NATIONALE
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POLITIK

HABITAT III
National Report Germany

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HABITAT III National Report

Foundations of National Urban Development

Germany is a federal state in which three levels – the municipal level, the state level and the federal level – work together on the basis of shared responsibility enshrined in law. Under the German constitution, referred to as the Basic Law (*Grundgesetz*), powers to legislate are fundamentally vested in the country's constituent states (*Länder* or *Bundesländer*). The Federation (*Bund*) can only legislate in areas expressly assigned to it in the Basic Law. The Federation thus has powers to legislate on spatial planning, land reallocation, landlord and tenant law, housing benefit law and parts of tax law. It lays down the conditions, tasks and guidelines for spatial planning in the Federal Spatial Planning Act (*Raumordnungsgesetz – ROG*). The Federal Building Code (*Baugesetzbuch*), in which planning law is codified, lays down the guidelines and instruments of planning in the area of land reallocation. The *Länder* may enact laws at variance with this.

Most policy areas relevant to the HABITAT Agenda are municipal responsibilities but at the same time are subject to federal legislation. The basic HABITAT goals were enacted in German law in the 1990s, with a number of supplementary elements added later in amending legislation. The main goals are adequate shelter for all, sustainable urban development and human settlements, improving the quality of life and promoting the establishment of local democratic structures.

Under the subsidiarity principle, the Federal Government and the *Länder* only assume responsibilities that cannot be provided for and dealt with at local level, meaning by cities and municipalities. Under Article 28 of the Basic Law, municipalities have the right to regulate all local affairs under their own responsibility, within the limits prescribed by law (partial fiscal autonomy) and subject to consultation of a democratically elected body representing the people (local authority autonomy). Local authority autonomy is split down into a number of policy areas: Staffing, organisational, financial, planning and regulatory autonomy. Accordingly, local authorities stipulate on how cities, towns and villages are to develop by compiling preparatory and binding land-use plans – subject to reciprocal consideration of superordinate planning levels (the mutual feedback principle). In doing so they are required to ensure sustainable urban and housing development that reconciles social, economic and environmental needs, including with respect to future generations, along with socially compatible allocation of space and land in the common interest.

To complete the many preparatory and supporting measures needed for planned urban development, German cities and municipalities in the process of preparing legally binding land-use plans make increasing use of what are known as urban development contracts. In consultation with private landowners and developers, such contracts govern burden-sharing between cities and municipalities and the private beneficiaries of legally binding urban development plans. Urban development contracts can cover all preparations and planning needed ahead of a planned development (including costs of planning and of the procedure for adoption of a binding land-use plan, except costs relating to official municipal tasks and/or to the provision of transport infrastructure) and all knock-on costs of a development (such as childcare and school places, provision of public green spaces, and environmental impact mitigation measures). Where appropriate, and provided that a direct link is upheld between performance and counter-performance, local authorities can also use urban development contracts to involve developers in the furtherance of wider urban development and housing policy goals. Examples include requiring land to be made available for social housing, the use of binding social housing quotas across an entire development, or the construction of social housing that the municipality will buy from the developers on the basis of agreed quality and price to boost the municipality's own social housing quota.

Within terms of reference laid down by *Länder*-level and regional spatial planning, preparatory and binding land-use plans aim to secure a humane environment, protect and foster the natural

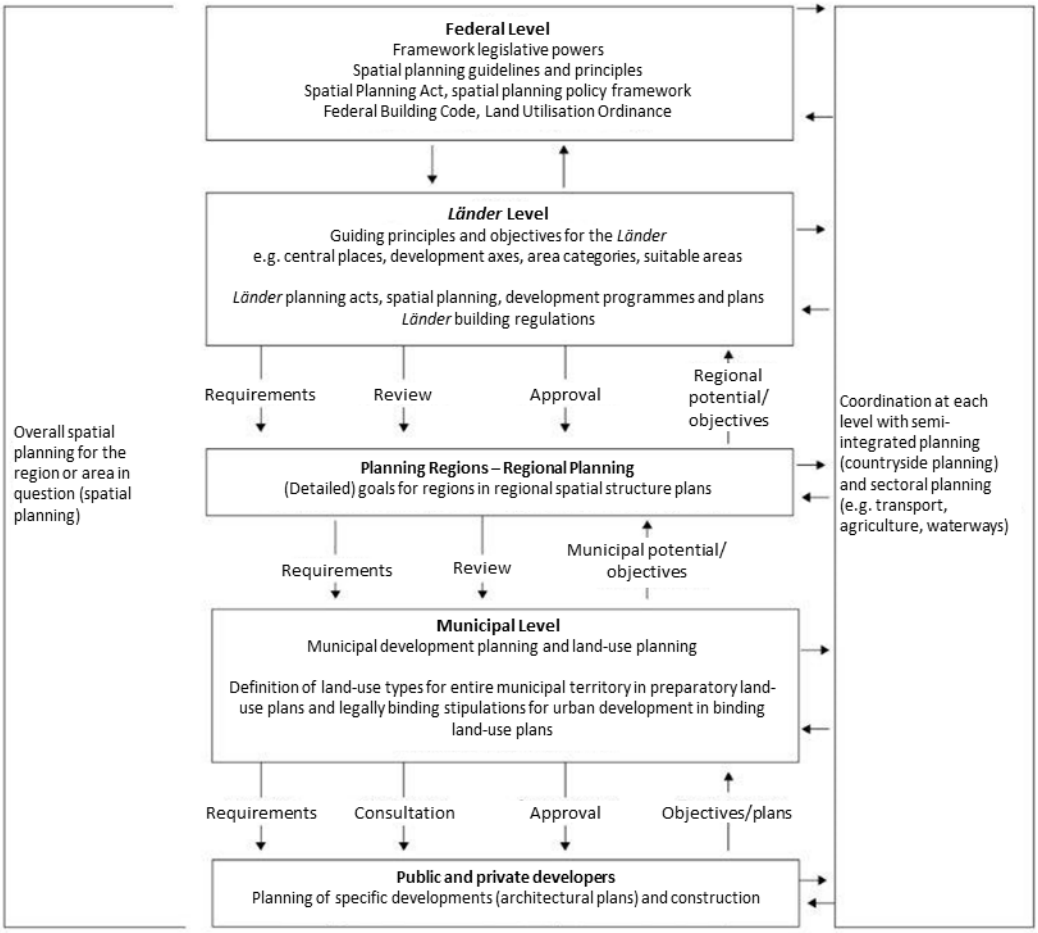
foundations of life, promote climate change mitigation and adaptation – most of all in urban development – and preserve and develop the shape of the urban environment and landscape. This places the focus of development on inner urban development.

These guiding principles are embedded among other things in the National Urban Development Policy. Despite the clear constitutional assignment of tasks, urban development is a national responsibility. A society's strengths and weaknesses are reflected most clearly in its cities. An economically successful, socially equitable and ecologically advanced society needs strong cities. Mindful of this, the National Urban Development Policy platform was launched as an outcome of the German EU Council Presidency in 2007. It provides an opportunity for all stakeholders from government, public authorities, the planning professions, industry and the scientific community to have their say on topics such as cities, living together in cities, urban qualities and good governance. On the one hand, it aims to bring together 'organised voices'. On the other, it also aims to listen to everyone who is committed to the city and local community. It therefore also addresses civil society groups, trade unions, churches, social welfare organisations and the media. Everyone who is interested in the future of cities and regions is invited to join in. As a joint project, the National Urban Development Policy also serves as an open platform for consultation on the German national contribution in the Habitat III process.

A city is a process of constant learning and adaptation. This also determines the activities of the National Urban Development Policy platform, which launches projects, stages conferences, holds workshops and seeks examples to flesh out the idea of the European city. The goal is the sustainable, economically strong, environmentally and socially compatible, inclusive, cooperative, liveable and sustainable city. This integrated policy approach is founded upon two policy documents: the LEIPZIG CHARTER on Sustainable European Cities and the Memorandum "URBAN ENERGIES – Urban Challenges". Both of these were the outcome of an international, open dialogue process.

Looking beyond the national focus, the Federal Government also aims to give greater emphasis to international urban development processes in the various policy areas and to underpin such processes with targeted foreign policy support.

