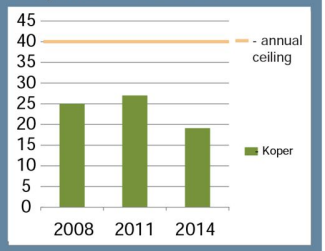
source: SURS

Quality of air

Number of days with exceeded limit concentratiron of PM10 50 µg/m^3



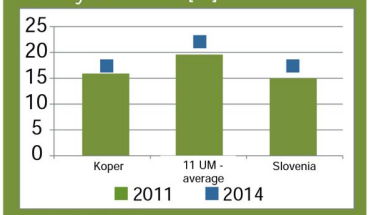
Average annual concentration PM10



source: ARSO

URBAN ECONOMY

Share of residents with tertiray education [%]



source: SURS

Young people

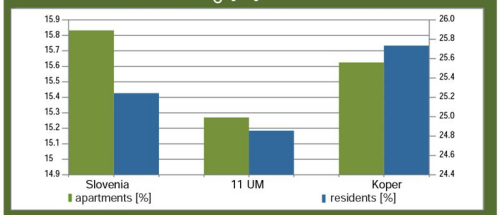
Young people aged 25 - 29, who live in the same houshold with parents [%]

9 %

source: SURS

HOUSING AND SERVICES

Share of overcrowding [%]



source: SURS

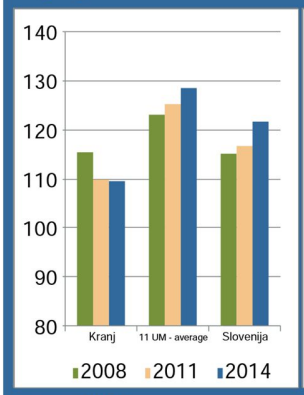
Urban municipality KRANJ

- 55.623 residents
- 151 km²
- 22.052 households

DEMOGRAPHY

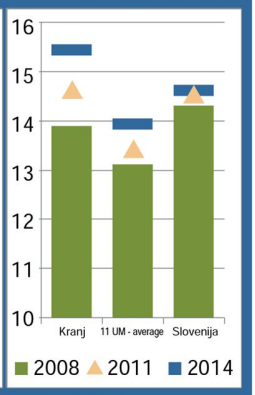
Ageing of population

Ageing index



source: SURS

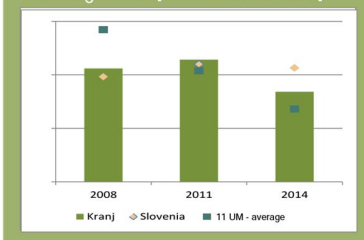
Share of young people [%]



source: SURS

SPATIAL DEVELOPMENT PLANNING

Passenger cars [cars/100 residents]

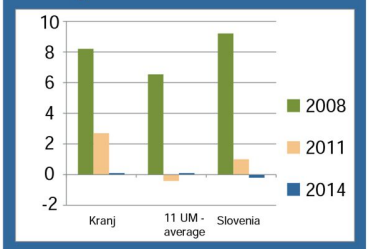


source: SURS

- Brownfields inside urban settelments **4,99 %**
  source: DUO (FA)
- Green areas by allocation of land,planned and use [%] **4 %**
  source: planned land use

Migration

Net migration



source: SURS

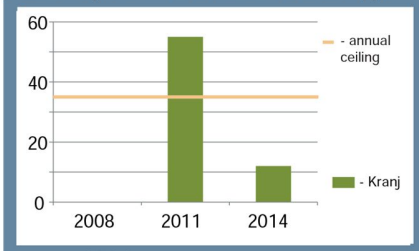
ENVIRONMENT AND URBAN DEVELOPMENT

- Collected municipal waste: **354 kg/resident**
- Water consumption in household: **62,73 m³/resident**

