

# Third United Nations Conference on Housing and Sustainable Urban Development (HABITAT III)

## National Report Austria

### Issues and Challenges for a New Urban Agenda

October 2016

Assoc.Prof.Dr. Wolfgang Amann  
DI Sandra Juraszovich, MA  
IIBW, Institute for Real Estate, Construction and Housing Ltd.  
PF 2, 1020 Vienna/Austria  
office@iibw.at; +43 1 9686008  
www.iibw.at

Acknowledgements to:

 EUROPE  
INTEGRATION  
FOREIGN AFFAIRS  
Austrian Federal Ministry for  
Europe, Integration and Foreign  
Affairs

 bm vfi  
Austrian Federal Ministry for  
Transport, Innovation and  
Technology

 MINISTERIUM  
FÜR EIN  
LEBENSWERTES  
ÖSTERREICH  
Austrian Federal Ministry of  
Agriculture, Forestry,  
Environment and Water  
Management

 bmwfw  
Austrian Federal Ministry  
of Science, Research  
and Economy

 WKO  
FACHVERBAND STEINE-KERAMIK  
Austrian Economic Chamber,  
Chapter of the Construction  
Product Industry

 ZIB  
Federation of the Construction  
Product Industry

 GBV  
Austrian Federation of Limited-  
Profit Housing Associations

 ERSTE BANK  
Erste Bank der oester-  
reichischen Sparkassen AG

# CONTENTS

ASSIGNMENT, ACKNOWLEDGEMENTS	5
I. URBAN DEMOGRAPHIC ISSUES	6
1. Managing rapid urbanization	7
2. Managing rural-urban linkages	8
3. Addressing urban youth needs	9
4. Responding to the needs of the aged	10
5. Integrating gender in urban development	11
6. Challenges experienced and lessons learnt in these areas (1-5)	12
7. Future challenges and issues in these areas (1-5) that could be addressed by a New Urban Agenda	13
II. LAND AND URBAN PLANNING	14
8. Ensuring sustainable urban planning and design	14
9. Improving urban land management, including addressing urban sprawl	15
10. Enhancing urban and peri-urban food production	16
11. Addressing urban mobility challenges	16
12. Improving technical capacity to plan and manage cities	17
13. Challenges experienced and lessons learnt in these areas (8-12)	17
14. Future challenges and issues in these areas (8-12) that could be addressed by a New Urban Agenda	18
III. ENVIRONMENT AND URBANIZATION	19
15. Addressing climate change	19
16. Disaster risk reduction	20
17. Reducing traffic congestion	21
18. Air Pollution	22
19. Challenges experienced and lessons learnt in these areas (15-18)	23
20. Future challenges and issues in these areas (15-18) that could be addressed by a New Urban Agenda	24
IV. URBAN GOVERNANCE AND LEGISLATION	25
21. Improving urban legislation	25
22. Decentralization and strengthening of local authorities	25
23. Improving participation and human rights in urban development	26
24. Enhancing urban safety and security	27
25. Improving social inclusion and equality	28
26. Challenges experienced and lessons learnt in these areas (21-25)	29
27. Future challenges and issues in these areas (21-25) that could be addressed by a New Urban Agenda	30
V. URBAN ECONOMY	31
28. Improving municipal/local finance	31
29. Strengthening and improving access to housing finance	31
30. Supporting local economic development	32
31. Creating decent jobs and livelihoods	32
32. Integration of the urban economy into national development policy	33
33. Challenges experienced and lessons learnt in these areas (28-32)	34
34. Future challenges and issues in these areas (28-32) that could be addressed by a New Urban Agenda	34

VI.	HOUSING AND BASIC SERVICES	35
	35. Slum upgrading and prevention	35
	36. Improving access to adequate housing	35
	37. Ensuring sustainable access to safe drinking water	36
	38. Ensuring sustainable access to basic sanitation and drainage	37
	39. Improving access to clean domestic energy	37
	40. Improving access to sustainable means of transport	38
	41. Challenges experienced and lessons learnt in these areas (35-40)	39
	42. Future challenges and issues in these areas (35-40) that could be addressed by a New Urban Agenda	40
VII.	INDICATORS	41
	ANNEX	45
	References	45

## **ASSIGNMENT, ACKNOWLEDGEMENTS**

The United Nations Human Settlements Programme, UN-HABITAT, is mandated to promote socially and environmentally sustainable towns and cities with the goal of providing adequate shelter for all. In a bi-decennial cycle, the UN organizes global conference on housing and sustainable urban development: Vancouver/Canada 1976, Istanbul/Turkey 1996, Quito/Ecuador 2016. IIBW has been assigned to provide the Country Report Austria. One of the authors of this study Wolfgang Amann is delegated as national expert.

The report refers to a template provided by the Habitat III secretariat and to the Urban Agenda of 2003 (The Habitat Agenda – Goals and Principles, Commitments and the Global Plan of Action).

The draft report was reviewed by a number of government bodies. Recommended amendments by the Federal Chancellery, the Ministry of Environment (BMLFUW), the Austrian Conference on Spatial Planning (ÖROK) and the Vienna Municipality were considered in the final report.

The preparation of the Country Report Austria was financially supported by four Federal Ministries and the following institutions of the private sector:

- Austrian Federal Ministry for Europe, Integration and Foreign Affairs
- Austrian Federal Ministry for Transport, Innovation and Technology
- Austrian Federal Ministry of Agriculture, Forestry, Environment and Water Management
- Austrian Federal Ministry of Science, Research and Economy
- Austrian Economic Chamber, Chapter of the Construction Product Industry
- Federation of the Construction Product Industry
- Austrian Federation of Limited-Profit Housing Associations
- Erste Bank der Oesterreichischen Sparkassen AG

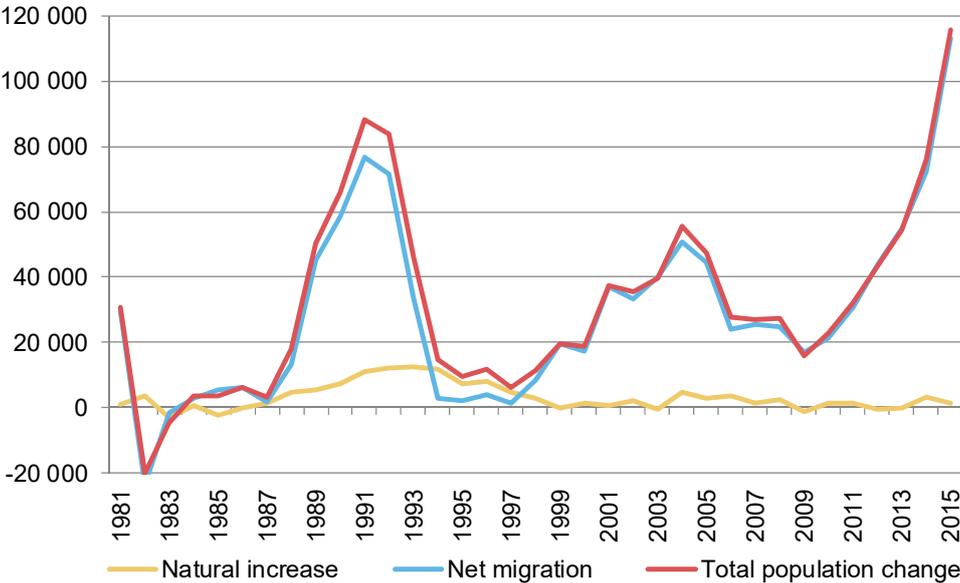
# I. URBAN DEMOGRAPHIC ISSUES

Population growth, aging population and continuing growth of population with a migration background: These headlines reflect some of the main issues relating to the demographic development in Austria.

In 2015, Austria had a population of 8.6 million inhabitants. According to the main scenario of the population projection by Statistics Austria, the total population will increase to 9.3 million people (+ 8%) until 2030. The population growth can be attributed first and foremost to a positive net migration (balance of immigration and emigration). In contrast, the natural increase (balance of births and deaths) makes only a comparatively small contribution to population growth (see Figure 1).

Austria experienced three waves of significant net immigration since the 1980s: The first in the end of the 1980s and beginning of the 1990s is linked to the fall of the Iron Curtain and substantial refugee inflows from the civil war in former Yugoslavia. The second wave of immigration which set in towards the end of the 1990s and reached its peak in 2004 with net immigration of 50,800 was largely due to the echo-effect of the first one. A third wave set in with the end of transition regulations of the new EU member states and was reinforced by the increasing inflow of refugees in 2014 and 2015 as a result of the humanitarian crisis in the Middle East. In 2015, Austria saw a strong 56-percent year-over-year increase in its net immigration rate as net immigration reached a high of 113,000 persons, which equals to 1.3% of resident population.

Figure 1: Yearly population change in Austria since 1981



Source: Statistics Austria, IIBW

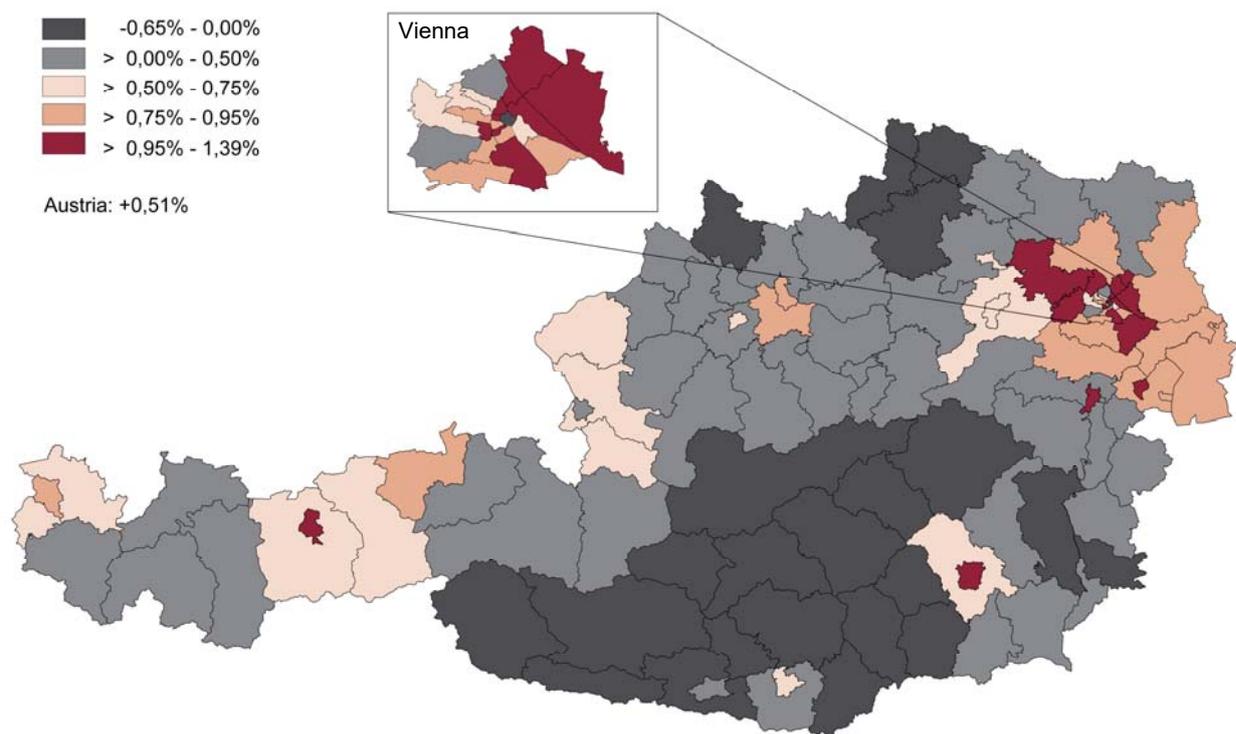
## 1. MANAGING RAPID URBANIZATION

In general, Austria is characterized by a low pace of urbanization. According to the World Bank, the percentage of the total population living in urban areas changed only marginally from 65% in 1980 to currently 66%. The capital city Vienna stands out as the only metropolis with currently 1.8 million inhabitants, while the second largest city Graz only has 280,000 inhabitants. However, the demographic developments indicate that urbanization will increase in the future. The strongest population growth is expected to be in Vienna and its surrounding area as well as in and around the major provincial capitals, whereas peripheral and structurally weak rural areas will face population decline (see Figure 2).

After decades of stagnation and loss of population, Vienna's strategic position in Europe changed with the fall of the Iron Curtain in 1989 and Austria's accession to the European Union in 1995, leading to growth, including to a suddenly increased demand for housing. Today, Vienna is one of the EU's fastest-growing cities. The reasons for this are a positive birth rate, the inward migration from other Austrian provinces as well as from the EU and non-EU countries and a higher life expectancy. According to the main scenario of the population projection by Statistics Austria 2015, Vienna's population will pass the 2 million mark by 2023. Between 2015 and 2030 the city's population is predicted to grow by 14% to 2.06 million inhabitants. Not only the city of Vienna itself, but the whole metropolitan area covering parts of the provinces of Lower Austria and Burgenland is characterized by a dynamic population growth (see Figure 2).

Naturally, urban growth presents challenges for a sustainable development: Increased demand for housing, especially affordable housing, scarcity and rapid price increase of building land, provision of social infrastructures such as kindergartens and schools as well as services and dwellings for the oldest part of the population, social inclusion and environmental sustainability are challenges which have to be addressed in years to come.

Figure 2: Population projection by districts 2015-2030 (Ø p.a.)



Source: IIBW based on Statistics Austria and ÖROK

## 2. MANAGING RURAL-URBAN LINKAGES

One of the main goals of Austrian settlement policies is an even development across Austria. Several measures have been developed to revitalize rural municipalities, including, amongst others, programs to settle industry, village renewal programs, new housing opportunities and infrastructure.

The Austrian Master Plan for Rural Areas has following key issues (BMLFUW, 2015a):

- Securing equal public services,
- Securing health care, childcare and universal postal services,
- Preserving small- and medium-sized enterprises in the areas of trade, tourism, agriculture and forestry and making them more attractive,
- Further developing a research and innovation policy in the strengths of rural areas (agriculture and forestry, food production, wine business, energy production, tourism and new services),
- Providing a better infrastructure for rural areas by expanding broadband capacities, improving public transport, securing and expanding the power supply networks, and through financial support for urban water management.

The migration balance 2014 and on a ten year average (see Table 1) illustrates the flow of migration within as well as to and from Austria. 740,000 persons have changed their place of residence within Austria in 2014 (9% of population), including international migration it was more than 1 million (12% of population), which is significantly above the long term average. Migration gains primarily concentrate in urban centers and agglomerations, whereas migration losses concern peripheral regions. Due to the situation of Vienna as Austria's single metropolis in the east of the country, it is here that gains in internal migration occur more widespread than in the other parts of Austria. Migration flows were largest between urban centers and their surrounding districts, with many regional cities losing inhabitants to suburban regions.

Migration flows are complex. There are strong pull factors of urban areas, particularly job opportunities, availability of higher education, a dense network of social infrastructure, supply of entertainment, the expectation of being close to the own peer group, and on the other hand a perspective for a life in anonymity. But Austria is characterized also by strong pull factors of rural and semi-urban areas, particularly highly developed regional economies, quality of life including high-quality housing, social and technical infrastructure, family bonds and a rich communitarian life. Average incomes in those regions are close to urban regions, with a much lower spread and a lower threat of poverty.

Table 1: Migration balance in Austria

	People	
	Ø 10 years	2014
Migration within Austria	696,000	740,000
International migration	212,000	268,000
thereof arrivals (international immigration)	124,000	170,000
thereof departures (international emigration)	88,000	98,000
International net-migration	36,00	72,000
<b>Migration total</b>	<b>908,000</b>	<b>1,008,00</b>

Source: Statistics Austria, IIBW

As another important aspect of rural-urban linkages, urban-regional partnerships aiming at a sustainable development of agglomerations can be identified. The Austrian Spatial Development Concept 2011 (ÖREK 2011) states as one aim to involve cities and regions in new forms of collaboration through integrated spatial development to achieve sustainable economic growth, and social and ecological development.