Fig. 1: Plan types and the spatial and urban planning hierarchy in Germany



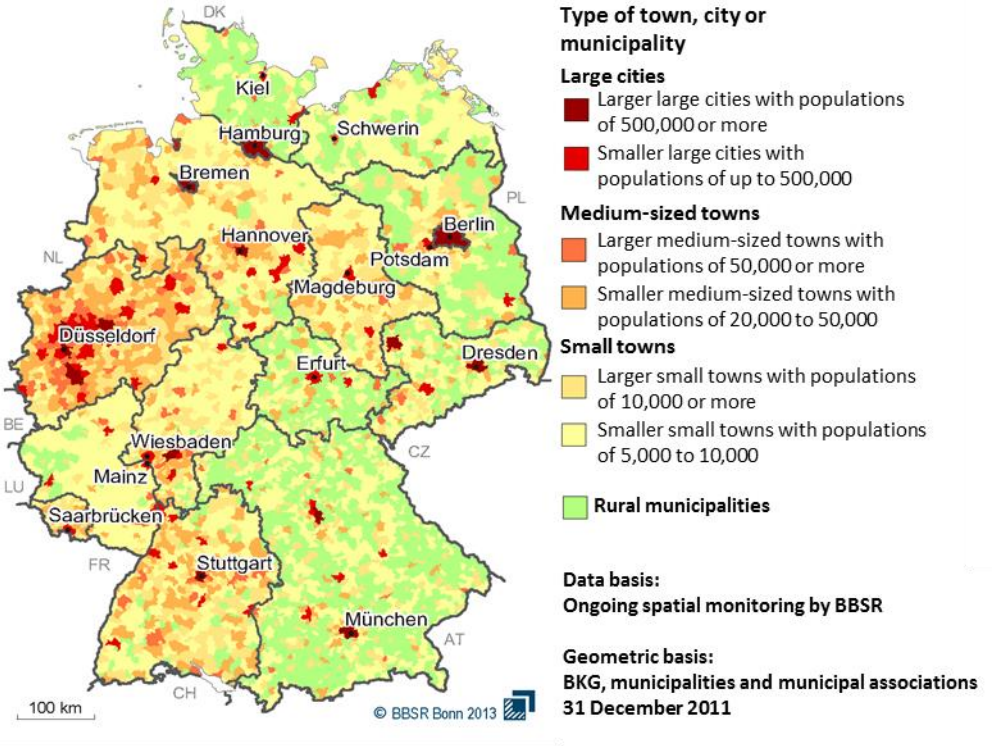
Source: *Bundestagsdrucksache* 13/3679 of 6 February 1996, p. 13

I. Urban Demographic Issues and Challenges for a New Urban Agenda

1. Managing rapid urbanisation

Germany has a polycentric urban structure. Of the current population of 81 million,[1] approximately 90% live in towns and cities. Towns and cities can be classified into small towns (5,000 to 20,000 population), medium-sized towns (20,000 to 100,000 population) and cities (upwards of 100,000 population). About 60% of the population live in medium-sized towns and cities with populations upwards of 20,000. Germany today has 15 cities with populations greater than 500,000. These are home to 17% of the total population.

Fig. 2: The urban system in Germany



The German urban development landscape today features simultaneous growth and shrinkage. At supra-regional scale there is a stark contrast between the population trends in eastern and western Germany. This is partly an outcome of the country's historical division, urban deindustrialisation in eastern Germany following reunification, and the resulting migration elsewhere. The east contracted while the west grew or remained stable. Under the heading of demographic change, cities and regions with demographically induced risks and problems are now also explicitly targeted as areas requiring policy and planning action. A rapidly shrinking population notably poses problems concerning infrastructure provision and the viability of basic services. This applies most of all in sparsely populated regions with weak economies; there is thus a need to talk about maintaining public services while keeping urban structures as they are and desettling peripheral areas that cease to be in

[1] As of 31 December 2012

demand. Such patterns shape spatial population dynamics to an increasing extent in both eastern and western Germany.

At the same time, many cities are gaining in attractiveness, in eastern and western Germany alike. Some such growth centres face housing shortages and thus steeply rising rents and property prices. They are now seeing shortages in the affordable housing segment combined with growing availability of more expensive properties. The rising prices not only reflect stronger demand. Other factors include modernisation (notably to improve energy efficiency), renovation of the existing residential housing stock, higher-quality new residential property and increased investor interest.

Longstanding residents may find themselves unable to pay higher rents, resulting in displacement and gentrification. Gentrification refers to an upgrading of neighbourhoods in parallel with a change in the residential population. In many cases it goes hand in hand with changes in ownership structure and rising rents. In many cities in Germany, the process leads to an increase in involuntary social segregation. The increasing concentration of unemployment and poverty in specific neighbourhoods is a growing challenge for urban communities. Individuals and families from migrant backgrounds are especially hard hit. 'Right to the city' protests against rising rents and gentrification have been seen in Germany as elsewhere. Such protests are localised, however, and not nationally organised as in other countries.

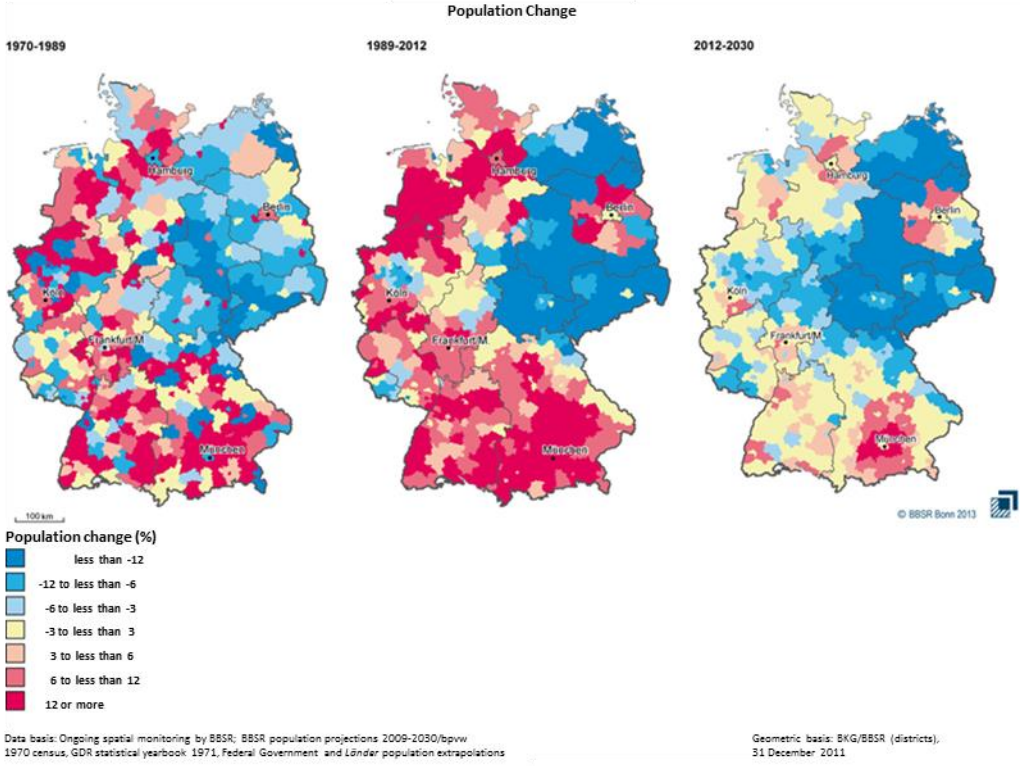
In sparsely populated regions with ongoing population loss, towns and cities are to be developed into anchors of economic stability and growth, with the population influx from surrounding areas contributing to the economic viability of the town or city and hence the region. Ongoing population influx into prosperous large cities, on the other hand, fosters infill development that poses a growing threat to urban environmental quality.

Since 2010, Germany has seen a return to continuously rising immigration. Germany is an immigration country: Increasing numbers of people come to Germany, which according to the OECD is the second-most popular destination for migrants worldwide. 2013 saw the highest immigration rate and the highest net migration rate since 1993. Immigration grew by 13 percent year on year in 2013, while emigration went up by 12 percent. A net total of 429,000 more people came to Germany than left. Most immigration concerns large *kreisfreie Städte* – independent cities that do not come under an intermediate regional administration – where the proportion of foreign nationals came to 12.5% in 2011.[2] Immigration plays an important part with regard to demand for skilled labour. However, it confronts cities with special integration challenges in terms of equal opportunities in employment, housing, education, language, health, etc. Germany's cities and municipalities also face huge challenges due to war and displacement. These partly relate to the availability of housing, but most of all they are about integrating the people concerned into society, as the situation in the war and displacement regions they come from is not likely to improve in the near future.

Looking to the future, the German population will show a slight decrease through to 2030 (despite immigration) and will settle down at around 79 million. In western as in eastern Germany, more and more regions will be affected by falling population numbers. The number of towns, cities and regions that are growing will tangibly decrease. For urban development policy, this means sustainably managing the adaptation process between growth and shrinkage and securing quality of life in all cities and municipalities into the future, including in times of scarce financial resources.