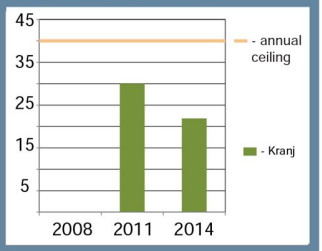
source: SURS

Quality of air

Number of days with exceeded limit concentratiron of PM10 50 µg/m³



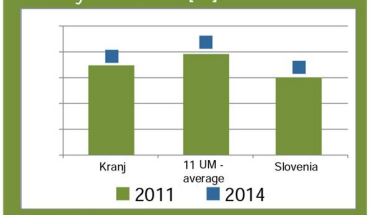
Average annual concentration PM10



source: ARSO

URBAN ECONOMY

Share of residents with tertiray education [%]



source: SURS

Young people

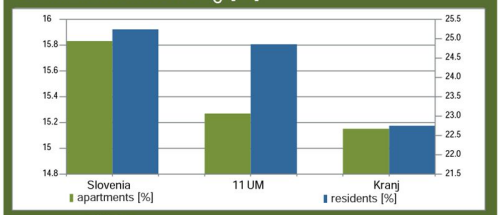
Young people aged 25 - 29, who live in the same houshold with parents [%]

- **6,3 %**

source: SURS

HOUSING AND SERVICES

Share of overcrowding [%]



source: SURS

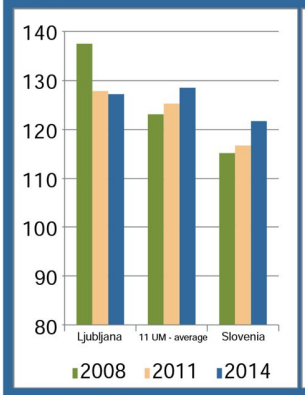
Urban municipality LJUBLJANA

- 285.857 residents
- 275 km²
- 124. 741households

DEMOGRAPHY

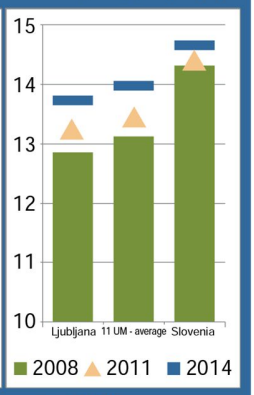
Ageing of population

Ageing index



source: SURS

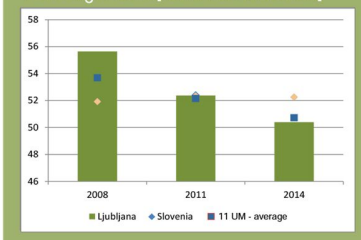
Share of young people [%]



source: SURS

SPATIAL DEVELOPMENT PLANNING

Passenger cars [cars/100 residents]

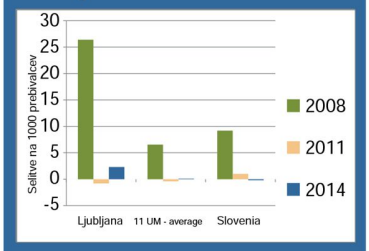


- Brownfields inside urban settelments **5,46 %**
  source: DUO (FA)
- Green areas by allocation of land,planned and use [%] **5,5 %**
  source: planned land use

source: SURS

Migration

Net migration



source: SURS

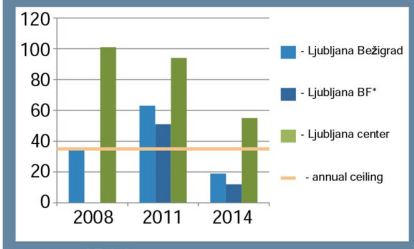
ENVIRONMENT AND URBAN DEVELOPMENT

- Collected municipal waste: **390 kg/resident**
- Water consumption in household: **58,56 m³/resident**

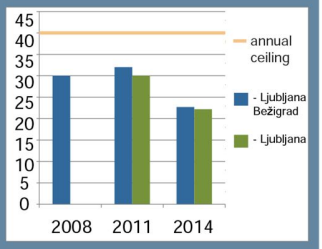
source: SURS

Quality of air

Number of days with exceeded limit concentratiron of PM10 50 µg/m³



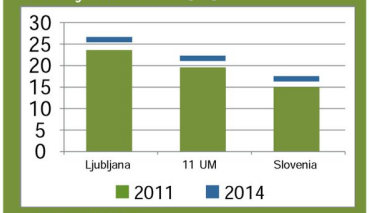
Average annual concentration PM10



source: ARSO

URBAN ECONOMY

Share of residents with tertiray education [%]



source: SURS

Young people

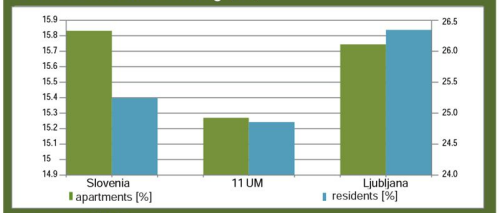
Young people aged 25 - 29, who live in the same houshold with parents [%]