Due to the frequent lack of clarity with respect to political responsibility for urban-regional partnerships, politicians often find it difficult to support regional cooperation. Examples for regional collaboration in Austria are Urban-Rural Management of Vienna and Lower Austria, Urban Region Graz, Intercommunal Development Central Region Linz-South-West and Rhine Valley in Vorarlberg. These examples show that Austria's urban regions already use a series of platforms. However, considering the widely divergent situations within a region it has become clear that there are limits to voluntary collaboration and that binding instruments are necessary. The Austrian Conference on Spatial Planning (*Österreichische Raumordnungskonferenz – ÖROK*) produced recommendations encouraging cooperation platforms among urban regions in Austria. Key points among others are the definition of urban regions as areas of planning and as a spatial reference for revenue sharing and the establishment of regional advisory for design and planning (see ÖROK, 2016).

Due to Austria's geography with the big settlement areas to be found close to the national borders, another important issue is the cooperation within border-crossing agglomerations. Here, cooperation needs to be sought with national, regional and local authorities of the neighboring countries in order to tackle congestion problems as well as to materialize agglomeration potentials. Vienna (where the two national capital agglomerations of Vienna and Bratislava are overlapping), Salzburg, or the Rhine Valley belong to these areas, just to mention a few. Cooperation is often supported through the territorial cooperation programs of the European Union.

### **3. ADDRESSING URBAN YOUTH NEEDS**

Since 1991 the percentage of children and young people under the age of 20 in Austria has decreased from 23.8% to 19.6% in 2015. In the future, children and young people under the age of 20 are projected to account for a slightly smaller proportion of the total population, namely 19.3% in 2030, and 18.6% in 2060.

A notable exception to this trend is Vienna, where a rising share of young people is expected. Already today, Vienna has the youngest average population age among Austria's federal provinces. This differs quite a lot to past times when Vienna had an image of a City of the Old. Migration from other Austrian provinces as well as from abroad has a major impact on the age distribution of the population since migration decisions are strongly affected by one's age. A young population offers a lot of potential for development, but also sets a challenge for the quantity and quality of the supply of social and educational facilities as well as childcare options. Part of the demand will have to be safeguarded by enlarging existing facilities; at the same time, urban expansion areas will have to reserve and develop additional spaces of sufficient size and good quality. Development agreements (see chapter II.8) between the City of Vienna and private developers will play an important role regarding the supply of social infrastructure.

Looking at the care rates (percentage of children in child day-care centers in relation to the resident population in that age group), a considerable increase in all age categories can be observed over the last decade throughout Austria. For instance, the care rate of 3-year old

children has increased from 45% in 2004 to currently 84%, the care rate of 4-year old children has risen from 89% to 95% and of 5-year old children from 92% to 97% (Statistics Austria). In 2010, mandatory two years kindergarten attendance at no cost to the parents was introduced in Vienna with a view of addressing the language difficulties immigrant children frequently face when entering compulsory education. In the future, comprehensive provision of all-day and integrated school and further upgrading of high-quality childcare will be mandatory, as stated in the Smart City Wien framework strategy.

#### **4. RESPONDING TO THE NEEDS OF THE AGED**

In 2015, 18.5% of Austria's population is over the age of 65. Statistics Austria predicts that this population group will make up 23% of the population by 2030 and 29% by 2060. While the total population will increase by 9% until 2030, the number of people over the age of 65 is predicted to increase by almost 39% (main scenario by Statistics Austria). Rural areas are more affected of aging than urban. A challenge is not only the quantitative increase in the elderly population, but also the increase in the number of people becoming care-dependent (IIBW, 2013).

Due to a well-established pension system, household incomes of elderly people are relatively high and only slightly below the total average. There is only a relatively small group of elderly people in threat of poverty, particularly women living alone and persons without pension entitlement.

A substantial part of elderly people, and the majority of highly aged population, have access to nursing allowances, structured in a seven level scheme of need for nursing.

Currently roughly 6% of population is in need of nursing, highly correlated to age. It is only 1.3% of population below 60 years, but 10% in the age strata 60-80 years and around 60% for the 80+ citizens. Due to the aging of population the total number of need of nursing will double until 2050.

Only around 3% of elderly people (0.7% of total population) live in nursing homes, the biggest part of them is of very high age and much in need of medical care. Most nursing homes have changed their policy and today only accept clients with a relevant nursing level (mostly 3 or 4 in a 7-level scale).

A much greater part of elderly people call on outpatient care, which is provided by mostly non-profit social service providers, and, on an informal basis, by family members. Outpatient care is expected to expand exceptionally in the coming years and will be fostered by implementing demand-oriented and efficient supply structures and processes to reduce and shorten hospital stays.

Total public expenditure on nursing and care for elderly people (without pensions) is estimated at approx. 3% of GDP, and strongly increasing.

The biggest part of elder population continues to live in normal apartments and detached houses. As household size decreases for several reasons (children leaving the common household; growing life expectancy; divorces; early death of one partner) the average consumption of floor space is significantly over average (80 m<sup>2</sup> for elderly singles). Their housing expenditure is slightly below the average population.

As a consequence of the ageing of the population, the housing stock in Austria is increasingly adapted to the needs of this population group. There are numerous initiatives and subsidies in place. New multi-apartment buildings usually have to be accessible barrier-free (elevators, no doorsteps).

Additionally, a range of living forms relating to the needs of seniors has emerged: Assisted Living, housing for generations (young and old people living together), flat-sharing schemes for seniors etc. Assisted Living has obtained a special status as the concept has been developed in the regional housing subsidy schemes of the provinces since the 1990s. Main elements are barrier-free accessible and usable apartments in combination with senior citizen related services.

Besides suitable forms of accommodation, public space, public transport infrastructure and public buildings must also be made accessible to enable older people to continue to lead rewarding lives in their communities as stated in the Habitat Agenda.

Austria has rank 13 (out of 96 countries) in the Global Age Watch Index 2015, with particularly good results concerning “enabling environment” (rank 2) and “income security” (rank 6), but poor results concerning labour market participation of the elder generation.

## **5. INTEGRATING GENDER IN URBAN DEVELOPMENT**

Austria has only rank 36 (out of 142 countries) in the Global Gender Gap Index 2014. Weaknesses are particularly inequality of wages and low participation in highly-paid and influential jobs (WEF, 2014).

Nevertheless, Austria is committed politically and legally to implement gender mainstreaming at national level, whereby the implementation is based on the European embodiment of equality and equal opportunities for women and men in all activities and areas of life. An inter-ministerial working group on gender mainstreaming supports and accompanies the continued implementation of gender mainstreaming at the federal level. In this context, gender-responsive budget management became enshrined in the Austrian Federal Constitution making Austria to a frontrunner in Europe. Gender budgeting can be described as the application of gender mainstreaming in the budgetary process with the aim to analyze the federal, state and municipality budgets with regard to their impact on the lives of women and men, and to adapt them according to gender equality objectives (IMAG GMB, 2014). The implementation of gender budgeting, however, is difficult and the organization “Women in Development Europe“ has criticized the insufficient way in which the policy is carried out (WIDE, 2010).

In terms of urban development, the City of Vienna has been addressing the issue of gender-sensitive planning already in the 1990s with the establishment of a *Frauenbüro (MA 57 - Municipal Department for the Promotion and Co-ordination of Women's Issues, today: Frauenabteilung der Stadt Wien)*.

As a result of the the gender pay gap and the gender pension gap women are highly affected by the increase of housing-costs. Due to the persistence of gender-stereotypes and -roles, women and men have different needs of their environment, as it is still primarily women who have a great demand for infrastructure that supports housework and childcare - close to 85% of oneparent households in Vienna are led by women. Mobility aspects not only influence mobility behavior but also influence temporal resources and, as a

consequence, determine how much time someone has for paid work, education or leisure-time activities.

According to these facts the City of Vienna - Municipal Department for the Promotion and Co-ordination of Women's Issues published the Vienna Gender Equality Monitoring Report in 2014, to promote women's issues also in relation to aspects of housing and environment. There are three main gender-goals defined and monitored: (1) improving the access to affordable, safe and legal housing (2) improving the usability of public space (3) increasing the participation of women and the integration of gender-criteria in urban planning.

In general, it is difficult to achieve a balanced composition of decision-making bodies in heavily male-dominated areas. For example, the Chamber of Architects and Engineering Consultants for Vienna, Lower Austria and Burgenland only had 17% female members in 2013 and in 2015 only 11%. Focusing on the representation of women in the chair of that chamber, the percentage of women sank from 25% to 0% in this period. Efforts to increase the representation of women in juries as important decision-making bodies for housing and urban development have only been successful to some extent: Women are less involved in urban development juries (22%) than in those deciding on the design of public parks (33%) and public space (43%) in Vienna. To guarantee the increase of women's participation in decision-making positions, gender-quotas or clear regulations seem necessary.

Since the 1990s, a number of gender mainstreaming model projects were implemented in the frame of urban design competitions. The strategic visions and objectives for the respective development areas must be formulated by taking account of gender-relevant quality characteristics. Furthermore, the competition documents should clarify the effects of the urban design targets on different user groups. Concrete lists of criteria fine-tuned to the specific requirements of a competition significantly facilitate the evaluation of equal opportunities for different user groups as afforded by the individual entries (for more information see City of Vienna, 2013). This planning approach puts into practice point 119 of the Habitat Agenda relating to the promotion of gender-sensitive planning and management.

Via the housing subsidy schemes of all provinces gender-related aspects are applied in all new construction of affordable multi-apartment buildings. This concerns measures within apartments (e.g. user neutrality of rooms) and on the settlement level (attractive community facilities, prevention of dark areas, childcare measures). One-parent-families enjoy privileges in terms of allocation of affordable housing and allowances.

## **6. CHALLENGES EXPERIENCED AND LESSONS LEARNT IN THESE AREAS (1-5)**

The population of Austria is growing, ageing and is becoming ethnically more heterogeneous. However, these developments are happening with different dynamics in different parts of the country: the long-term demographic development in Austria shows a sustained trend of diminishing population along the former "Iron Curtain" borders as well as in the peripheral inner alpine regions. The in-migration gains are reported mainly by the catchment areas of cities and the statistics imply that urbanization will further gain in importance. The dynamic demographic development of urban regions poses new challenges on planners and policymakers regarding technical as well as social infrastructure. Strong housing demand has resulted in climbing prices in the rental and particularly in the ownership market. The latter has additionally been triggered by the financial crisis and its effects since 2008. The issue of affordable housing is a priority topic on the political agenda.

Another important aspect is integration, as international migration attracts people of different cultural and social backgrounds. Housing can be seen as central issue of integration (besides of the working place and school). On the one hand, housing conditions and spatial distribution patterns of migrants in a city can be considered important indicators for the status quo of integration; on the other hand, housing policies are an important part of overall social policy at the local level. For counterbalancing threat of conflict between residents in municipal housing estates, the municipality of Vienna has introduced the *Wohnpartner* service in 2009, focusing on the promotion of solidarity and individual responsibility. *Wohnpartner* facilitates cooperation between resident groups and provides for professional conflict management.

An aging population, the increase of the share of older individuals in a society due to fertility declines and rising life expectancy, poses a challenge to the Austrian society. The objective lies in preserving and promoting independent lifestyles of people including the very aged and in improving the quality of assistance, support and domestic services. In Austria, the process of adapting the housing stock and developing alternative housing solutions for the needs of elderly people has already started in the 1990s within the framework of housing subsidy schemes.

## **7. FUTURE CHALLENGES AND ISSUES IN THESE AREAS (1-5) THAT COULD BE ADDRESSED BY A NEW URBAN AGENDA**

- Growing pressure on cities and sub-urban areas: To avoid an unsustainable transition and urban scattering, compact, mixed-used settlement structures with high urban quality has to be the central paradigm of planning. The rising consumption of space for settlements and transport is resulting in a loss of biodiversity and diversity of cultural landscapes.
- Both urban and rural regions have many potentials and characteristics that can make specific contributions to a comprehensive spatial development. However, the past has shown that there are limits to voluntary collaboration between cities and their hinterland. For the future, innovative and collaborative instruments and rules are necessary in order to achieve sustainable growth. Urban regions, including semi-urban areas around the cities, have to become established in the mindsets and actions of the actors involved in spatial development.
- Demand for more efficient and more extensive community services will increase due to increasing elderly population. Local governments play a key role determining the location, choice, affordability and design of housing and of support services for the elderly. Best practice examples for municipal and regional social and health strategies should be gathered and disseminated.
- Gender mainstreaming is meant to equally take into consideration the needs of and challenges for women and men. Currently, a stronger focus is put on women and disadvantages they are confronted with regarding economic, social and political participation. When implementing gender mainstreaming in urban planning, the objective is to take into account interests and needs of both sexes. When designing strategies and implementing projects, e.g. on the reconciliation of work and family life, women and men should be focused.

## II. LAND AND URBAN PLANNING

Austria is a Federal State. It assigns major responsibilities to the provinces and municipalities. The competencies in spatial planning are strongly split between the federal state, the federal provinces and the municipalities concerning legislation and enforcement. In Austria, no general planning law exists on the federal level. Legal regulations concerning spatial development are laid down in many different legal texts (e.g. Forest Law, Water Right, Federal Transport Network). The federal state intervenes in spatial development mainly by sector planning. Legislation and implementation of spatial planning belong to the autonomous responsibilities of the provinces. The nine provinces (*Länder*) enact their own spatial planning laws and they are responsible for planning at the provincial and regional levels. As a result, there are nine spatial planning laws in Austria, one for each province. On the local level, the implementation of spatial planning lies within the autonomous competence of the municipal authorities.

Vienna is in a unique position as it maintains the status both of a federal province and a municipality divided into 23 districts. Thus, Vienna has considerably wider powers, especially concerning planning, than other municipalities.

### 8. ENSURING SUSTAINABLE URBAN PLANNING AND DESIGN

The main planning instruments on the local levels are the local development plan (*Örtliches Entwicklungskonzept*), the land-use plan (*Flächenwidmungsplan*) and the building regulation plan (*Bebauungsplan*). The local development plan lays down the long term objectives of the development of a municipality, usually for a 10-years horizon. The land use plan determines the permissible use of land, down to the individual lot-level, and divides the municipality's territory into zones designated for specific purposes, e.g. building land, green land and main traffic areas. The building regulation plan includes figures about the utilization of the site, the maximum height of a building, the construction typology (closed, open, terraced houses) and a variety of further possible specifications for their design.

In comparison with the local development plan the land use plan as well as the building regulation plan are legally binding to site owners. Furthermore, all these plans must comply with the province's spatial planning law and the existing state and regional plans. The provincial government acts as a supervising authority.

Vienna has introduced in 1995 the innovative instrument of developers' competitions (*Bauträgerwettbewerbe*) for large-scale housing developments addressing public subsidies (which is the majority of multi-apartment new construction). The procedure is to identify project teams offering optimized realization concepts and aims at combining both the possibility of municipal regulation and the advantages of competition. An interdisciplinary expert jury assesses and evaluates the project entries according to a quality scheme consisting of (1) architectural quality, (2) economy, (3) ecology and (4) social sustainability. Smaller housing projects may also be submitted by all developers to the Land Advisory Board (*Grundstücksbeirat*). The content and data submitted in the competition entry of the victorious project team are binding commitments that must be adhered to in project realization. The emergent projects are characterized by high quality standards, e.g. concerning energy efficiency; often higher than in commercial new construction.

Another important tool for sustainable urban development in Vienna is the municipal *Housing Fund (Wohnfonds Wien)*. One of its core tasks is stockpiling of building land for social housing. The fund purchases in large quantities green land, accompanies the process of zoning according to urban development specifications and provides building land to landlords for the realization of affordable housing, basically at own costs.