[2] Source: 2011 census

Fig. 3: Demographic change in Germany



2. **Managing rural-urban linkages**

Germany does not have a dominant capital region. Except in the north-east, the country has a balanced urban system throughout. Metropolitan functions are thus spread evenly across Germany, creating strong potential for local and regional linkages. A dense road and rail network in most regions and well-developed public transport secure urban-rural passenger and freight mobility. Digital access is improving with the accelerated broadband rollout. This is made a necessity by competition for locations, enterprise and skilled labour. Digital infrastructure is expected to ease accessibility and service deficits for households, businesses and municipalities in rural regions and to improve their attractiveness as places to live and work. This helps in establishing equivalent living conditions and in stabilisation. The objective is to create better functional, physical and virtual linkages between urban and rural areas and to better organise the interconnections that already exist. This is also supported by Germany's eleven metropolitan regions,[3] which pool regional potential on a large geographic scale in answer to globalisation. The metropolitan regions forge collaborations and partnerships between cities and rural regions, inner cities and the suburbs, and governmental and non-governmental stakeholders.

Urban and rural regions depend upon and mutually benefit from each other. Such relationships extend far beyond the direct urban periphery. Rural regions thus need towns and cities as focal points for jobs and higher-order basic services such as specialised hospitals and tertiary education institutions. Urban regions need the countryside for recreation, leisure, sports and food and water supplies. Urban-rural linkages have always been important in Germany because the locations of vital regional infrastructure are determined by the central place system. This is a polycentric system where central places fulfil

[3] http://www.deutsche-metropolregionen.org/fileadmin/ikm/IKM-Veroeffentlichungen/IKM_Monitoring2010_lite_n.pdf

specific service and development functions for the population in their catchment area. Cluster strategies connect urban and rural businesses, regional tourism strategies link up attractions, municipalities share the cost of expensive infrastructure in joint waste management and sewerage boards, and recycling schemes make for efficient resource use. New factors have emerged in recent years alongside recreation, such as increasing demand for regional produce.[4] The development of regional marketing is important economically and environmentally and is specifically promoted in state programmes.

Urban-rural linkages as a specific form of inter-municipal cooperation have gained in geographical reach over the years, as can be seen from increasing commuting distances – notably in sparsely populated and economically less developed regions of eastern Germany. At the same time, projections to 2025 show nationwide transport linkages increasing. Traffic volumes are therefore expected to continue growing and rural-urban linkages to become closer still.

Based on the diversity of rural-urban linkages, regional stakeholders have acknowledged the importance of operating in functional spaces and of working to organise and perpetuate such linkages, including across national borders. This will only succeed if the needs of both urban and rural residents are taken into account. The outcome is enhanced growth, innovation and quality of life. Policies developed in Germany in recent years under the banner of urban-regional partnerships unlock synergies for growth and innovation in urban and rural regions by sharing future-focused responsibilities. It is important for these urban-rural partnerships to be institutionalised and given decision-making structures. Success factors for such policies include the identification of shared strategies and specific projects, and participation of stakeholders from government, administration, the private sector and civil society so that regional development evolves into an integrated approach.

3. **Addressing urban youth needs**

About a quarter of Germany's population of 81 million is under the age of 25. One in ten is aged between 15 and 24. Over time, however, these numbers will decrease: The number of under-20s will drop from about 16 million today to about 10 million in 2060.[5]

Germany has a comprehensive education infrastructure from early childcare and nursery care through to schools and universities. Since 2013, there has been a legal entitlement to early childhood care with daycare facilities or child minders for all children from the age of one. The right of adolescents to school education and individual furtherance is likewise enshrined in law.[6] As good school education reduces poverty risk and creates employment prospects, Germany has compulsory general schooling from the age of seven.

German school education has seen radical reform in recent years. A push towards all-day schooling aims to improve education quality and make it easier for women to work. More and more schools operate in partnership with extramural providers. The objective here is to link education, leisure activities and careers guidance.[7]

The school-age population has declined steadily in recent years. Schools have been closed, most of all in western German cities. The remaining schools have to make up for this and take more pupils

[4] See Section 10

[5] Source: Federal Statistical Office

[6] This is enshrined in education acts enacted by each of the *Länder*.

[7] Referred to as *Lokale Bildungslandschaften* or 'local educational landscapes'.

than before.[8] In rural regions especially, fewer schools can mean far greater distances between home and school.

The educational development of young people in Germany is strongly correlated with parental education and qualifications and the socio-spatial environment. Children and adolescents from socially disadvantaged surroundings and with an immigrant background have a poorer chance of educational success. This frequently continues into later life. 13.3% of people with an immigrant background and aged 25 to 64 have no school-leaving qualification. School students with an immigrant background are also less likely to attend *Gymnasium* (grammar school) and tend to attain lower academic performance overall. Social segregation, the concentration of poverty and unemployment in specific districts and the attendant negative neighbourhood effects stunt young people's development opportunities and contribute in entrenching the structures that perpetuate poverty.

Through child and youth services, the Federal Government creates a favourable environment for the development and education of children and adolescents. Child and youth services face the challenge of aligning their activities quantitatively with population trends while responding conceptually to changes in their target groups. Institutional facilities such as youth, counselling and family education centres will have to adapt their work to these developments.

Three out of four people under the age of 25 live in cities. Young people show strong interest in city issues and organise themselves in youth clubs, youth forums, youth advisory councils or local youth councils. According to a study, they are very eager to engage in civil involvement.[9] German cities and municipalities have adopted highly creative and innovative forms of youth participation in recent years. Youth participation in spatial planning at various scales is increasing, enriches urban development, gives impetus and stimulates debate and ideas.[10]

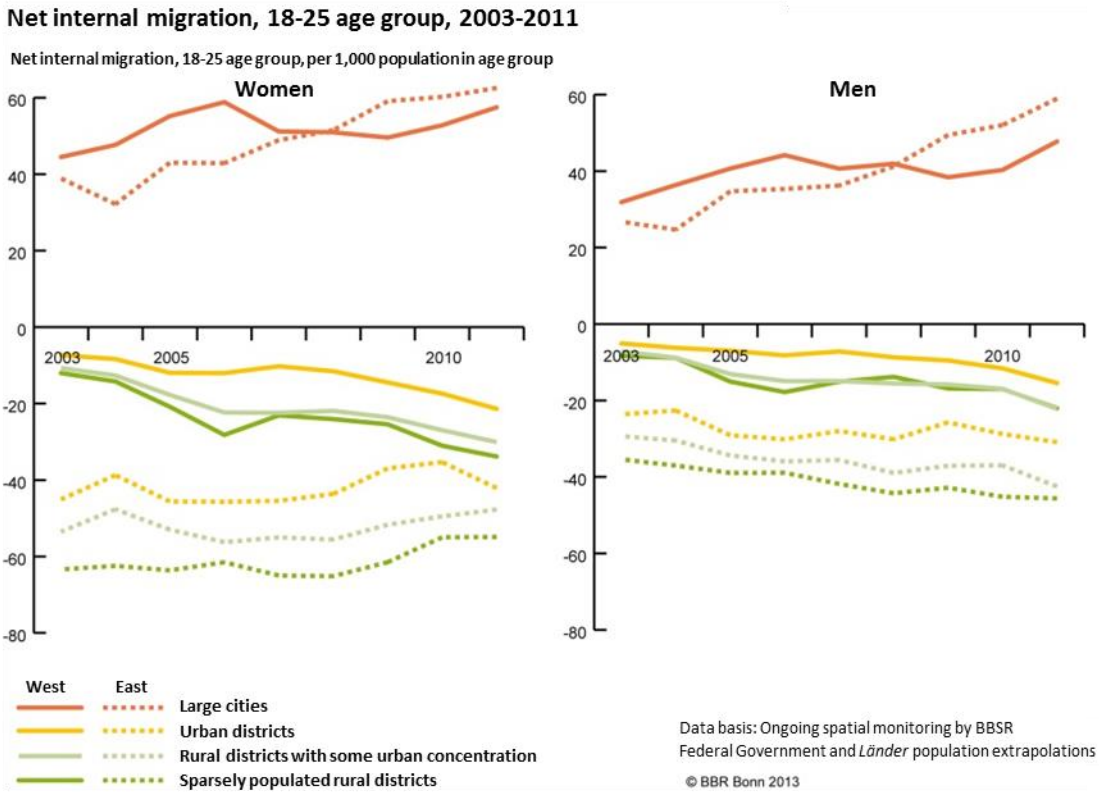
A city's ability to attract upwardly mobile, education-oriented young people is an increasingly important location factor. Cities have the greatest opportunities for employment-relevant education and training and the most jobs. They offer a wide range of cultural and leisure amenities including libraries, theatres, cinemas and sports facilities. The trend in internal migration involving young people is therefore clearly towards towns and cities.