6,7 %

source: SURS

HOUSING AND SERVICES

Share of overcrowding [%]



source: SURS

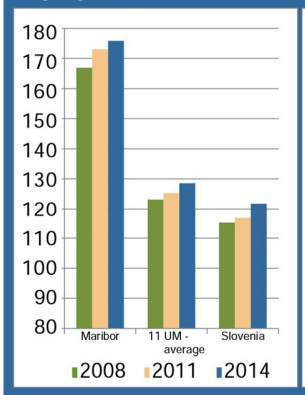
Urban municipality MARIBOR

- 112.088 residents
- 148 km²
- 51.543 households

DEMOGRAPHY

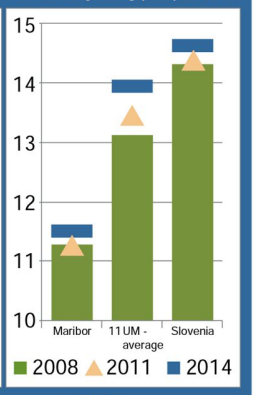
Ageing of population

Ageing index



source: SURS

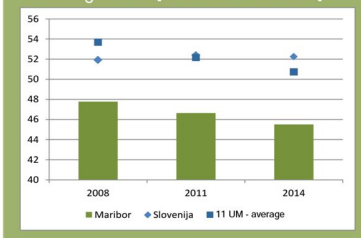
Share of young people [%]



source: SURS

SPATIAL DEVELOPMENT PLANNING

Passenger cars [cars/100 residents]



Brownfields inside urban settelments 4,74 %

source: DUO (FA)

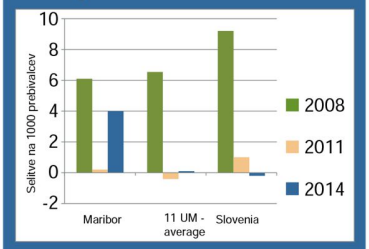
Green areas by allocation of land,planned and use [%] 2,2 %

source: planned land use

source: SURS

Migration

Net migration



source: SURS

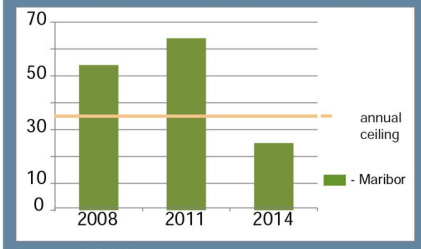
ENVIRONMENT AND URBAN DEVELOPMENT

- Collected municipal waste: **445 kg/resident**
- Water consumption in household: **42,67 m³/resident**

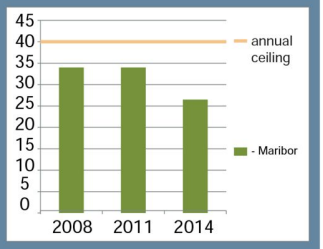
source: SURS

Quality of air

Number of days with exceeded limit concentratiron of PM10 50 µg/m³



Average annual concentration PM10



source: ARSO

URBAN ECONOMY

Share of residents with tertiray education [%]

source: SURS

Young people

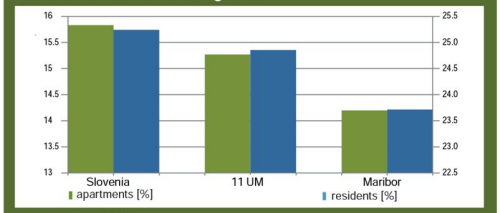
Young people aged 25 - 29, who live in the same houshold with parents [%]