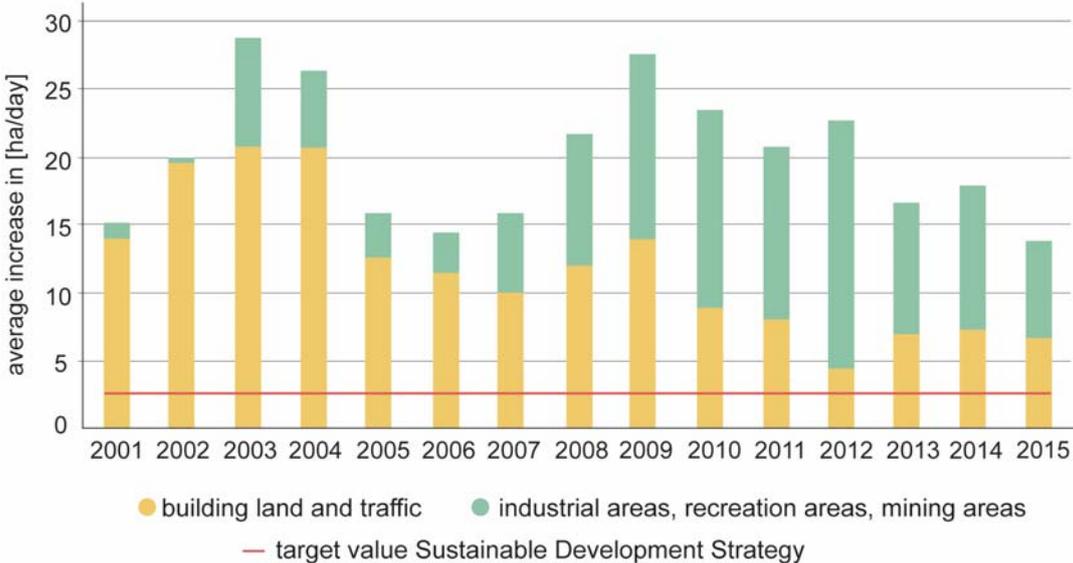
**9. IMPROVING URBAN LAND MANAGEMENT, INCLUDING ADDRESSING URBAN SPRAWL**

Land consumption in Austria amounts to 16.1 ha per day (average 2012-2015) which is clearly above the target value of the *Sustainable Development Strategy* of 2.5 ha per day (see Figure 3). Since 2009, a reduction of land-take, especially for building land and traffic areas, can be observed. This might be explained by the fact that population growth happened most of all in the urban centers where higher land prices and densities result in a lower consumption of land. While the amount of land taken for residential settlements and transportation per inhabitant in Vienna dropped by about 4% between 2006 and 2013, the land consumption in the rest of Austria increased by an average of 9% in the same period (Hiess, 2015).

The housing subsidy schemes of the provinces offer incentives for a more sustainable residential development. Until now, however, the system shows an ambivalent performance with very good results in terms of social and economic sustainability, but questionable effects on sprawl and land consumption. The abolishment of the maximum size for single-family houses in the subsidy schemes has supported the tendency to larger houses which naturally increases the amount of land taken up by building.

There are calls for a better linking of subsidies for residential construction and spatial planning. The province of Tyrol and its regulations regarding consumption of land within the frame of single-family-houses subsidy scheme can be seen as a forerunner in this matter. The subsidy in the form of a fixed amount per square meter of usable floor area depends on the average consumption of land per dwelling. Thus, space-saving construction and an economical use of land resources are favored. Another criterion that tightens

Figure 3: Development of land consumption in ha/day in Austria



Source: Umweltbundesamt, IIBW

eligibility conditions of housing subsidies to spatial planning aims is the introduction of bonuses for locations within village boundaries, accessibility by public transport and bicycle. Examples exist in several provinces.

In addition to space-saving construction the mobilization of building land is seen as a key aspect in addressing the issue of urban sprawl. According to a project by ÖROK (Umweltbundesamt, 2016), more than one quarter (26.5%) of the land intended for building is not built-up in Austria. These reserves of building land are oftentimes not available for the market in the medium term and new designation of building land leads to disperse developments. Linked to land speculation is the issue of scarcity of building land which leads to a rise in land price and consequently to higher rents and sales prices of housing.

## **10. ENHANCING URBAN AND PERI-URBAN FOOD PRODUCTION**

A notable part of Vienna's green spaces is used for agriculture: almost 6,000 hectares, i.e. approx. 16% of Vienna's total area. An important role plays traditional viticulture. In the Vienna Urban Development Plan 2025, the protection of city-compatible agriculture is stated as a significant measure regarding green and open spaces (MA 18, 2015). The Agricultural-Structural Development Plan for Vienna from 2014 formulates the strategy and measures for safeguarding the development of agriculture within the city boundaries. The key objectives are the preservation of the cultivation of agriculturally used areas in coordination with the objectives of city development and the further ecologisation of cultivation (further expansion of ecologically sound, sustainable agricultural production). The Agricultural-Structural Development Plan delimits areas that are to serve agricultural purposes in the long term and harmonizes them with the programme for the protection of Vienna's spacious Green Belt (MA 58, 2014). Direct marketing of agricultural products helps to cut down resource consumption, to strengthen the regional economy and it contributes positively to the city's climate protection goals. Furthermore agricultural landscapes fulfil other important functions such as identity creation and provision with urban leisure opportunities.

Urban gardening is a growing international movement: Vegetables and herbs are to be grown for self-supply – individually or with others. There are many successful examples in Austrian cities, often supported with publicly funded spaces and programs. For instance, publicly supported community gardens in Vienna are the City Farm Schönbrunn that mainly aims to educate about environmental issues, community, and sustainability and the Citizens' Garden (*Bürgergarten*) which has also developed into a cultural hotspot. Furthermore, the Urban Renewal Offices in Vienna offers support to aspiring gardeners: There are programs to support gardening on the pavement in tree pits, but also to establish neighborhood gardens.

## **11. ADDRESSING URBAN MOBILITY CHALLENGES**

Population growths, an increase in the number of households, prosperity and changes in mobility behavior have together resulted in a massive boost of traffic. The motorization rate rose by 379% between 1965 and 2009, from 109 passenger cars per 1,000 inhabitants to 522 (BMVIT, 2011). The latest official modal split data for Austria as a whole unfortunately date from 1995. In 2014, a new study has been conducted, but the findings are not yet available.

In general, Austria is moving towards an approach to sustainable mobility planning. Policies of Austrian cities and municipalities regarding mobility have in common that they are all aiming at shifting motorized traffic by individual means of transportation towards environmentally benign forms (public transport, bicycle and by foot). To achieve the ambitious targets set in urban development plans and strategies, technical innovations, such as electro-mobility will be an important element of urban mobility in the future. In Vienna as well as Graz, model regions focusing on e-mobility and on a gradual switch towards an integrated transport system where public transport is effectively complemented by electro-mobility and e-car sharing, were established.

For further information regarding urban mobility see chapter III.17. and VI.40.

## **12. IMPROVING TECHNICAL CAPACITY TO PLAN AND MANAGE CITIES**

Contract based spatial planning (*Vertragsraumordnung*) is seen as a suitable means for contributing to a sustainable development. In consultation with private landowners and developers, such contracts govern burden-sharing between municipalities and the private beneficiaries of legally binding land-use plans, usually in return of land value increase caused by zoning. Hence, change of zoning from e.g. agricultural use to building land results not only in windfall gains to the land owner, but also benefits to the public, as parts of the land may be dedicated to social housing at discounted land price or social or technical infrastructure may be financed by the land owner. But in 1999, the ruling of the Constitutional Court on Salzburg's Contract-based Spatial Planning created uncertainty regarding the use of contracts in relation to amendments of land use plans. The reason for the repeal of the contract based spatial planning at the time was the defined compulsory linking between private law agreements and mandatory regulations. Today, all provinces have regulations in place to provide for contract based spatial planning, but final legal certainty on this issue is missing and would require clearance in the Constitutional Law. ÖROK (2014) lists indispensable issues to be considered for legally binding contracts.

Cities and municipalities in Austria make increasing use of urban development contracts. In 2014, the amendment of the Vienna Building Code brought innovations regarding strategic measures for urban developments. Through development agreements (*Städtebauliche Verträge*) standards relating to social, technical and transportation infrastructure (e.g.: educational and health facilities, recreation areas, mobility concepts) are determined. Thus, the City of Vienna actively uses private-law agreements between the public sector and private developers in relationship to zoning measures and building regulations to influence urban planning projects. In these development agreements not only standards regarding infrastructure can be defined, but also a quota for social housing units can be set. Another example is the City of Graz, where Smart City neighborhoods will be financed as public-private partnership projects and development contracts between the city, private developers and investors will secure implementation and funding of the Smart City qualities.

## **13. CHALLENGES EXPERIENCED AND LESSONS LEARNT IN THESE AREAS (8-12)**

Development of transport infrastructure and construction of residential areas exert multiple pressures on green spaces and agricultural land. Initiatives like "Vienna's Open Space Network" or "Masterplan Green Network Graz" show that Austrian cities have committed themselves to an urban development which considers green space as crucial element. Another example of comprehensive preservation of existing nature is the Vienna Woods region. In 2005, an initiative of the federal provinces of Lower Austria and Vienna

brought about protection for the Vienna Woods region. Today the UNESCO biosphere park Vienna Woods, which comprises 7 Viennese districts and 51 municipalities in Lower Austria is a model region for sustainable development with high nature recreation value. However, as pointed out in chapter II.9, Austria is still characterized by high land consumption. The continued trend of urban sprawl not only leads to the fragmentation of ecosystems, but also results in additional infrastructure costs. In this regard, the Austrian spatial planning system shows an ambivalent performance lacking more thorough regulations in respect of the economical use of land resources.

Contract-based spatial planning is increasingly applied to ensure the desired development. The instrument of contract-based spatial planning is seen as crucial regarding the mobilization of building land. Moreover, also other factors to influence urban development, e.g. provision of social or technical infrastructure, can be specified in development agreements. A critical question is how transparent these negotiations and how legally certain the agreements are. A prior criticism regarding the present model of development agreements is that there are no generally applicable rules regarding what percentage of zoning gain the city authorities are pursuing.

#### **14. FUTURE CHALLENGES AND ISSUES IN THESE AREAS (8-12) THAT COULD BE ADDRESSED BY A NEW URBAN AGENDA**

- Urban development and the protection of green space and agricultural space should not be considered independently of one another; rather green space and agricultural space have to be seen as an integral part of sustainable urban development.
- Coordination and cooperation between spatial planning and housing subsidy programs need to be further intensified: To cope with population growth and the increasing amount of land used for human settlements and transportation, land use planning, building regulations as well as housing subsidy schemes have to be accompanied by strategies on eco-sufficiency and economical use of land resources.
- Regarding transportation, it seems very important to adopt a regional view that extends across municipal boundaries, e.g. by means of integrated mobility and regional development with a special focus on commuter flows.

### III. ENVIRONMENT AND URBANIZATION

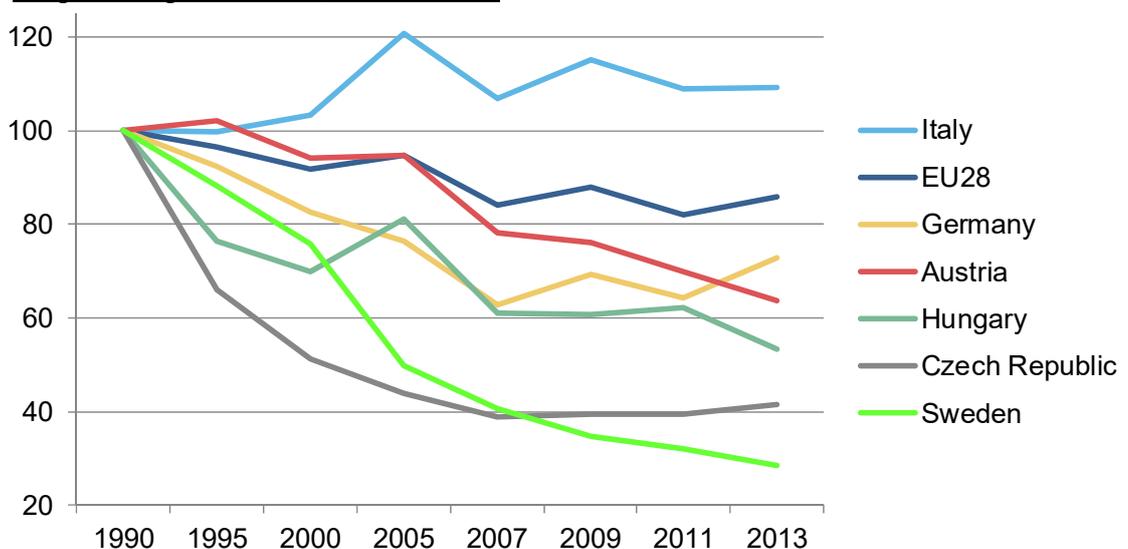
With 24 tons per head and year, Austria's resource consumption is well above European average (16 tons) and markedly above global average (9 tons). In the period 1995-2008, resource efficiency increased by about 25%, but also resource consumption increased by 10%. The Austrian Resource Efficiency Action Plan (REAP), prepared by the Ministry of Environment (BMLFUW) in 2012, is Austria's response to the "Roadmap to a Resource Efficient Europe" published by the European Commission in September 2011 and proposes measures to reduce resource consumption in Austria and to further improve resource efficiency. The goal pursued by the Austrian REAP is to decouple resource consumption from economic growth and to reach an increase in resource efficiency of at least 50% by the year 2020, which means a decrease of resource consumption by 20% (based on the figures of 2008). Vienna's smart city strategy even aims at decreasing final energy consumption per capita by 40% by 2050 (compared to 2005) and at guaranteeing 50% of Vienna's gross energy input to be from renewable sources.

#### 15. ADDRESSING CLIMATE CHANGE

Austria's energy policy is simultaneously conducted at two levels, the federal level and level of Austria's nine federal provinces (*Länder*). Furthermore, energy strategies are influenced by binding EU regulations. For better coordination of the actions on different governmental levels, a joint climate change adaption strategy has been set up (*Österreichische Strategie zur Anpassung an den Klimawandel*).

The federal law on climate protection, passed in 2011, adapted in 2013, sets a maximum threshold for greenhouse gas emissions for the period 2008-2012 and 2013-2020 on a yearly as well as sectoral basis. It applies to the six sectors agriculture, buildings, energy and industry, fluorinated greenhouse gases, transport and waste (BMLFUW, 2015b). The federal law on energy efficiency passed in 2014 and in force until end of 2020 sets an

Figure 4: Development Greenhouse Gas Emissions in buildings in Austria and selected neighboring countries, 1990 = 100



Re.: „buildings“ = Sector CRF 1.A.4  
 Source: Eurostat, IIBW

energy consumption target for Austria of 1,050 PJ in the year 2020. This target corresponds to final energy savings of 310 PJ compared to a 'business as usual' scenario. The Energy Efficiency Law aims at the optimization of the electricity and gas networks, and the renovation of residential and commercial buildings, as well as the obligation of utilities to increase efficiency measures (Austrian Energy Agency, 2015).

During the period of the Kyoto Treaty (1990-2012), but particularly since 2005, greenhouse gas emissions in buildings have been substantially reduced due to ambitious energy standards of new buildings, continuing efforts regarding refurbishments and conversion of heating systems (see Figure 4).

The high energy standards in the construction of new buildings are linked to the Austrian system of housing subsidies as the schemes have been continuously extended towards including energy efficiency criteria and renewable energy systems. Good energy performance in new construction is guaranteed by the maximally permissible annual thermal heat demand per square meter in the building codes of the regions, and by the stipulations on energy performance within the regional housing subsidy laws. The minimum standards for new construction have been tightening severely since the early 2000s and converged at the limit of 25 kWh/m<sup>2</sup>/year heating demand in 2012, which is close to zero energy standard. Since a large part of new constructions makes use of these regional subsidies, the limits regarding thermal standards function as a strong incentive (see Case Study "The Austrian System of Social Housing"). The EU Energy Performance of Building Directive (EPBD 2010 "recast", 2010/31/EU) is implemented in the building codes of all Austrian federal provinces and regulates gradually increasing thermal standards of all new construction (not only subsidized housing) to nearly zero-energy standard until 2021.

In addition to the measures taken in the field of new construction, the refurbishment rate is bound to increase in order to reach the 2020 goal of reduction of final energy consumption in the building sector. The subsidy schemes of all provinces provide strong incentives for ambitious thermal refurbishments. In addition, a federal building refurbishment programme (*Sanierungsscheck*) aims at the thermal refurbishment of residential and commercial buildings. Unlike the development of thermal standards in new construction, the thermal refurbishment quota is lagging behind.