[8] Primary schools have an average of 170 students; secondary schools more than 500.

[9] Source: Federal Government Civic Engagement Report 2009

[10] Source: Kompass Jugendliche und Stadtentwicklung (BMVBS, 2013)

Fig. 4: Internal migration of population aged 18 to 24

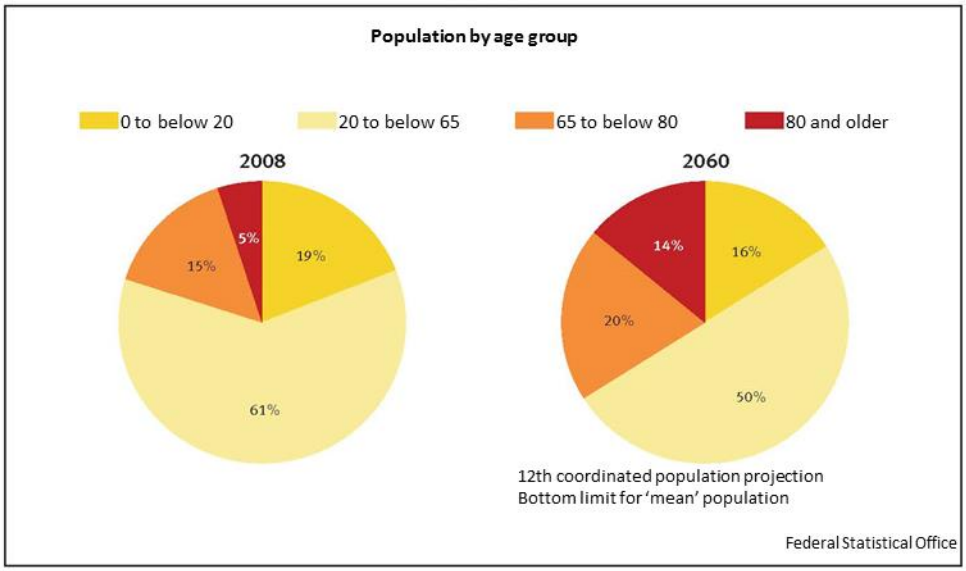


4. **Responding to the needs of the aged**

People in Germany are living longer and the proportion of older people in the population is growing. About one in five of Germany's population of 81 million today is over 65 and about one in ten is over

75 years of age. This age group is set to grow. Ageing changes cities and municipalities. It impacts the labour and housing markets, mobility and demand for urban infrastructure.

Fig. 5: Population by age group



Older people have a smaller action radius and are less mobile, need more from their direct surroundings and require more medical care. Age-friendly cities are thus cities with short distances, well-developed public transport, safe streets and spaces, and a good range of social and medical infrastructure.

Older people have the desire to live independently in their own homes or in familiar surroundings as long as possible. 93% of over-65s and no less than two-thirds of 90-year-olds live in their own self-contained dwelling. Only a relatively small proportion of older people live in special accommodation such as old-age and nursing homes. However, today's housing supply and public services do not meet the requirements of older people. Only 5.2% of senior citizens live in fully or partially accessible accommodation – the equivalent of roughly 570,000 dwellings. By expert estimates, only 1% to 2% of the total German residential building stock is age-friendly. Entrance steps and thresholds, non-level access to balconies and patios and non-age-friendly bathrooms are the biggest problems facing people who are no longer fully mobile. Besides suitable living accommodation, streets, public transport infrastructure and public buildings must also be made accessible.

Increased day and night-time heat stress in consequence of climate change places a severe additional load on the cardiovascular system, especially in vulnerable groups such as children and old people. Measures to provide cooling and shade are therefore increasingly important in Germany as elsewhere – at urban/regional planning level with fresh air corridors and with shaded green spaces and water features as part of infill development, and at building level in terms of exposedness, screening, ventilation, and technical systems.

Germany has some 12,000 nursing homes, 60% of which are in towns and cities. If the percentage needing care stays constant, the number of people needing care is set to rise from about 2.5 million today to about 3.4 million in 2030. In the construction of new age-friendly housing or the modernisation of existing housing, suitable forms of accommodation must therefore be developed so that people needing care can be looked after by relatives or professional carers at home, in the family context or in multigenerational living arrangements. Promoting non-institutional care in age-friendly housing enables

more older people to continue living at home. This reduces the number of people needing nursing home places and cuts costs.

5. Integrating gender in urban development

Gender equality is enshrined in German law. Under Article 3 (2) of the Basic Law, the state is expressly required "to promote the actual implementation of equal rights for women and men" and to "take steps to eliminate disadvantages that now exist".[11] This anticipates the implementation of diversity strategies.

In 2004, equal opportunities became a requirement under the Federal Building Code.[12] In 2005, the Federal Government and the *Länder* additionally incorporated the goal of gender equity in the rules on urban development assistance.[13] Urban development assistance is federal financial assistance for the support of comprehensive urban development measures at neighbourhood level, granted as part of limited-term programmes. The *Länder* and the local authorities that receive the assistance contribute financially.

The relevance of urban planning and urban development to gender equality has long been recognised in Germany. Gender-sensitive urban planning takes into account male and female space appropriation and utilisation patterns, work-life balance, and the role of design in preventing violence.[14] This applies equally across urban planning policy areas such as housing, residential surroundings, open spaces, infrastructure and transportation. The core implementation steps are gender-disaggregated analysis of the initial status, gender relevance assessment, formulation of specific gender equality goals, implementation and evaluation. Implementing gender equality policy is a cross-cutting task that requires all municipal planning stakeholders to apply a gender-disaggregated approach in proposals, projects and plans, at all levels and in all process stages.

Women and men place different demands on the design and use of public spaces. Women are more likely than men to use public transport and, most of all in the case of single mothers and older women, their everyday lives often centre on mixed-use neighbourhoods. The larger the city, the larger the percentage of women in the population. The percentage of young, well-educated women in cities has grown disproportionately since the beginning of the century. Among under-40s too, more women than men live in Germany's cities today – although with some regional variation.

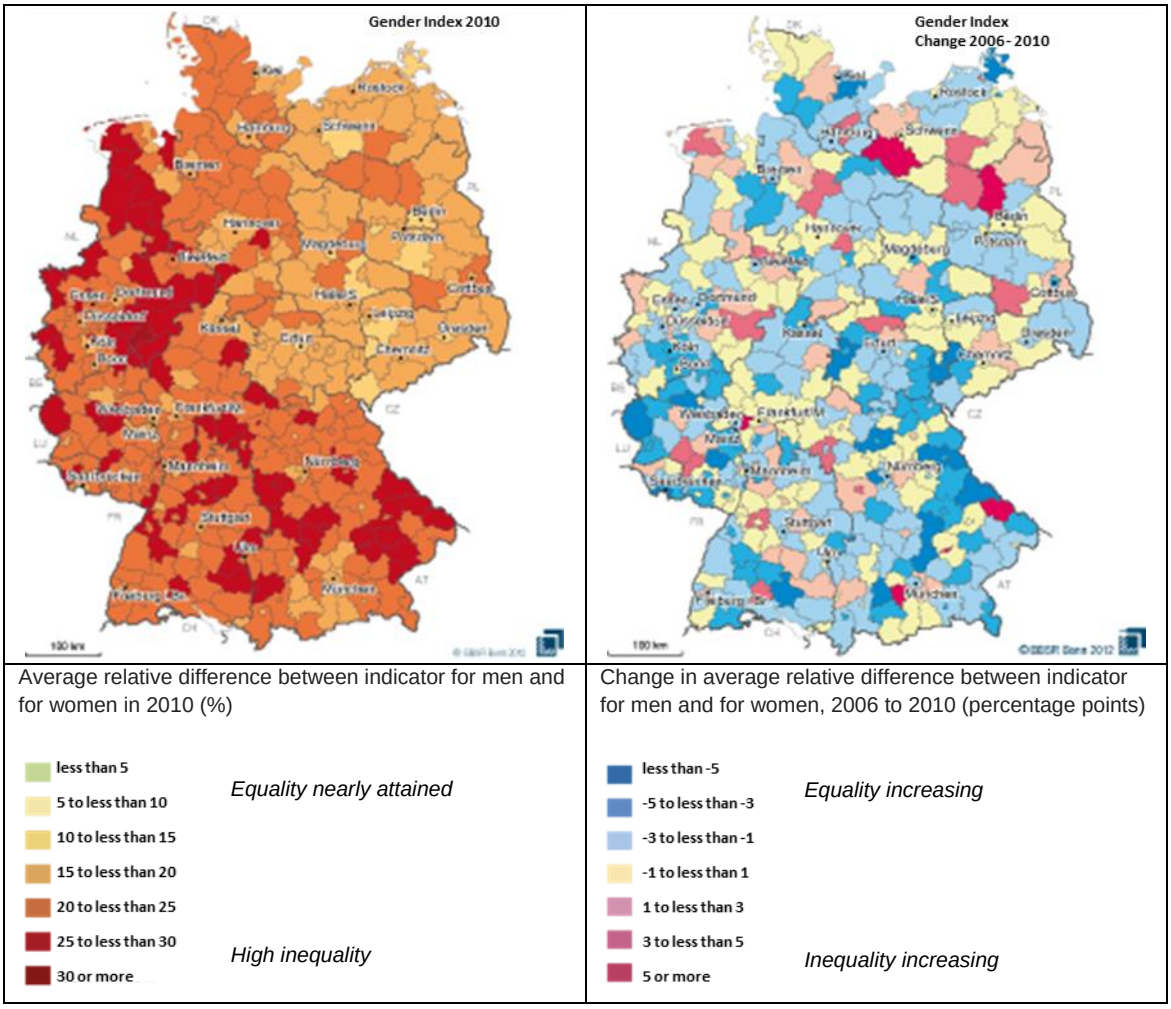
Gender-equitable planning goals are systematically classified in the catalogue of gender indicators compiled by the Federal Government, enabling the indicators to be used in municipal monitoring systems. Experience in urban development shows that it is easier to incorporate gender mainstreaming in formal planning processes with clearly structured steps than in informal processes. Informal processes are widespread in municipal planning, however. A promising approach for all purposes is the use of verifiable agreed targets.