9 %

source: SURS

HOUSING AND SERVICES

Share of overcrowding [%]



source: SURS

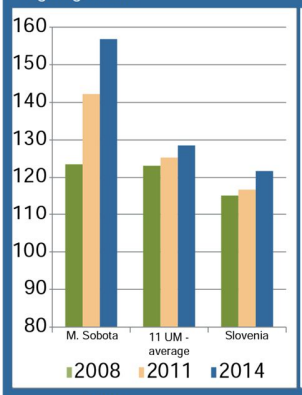
Urban municipality MURSKA SOBOTA

- 19.016 residents
- 64 km²
- 7.820 households

DEMOGRAPHY

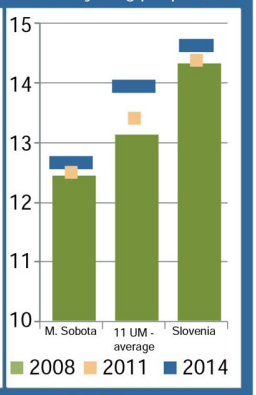
Ageing of population

Ageing index



source: SURS

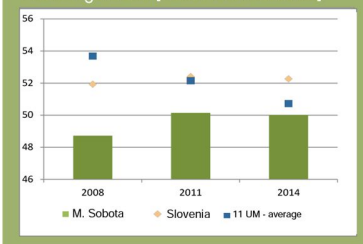
Share of young people [%]



source: SURS

SPATIAL DEVELOPMENT PLANNING

Passenger cars [cars/100 residents]

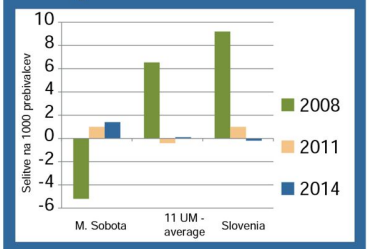


source: SURS

- Brownfields inside urban settelments **3,91 %**
  source: DUO (FA)
- Green areas by allocation of land,planned and use [%] **6 %**
  * source: planned land use

Migration

Net migration



source: SURS

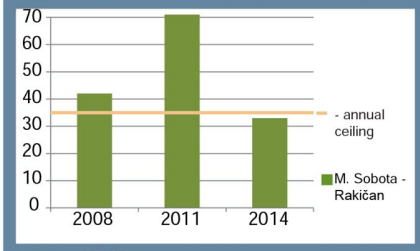
ENVIRONMENT AND URBAN DEVELOPMENT

- Collected municipal waste: **479 kg/resident**
- Water consumption in household: **40,54 m³/resident**

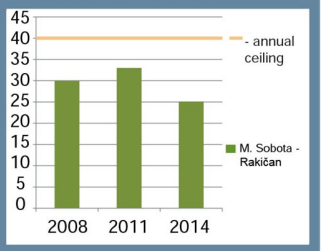
source: SURS

Quality of air

Number of days with exceeded limit concentratiron of PM10 50 µg/m³



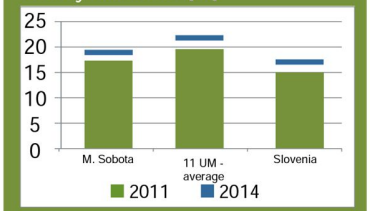
Average annual concentration PM10



source: ARSO

URBAN ECONOMY

Share of residents with tertiray education [%]



source: SURS

Young people

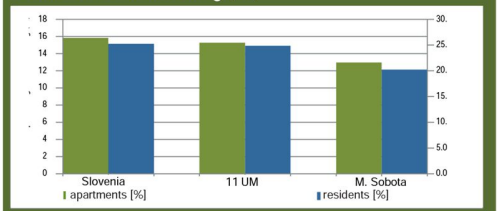
Young people aged 25 - 29, who live in the same houshold with parents [%]