The City of Vienna has been implementing the Vienna Climate Protection Programme since 1999. In addition, it has recently started an interdisciplinary process to draw up a programme for climate change adaptation in Vienna. Measures to facilitate the greening of buildings are promoted, such as green roofing and green facades in connection with rainwater management solutions. This approach leaves rainwater that falls on built-up areas and sealed surfaces in the natural cycle and reduces the burden on sewers. In addition, this also adds to the creation of more green spaces and the reduction of urban heat islands. Further measures to reduce urban heat islands are outlined in the City of Vienna's strategy plan on urban heat islands.

## **16. DISASTER RISK REDUCTION**

Due to Austria's geographical position, floods, landslides, as well as avalanches are the main reasons of disasters. In the Austrian legislation, multiple regulations with respect to natural hazards exist, including articles in the Austrian Forest Act, the Austrian Hydrography Act and the Disaster Fund Act at federal level as well as laws regulating spatial planning and land use planning on the provinces.

There are detailed hazard zone maps for almost all the areas that are exposed to torrents, avalanches and erosion. The hazard-zone maps are administrated by the governmental departments of the Forest-technical Service of Torrent and Avalanche Control and of the Federal Water Engineering Administration. Hazard-zone maps have the character of professional assessments (expert opinion) without direct legal binding effect unless there is a particular reference in the spatial planning laws of the individual provinces.

Major flood events in 2002, 2005 and 2013 caused heavy damage and led to discussions about flood protection measures in Austria. Spatial planning was identified to play a key role in integrated flood management to mitigate potential damage in the future. The flood events in 2002 have launched a process at the level of the European Union, which resulted in the adoption of Directive No 2007/60/EC on the assessment and management of flood risks (EU Flood Directive). In Austria the EU Flood Directive has been implemented within the framework of the Water Rights Act (*Wasserrechtsgesetz 1959*). The EU Floods Directive has introduced a cyclical planning approach for the management of flood risks. The three tools provided in the Directive – preliminary risk assessment, flood hazard and flood risk maps as well as flood risk management plans – must be revised every six years to be able to adapt to changing conditions (e.g. climate change). In order to allow the public an easy access, the flood hazard and flood risk maps are available as web-GIS service. On the basis of the findings of the flood hazard and flood risk maps a catalogue of measures was drawn up.

According to the constitution of the Republic of Austria, losses resulting from natural hazards do not fall under the national jurisdiction. Thus, any responsibility for potential aids to repair damage resulting from natural hazards generally is assigned to the provinces. Nevertheless, in the second half of the 20<sup>th</sup> century after a number of major hazard events the disaster fund (*Katastrophenfonds*) of the federal state was introduced. The disaster fund is financed out of a mix of income, capital and corporate taxes, amounting to total 1.1% of annual tax incomes. By means of the disaster fund, the federal state subsidizes the provinces with up to 60% of the reimbursement paid to victims of natural hazards. The disaster fund is also used to finance ex-ante prevention investments as well as warning and alarm systems. In 2015, two thirds of the expenditure was accounted to preventive measures (BMF, 2016a).

## **17. REDUCING TRAFFIC CONGESTION**

Austria is highly motorized with around 550 cars per 1,000 inhabitants. The capital city Vienna is an exemption. Due to availability of public transport, a compact settlement structure and limited parking possibilities the motorization rate is below 400 cars per 1,000 inhabitants. In recent years, Vienna presented a clear trend in favor of public transport: today 39% of all transport is made by public transport. Cycling is continuously on the rise, albeit starting from a much lower level, it accounts for only slightly more than 6% of total transport. The share of walking remains stable at a remarkable 28%. The goal pursued according to the Urban Development Plan 2025 (*STEP*) is a decrease of motorized private transport in the city to 20% by 2025, to 15% by 2030, and to markedly less than 15% by 2050. To achieve these ambitious targets the Urban Development Plan includes an extension of the public transportation network, better availability and quality of cycling infrastructure and further promotion of private-law agreements relating to mobility issues (e.g. mobility cards, bike sharing and car sharing systems).

As another effective instrument to shift transport to other modes of transportation among domestic population and commuters alike, parking space management was identified. The evaluation of parking space management has shown that the capacity use for parking spaces in streets has declined by up to 30% when the system was introduced in some central districts in 2012, especially due to a reduction of cars not licensed in Vienna (MA 18, 2014).

A particular challenge regarding traffic congestion is the commuter traffic. In 2013, about 78% of all commuters drove to work by car, only 10% traveled solely by public transport. Park-&-Ride facilities are important interfaces between individual motorized transport and public transport. Furthermore, an analysis of commuter flows in the metropolitan region of Vienna by the Vienna University of Technology points out that footpaths and cycle routes to train stations have improved attractiveness of public transport (Brezina, Hader & Eder, 2015).

Since 2005 the *klima:aktiv* mobility programme of the Ministry of Environment (BMLFUW) has achieved imposing results. Until 2015 altogether 6,600 climate relevant mobility projects in around 5,000 companies, 700 cities and regions, 650 touristic facilities and 250 schools have been initiated, including alternative drive technologies, bicycle projects and training programmes. € 80 mill. of subsidies have triggered an investment volume of more than € 500 mill. and created 6,000 green jobs. The programme caused more than 600,000 tons of reduced GHG emissions.

There were debates on the introduction of a Low Emission Zones (LEZ) and congestion charges in Austrian cities, but in the end such measures were rejected. In Vienna, according to the Smart City strategy, motorized individual traffic within municipal boundaries will have to switch from conventional propulsion technologies to alternative technologies (e.g. electro mobility) by 2050 and commercial traffic needs to be largely CO<sub>2</sub>-free by 2030.

For further information regarding urban mobility see chapter II.11 and VI.40.

## **18. AIR POLLUTION**

Atmospheric pollution has been one of the major initial drivers of environmental protection policies in Austria. In recent years, the focus has turned to health risks related to exposure to particulate matter.

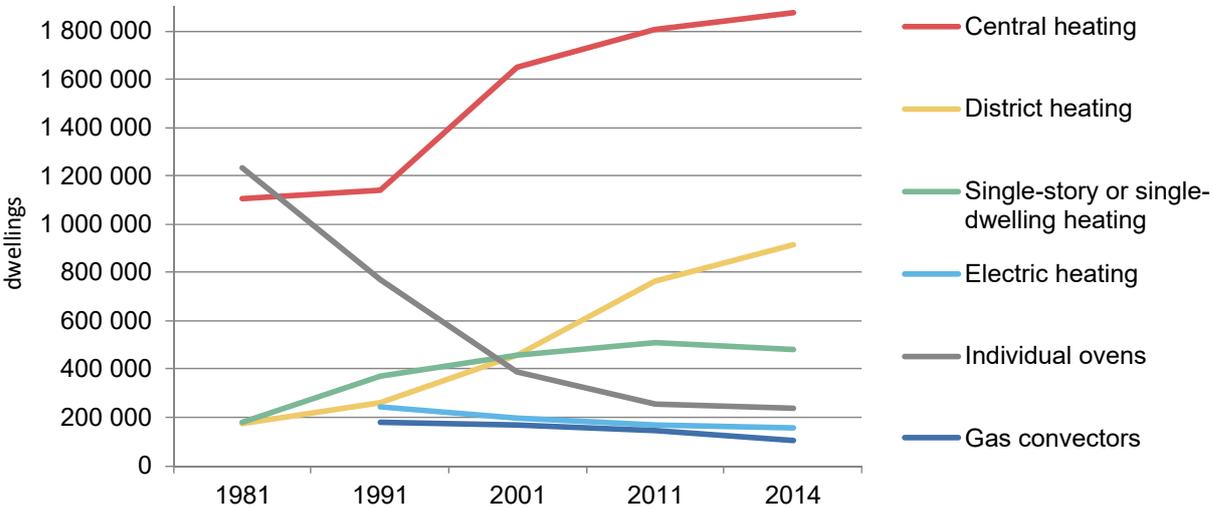
A major driver for the emission of air pollutants, especially for NO<sub>x</sub>, PM<sub>10</sub> and NMVOC is traffic, and to some extent also energy production and heating of buildings. According to Eurostat, 17% of the urban population was exposed to air pollution by particulate matter in 2013. The EU-28 average was 16%. Even though that since 1990, PM<sub>10</sub> emissions have decreased by 18% and NO<sub>x</sub> emissions have dropped by 25%, air quality limit values, especially of PM<sub>10</sub> and NO<sub>x</sub> in recent years, were exceeded. Therefore, abatement measures have been introduced at local, regional and national level. The majority of these measures addresses traffic, residential heating and industry. Examples for measures taken are:

- Dynamic speed limits for passenger cars at highways dependent on pollutant levels,
- Subsidies for retrofitting of diesel particle filters for passenger cars and construction machinery,
- Subsidies for exchange of old heating systems,
- Measures to reduce heating demand in buildings by linking subsidies to certain energetic performances (see chapter III.15).

Graz, the second biggest city in Austria, has problems complying with EU air quality limits. After 70% of the inhabitants voted against a Low Emission Zone (*Umweltzone*) in a local referendum in 2012, a debate around effective measures to combat air pollution was sparked.

Exposure of the air due to sulphur dioxide (SO<sub>2</sub>) has been reduced significantly over the past decades on the basis of different measures such as the reduction of emissions from heating by extending the district heating system. In 2014, almost every fourth Austrian household (24%) was connected to district heating. While central heating systems and district heating have gained importance since 1981, the number of dwellings heated by individual ovens has dramatically decreased (see Figure 5). The largest district heating system in Austria is in Vienna, where almost 41% of dwellings are connected. District heating in Vienna is largely produced from waste heat and can be highlighted as “green system” for space and water heating.

Figure 5: Type of heating in Austria



Source: Statistics Austria, IIBW

**19. CHALLENGES EXPERIENCED AND LESSONS LEARNT IN THESE AREAS (15-18)**

In the context of environment and urbanization, the Smart City concept has emerged as a promising approach. The European Innovation Partnership on Smart Cities and Communities argues that there are opportunities for “linking and upgrading infrastructure, technologies and services in key urban sectors (transport, buildings, energy, ICT) in a smart way [that] will improve quality of life, competitiveness and sustainability of our cities”. The Smart City concept is also part of urban development plans of many Austrian cities. For instance, Graz has launched the Smart City Graz project focusing on low-emission, resource-conserving and energy-efficient urban development. By 2030, five Smart City neighborhoods are to be created including decentral photovoltaic, a local energy network and the implementation of multimodal mobility solutions (Stadtbaudirektion Graz, 2016). In Vienna, a Smart City strategy was adapted as a holistic approach, focusing on resource efficiency based on technological and scientific innovations while offering its citizens the best possible quality of life. The programme “Smart City Profiles” supports Austrian cities and municipalities in the development of smart and sustainable urban strategies and in the planning of measures. The focus lies on climate change and energy efficiency for five urban areas: building and settlement patterns, transport and mobility, technical infrastructure, economy and population, and politics, administration and governance.

Austria is hit hard by climate change: In the period after 1980 global temperatures rose by approximately 0.5°C, compared to an increase of approximately 1°C in Austria. A further temperature increase in Austria is expected and will influence the weather-dependent sectors such as agriculture and forestry, tourism, hydrology, energy, health and transport and the sectors that are linked to those (APCC, 2014). As one of the first EU member states, Austria formally started the ratification process of the Paris Agreement on reducing global warming (2015) in July 2016. Austria is currently developing an integrated energy and climate strategy which will need to be consistent with the Paris agreement.

In 2015, 70% of electricity in Austria was generated by renewable energies such as hydro-power and biogenic fuels as well as wind and photovoltaic power. Most provinces have committed to autonomy in electricity generation in the near future (balanced over total consumption of one year); Burgenland and Lower Austria have already achieved this goal. Furthermore, green tech building and construction know-how in Austria is traditionally strong, resulting in a considerable reduction of greenhouse gas emissions in buildings. However, the 2015 edition of the annual European Environment Agency (EEA) “Trends and projections” report warns that Austria would have to enhance national efforts to bring their domestic emissions below ESD target levels by 2020. In Austria, greenhouse gas emissions can primarily be attributed to the transport sector, where further amendments, e.g. efficiency improvements of vehicles, modal shift to public or non-motorized transport, are to be made. However, it must be noted that due to Austria’s geographical position and fuel price policy, a considerable share of road fuel sold in Austria is actually consumed in neighboring countries, but because of the greenhouse gas inventory guidelines these emissions have to be attributed to Austria. According to the Federal Ministry of Environment up to one third of annual Austrian CO<sub>2</sub> emissions from transport have been caused by that effect (BMLFUW, 2015c).

## **20. FUTURE CHALLENGES AND ISSUES IN THESE AREAS (15-18) THAT COULD BE ADDRESSED BY A NEW URBAN AGENDA**

- Energy-saving spatial and settlement development should be promoted that contributes to avoid motorized individual traffic and helps adapting to climate change (energy-saving construction, areas for flood protection, flood retention and outflows, but also green areas and biotopes close to residential areas to improve the local climate).
- Understanding and awareness of the natural hazard may be improved by better supply of information to the community and thus promoting citizen participation.
- Objectives to improve energy efficiency and to promote renewable energy sources to cope with climate change have to be sufficiently backed by tangible measures – and therefore by political commitment – to make them achievable.
- Global know-how diffusion: Austria would be well advised to share its green tech building know-how with other countries; in return Austria should pay attention to sectors in which Austria is not currently among the know-how leaders, e.g. taxation of pollution and resource usage, or clean air issues in urban areas.
- Increase the number of individual projects with a local focus to effectively contribute to the successful implementation of climate protection and environmental goals. Projects with a local focus also make it easier and more likely for residents to identify with the goals. The projects raise awareness and create interest among residents.

## **IV. URBAN GOVERNANCE AND LEGISLATION**

### **21. IMPROVING URBAN LEGISLATION**

In the cross-cutting task of urban planning, competing interests and priorities between different disciplines are ultimately resulting in physical effects of change on a particular plot, neighborhood or city. Solid urban planning therefore requires an integrated approach. Due to the federal structure of Austria, provincial and local governments are the key players in adopting and improving urban legislation, with the federal level holding important competencies in sectorial planning fields, such as national transport and energy infrastructure or monument protection. Despite major differences in the existing spatial planning acts and building codes of the federal provinces, common trends on the local and regional level are becoming discernible. Recent revisions to building codes and planning laws have focused on regulations regarding energy legislation, accessibility and sprawl. Nevertheless, integration of legal planning-related competencies between the local, regional and federal level remains a challenge for coordination. In Austria, this process in the field of spatial planning and development is tackled by a joint permanent conference between the different administrative levels (*Österreichische Raumordnungskonferenz – ÖROK*), which is hosted by the *Federal Chancellery* in co-lead with the *Länder* and the associations of cities and municipalities.

In order to meet the increasing demands on sustainable development, a more efficient use of available instruments to spatial planning is required, e.g. mechanisms of mobilizing building land, contract-based spatial development or special zoning.

Improving the procedural efficiency of the planning process by optimization and acceleration of planning, zoning and permission procedures is another issues which is repeatedly called for by representatives of the housing and real estate sectors. Considering the highly complex issue of integrated urban planning and the need for faster planning and building procedures, there seems to be a need for better integration and interdisciplinary approaches that will at the same time promote compliance with relevant strategies, such as the UNESCO Recommendations on the Historic Urban Landscape, and will increase the overall quality of the built environment and hence quality of life for citizens. This is one of the issues, why progress and developments in the field of integrated quality of the built environment is monitored every 5 years in a governmental report (*Österreichischer Baukulturreport*).

### **22. DECENTRALIZATION AND STRENGTHENING OF LOCAL AUTHORITIES**

The political system of Austria is extensively decentralized, with nine widely autonomous *Länder*, ranging from 0.3 to 1.8 million inhabitants.