With growing sensitivity to gender mainstreaming, more and more indicators in the Federal Government's spatial and urban monitoring system have been made available on a gender-

[11] Basic Law (*Grundgesetz)* for the Federal Republic of Germany, Article 3 (2), second sentence
[12] Section 1 (6) of the Federal Building Code (*Baugesetzbuch*)
[13] Recital VIII of the preamble to the administrative agreement on financial support for urban development (*Verwaltungsvereinbarung zur Städtebauförderung*)
[14] See also Section 24

disaggregated basis. The Gender Index[15] compiled since 2008 is an indicator-based information platform on regional gender equality policy. The index measures the equality or inequality of opportunities for women and men against 19 indicators in the areas of education and training, employment and participation. It measures the application of gender mainstreaming in Germany's regions. From it, it is evident that equal opportunity goals have not yet been fully attained across Germany. At the same time, gender mainstreaming shows marked gains in many regions since 2006.

Fig. 6: Gender index



6. Challenges experienced and lessons learned in these areas

Managing rapid urbanisation

Simultaneous growth and shrinkage poses major urban development policy challenges at all levels. These shared challenges, which also entail shared financial responsibility, are addressed on a lasting basis with urban development assistance using a multi-level approach organised by the Federal Government, the *Länder* and local authorities.

[15] Compiled by the Hans Böckler Foundation and the Federal Institute for Research on Building, Urban Affairs and Spatial Development (BBSR)

- The *Kleinere Städte und Gemeinden* (Small and Medium-Sized Towns) programme aims to strengthen small and medium-sized towns as hubs for basic services and to maintain access to municipal infrastructure.
- The *Stadtumbau Ost* and *Stadtumbau West* (Urban Redevelopment East and West) programmes help with demographic and economic structural change, addressing loss of amenities, vacancies and urban wasteland, stabilising urban structures and strengthening inner cities.
- The *Städtebaulicher Denkmalschutz* (Urban Architectural Heritage Programme) targets broad-based conservation of architecture of cultural heritage value in historic urban centres.
- The *Aktive Stadt- und Ortsteilzentren* (Active City and District Centres) programme reinvigorates the functional amenities and diversity of inner cities, town centres and central service areas.
- The *Soziale Stadt* (Social City) programme uses urban planning measures to improve quality of life and social cohesion in disadvantaged neighbourhoods.

Urban development assistance is an important element of the National Urban Development Policy and aims to better address the problems and diverse challenges resulting from diverging local economic, social, environmental and demographic trends.

Managing rural-urban linkages

Urban-rural partnerships – a specific form of inter-municipal cooperation – are an important means of boosting competitiveness and quality of life across an entire region while attaining equivalent living conditions. The aim is for all regions, according to potential, to contribute to and likewise to benefit from growth and innovation. This entails thinking in terms of functional spaces and action extending beyond municipal boundaries. It is an approach that is consistent with the European idea of territorial cohesion and is to be encouraged. The European Regional Development Fund (ERDF), the European Social Fund (ESF) and the European Agricultural Fund for Rural Development (EAFRD) already provide options for taking urban-rural partnerships into consideration in funding.

From a spatial development policy perspective, any Structural Fund support for integrated territorial approaches should provide for the establishment of urban-rural partnerships, the formulation of detailed integrated regional development strategies, and joint urban-rural initiatives. This also requires the elimination of state barriers such as the tax disadvantages that often go hand in hand with inter-municipal cooperation. The European Commission proposals for the Structural Funds regulations from 2014 provide for new instruments to better facilitate inter-municipal cooperation.

Addressing urban youth needs

To guarantee young people a healthy upbringing and good education, individual support must be combined with improvements in the education system. Educationally disadvantaged young people especially need targeted support. Youth migration services therefore promote the social, educational and vocational integration of young immigrants. Disadvantaged young people in socially segregated neighbourhoods are supported in a new inter-agency model programme, *Jugend stärken im Quartier*.

A major part is played by the promotion of voluntary work. One element of this is the establishment of voluntary years of social or environmental work. Public facilities should be made available for young people to implement neighbourhood projects of their own. This must go hand in hand with the assignment of responsibility and creative freedom.

Institutional improvements such as measures to open up neighbourhood schools come under the *Soziale Stadt* (Social City) urban development assistance programme. Schools and community facilities that are open to their neighbourhood must be made centres of integration.

Conventional planning and public consultation procedures hold little appeal for young people. The revised Federal Building Code now makes express reference to the need for youth participation. In future, local authorities must develop adequate participation models that allow young people to have their interests represented.

Responding to the needs of the aged

Local authorities face the task of finding answers to demographic trends. Ageing and the fragmentation of lifestyles in particular necessitate modifications, repurposing, new development and demolition of buildings and precincts in accordance with population growth and shrinkage. A major challenge will be age-friendly conversion of existing housing and urban infrastructure. Incentive systems and modifications to legislation play a part in addressing such challenges. The same tasks are also faced however by owner-occupiers, private landlords and the housing industry.

Sustainable urban structures require multigenerational planning. Multigenerational living arrangements and community centres offer special opportunities for living together in a spirit of tolerance and mutual understanding. Many older people contribute actively to the community – often on a voluntary basis. This reduces barriers between young and old. Quality criteria for old people primarily include mixed urban structures, easy access, affordable rents, age-friendly housing and attractive public spaces in walking distance. A diverse range of living arrangements and shared amenities for all local residents are the foundation for attractive, liveable and sustainable neighbourhoods.

Integrating gender in urban development

Even with equal opportunities enshrined in law, the process of attaining gender equality is not self-sustaining. The principles and goals of gender mainstreaming need to be translated into everyday life. That this is still not self-evident in many places often has to do with gender ratios among decision makers.

Since 2006, under the European Charter for Equality of Women and Men in Local Life, local authorities have been required to develop, adopt and implement equality action plans. In Germany, only 34 municipalities and counties and the Rhineland-Palatinate Association of Towns and Cities have signed the charter to date.

Work must continue in Germany on laying the foundations to establish gender mainstreaming. This includes embedding the principle across all departments in municipal administrations, most of all at management level. A further need is for ongoing monitoring that triggers corrective action where gender mainstreaming is neglected.

7. Future challenges and issues in these areas that could be addressed by a New Urban Agenda

Managing rapid urbanisation

- Demographic change is reflected spatially and over time in parallel growth and shrinkage of cities and municipalities. This poses major challenges both for municipalities with shrinking populations and for growing cities and regions. Surmounting these challenges in a way that is consistent with socially and environmentally sustainable urban development calls for innovative planning and funding approaches together with technical solutions.

- The conditions must be created for equivalent development and good provision of services in urban and rural areas. Both urban and rural areas are entitled to good development opportunities. The multi-level system with clear responsibilities at each level and the concept of local self-government have proved their worth in the German experience. Greater use should be made in future however of the scope for regional planning to guide overall local planning. At local level, many challenges can be discussed, decisions made and implemented, and existing infrastructure managed on an ongoing basis with public involvement.

- Greater use should be made of incentive systems to ensure the provision of basic services. This can also include incentives provided through the financial equalisation arrangements between the various levels of government, individual incentives (for example in healthcare) and PPP models.