14,5 %

source: SURS

HOUSING AND SERVICES

Share of overcrowding [%]



source: SURS

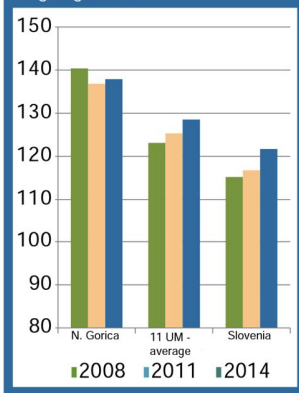
Urban municipality NOVA GORICA

- 31.773 residents
- 280 km²
- 12.944 households

DEMOGRAPHY

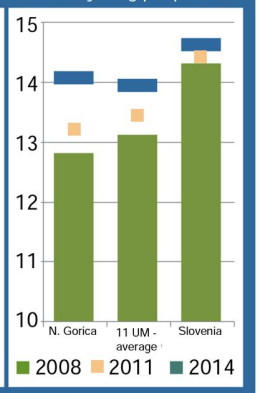
Ageing of population

Ageing index



source: SURS

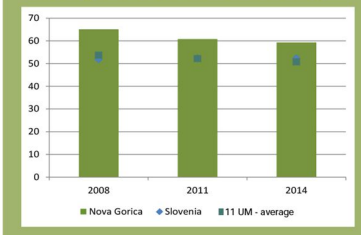
Share of young people [%]



source: SURS

SPATIAL DEVELOPMENT PLANNING

Passenger cars [cars/100 residents]

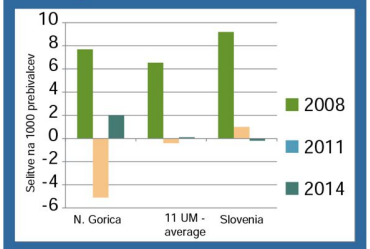


- Brownfields inside urban settelments 13 %
  source: DUO (FA)
- Green areas by allocation of land,planned and use [%] 5,6 %
  source: planned land use

source: SURS

Migration

Net migration



source: SURS

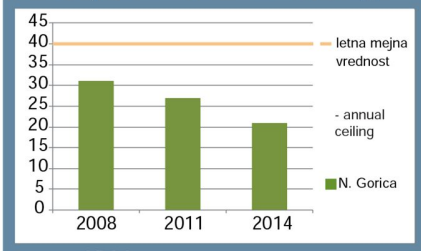
ENVIRONMENT AND URBAN DEVELOPMENT

- Collected municipal waste: 439 kg/resident
- Water consumption in household: 41,89 m³/resident

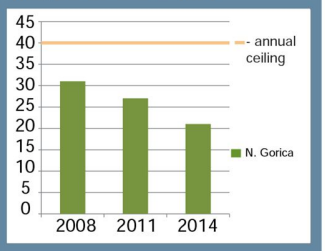
source: SURS

Quality of air

Number of days with exceeded limit concentratiron of PM10 50 µg/m³



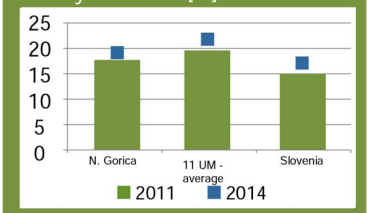
Average annual concentration PM10



source: ARSO

URBAN ECONOMY

Share of residents with tertiray education [%]



source: SURS

Young people

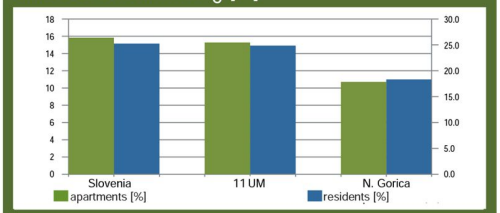
Young people aged 25 - 29, who live in the same houshold with parents [%]

- 8,6 %

source: SURS

HOUSING AND SERVICES

Share of overcrowding [%]