Municipalities have the constitutionally guaranteed right to local self-government. They are endowed with their own sphere of competence and operating at a considerably high level of independence. Their own sphere of competence includes any issues that are in the exclusive or predominant interest of the local community, and suited to be handled within local boundaries. When municipalities perform tasks within their own sphere of functions, they cannot be given instructions by federal or provincial authorities, although they are subject to supervision by them. Article 118 (3) of the Constitutional Law sets out an illustrative list of matters for which municipalities are responsible within their autonomous sphere, such as the appointment of municipal authorities, local public security administration, local building inspection, local fire control and local development planning. Furthermore, local authorities hold responsibilities that are delegated to them by the federal state or the

provinces including among others registration of the inhabitants, organization of elections and health measures. In addition, the federal state and the provinces share responsibilities with the municipalities in areas such as education and health care. In the field of housing, municipalities have a large own social housing stock, particularly in Vienna. In some provinces they are responsible for allocation of LPHA housing and support new construction of affordable housing by provision of building land.

As community tasks have become more extensive in recent years, many municipalities are faced with increasing financial challenges. Hence, fiscal equalization (as described in chapter V.28) is an important part of municipal budgets. In 2016, Austrian Court of Audit published two reports emphasizing the necessity of a comprehensive reform of fiscal equalization as the current arrangement fails to sufficiently take into account current developments. The Austrian Conference on Spatial Planning (ÖROK) takes the view that inter-communal cooperation can be an option for municipalities for coping with growing tasks at simultaneously stagnating financial means (see ÖROK, 2011). An amendment to the Constitutional Law of 2011 even strengthened the powers of municipalities to establish inter-municipal associations. The creation of Municipality Associations is no longer limited to one specific purpose in only one province.

Federalism, i.e. the strengths and weaknesses of the highly decentralized political system in Austria, is repeatedly subject to political debates. Currently a debate has revived to give provinces the authority to levy more own taxes.

On international level, Austria is committed to implement the Urban Agenda of the EU, which has been adopted by the responsible EU Ministers for Urban Development in May 2016 and which strives to better integrate the local level into design and implementation of EU urban policies. Amongst the first four Working Groups, one is dedicated to exploring possibilities of the EU to improve availability of affordable housing throughout EU Member states. The City of Vienna is actively involved in this partnership.

### **23. IMPROVING PARTICIPATION AND HUMAN RIGHTS IN URBAN DEVELOPMENT**

Participation in urban development projects has been recognized as an essential component of decision-making. In 2008, recommendations regarding „Standards of Public Participation” were adopted by the Austrian Council of Ministers. However, participatory processes are not equally pronounced in all cities and communities. The small province Vorarlberg can serve as good practice in this respect. A key driver is the Office for Future Affairs (*Büro für Zukunftsfragen*), a department of the provincial government which promotes the “Citizens Council” (*BürgerInnen-Rat*). The “Citizens Council”, which is based on the model of the *Wisdom Council*, consists of 12 to 16 citizens selected at random, who spend one to two days together, developing proposals for improving issues of public interest. They are assisted in this by a dynamic facilitator using a special moderation method which emphasis the group's ability to organize itself. The Council's findings are documented and first presented publicly and then discussed again in workshops with political representatives. The Citizens Council makes no decisions, but recommendations and thus serves the decision making process. The advantage of the ability of a small group to discuss topics in more detail is connected with the broad impact by public presentation and discussion of results. The Citizens Council is used on a municipal as well as regional level. For instant, a statewide Citizen Council is convened twice a year by the provincial government of Vorarlberg to engage the population of Vorarlberg in important issues regarding the regional development.

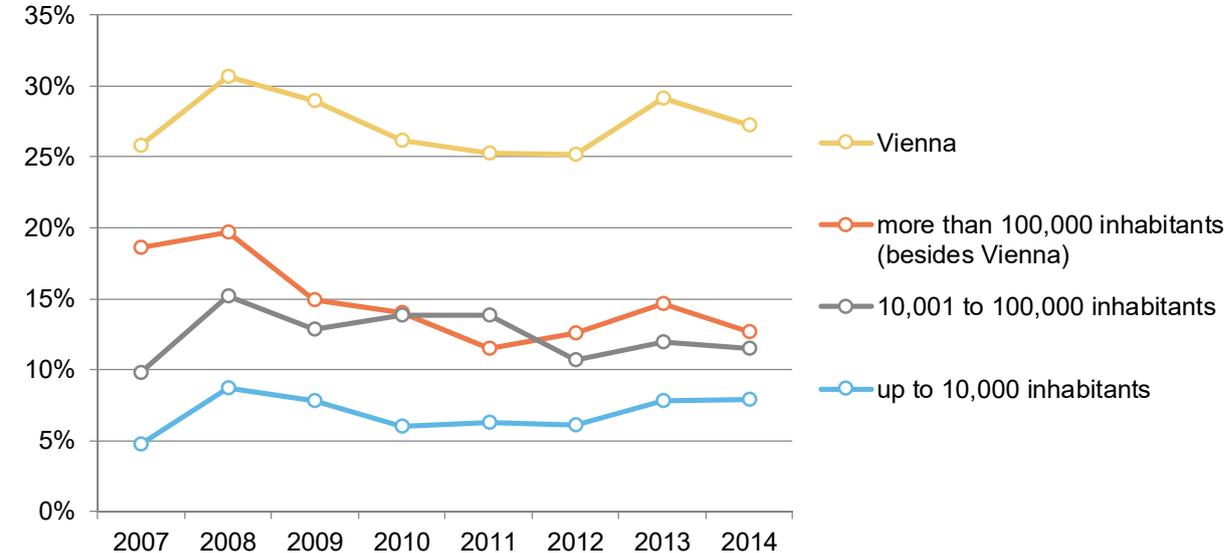
In Vienna, the Urban Renewal Offices (*Gebietsbetreuung Stadterneuerung*) and the Neighborhood Management Offices (*Stadtteilmanagement*) create the framework for close interconnections between urban planning processes and people. Originally, the work of the Urban Renewal Offices was mainly concentrated on technical support and consultancy for urban renewal. Today, the Urban Renewal Offices increasingly became the coordinator and organizer of public participation. The Urban Renewal Offices serve as a two-sided communication channels, offering information and advice in matters regarding housing issues, neighborhood improvement, infrastructure and urban renewal to residents and local stakeholders, while at the same time creating platforms for participation in local decision-making and thus offering a more direct transmission of local problems to political decision-making processes. In 2011, Neighborhood Management Offices were established for new urban development areas to engage future residents in the local development. These organizations have transformed the centralized-hierarchical structure of public administration into a more horizontal system. To balance the articulated interests of the population involved and of local enterprises with the overall requirements of the city, a Master Plan for Participatory Urban Development, which defines procedural principles along concrete examples of planning situations, is currently underway.

**24. ENHANCING URBAN SAFETY AND SECURITY**

Personal security is a core element for the well-being of individuals. In Austria, about 81% of people say that they feel safe walking alone at night. This is significantly above the OECD average of 68%. A more objective measure of a country's safety level is the homicide rate (the number of murders per 100,000 inhabitants). According to the latest OECD data, Austria's homicide rate is 0.4, much lower than the OECD average of 4.1 (OECD, 2015).

The EU-SILC survey provides data about the percentage of the total population who face problems of crime, violence or vandalism in their neighborhoods. Expectedly the share of population that reported the occurrence of crime, violence or vandalism is different depending on municipality size (Figure 6). For instance, the highest percentage can be found in Vienna (27% in 2014), the lowest share in municipalities with less than 10,000 inhabitants (8%). The data showed a downward trend between 2008 and 2013.

**Figure 6: Percentage of the total population that reported the occurrence of crime, violence or vandalism in their local area by municipality size**



Source: EU-SILC, Statistics Austria, IIBW

Gender aspects of violence are discussed with regard to selected intentional crimes: Victims of physical violence (murder, assault and battery) are predominantly male, while women predominantly become victims of dangerous threats, stalking and long-term violence. The perpetrators of all crimes are predominantly male. Men become victims of physical violence predominantly in the public space, women in the private space.

While men are at a greater risk of being victims of violent crime, women report lower perception of security than men (OECD, 2015). Adequate design of public space and adjoining buildings can reduce this sense of anxiety. Vienna has integrated a gender perspective in urban and residential planning (see chapter 1.5).

The recommendation of the European Parliament - Women's Rights and Gender Equality Committees (1987), suggests that per each 10,000 inhabitants a women's shelter place should be provided. This target is almost achieved.

Provincial governments have responded to the increasing feeling of insecurity of the population and promote security measures such as safety doors and burglar alarm system within their housing subsidy schemes.

## **25. IMPROVING SOCIAL INCLUSION AND EQUALITY**

A commonly used measure of inequality is the Gini Coefficient which ranges from 0 (representing perfect equality) to 100 (implying perfect inequality). According to Eurostat, the Gini Coefficient in Austria was 27.2 in 2015, compared to almost 31 in EU average. However, there is a considerable inequality of income distribution which is expressed in the inequality of income ratio. This indicator is calculated as the ratio of total income received by the 20% of population with the highest income to that received by the 20% with the lowest income. In Austria, the top 20% of the population earn about four times as much as the bottom 20% in 2015. However, compared to other European countries inequality of income is still low (see Figure 7). For instance, the EU average ratio was 5.5 (2014).

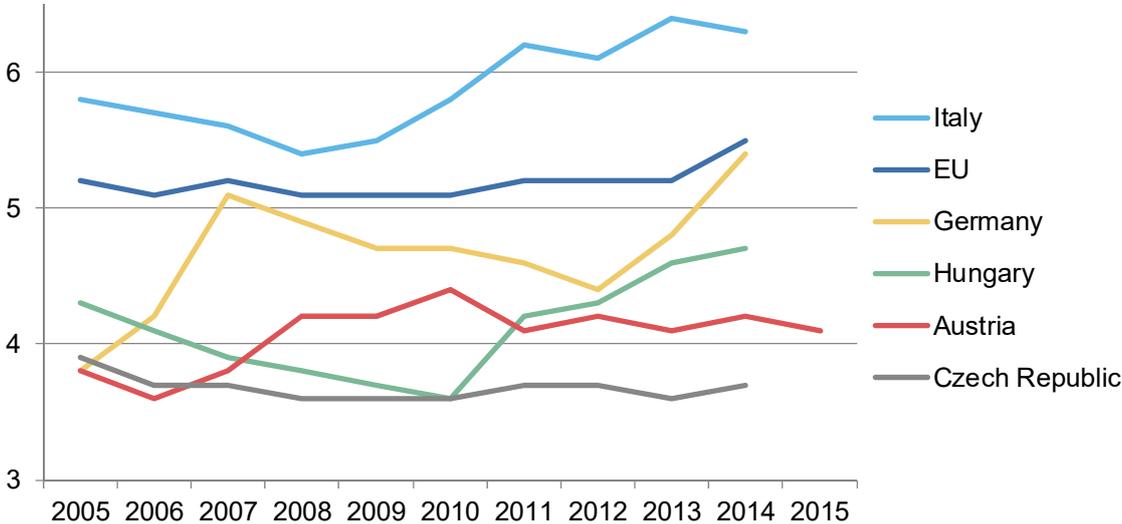
The Social Inclusion Monitor Europe-Index Report by the Bertelsmann Stiftung shows the development on issues of social justice in each EU member state. The Social Justice Index comprises 27 quantitative and eight qualitative indicators, each associated with one of the six dimensions of social justice: 1) poverty prevention, 2) equitable education, 3) labor market access, 4) social cohesion and nondiscrimination, 5) health and 6) intergenerational justice. With a score of 6.57, Austria ranks sixth among the EU-28 countries. While Austria performs very well in the categories labor market access and health, also weaknesses, especially regarding equitable education, are identified (Schraad-Tischler, 2015). Even though intergenerational education mobility has increased somewhat in Austria in recent years, it remains much lower than in most other European countries. An OECD (2010) study reveals that Austria is among the countries where socio-economic background appears to have the largest influence on students' performance. According to Statistics Austria in 2011, the highest probability to attend a university had by far young adults with academic family background: 41% of them also completed university education. The overall average of the young adults was 12%, whereas the share of those with parents with no more than compulsory schooling was only 5%. Furthermore, the data show that especially among young adults, whose parents have completed no more than compulsory schooling, those with a foreign background have significantly less access to higher education than those without a foreign background (Knittler, 2011). These data highlight a missed opportunity to sufficiently integrate children and young adults at the margins of Austrian society: those

from immigrant and poorer households. In order to improve the situation in Vienna, the Smart City Wien strategy focuses strongly on social inclusion by setting goals for better education, affordable housing, better opportunities for active participation at work and for gender equality.

Social exclusion and inequality is often accompanied by unsatisfactory or precarious housing. Due to their lower average income, women have to use a larger percentage of their income for housing than men (see section VI).

Homeless women are particularly vulnerable and need special services and support. In 2008 “wieder Wohnen GmbH” – Vienna’s most important player in the Viennese field of homeless support and benefit (Wiener Wohnungslosenhilfe) has published the “Gender (Mainstreaming) Manifest” to guarantee, that all public services in Vienna for homeless people and their future offers will be gender-sensitive.

**Figure 7: Income quintile share ratio in Austria and selected neighboring countries**



Source: Eurostat, IIBW

**26. CHALLENGES EXPERIENCED AND LESSONS LEARNT IN THESE AREAS (21-25)**

Federalism in Austria creates benefits, but also is a great challenge. On one hand, it brings politics closer to citizens and has helped to economically promote rural areas. On the other hand it creates huge structures of political and administrative bodies, including 10 legislative councils (one of the Federal State, one in each province) and plenty of legal regulations in the authority of the Länder with lots of redundancies and/or unreasonable differentiation.

Further developments, which may lead to growing convergence (e.g. in application of EU legislation) or divergence (e.g. in tax levy), require comprehensive reasoning.

By its paramount role as contractor, planner and owner of buildings and infrastructure (e.g. schools, courts, universities, office buildings, including surrounding public space), the public sector is a key player to influence quality of life, environment and inclusion for citizens. Through the strong compartmentalization within the public sector it needs high efforts on coordination to activate this potential for better integration and quality (“Baukultur”). To promote this approach, several regional governments as well as the federal administration have induced processes and established coordination councils on this matter (e.g. *Beirat für Baukultur* of the

federal ministries, involving the regional governments and associations of cities and municipalities, established in the *Federal Chancellery*). As a result of the latest governmental report on building culture, a joint guideline for common quality criteria for planning of federal buildings is currently being elaborated (*Baukulturelle Leitlinien des Bundes*). It is eventually envisaged to establish a set of joint quality objectives for public or publicly financed buildings, in consensus with regional and local authorities.

As in other European countries, immigrants in Austria tend to settle in cities and urban areas. In Vienna, the share of people with foreign background (UNECE definition: a person whose parents were born abroad) was with 42% twice as high as the Austrian average (21.4%) in 2015. The integration of the arriving migrants in the education system and labor market is a big and increasing challenge. Integration processes always have a spatial dimension as they happen locally and are significantly influenced by communal and regional policy measures. The Austrian Conference on Spatial Planning (ÖROK) calls for an active integration policy in order to prevent potential conflicts, on the one hand, and also to take advantage of the potentials of in-migration, on the other. As an important step, the National Action Plan for Integration (Nationaler Aktionsplan für Integration) was elaborated in 2010 and for the first time all integration policies of Provincial Governments, Local Authorities, Cities, Social Partners and the Federation were brought together.

The fact that the Austrian population will become more ethnically diverse, but voting rights depend on holding Austrian citizenship, is a great challenge from a democratic perspective. New models of “citizenships” should therefore be discussed in the social and political discourse.