- To eliminate accessibility and service deficits in rural regions in today's knowledge-based society, digital infrastructure and access must be improved and the broadband rollout accelerated.

Managing rural-urban linkages

- Cities and their surrounding regions should enter into new collaborations while sustaining and extending existing collaborations. This provides opportunities to secure and better integrate regional economies and product cycles together with food, energy and water supplies (the Urban Nexus approach), to improve urban regional transport and to open up surrounding regions for recreation.

- A key element in good rural development is enhanced cooperation between local authorities.

- The aim should be for urban-regional balance with mutual equilibrium between the differing functions. A keystone is the establishment of regional transportation systems that reduce transport costs for people and goods, link rural products and services into the economy, make efficient use of resources, and strengthen small and medium-sized businesses across the region.

Addressing urban youth needs

- Children and adolescents must have equal opportunities for a good upbringing. Active efforts must be made to prevent children and adolescents from poorer families from being disadvantaged through segregation.

- All young people must be given access to education and training commensurate with their abilities and interests. One challenge is that of integrating young people from educationally deprived backgrounds. A neighbourhood-based approach targeting young people from disadvantaged areas has proved valuable here.

- Towns and cities offer scope for successful integration of people with immigrant backgrounds. This requires the establishment of places of encounter and promotion of civic engagement. Through

their unpaid efforts, German sports clubs make an important contribution in fostering young people's development and integrating people with immigrant backgrounds.

- Young people can contribute with their ideas and commitment to making cities better places to live. For that purpose, they must be provided with spaces and suitable means of participation, and given opportunities and support.

- Youth participation must be strengthened. This requires good incentives, however, and new forms of participation.

Responding to the needs of the aged

- Ageing and the fragmentation of lifestyles necessitate modifications, repurposing and the addition and demolition of buildings and precincts in accordance with population growth and shrinkage. This should be combined in an intelligent way with efforts to make cities environmentally more sustainable.

- The special needs of older people in terms of infrastructure such as public transport, pavements, etc., and of hospitals and community amenities must be better integrated into urban development plans.

- Multigenerational housing is one successful approach. This should be further developed and made a lasting feature.

- Older people and people needing care should be able to live as independently as possible in their own home. Alongside the age-friendly conversion of existing housing, it is also necessary to establish age-friendly and technical support services.

- Mixed urban structures, easy access, affordable rents and age-friendly housing are essential conditions for senior citizens to stay as long as possible in their familiar surroundings. Age-friendly adaptation of existing housing must be financially supported on an ongoing basis. Increasing use is made in this connection of integrated neighbourhood plans.

Integrating gender in urban development

- Work must be done to establish gender mainstreaming across the board. This requires incentive systems and the introduction of ongoing monitoring.

II. Land and Urban Planning: Issues and Challenges for a New Urban Agenda

8. Ensuring sustainable urban planning and design

The Federal Republic of Germany aims for sustainable urban development in the European context. The Leipzig Charter on Sustainable European Cities adopted in 2007 gave preeminence both to integrated urban development for the sustainable development of towns and cities in general and to the socially oriented strengthening of deprived neighbourhoods in particular.

Sustainable urban development is enshrined in German law through the instrument of urban land-use planning laid down in the Federal Building Code: “Urban land-use plans shall ensure sustainable urban and housing development that reconciles social, economic and environmental needs, including with respect to future generations, along with socially compatible allocation of land in the common interest. They shall contribute towards ensuring a humane environment, protecting and nurturing the natural foundations of life, promoting climate change mitigation and adaptation, in particular in urban development, and preserving and developing the architectural fabric and the urban landscape.”[16] Sustainable urban development is also governed by provisions in many other areas of law such as general spatial planning, *Länder*-level spatial planning and legislation relating to climate change.

The cultural concept of sustainable urban development encompasses the quest for quality in the built environment and in planning processes and procedures, participation and cooperation of all urban development stakeholders, and the provision and upkeep of infrastructure and basic services. All this is encapsulated in the German term *Baukultur*, which signifies excellence in planning and building, full consultation, and close attention to the quality of the built environment.

German cities face growing resource consumption and environmental pressures. Although it is now decreasing due to new planning policies and restrictions, land take for built development still comes into conflict with the need to preserve natural spaces and farmland. At the same time, cities are increasingly attractive as places to live and work and as cultural centres. Dynamic large cities especially are experiencing population growth while the population of Germany as a whole is shrinking. Yet the growing attractiveness of the urban living environment goes hand in hand with increasing social disparities, which threaten social cohesion in and among cities.

Alongside climate change and economic change, German cities and municipalities are confronted most of all with various manifestations of demographic change. All German towns and cities, however, harbour potential for economic dynamism, cultural identity and innovation. Germany’s urban regions thus hold not only conflicts and challenges, but also options for sustainable development. Actively shaping sustainable development and climate change mitigation at municipal level presents major opportunities in this regard. Action on climate change, such as the development of climate-friendly mobility infrastructure and also low-threshold activities to promote sustainable lifestyles, increases the attractiveness of cities and municipalities.

European-style cities with their urban structures and pronounced culture of adaptability offer favourable conditions for integrated and sustainable urban development. With regard to cities in Germany, the built fabric and structures of the ‘city of tomorrow’ are largely already in place. The prime focus of sustainable urban development in Germany is thus on urban infill development and redevelopment and on enhancing the quality of the urban living environment. This implies a number of guiding principles for urban planning:

- Inner urban development before greenfield development
- Conservation of viable existing urban structures and historic buildings
- Brownfield redevelopment and structural adaptation
- Mixed use with local accessibility
- Compact built environment in balance with green and open spaces
- Open and accessible urban spaces
- Establishment and conservation of natural spaces
- Functional enhancement of central urban spaces

[16] Section 1 of the Federal Building Code (*Baugesetzbuch*)

9. Improving urban land management, including addressing urban sprawl

Germany has long pursued a policy of compact development. Under the National Sustainability Strategy, land take in Germany is to be limited to 30 ha/day by 2020, compared with 129 ha/day in 2000. It was already down to 74 ha/day in 2012. On the most recent available data (2000-2006), rededication of unbuilt land for housing or commercial use, at 0.4%, was below the 0.6% average across 36 European countries. Before that, however, in the years 1990 to 2000, the annual land take was 0.7%, above the European average of 0.5% per year. Bearing in mind the slightly shrinking population, conversion of unbuilt land into built land nonetheless remains at a high level. This is because land take depends on the designation of building land in zoning decisions by cities and municipalities. This is not coordinated or restricted by higher-level *Länder* spatial planning.

By means of urban land-use planning in their municipal territory, local authorities can designate new building land or bring brownfield and former industrial sites back into use for new developments.

Some municipalities prioritise housing development to consolidate their population base and attract young households so that social and technical infrastructure is kept in use. Consequently, with the population shrinking, cities and municipalities are increasingly pitched into competition with each other for young households. In some regions this has the paradoxical effect of driving expansionary zoning policies with larger areas being designated as building land even as demand falls due to demographic change. Instead of this, shrinking municipalities need to actively shape their development, for example by demolition or by rededication of housing land. Not all places are equally affected by population decline, however.

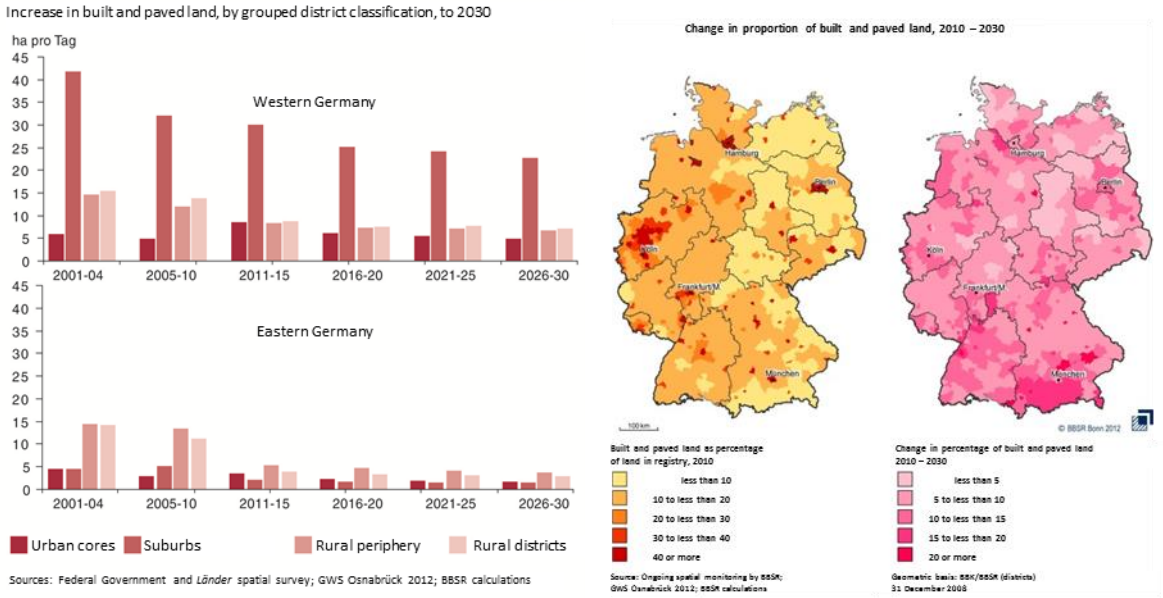
Prospering municipalities will see ongoing demand for building land, especially where what little land remains in reserve is difficult to release for development.