source: SURS

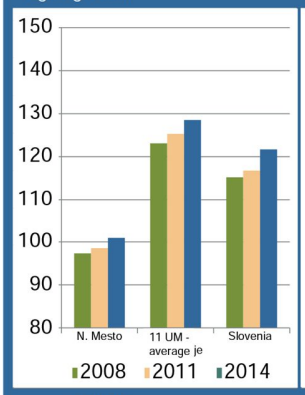
Urban municipality NOVO MESTO

- 36.333 residents
- 236 km²
- 13.913 households

DEMOGRAPHY

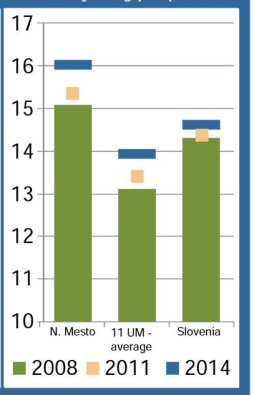
Ageing of population

Ageing index



source: SURS

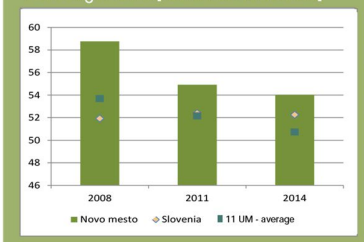
Share of young people [%]



source: SURS

SPATIAL DEVELOPMENT PLANNING

Passenger cars [cars/100 residents]

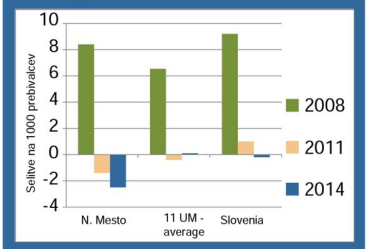


source: SURS

- Brownfields inside urban settelments **4,35 %**
  source: DUO (FA)
- Green areas by allocation of land,planned and use [%] **8,5 %**
  * source: planned land use

Migration

Net migration



source: SURS

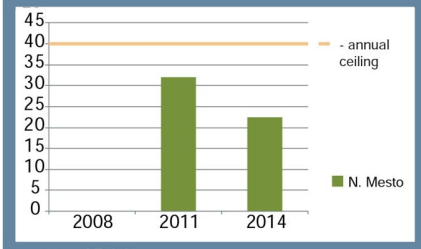
ENVIRONMENT AND URBAN DEVELOPMENT

- Collected municipal waste: **337 kg/resident**
- Water consumption in household: **37,9 m³/resident**

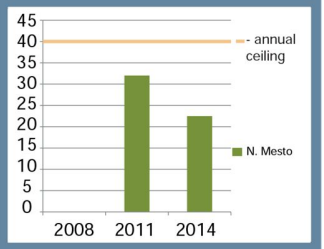
source: SURS

Quality of air

Number of days with exceeded limit concentratiron of PM10 50 µg/m³



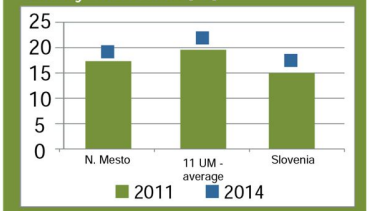
Average annual concentration PM10



source: ARSO

URBAN ECONOMY

Share of residents with tertiray education [%]



source: SURS

Young people

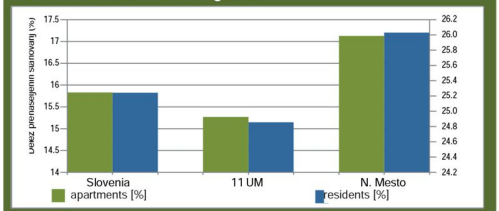
Young people aged 25 - 29, who live in the same houshold with parents [%]

9,1 %

source: SURS

HOUSING AND SERVICES

Share of overcrowding [%]



source: SURS

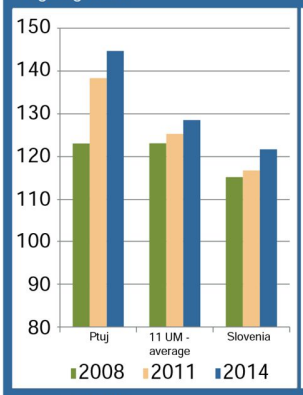
Urban municipality PTUJ

- 36 333 residents
- 236km²
- 13.913households

DEMOGRAPHY

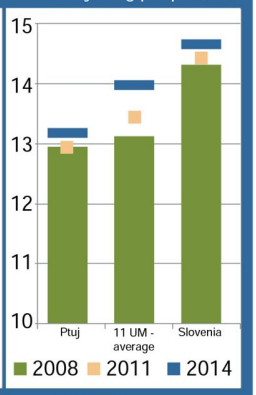
Ageing of population

Ageing index



source: SURS

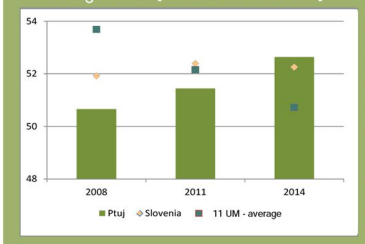
Share of young people [%]



source: SURS

SPATIAL DEVELOPMENT PLANNING

Passenger cars [cars/100 residents]