## **27. FUTURE CHALLENGES AND ISSUES IN THESE AREAS (21-25) THAT COULD BE ADDRESSED BY A NEW URBAN AGENDA**

- Procedural efficiency of the planning system contributes to both, the quantitative and qualitative outcome of the housing market and therefore should be seen as crucial for the provision of affordable housing, offering a high quality standard of living.
- The reality of the metropolitan regions calls for governance approaches that add aspects of city-region interests to the historically evolved administrative structures of merely locally oriented authorities.
- The public sector needs to enforce its awareness and coordination to increase quality of life in cities through the built environment within its own influence, showcasing innovation and high quality (including cost-effectiveness) in infrastructure planning and investment.
- To avoid “reinventing the wheel”, best practice examples in urban Governance and legislation should be gathered and disseminated – on national, but also international level, as it is envisaged e.g. within the Urban Agenda for the EU.
- Binding guidelines for participatory procedures are to set out a clear framework for future processes. Furthermore, suitable forms of participation for different scale levels – from small-scale issues to those that extend to the city as a whole – have to be developed.
- As migrant flows intensify, an increasing number of people are excluded from basic democratic participation. Models that provide migrants with participatory rights after a certain period of main residence should be discussed and implemented.

## V. URBAN ECONOMY

### 28. IMPROVING MUNICIPAL/LOCAL FINANCE

The system of financial equalization provides for the distribution of taxation rights and tax revenues between the federal state, the federal provinces and the municipalities of Austria. This system is of particular importance for local authorities because it accounts for a significant share of their total revenues. As the Federal Act on Financial Equalization has a limited term of validity (usually four to six years), it needs to be renegotiated between representatives of the federal, provincial and municipal levels at regular intervals. The municipal level is represented by two different associations, the association of cities (*Städtebund*) and the association of municipalities (*Gemeindebund*), with different political affiliations (BMF, 2016b). The present agreement came into force in 2008, and was supposed to end by 2013, however, it was prolonged three times and is still valid. Negotiations for a new agreement are currently in progress.

A significant aspect of negotiations is funding of the housing subsidy scheme of the provinces. In the most recent financial equalization negotiations (2008) the earmarking of housing funds was abolished, leaving future housing policy commitments to the discretion of the regions. Negotiations for a new agreement are currently in progress and a re-introduction of the earmarking of housing funds is discussed.

To increase the transparency of municipal budgets an online platform was recently introduced (see <http://www.gemeindefinanzen.at/>). The platform shows expenditure and revenue of the individual municipalities broken down by various indicators and sectors. The initiative was initiated by the Austrian Association of Municipalities (*Gemeindebund*) in cooperation with *Kommunalkredit Austria*. Due to its special status as province and municipality, data for Vienna are not available.

### 29. STRENGTHENING AND IMPROVING ACCESS TO HOUSING FINANCE

Housing finance in Austria used to be dominated by own equity and subsidized public loans. Until today, soft loans or annuity grants in support of capital market loans, provided by provincial governments, are very important in the single-family housing sector and particularly in subsidized multi-apartment housing (see Case Study “The Austrian System of Social Housing”).

Additionally, there are three types of special purpose banks entrusted with the task to raise money for housing construction: the Mortgage Banks that issue covered mortgage bonds (*Pfandbriefe*), the Contract Savings Banks (*Bausparkassen*) and the Housing Construction Banks (*Wohnbaubanken*). Their main aim is to manage special purpose, closed circuits of finance for housing construction or housing purchases. Finance by special purpose housing banks proved efficiency as shock absorber during the Global Financial Crisis of 2007/08, when international capital markets almost came to a halt.

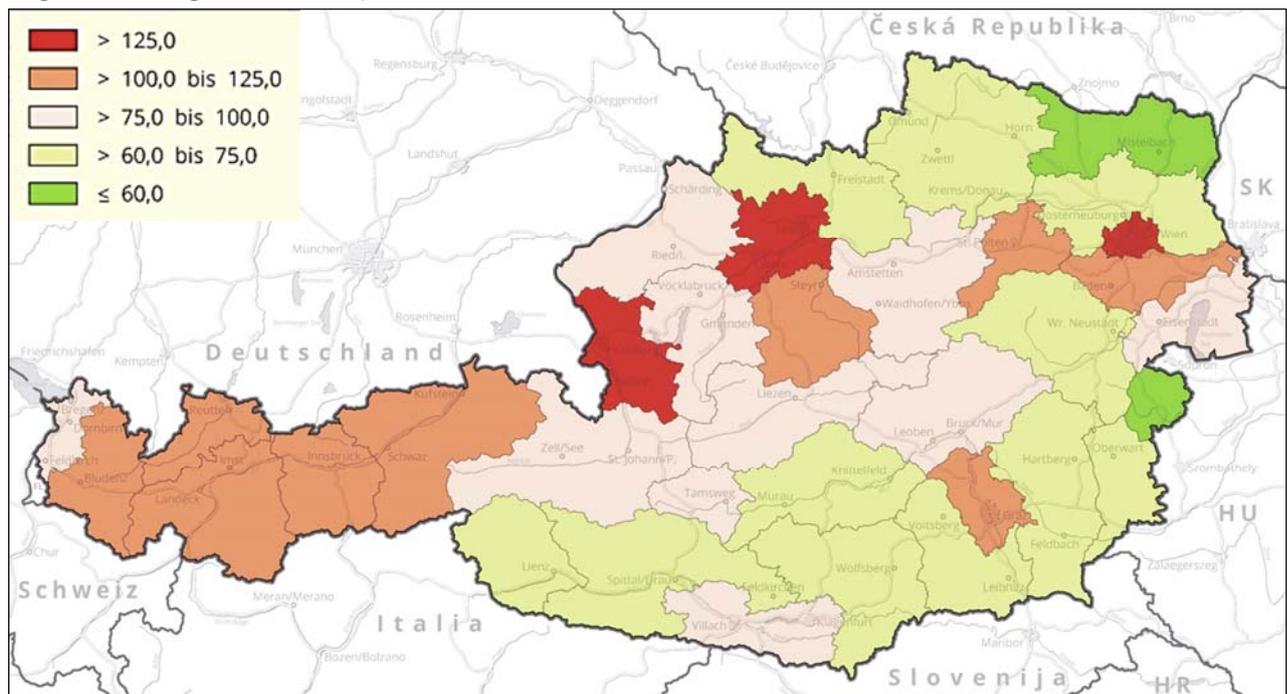
In 2015, a federal housing construction investment bank (*Wohnbauinvestitionsbank*, WBIB) was set up to channel € 700 million of low interest loans provided by the European Investment Bank and partly guaranteed by the Federal State into affordable housing throughout Austria. The WBIB will act as a hub for the residential construction initiative (so-called *Wohnbauoffensive*, see chapter V.31). Long term low and stable interest rates for housing construction are the main drivers.

### 30. SUPPORTING LOCAL ECONOMIC DEVELOPMENT

For decades, Austria's regional pattern has been characterized by a distinct west-east divide in economic dynamics that had its origins in the geopolitical position of the country along the Iron Curtain. Since the opening of the borders and the enlargement of the EU towards Central Eastern Europe, a remarkable catching-up process of the Eastern regions has been apparent, contributing to the decline in regional disparities. According to the OECD in 2013, Austria had the second lowest regional disparities in GDP per capita in OECD countries.

Municipalities often compete with each other to attract enterprises to locate there – competition exists between rural municipalities, but also between cities and their hinterlands. However, if development impulses are created at the best-suited locations and the costs and returns are distributed among the involved municipalities, then the developments will be more in line with the requirements of spatial planning. Furthermore, the financial benefits and burdens are distributed more evenly and will ease the financial burden on the public budgets. Therefore, cooperative modes of location development and location marketing should be further developed.

Figure 8: Regional GDP per inhabitants 2012, Nuts 3-level, Austria =100



Source: ÖROK Atlas [www.oerok-atlas.at](http://www.oerok-atlas.at)

### 31. CREATING DECENT JOBS AND LIVELIHOODS

With regard to the labor market, Austria had a particular good performance for a long time, achieving the lowest unemployment rate all over the EU. However, due to a relatively low level of economic growth and rising labor force supply the unemployment rate has increased considerably in the past few years. Against this backdrop, the Austrian government has announced an additional investment package to foster job and economic growth in 2015. At the heart of the proposal is a residential construction initiative (so-called *Wohnbauoffensive*), which aims at creating 30,000 additional affordable housing units across Austria over the next 5 to 7 years. The total investment should amount to almost

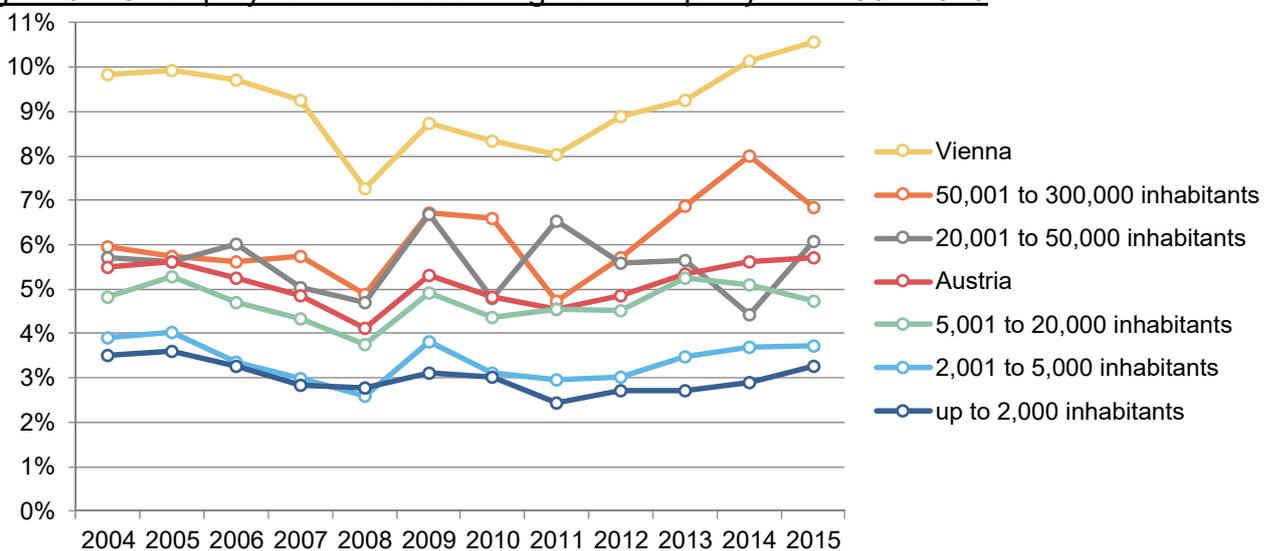
€ 6 billion and the government expects an economic impulse of 0.4% additional GDP growth per year (BMFWF, 2015).

The national unemployment rate (ILO definition, as a percentage of the active population aged 15 to 74, yearly average) was at 5.7% in 2015. It closely correlates with the size of municipalities (Figure 9). While the unemployment rate in villages with less than 2,000 inhabitants was only at 3.3%, unemployment in cities with 50,000 to 300,000 inhabitants was at 6.8% in 2015. In Vienna, Austria's biggest city with 1.8 million inhabitants, unemployment rate was even at 10.6%. This reflects the astonishing economic strength of rural areas in Austria.

A similar picture can be observed when looking at the indicator "people at risk of poverty or social exclusion". In the EU on average a higher proportion of people living in rural areas were at risk of poverty or social exclusion compared with those living in cities in 2014 according to Eurostat data. In Austria the picture is different as the share of people at risk of poverty or social exclusion was more than 10 percentage points higher in cities (28.3%) than in rural areas (14.1%). The difference has even increased over the last decade. A main reason that the risk of poverty or social exclusion is less pronounced in rural areas in Austria than in other European countries is the long tradition of regional development policies which were introduced already in the 1970ies in Austria aiming at maintaining and improving of economic structure in rural regions. But also the housing subsidy schemes have helped to strengthen rural areas and are aiming at fostering regional development.

Economic and social strength of rural areas is one main reason for the overall quite competitive economic performance of Austria.

**Figure 9: Unemployment rate according to municipality size 2004-2015**



Re.: Unemployment rate as a percentage of the active population aged 15 to 74

Source: Statistics Austria, IIBW

## 32. INTEGRATION OF THE URBAN ECONOMY INTO NATIONAL DEVELOPMENT POLICY

Urban regions and agglomeration areas are the focus of economic policy as they have become the central places of a knowledge economy. The Austrian Spatial Development Concept 2011 (*ÖREK 2011*) states that an economic spatial development strategy should pursue to strengthen the innovation capacity of the regions and improve the qualifications

of inhabitants. The ÖREK 2011 also realizes, however, that cities are just as important for the overall competitiveness of Austria as rural areas specialized in tourism or industry. A major aim of economic development has to be the promotion of polycentric and balanced spatial development (ÖROK, 2011).

### **33. CHALLENGES EXPERIENCED AND LESSONS LEARNT IN THESE AREAS (28-32)**

Urban areas face multiple challenges: They are key centers of employment and they serve important economic functions, but they are also faced with in-migration of poorly educated and low income people. Subsequently, income inequalities between poorer and richer households are much higher than in rural areas and increasing, posing a risk for social cohesion.

Negotiations of the financial equalization agreements are characterized by various interests. There is an ongoing debate whether the current model is justified that urban areas get higher per capita amounts from federal tax incomes compared to rural areas. For others the current model is not going far enough and they call for a more “task-oriented” financial equalization. Still others ask for an inter-community mode of financial equalization which provides those individual municipalities with a financial compensation that decides against economic development opportunities so as to be able to support regional interests as the current model often “rewards” economic development at the expense of land consumption.

Regarding housing finance, the mixed approach of state subsidies and capital market instruments has proven effective and has generated higher levels of housing production over time, with LPHAs playing a strategic role in the housing market.

### **34. FUTURE CHALLENGES AND ISSUES IN THESE AREAS (28-32) THAT COULD BE ADDRESSED BY A NEW URBAN AGENDA**

- Cooperation structures for municipalities should be extended to safeguard a sustainable economic development of regions without negative impact to the environment, e.g. for joint development projects, administrative cooperation or common enterprise locations.

## VI. HOUSING AND BASIC SERVICES

### 35. SLUM UPGRADING AND PREVENTION

There are no areas in Austria to be considered as slums. Additionally, Austria is characterized by a low level of social segregation. The Austrian housing policy acknowledges housing as a basic human need and encourages an affordable and high-quality supply of dwellings.

Promoting a social mix in neighborhoods and preventing ghettoization has always been a priority of local authorities. A particular case is Vienna where municipal housing and social housing in forms of Limited Profit Housing Associations (LPHA) are scattered across the city. Compared to other cities the segregation in Vienna has remained relatively low. The local government sees the long-standing tradition of social housing construction as safeguards of good social mix. Social housing makes up 42% of the total housing stock and about 60% of all Vienna households live in social housing apartments, thus the city government remains in control of a large part of housing in the city. There are income limits to determine who can apply for social housing. However, the income ceiling de facto allows about 80% of households to access social housing in Vienna. The logic behind this comparatively high level of income ceilings is social mix. Furthermore, the income restrictions only apply when tenants first move in. Residents are never required to move out, even if household income levels increase in the following years.

### 36. IMPROVING ACCESS TO ADEQUATE HOUSING

The average housing standard in Austria has continually improved (see chapter VI.38). Parallel to the increase of quality of the housing stock, the average size of a home has risen to almost 100 m<sup>2</sup> (Table 2).

The average floor space per person rose between 1971 and 2014 from 22.9 m<sup>2</sup> to 44.7 m<sup>2</sup>. However, the average floor space for persons with a migrant background was with 31 m<sup>2</sup> about one third lower. Especially migrants from the former Yugoslavia and from Turkey lived with 26 and 22 m<sup>2</sup> average floors space per person lived in more confined housing conditions than the population without a migration background (48 m<sup>2</sup>) (Statistik Austria 2015, p. 77). The right to adequate housing to all persons according to point 61 of the Habitat Agenda seems widely fulfilled. Nevertheless, additional efforts are needed facing the needs of most vulnerable people.

Table 2: Average dwelling size of main residence and floor space per person in Austria

	dwelling size (m <sup>2</sup> )	increase (m <sup>2</sup> )	floor space per person (m <sup>2</sup> )
<b>1971</b>	66.0		22.9
<b>1981</b>	77.0	+ 11	28.4
<b>1991</b>	85.0	+ 8	32.7
<b>2001</b>	92.0	+ 7	38.7
<b>2011</b>	99.0	+ 8	43.7
<b>2014</b>	99.7		44.7

Source: Statistics Austria

A big challenge for the coming months and years is to accommodate the large number of migrants with legal asylum status. Some of the federal provinces have introduced new housing subsidy programs which are in particular directed towards low-income households, including migrants with legal asylum status. One example is the housing programme “Wohn.Chance.NÖ” in Lower Austria. The rent is set with 250 €/month for a dwelling with about 60 m2, which amounts to approximately 4.2 € per square meter, within the cost-rent framework of the LPHA sector. In this context, building lease will be an important factor to keep costs of construction low in order to achieve the pre-specified rent level.