Not a few municipalities plan to designate and actively stockpile additional land as commercial building land – even though commercial building land markets are cooling down and despite a growing supply of derelict commercial and industrial sites. In most regions, the current reserves of building land already exceed the long-term needs of business and industry. The result is persistently low prices for commercial building land and difficulties in selling such land.

Many local authorities now see the costs of expansionary building land development policies as a major disadvantage, however. In many cases, new developments exceed the capacity of local infrastructure. New nursery schools have to be built, the sewerage system extended, or road links improved at major expense.

Inner urban development through brownfield redevelopment and infill development is not only needed for environmental reasons. Intensifying inner urban development reduces development pressure in outlying areas and more land remains available for farming, forestry, recreation and nature. An express aim of the major revision of German urban planning law in 2013 was to place the focus of development on inner urban development. This has resulted in stricter legal requirements for urban land-use planning. Any potential for inner urban development must now be taken as the basis in planning. Proof of need must be demonstrated for additional development of building land with reference to current local population and economic growth projections. Local authorities may also apply a circular flow land use management approach that includes rededication, land recycling and, in shrinking communities, restoring land to natural conditions. Moving forward, new and modified environmental policy instruments will be needed such as strategies for restoring ground permeability, renaturalisation, wasteland management and traffic calming. A further problem is that of releasing land that is not in municipal ownership or cannot be used because of contamination.

Fig. 7: Past and projected land take in Germany



10. **Enhancing urban and peri-urban food production**

All towns, cities and regions in the country have adequate, secure food supplies. Most farmland is outside towns and cities, but the decentralised urban structure and fully developed transport infrastructure facilitate good distribution of food to urban centres. This applies for both German and imported produce.

Over 50% of the German land surface is farmland. Nearly half of such land is highly fertile. Most German cities have developed in locations with fertile soils, leading to land use conflicts that date back many decades. Germany's agricultural land area is continuously shrinking, mainly due to increasing land take for development and transport in parallel with a loss in importance of the primary sector. A decrease of 2% is expected as a result of land take for development by 2030. This mainly relates to urban or peri-urban and in many cases fertile land.

High-quality farmland close to urban areas is important for specialised crops such as fruit and vegetables. Germany is currently only 20% self-sufficient in fruit and 37% in vegetables other than legumes and potatoes[17], whereas cereals, milk products and meat attain figures well in excess of 100% and are also exported. The ongoing loss of fertile land in conurbations means that less and less land is available for fruit and vegetable cultivation in the vicinity of towns and cities. Among other things this means greater haulage distances with a corresponding undesirable impact on the climate.

On average, food travels some 200 km in Germany from farm to shelf. Transport volumes and distances have increased in recent years. For reasons of perishability, flexibility and low freight costs, 80% of food travels by road. Water and rail transport plays a secondary role.

There are also contrary trends, however: Demand is increasing in Germany for regional foodstuffs grown close to home. One reason is growing discontent with globalised mass production farming, the resulting long transport distances and associated environmental and climate impacts. Numerous food scandals have also played their part. The international Slow Food movement founded in Italy, for

[17] Source: BLE and BMELV

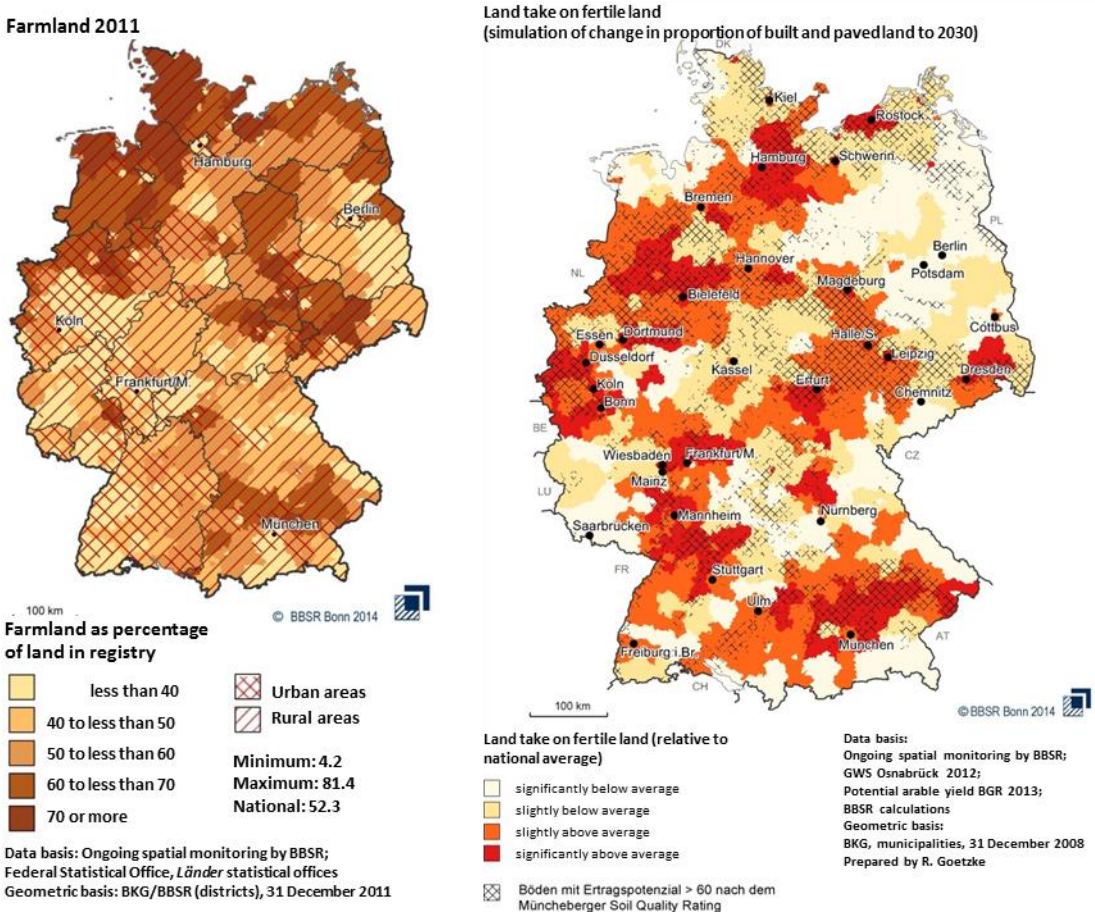
example, has now become established in Germany. Members in 80 cities are committed to the cause of good regional produce and greater transparency in the food market.

Other approaches aim at increasing the amount of food produced in cities. Trials are underway with ‘vertical farming’, where fruit, vegetables, edible fungi etc. are grown in buildings and rooftop greenhouses.

In horticulture there is an increasing trend towards communal urban gardening, often on brownfield sites. This allows urban residents to grow fruit, vegetables and herbs for their own use. A number of towns and cities are also trying out a special form of commons, where the council grows fruit and vegetables in public spaces for residents to harvest. Alongside these recent trends, Germany has a long tradition of allotment gardening with over a million allotment holdings. Allotment holders generally dedicate more than a third of their plots to the cultivation of fruit and vegetables for their own use. Both old and new forms of urban gardening serve other important functions besides subsistence. Urban gardens are places of encounter and communication, including for residents of deprived neighbourhoods, they provide additional urban greenery and improve the urban environmental footprint and climate resilience. As community gardens and in cooperation with schools and child daycare facilities they support social cohesion, most of all in deprived areas.

Vertical farming and urban gardens so far play a secondary role in terms of food security and no major changes are expected in this regard, partly for economic reasons. It is therefore all the more necessary to protect the remaining fertile farmland in the proximity of towns and cities from being rededicated for development and roadbuilding.

Fig. 8: Farmland and land fertility in Germany



11. **Addressing urban mobility challenges**

Urban mobility and urban development necessarily belong together. In Germany as elsewhere, mobility is key to quality of life, social participation and productivity.