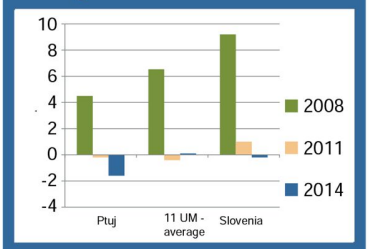


source: SURS

- Brownfields inside urban settelments 3 %
  source: DUO (FA)
- Green areas by allocation of land,planned and use [%] 4,7 %
  * source: planned land use

Migration

Net migration



source: SURS

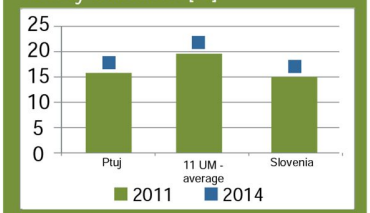
ENVIRONMENT AND URBAN DEVELOPMENT

- Collected municipal waste: **421 kg/resident**
- Water consumption in household: **35,41 m³/resident**

source: SURS

URBAN ECONOMY

Share of residents with tertiray education [%]



source: SURS

Young people

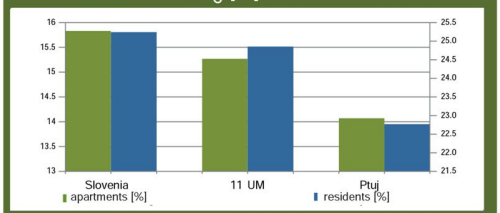
Young people aged 25 - 29, who live in the same houshold with parents [%]

- 9 %

source: SURS

HOUSING AND SERVICES

Share of overcrowding [%]



source: SURS

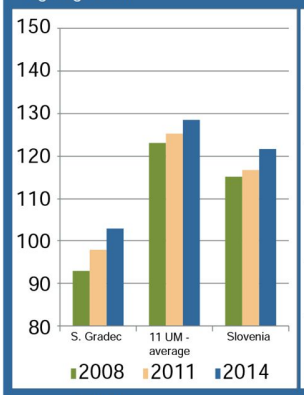
Urban municipality SLOVENJ GRADEC

- 16.839 residents
- 147 km²
- 6.656 households

DEMOGRAPHY

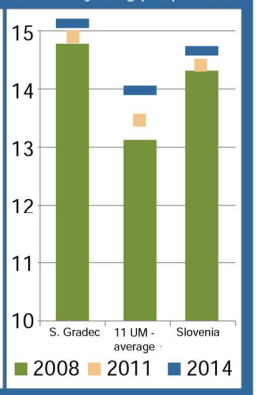
Ageing of population

Ageing index



source: SURS

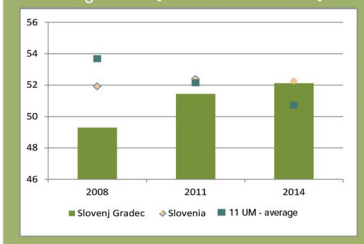
Share of young people [%]



source: SURS

SPATIAL DEVELOPMENT PLANNING

Passenger cars [cars/100 residents]

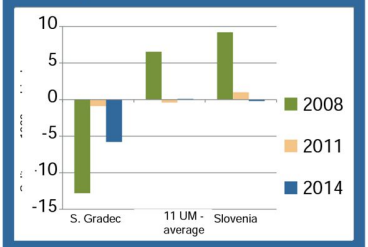


source: SURS

- Brownfields inside urban settelments **6,2 %**
  source: DUO (FA)
- Green areas by allocation of land,planned and use [%] **4,4 %**
  * source: planned land use