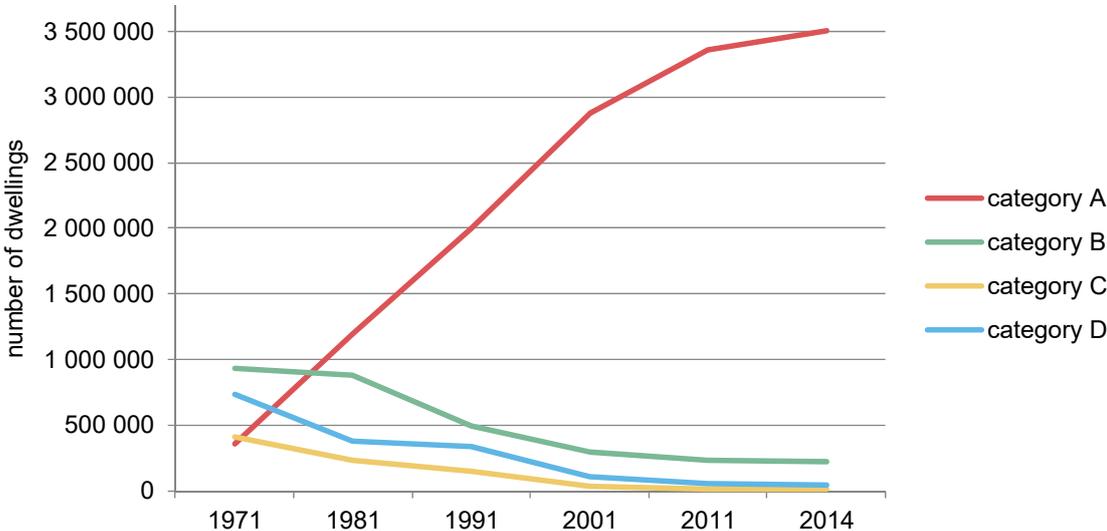
**37. ENSURING SUSTAINABLE ACCESS TO SAFE DRINKING WATER**

Due to its geographical position and topography, Austria has, compared to other countries, vast drinking water resources and reserves. There is universal access to high-quality drinking water across Austria as 100% of the population has access to improved drinking water sources (World Bank). Since 1959, around € 55 billion has been invested in drinking water supply and sewage systems. Some 90% of the population is supplied through central water supply facilities; the remaining 10% of the population obtain their drinking water from their own domestic wells and springs. A 100% connection rate to public disposal networks will be impossible to achieve due to the Austrian topography (BMLFUW, 2016).

While 50% of the Austrian population is supplied with spring water, the other 50% get their drinking water from groundwater supplies. Since 1991, the water quality in Austria has been consistently measured by private and public contractors commissioned by the Ministry of Environment (which is also responsible for Agriculture, Forestry and Water Management) and the Austrian Federal Provinces. The objective of this monitoring programme is to record the status of Austria’s surface waters and groundwater. Results show that most parameters related to drinking water quality are well below the specified limits.

In 2012, the initiative “VOR SORGEN” was launched by the Federal Ministry of Environment, all nine Länder, the representations of interest of cities and municipalities, and a number of related interest groups, to increase the awareness for the necessity of conservation measures in the drinking water sector (see BMLFUW, 2016).

Figure 10: Dwellings according to equipment categories in Austria



Source: Statistics Austria

### 38. ENSURING SUSTAINABLE ACCESS TO BASIC SANITATION AND DRAINAGE

According to the World Bank, 100% of the Austrian population use improved sanitation facilities. The indicator “improved sanitation facilities” includes flush/pour flush (to piped sewer system, septic tank, pit latrine), ventilated improved pit (VIP) latrine, pit latrine with slab, and composting toilet.

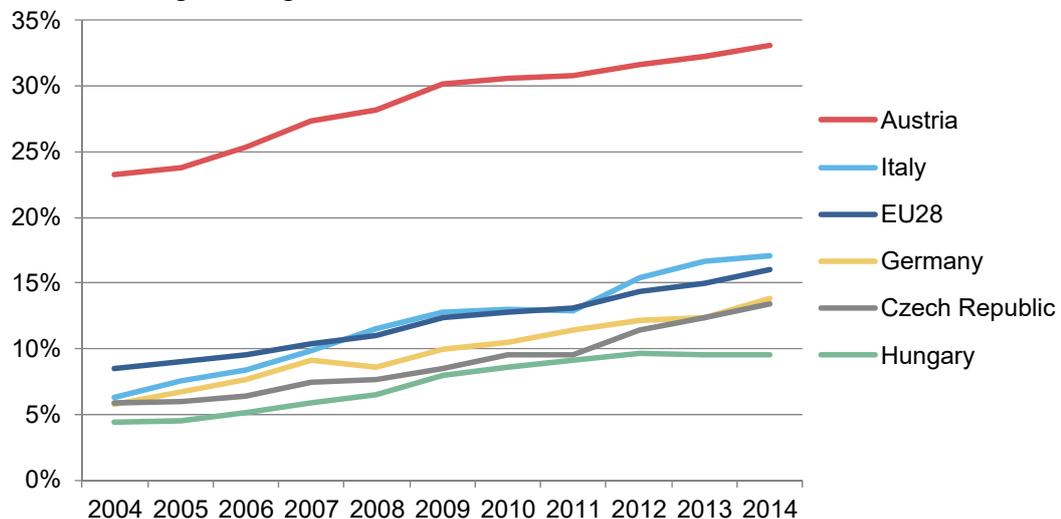
Already 93% of dwellings are among the best equipped dwellings with bathroom or shower, WC and central heating (equipment category A) – compared to 77% in the year 1995 and only 15% in the year 1971. All lower categories (B – inside toilet and bathroom, single oven heating, C – inside toilet, some form of inside water supply, D - lacking water supply and/or inside toilet) have strongly declined (Figure 10), due to massive (public) investments in refurbishment and quality upgrade. Sub-standard dwellings make up only 1% of the housing stock. The proportion of sub-standard accommodation can be mainly attributed to the housing stock in Vienna, where still 3.2% of the total housing stock fall into this category.

### 39. IMPROVING ACCESS TO CLEAN DOMESTIC ENERGY

The Austrian policymaker and government institutions are committed to the promotion of access to sustainable sources of energy as included in the Habitat Agenda under point 85. In 2014, the share of renewable energy as defined in EU Directive 2009/28/EC amounted to 33% in Austria. For comparison: The share of renewable energy in the gross final energy consumption of the EU-28 amounted according to Eurostat to 16% (see Figure 11).

The types of renewables that contributed most to the total volume of renewable energy in Austria were hydropower with 38%, solid biomass with 30% and the renewable shares in district heating with 10%. Other important contributions were from black liquors used for energy with 7% and biofuels with 6%. The contribution of the sectors wind energy, solar thermal energy, ambient heat, biogas, geothermal energy and photovoltaics make up in total 9%. The share of renewable energy in gross final energy consumption is to increase to 35% by 2020. By focusing on the intensified use of renewables, the degree of national energy self-sufficiency is enhancing.

**Figure 11: Share of renewable energy in gross final energy consumption in Austria and selected neighboring countries**



Source: Eurostat

In the residential building sector energy related social housing subsidies are important instruments to activate energy savings and renewable energy gains (see Case Study “The Austrian System of Social Housing”). Energy efficiency standards have been improving constantly in new construction as well as in building renovation. Decentralized energy supply stations powered from renewable energy source play a secondary, but nevertheless important, role. New regulatory framework conditions will probably also give rise to further investments in in that sector. Already in the previous years, significant increases of electricity generation from wind and photovoltaics (+24%) were observed due to a further expansion of plant capacities.

The Green Electricity Act (*Ökostromgesetz 2012*) is the central regulatory act for promoting green energy in the Austrian electricity market. Electricity from renewable sources is supported mainly through feed-in tariffs which are set out in the Green Electricity Act. But other models, particularly the promotion of maximum on-place use of generated electricity, are developing. Furthermore, the construction of PV installations on buildings and small or medium-sized hydro-electric power stations is supported through subsidies. Electricity from renewable sources is granted access to the grid according to the general legislation on energy and according to non-discriminatory principles.

#### **40. IMPROVING ACCESS TO SUSTAINABLE MEANS OF TRANSPORT**

The Transport Master Plan for Austria is the current national framework and describes Austria’s transport strategies, objectives and policies until 2025+ for all transport modes and operators (BMVIT, 2012). The target levels “more socially equitable, safer, more environmentally friendly and more efficient” are applied to the field of transport infrastructure and give leeway to urban mobility strategies.

The climate protection programme “klima:aktiv mobil” offers cities and municipalities (as well as several other target groups) consultation and financial support for the implementation of mobility management measures. The programme was set up in 2004 and was recently extended to 2020. The programme supports measures focusing on mobility management, including alternative vehicles and renewable energy, intelligent multimodal mobility, eco-driving, cycling, walking, demand-oriented public transport and awareness raising. 5,700 climate-friendly mobility projects were launched, which have been implemented by 4,200 businesses, 650 towns, municipalities and regions, 600 providers of tourist services and 250 schools. The annual reduction of CO<sub>2</sub> amounts up to 590 000 tons. According to the Austrian Federal Ministry of Environment (*BMLFUW*), funding of mobility projects amounting to € 74.8 million has triggered an investment volume of around € 500 million. “Klima:aktiv mobil” has already twice received EU Public Sector Awards and is also a European best practice example of the Pan-European Programmes for Transport, Environment and Health of the UNECE – WHO – EU platform for mobility management (*BMLFUW*, 2015b).

The European Commission published guidelines for “Sustainable Urban Mobility Plans” (SUMP), setting standards for strategic transport planning. The SUMP-standards were adhered to in the preparation of the Urban Mobility Plan in Vienna which was adopted by the City Council as part of the Urban Development Plan STEP 2025 in December 2014. The Urban Mobility Plan aims at fostering mobility in Vienna being fair, healthy, compact, eco-friendly, robust and efficient.

The mobility concept of “Aspern Vienna’s Urban Lakeside” can be mentioned as a model project regarding sustainable urban mobility. An efficient, high-capacity public transport link (extension of underground line U2) has been put in place prior to the overall development of this remote development zone. Underground parking facilities are accommodated in a simplified system of communal neighborhood garages, which both enlivens the public space and ensures that in large parts of the development public transport is equally close to home as the private car. To implement alternative forms of mobility, e.g. car-sharing pool, cycle hire system and cycle repair service, a mobility fund was set up, financed from the charges levied for garage construction and operation (Wien 3420 AG).

For further information regarding urban mobility see chapter II.11 and III.17.

#### **41. CHALLENGES EXPERIENCED AND LESSONS LEARNT IN THESE AREAS (35-40)**

The provision of adequate shelter is the main objective of the Austrian housing policy for already many decades with an impressive degree of continuity. Within the framework of housing subsidy schemes, the nine Länder were able to set up a large and internationally acknowledged social rental housing sector. The predominant instruments are object-related subsidies towards producer of housing (“bricks and mortar”) which are accompanied by subject-side subsidies. Limited-profit housing associations (LPHAs) which have access to public subsidies have become the most dynamic sector on the multi-story housing market in Austria in the last decades. The municipal housing stock in Austria mainly comprises of that of the capital city Vienna, where municipal housing makes up 23% of the total housing stock (approximately 220,000 housing units). Whereas some Austrian cities decided to sell off their municipal housing stock (e.g. to LPHAs), Vienna has kept a tight hand on this asset. Of the 220,000 municipal flats, nearly 70,000 were constructed in the 1920s and 1930s, showing the enduring legacy of the “Red Vienna” period, and the commitment to its maintenance. The fact that municipal housing estates were built throughout the city, had a long-term anti-segregation effect. Compared to other cities the segregation in Vienna has remained relatively low and social housing policy has always been aiming at ameliorating the social mix in the city.

Limited-profit housing is directed towards middle and low income households and functions as a substitute to private renting. Thus, limited-profit housing influences the general price level and fosters overall efficiency in the housing market (see Case Study “The Austrian System of Social Housing”).

The availability and price level of LPHAs will be the main challenges of the future. Firstly, many cities in Austria are faced with strong land restrictions and a lack of available building land for affordable housing projects. New methods for mobilizing building land will have to be explored. Secondly, cost-rents, one of the main principle of limited-profit housing, are growing less affordable, as certain cost components are increasing stronger than incomes of the target groups (construction costs), or even very strongly (land costs in urban areas). As a result, housing provided by LPHAs is increasingly becoming out of reach for low income households, despite subject-related subsidies fill the gap.

Furthermore, data suggest that the population with a migrant background is particularly disadvantaged as they are significantly more likely to live in overcrowded places (see chapter VI.36). LPHAs will be called to adopt measures directed towards better integration of migrant population.

In a society with strongly growing diversity and insufficient integration of newcomers it seems likely that the affordable and social housing sector will decreasingly be able to accommodate the vast majority of those in need, as it did in the past.

#### **42. FUTURE CHALLENGES AND ISSUES IN THESE AREAS (35-40) THAT COULD BE ADDRESSED BY A NEW URBAN AGENDA**

- Affordable housing should be more firmly established as a goal in legislation relating to urban planning.
- Affordability and quality of housing for migrants and population with migrant background are central issues and must increasingly come to the fore.
- Density regulations: To support housing developments with sustainable access to basic services - water/sanitation, waste management, energy, mobility - an effort should be made to achieve appropriate densities, above all, in local planning instruments.

## VII. INDICATORS

### I. PERCENTAGE OF PEOPLE LIVING IN SLUMS

Austria does not have areas that can be defined as slums.

#### **Percentage of people living in slums**

	<b>1996</b>	<b>2006</b>	<b>2013</b>
<b>Total</b>	0%	0%	0%

Source: IIBW

### II. PERCENTAGE OF URBAN POPULATION WITH ACCESS TO ADEQUATE HOUSING

#### **Reversion of severe housing deprivation rate**

	<b>1996</b>	<b>2006</b>	<b>2013</b>
<b>Total</b>	nav	96.1%	96.1%
<b>Man</b>	nav	95.8%	96.1%
<b>Women</b>	nav	96.4%	96.1%

Source: Eurostat, IIBW

The *severe housing deprivation rate* according to Eurostat is defined as the percentage of population living in the dwelling which is considered as overcrowded, while also exhibiting at least one of the housing deprivation measures. Aspects of housing deprivation are lack of a bath or a toilet, a leaking roof in the dwelling, or a dwelling considered as being too dark. The reversion of the severe housing deprivation rate gives an indication of the population with access to adequate housing.

### III. PERCENTAGE OF PEOPLE RESIDING IN URBAN AREAS WITH ACCESS TO SAFE DRINKING WATER

#### **Percentage of people residing in urban areas with access to safe drinking water**

	<b>1996</b>	<b>2006</b>	<b>2013</b>
<b>Total</b>	100%	100%	100%

Source: IIBW

### IV. PERCENTAGE OF PEOPLE RESIDING IN URBAN AREAS WITH ACCESS TO ADEQUATE SANITATION

#### **Percentage of people residing in urban areas with access to adequate sanitation**

	<b>1996</b>	<b>2006</b>	<b>2013</b>
<b>Total</b>	100%	100%	100%

Source: IIBW

V. PERCENTAGE OF PEOPLE RESIDING IN URBAN AREAS WITH ACCESS TO REGULAR WASTE COLLECTION

**Percentage of people residing in urban areas with access to regular waste collection**

	<b>1996</b>	<b>2006</b>	<b>2013</b>
<b>Total</b>	100%	100%	100%

Source: IIBW

VI. PERCENTAGE OF PEOPLE RESIDING IN URBAN AREAS WITH ACCESS TO CLEAN DOMESTIC ENERGY

No data available.