Migration

Net migration



source: SURS

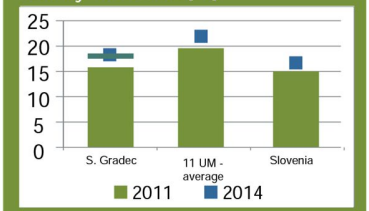
ENVIRONMENT AND URBAN DEVELOPMENT

- Collected municipal waste: **278 kg/resident**
- Water consumption in household: **33,15 m³/resident**

source: SURS

URBAN ECONOMY

Share of residents with tertiray education [%]



source: SURS

Young people

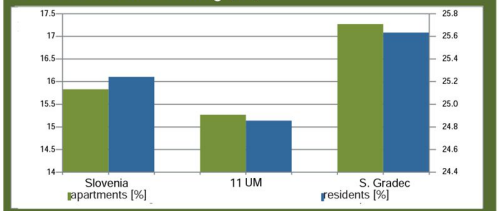
Young people aged 25 - 29, who live in the same houshold with parents [%]

10,4 %

source: SURS

HOUSING AND SERVICES

Share of overcrowding [%]



source: SURS

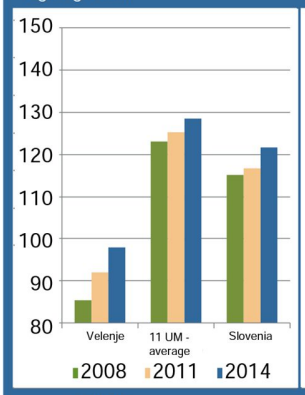
Urban municipality VELENJE

- 32.973 residents
- 84 km²
- 13.428 households

DEMOGRAPHY

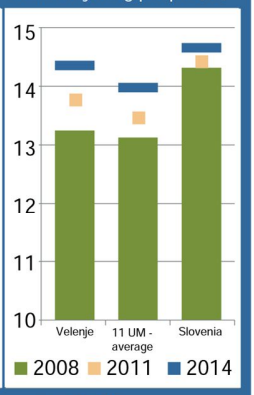
Ageing of population

Ageing index



source: SURS

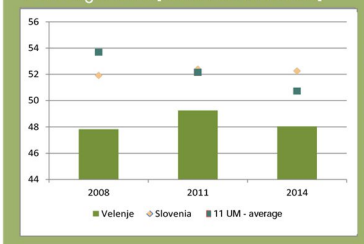
Share of young people [%]



source: SURS

SPATIAL DEVELOPMENT PLANNING

Passenger cars [cars/100 residents]

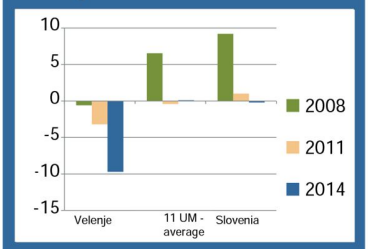


source: SURS

- Brownfields inside urban settelments 4 %
  source: DUO (FA)
- Green areas by allocation of land,planned and use [%] 9%
  * source: planned land use

Migration

Net migration



source: SURS

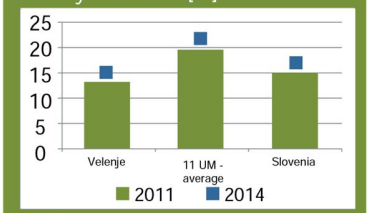
ENVIRONMENT AND URBAN DEVELOPMENT

- Collected municipal waste: **301 kg/resident**
- Water consumption in household: **52,99 m³/resident**

source: SURS

URBAN ECONOMY

Share of residents with tertiray education [%]



source: SURS

Young people

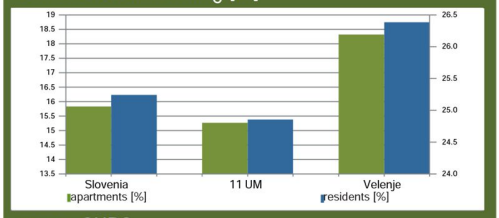
Young people aged 25 - 29, who live in the same houshold with parents [%]

- 13 %

source: SURS

HOUSING AND SERVICES

Share of overcrowding [%]



source: SURS

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