VII. PERCENTAGE OF PEOPLE RESIDING IN URBAN AREAS WITH ACCESS TO PUBLIC TRANSPORT

**Percentage of people residing in urban areas with access to public transport**

	<b>1996</b>	<b>2006</b>	<b>2013</b>
<b>Total</b>	100%	100%	100%

Source: IIBW

VIII. LEVEL OF EFFECTIVE DECENTRALIZATION FOR SUSTAINABLE URBAN DEVELOPMENT MEASURED BY:

(i) Percentage of policies and legislation on urban issues in whose formulation local and regional governments participated from 1996 to the present;

No accurate figures available.

There is no policy or programme in Austria that explicitly illustrates the national perspective of urban issues and challenges from the standpoint of the federal government. Urban policy may be considered to be carried out by the cities themselves as legislation and implementation of planning belong to the autonomous responsibilities of the Länder and municipalities, albeit with the significant restriction that the named powers of the federal government regarding important sectoral measures and planning activities with territorial reference remain intact (e.g. railways, forestry, laws relating to water). As a coordinating authority the Austrian Conference on Spatial Planning (ÖROK) was established by the federal government, the Länder and municipalities.

(ii) Percentage share of both income and expenditure allocated to local and regional governments from the national budget

**% of total revenue of federal state allocated**

	<b>1996</b>	<b>2006</b>	<b>2013</b>
<b>to provinces</b>	nav	26.5%	28.6%
<b>to municipalities</b>	nav	10.9%	11.9%

Source: BMF

(iii) Percentage share of local authorities' expenditure financed from local revenue  
 Additional to the transfer from the federal state which makes up approximately 40% of the local revenue, municipalities finance themselves primarily through their own taxes, significant are municipal tax, property tax, as well as through fees and charges.

IX. PERCENTAGE OF CITY, REGIONAL AND NATIONAL AUTHORITIES THAT HAVE IMPLEMENTED URBAN POLICIES SUPPORTIVE OF LOCAL ECONOMIC DEVELOPMENT AND CREATION OF DECENT JOBS AND LIVELIHOODS

No accurate figures available, but most cities and regional authorities have done this. Nearly every province has a spatial planning concept, spatial strategies for regions, and sectoral development strategies which deal with economic issues of the province. Development and land use planning lies in the hand of the municipalities in Austria. The instruments of the local level include local development programs, land use plans and building codes. The local development programme lays down the long term objectives policies for development of a city resp. local community area and covers strategic objectives regarding the local economic development.

X. PERCENTAGE OF CITY AND REGIONAL AUTHORITIES THAT HAVE ADOPTED OR IMPLEMENTED URBAN SAFETY AND SECURITY POLICIES OR STRATEGIES

No accurate figures available.

XI. PERCENTAGE OF CITY AND REGIONAL AUTHORITIES THAT HAVE IMPLEMENTED PLANS AND DESIGNS FOR SUSTAINABLE AND RESILIENT CITIES THAT ARE INCLUSIVE AND RESPOND TO URBAN POPULATION GROWTH ADEQUATELY

Every city has a development and land use plan as well as detailed construction legislation. The local development programme lays down the long term objectives and policies for development of the city resp. local community area and covers topics such as residential development, traffic, environment and economic development.

XII. SHARE OF NATIONAL GROSS DOMESTIC PRODUCT (GDP) THAT IS PRODUCED IN URBAN AREAS

**Share of national gross domestic product (GDP) that is produced in urban areas**

	1996	2006	2013
	nav	68%	67%

Source: Statistics Austria, IIBW

Selection of urban areas according to population density > 100 at Nuts-3 level:  
 Wien, Sankt Pölten, Wiener Umland/Nordteil, Wiener Umland/Südteil, Wien, Klagenfurt-Villach, Graz, Linz-Wels, Salzburg und Umgebung, Innsbruck, Rheintal-Bodenseegebiet

### XIII. ANY OTHER URBAN-RELATED DATA RELEVANT TO THE NATIONAL REPORT

#### **Housing permits per 1,000 inhabitants**

	<b>1996</b>	<b>2006</b>	<b>2013</b>
<b>Austria</b>	6.6	4.7	5.5
<b>Euroconstruct countries</b>	nav	5.6	3.1

Source: Euroconstruct, IIBW

#### **Housing cost ratio (national accounts)**

	<b>1996</b>	<b>2006</b>	<b>2013</b>
<b>Austria</b>	19.7%	21.1%	21.9%
<b>EU</b>	20.6%	21.6%	24.7%

Source: Eurostat, IIBW

#### **Public expenditure on housing in % of GDP**

	<b>1996</b>	<b>2006</b>	<b>2013</b>
<b>Austria</b>	nav	1.0%	0.8%
<b>EU</b>	nav	1.7%	nav

Source: IIBW

# ANNEX

## REFERENCES

- APCC (Austrian Panel on Climate Change) (2014) Austrian Assessment Report Climate Change 2014 (AAR14): Synopsis – Main Findings. Vienna: Climate Change Centre Austria.
- Austrian Energy Agency (2015) Energy efficiency trends and policies in Austria. Online. Available at: <http://www.odyssee-mure.eu/publications/national-reports/energy-efficiency-austria.pdf> (accessed 23 June 2016).
- BMF (Bundesministerium für Finanzen) (2016a) Katastrophenfonds (Disaster fund). Online. Available at <https://www.bmf.gv.at/budget/finanzbeziehungen-zu-laendern-und-gemeinden/katastrophenfonds.html> (accessed 23 June 2016).
- BMF (Bundesministerium für Finanzen) (2016b) Fiscal Federalism. Online. Available at: <https://english.bmf.gv.at/budget-economic-policy/Fiscal-Federalism.html> (accessed 24 July 2016).
- BMLFUW (Bundesministerium für Land- und Forstwirtschaft, Umwelt und Wasserwirtschaft) (2012) Ressourceneffizienz Aktionsplan ( REAP) (Resource Efficiency Action Plan). Vienna: BMLFUW.
- BMLFUW (Bundesministerium für Land- und Forstwirtschaft, Umwelt und Wasserwirtschaft) (2012) Die Österreichische Strategie zur Anpassung an den Klimawandel (The Austrian Strategy for Adaptation to Climate Change). Vienna: BMLFUW. Online. Available at [https://www.bmlfuw.gv.at/dam/jcr:c711dda4-1c35-4928-9619-f8033a1f0d14/AustrianAdaptationStrategy\\_Context\\_FINAL\\_for-prints\\_25092013\\_v02.pdf](https://www.bmlfuw.gv.at/dam/jcr:c711dda4-1c35-4928-9619-f8033a1f0d14/AustrianAdaptationStrategy_Context_FINAL_for-prints_25092013_v02.pdf)
- BMLFUW (Bundesministerium für Land- und Forstwirtschaft, Umwelt und Wasserwirtschaft) (2015a) Master Plan for Rural Areas. Online. Available at: <https://www.bmlfuw.gv.at/en/agriculture/Rural-development/Masterplanruralareas.html> (accessed 19 July 2016).
- BMLFUW (Bundesministerium für Land- und Forstwirtschaft, Umwelt und Wasserwirtschaft) (2015b) Klimaaktiv mobil. Förderungsprogramm Leistungsbericht und neue Offensive (Klimaaktiv mobil. Performance report and new support initiatives). Vienna: BMLFUW.
- BMLFUW (Bundesministerium für Land- und Forstwirtschaft, Umwelt und Wasserwirtschaft) (2015c) Austrian greenhouse gas emissions trend and changes in national circumstances. Online. Available at: <https://www.bmlfuw.gv.at/en/environment/Climateprotect/Greenhousegas.html> (accessed 2 August 2016).
- BMLFUW (Bundesministerium für Land- und Forstwirtschaft, Umwelt und Wasserwirtschaft) (2016) Vorsorgen. Online. Available at: <http://www.wasseraktiv.at/vorsorgen/home/> (accessed 21 July 2016).
- BMVIT (Bundesministerium für Verkehr, Innovation und Technologie) (2011) Transport in Figures. Edition 2011. Online. Available at: [http://www.bmvit.gv.at/bmvit/verkehr/gesamtverkehr/statistik/downloads/TIF\\_11\\_english\\_2011\\_20130627.pdf](http://www.bmvit.gv.at/bmvit/verkehr/gesamtverkehr/statistik/downloads/TIF_11_english_2011_20130627.pdf) (accessed 18 July 2016).
- BMVIT (Bundesministerium für Verkehr, Innovation und Technologie) (2012) Gesamtverkehrsplan für Österreich (Transport Master Plan for Austria). Online. Available at: [http://www.bmvit.gv.at/verkehr/gesamtverkehr/gvp/downloads/gvp\\_gesamt.pdf](http://www.bmvit.gv.at/verkehr/gesamtverkehr/gvp/downloads/gvp_gesamt.pdf) (accessed 16 July 2016).
- BMWFW (Bundesministerium für Wissenschaft, Forschung und Wirtschaft) (2015) Economic Report Austria 2015. Executive Summary. Online. Available at: <http://www.bmwfw.gv.at/Wirtschaftspolitik/Wirtschaftspolitik/Documents/Wirtschaftsbericht2015ExecSummEN.pdf> (accessed 16 July 2016).
- Brezina, T., Hader, E., Eder, E. (2015) Pendler in der Ostregion – Potenziale für die Bahn (Commuters in the East region – Potential for the public transport). Verkehr und Infrastruktur. Arbeiterkammer Burgenland. Arbeiterkammer Niederösterreich. Arbeiterkammer Wien. Online. Available at: [https://media.arbeiterkammer.at/wien/Verkehr\\_und\\_Infrastruktur\\_56.pdf](https://media.arbeiterkammer.at/wien/Verkehr_und_Infrastruktur_56.pdf) (accessed July 23 2016).
- Bundeskanzleramt (2011) Österreichischer Baukulturreport 2011. Online. Available at: <http://baukulturreport.at>
- City of Vienna (2013) Gender Mainstreaming in Urban Planning and Urban Development. STEP 2025, Werkstattbericht 130a (MA 18 – Urban Development and Planning). Available at: <https://www.wien.gv.at/stadtentwicklung/studien/pdf/b008358.pdf>
- EEA (European Environment Agency) (2015) Trends and projections in Europe 2015 Tracking progress towards Europe's climate and energy targets. Luxembourg: EEA.

- European Innovation Partnership on Smart Cities and Communities (n.d.) Smart Cities and Communities. Online. Available at: [https://eu-smartcities.eu/sites/all/files/brochure\\_WEB\\_eusmart2\\_5.pdf](https://eu-smartcities.eu/sites/all/files/brochure_WEB_eusmart2_5.pdf) (accessed 3 August 2016).
- Hiess, H. (2015) Rahmenbedingungen und Trends der räumlichen Entwicklung (Framework and trends of the spatial development). In ÖROK (2015) 14. Raumordnungsbericht. Analyse und Berichte zur räumlichen Entwicklung Österreichs 2012-2014 (14th Spatial Planning Report 2012-2014). Vienna: ÖROK.
- IIBW (2013) Gemeinnütziges Wohnen im Alter. Volkswirtschaftliche Analyse unterschiedlicher Wohn- und Betreuungsformen (Wien: IIBW, im Auftrag der Salzburg Wohnbau und des Bundesministeriums für Wirtschaft, Familie und Jugend).
- IMAG GMB (2014) Gender Budgeting in Österreich (Gender Budgeting in Austria). Online. Available at: <http://www.imag-gendermainstreaming.at/cms/imag/content.htm?channel=CH0521&doc=CMS1060358779484&lang=en> (accessed 15 July 2016).
- Knittler, K. (2011) Intergenerationale Bildungsmobilität (Intergenerational education mobility). Online. Available at: [http://www.konsumentenfragen.at/cms/konsumentenfragen/attachments/8/2/4/CH0928/CMS1304926851259/intergenerationale\\_bildungsmobilitaet\\_vergleich\\_der\\_bildungsstruktur\\_junge\[1\].pdf](http://www.konsumentenfragen.at/cms/konsumentenfragen/attachments/8/2/4/CH0928/CMS1304926851259/intergenerationale_bildungsmobilitaet_vergleich_der_bildungsstruktur_junge[1].pdf) (accessed 27 July 2016).
- MA 18 (2014) STEP 2025. Urban Development Plan Vienna. Online. Available at: <https://www.wien.gv.at/stadt-entwicklung/studien/pdf/b008379b.pdf> (accessed 24 June 2016).
- MA 18 (2015) Thematic Concept. Green and Open Space. Online. Available at: <https://www.wien.gv.at/stadtentwicklung/studien/pdf/b008440.pdf> (accessed 2 August 2016).
- MA 58 (2014) Agrarstruktureller Entwicklungsplan für Wien 2014 (Agricultural-structural Development Plan for Vienna 2014). Online. Available at: <https://www.wien.gv.at/umwelt/wasserrecht/pdf/agrarstruktureller-entwicklungsplan.pdf> (accessed 2 August 2016).
- OECD (2010) A Family Affair: Intergenerational Social Mobility across OECD Countries. In OECD (eds.) Economic Policy Reforms: Going for Growth. Online. Available at: <https://www.oecd.org/centrodemexico/medios/44582910.pdf> (accessed 27 July 2016).
- OECD (2013) OECD Regions at a Glance 2013 - Austria Profile. Online. Available at: <https://www.oecd.org/gov/regional-policy/Country-statistics-profile-Austria.pdf> (accessed 3 August 2016).
- OECD (2015) How's Life? 2015. Measuring Well-Being. Paris: OECD.
- ÖROK (2011) Austrian Spatial Development Concept. ÖREK 2011. Vienna: ÖROK.
- ÖROK (2014) Beiträge der Raumordnung zur Unterschätzung „leistbaren Wohnens“. Schriftreihe Nr. 191 (ÖROK-Publication No. 191 - Contribution of spatial planning to affordable housing). Vienna: ÖROK.
- ÖROK (2016) Agenda Stadtregionen in Österreich. Empfehlungen der ÖREK-Partnerschaft „Kooperationsplattform Stadtregion“ und Materialband. Schriftenreihe 198. (ÖROK-Publication No. 198 – Agenda for urban regions in Austria). Vienna: ÖROK.
- Schraad-Tischler, D. (2015) Social Justice in the EU-Index Report 2015. Social Inclusion Monitor Europe. Online. Available at: [http://www.social-inclusion-monitor.eu/fileadmin/user\\_upload/Social\\_Justice\\_in\\_the\\_EU\\_2015.pdf](http://www.social-inclusion-monitor.eu/fileadmin/user_upload/Social_Justice_in_the_EU_2015.pdf) (accessed 27 July 2016).
- Stadtbaudirektion Graz (2016) Smart City Graz. Online. Available at: <http://www.smartcitygraz.at/> (accessed 21 July 2016).
- Umweltbundesamt (2016): Gewidmetes, nicht bebautes Bauland. Erstellung von Auswertungen für Österreich i. A. d. ÖROK. Vienna: Umweltbundesamt.
- UNESCO (2011), Recommendation on the Historic Urban Landscape. Online. Available at [http://portal.unesco.org/en/ev.php-URL\\_ID=48857&URL\\_DO=DO\\_TOPIC&URL\\_SECTION=201.html](http://portal.unesco.org/en/ev.php-URL_ID=48857&URL_DO=DO_TOPIC&URL_SECTION=201.html)
- WEF (2014): The Global Gender Gap Index 2014 (World Economic Forum).
- Wide (Netzwerk Women in Development Europe) (2010) Kassasturz. Finanzkrise und Entwicklung aus feministischer Perspektive (Cash Check. Finance Crises and development from the feminist perspective). Online. Available at: [http://www.wide-netzwerk.at/images/publikationen/2010/wide-positionspapier\\_kassasturz-2010.pdf](http://www.wide-netzwerk.at/images/publikationen/2010/wide-positionspapier_kassasturz-2010.pdf) (accessed 15 July 2016).
- Wien 3420 AG (n.d.) Traffic and Transport. Online. Available at: <http://www.aspern-seestadt.at/en/living-working/traffic-and-transport/> (accessed 15 July 2016).