For many years, the dominant mode of transport in towns and cities was the car. The number of cars on the road and motorised private transport increased most of all as a result of suburbanisation from the 1970s onwards. To this day in Germany, the greatest number of journeys and the largest distances are travelled by car. The result is severe and growing congestion. Notably, motorised private transport accounts for a significantly smaller proportion of all journeys in large cities than in other cities, towns and municipalities. That proportion is still substantial, however, at an average of 50%.

Many households live without a car either because they cannot afford one or out of choice. The average number of urban households that do not own a car in Germany is 30% in cities, 15% in medium-sized towns and 11% in small towns. Emerging trends in Germany such as a return to city living show signs of a change in urban mobility preferences. In recent years, many young adults in larger cities have started to do without taking a driving test or acquiring a car, because not owning a car does not necessarily mean being less mobile.

The well-developed local public transport[18] systems in many towns and cities meet most mobility needs and are also climate-friendly. These systems need to adapt to current trends such as demographic change, increased use of local public transport by older people, and falling school numbers. Expanding, upgrading and improving the accessibility of local public transport while reducing urban private motor transport are therefore key challenges for the future. Local public transport also plays an important part in connecting the urban periphery with surrounding rural areas.

Local public transport – which is also considered to include taxis and hire cars – is supplemented with well-established networks of footways and cycle paths and car sharing arrangements. There is currently a boom in car sharing with constantly rising user numbers. There are now car sharing systems in 343 municipalities (including many small and medium-sized towns). Germany has some 3,900 private car rental outlets.

The future lies in integrated transportation systems that combine different modes of transport. As part of efforts to promote bicycle use, for example, local public transport is being linked up with public bike hire schemes. Shared, complementary use of the two systems makes for changes in mobility patterns with less car dependence. Mix-and-match transport systems make it possible to travel door to door. An increasing part is played by digital media for purposes such as mobile ticket purchases and hire car bookings.

As early as 2010, the Federal Government launched the National Electric Mobility Platform to lend a major boost to electric mobility in Germany and speed the market launch of innovative electric vehicles. Increasing use of vehicles with alternative means of propulsion and powered by renewable energy can contribute significantly in climate change mitigation and also cut traffic noise. At the same time, sustainable mobility and urban development approaches need to be linked together while allowing for alterations in urban structure in consequence of demographic change. The groundwork for this is laid by accessibility analysis on the basis of alternative mobility systems.

[18] Local public transport refers in Germany to the local part of public road, rail and water transport provided as part of basic services.

Noise pollution has become one of the main urban environmental problems. Noise from road and rail traffic is a major part of this.

Freight transport volumes are continuously growing in Germany. Greater quantities of goods travel ever greater distances. Distances from producer to consumer are increasing as it is more cost-effective to transport goods than to produce them locally. As with passenger transport, therefore, freight and commercial transport needs to be organised so as to be compatible with cities. Local authorities aim to relieve cities of noise and pollution and improve main streets, public spaces and squares on a human scale.

12. **Improving technical capacity to plan and manage cities**

Local self-government includes basic elements of financial autonomy. This includes a municipal source of tax revenue based on the right to set a multiplier on local trade tax and local real property tax. German cities and municipalities also receive financial support in the performance of their responsibilities from the Federal Government and the *Länder*. Many local authorities nonetheless face financial pressures. According to current figures from the Federal Ministry for Economic Affairs, German local authorities have a cumulative investment spending backlog of some €156 billion.

Urban planning is governed in Germany by the Federal Building Code and other building legislation. The Federal Building Code lays down guidelines and procedural requirements for urban development projects. It includes a two-stage consultation model. How the consultation of the public and government agencies takes place in detail however is decided by local authorities themselves according to the reason for and the subject matter and scope of the planning activity at issue. Public involvement through consultation is nonetheless a constitutive element of a vibrant, representative democracy and a key precondition for sustainable integrated urban development. It legitimises majority local council decisions as an expression of the common interest and improves the quality and public acceptance of planning. At the same time, however, public participation complicates planning and decision making and is more demanding in terms of resources and skills. This poses special challenges for administrators and policymakers. The situation with regard to informal planning is the same: Urban development and integrated development plans lay down long-term goals and the strategic trajectory for a city's future. They coordinate the integration of various sectoral policies. Their informal nature is a strength when it comes to involving residents. In recent years this has increasingly taken place through new forms of public participation and private initiative in urban development. These include civic trusts, participatory budgeting, citizens' boards, pop-up amenities, energy cooperatives and crowdfunding initiatives.

Urban development in Germany has always been a community effort involving local or regional industry and civil society to varying degrees alongside the public sector. Collaboration with local business and involvement of private initiatives are nothing new: Such approaches are already used in public-private partnership models and in binding land-use plans implemented by developers.

Changing economic, environmental and social challenges highlight the importance of enhancing urban governance. Cities can thus be made more resilient with regard to visible shifts in the management, performance and financing of public and community responsibilities. The focus here is on greater cooperation between government and society and on involving the private sector in putting sustainable urban development into practice:

- Linking up businesses and civil society organisations is an important aspect at neighbourhood level. The aim is to maintain and enhance the attractiveness of neighbourhoods and to promote endogenous potential, local economies, educational institutions, etc.
- Businesses are encouraged to support urban development in corporate social responsibility activities and private foundations are involved in urban development projects.
- Measures to improve urban energy efficiency make it important to cooperate with the energy industry in planning and investment.

Business improvement districts (BIDs) and housing improvement districts (HIDs) have been called into being in some places to promote cooperation between individual owners in a neighbourhood. Both are based on the use of public statutes under which, subject to minimum consent, all owners affected can be called upon for the private funding of a private sector project. Even voluntary cooperation with single owner-occupiers and building owners (or owners' associations) can be highly successful, as practical examples have shown.

Increased participation requires the support of the public sector for guidance and impetus in furthering the common interest and preventing individual parties from imposing their will on less well-organised parts of the local population. Also, involving private initiative must not be allowed to result in the privatisation of urban development. Like their formal counterparts, therefore, informal procedures need a fair process for balancing interests. The challenge is thus to organise – at all levels of government – strategic alliances and communities that share responsibility and are centred around the goals of sustainable, integrated urban development. Because they are not externally binding, however, informal planning instruments do not replace formal instruments, but complement them and assist in ensuring they are deployed on a needs-appropriate basis.

13. Challenges experienced and lessons learned in these areas

Ensuring sustainable urban planning and design
Ensuring sustainable, future-ready cities makes it necessary to tap into all resources of society: The economic potential of private enterprise, governmental institutions with their transfer payments and subsidies, and civic engagement by the public. The Federal Government's newly launched National Platform for the City of the Future is currently working on a research and innovation agenda for this purpose.
Through its National Urban Development Policy platform, the Federal Government gives new impetus to informal and formal planning across six priority action areas:

• Civil Society: Activating citizens for their city
• Social City: Creating opportunities and preserving cohesion
• The Innovative City: The driving force of economic development
• Climate Change and Global Responsibility: Building the city of tomorrow
• *Baukultur:* Designing better cities
• Regionalisation: The future of the city is the region

The platform has developed into a catalyst for new approaches in urban development and has built up a large network of active participants in government, administration and society.

Various instruments of urban development must continue to work together. Applicable legislation must be aligned with relevant funding programmes and with information and communication activities for effective use at local level to the benefit of business and the public without excessive administrative effort.

Urban land management and urban sprawl

Integrated urban development aligned with strategic targets is reflected in a wide range of land use demands. Land use competition has intensified. Housing and social infrastructure often compete for space with commercial land uses. Housing and commercial uses conflict in turn with the equally important need for open spaces. Because of these competing land use demands, it is vital for cities to agree and align their activities with strategic urban development goals. Strategic land management and strategic urban development are mutually dependent.

The main inner urban development measures are infill development and bringing brownfield sites back into use for built development. These drive a rise in building density and hence urban concentration.

Together with climate change, this compounds the urban heat island effect due to the increased mass of buildings storing heat in the same unit area. There is also a potential risk of unbuilt land being lost to development, together with its positive urban climate and social potential.

In the interests of sustainable land use, therefore, a dual approach to urban development is needed, with the focus on enhancing not only built development but also urban green spaces. Environmental impact mitigation rules that are already in place aim to prevent negative impacts on the natural environment and to mitigate impacts that are unavoidable.

Measures to improve the availability of open spaces are very important in dense conurbations for local recreation and urban quality of life. Inner urban development strategies must also target climate-friendly land use and impact positively on air quality and the urban climate.

Urban and peri-urban food production

High-quality, climatically favoured land in the vicinity of cities is to be retained in Germany for agricultural production. Any rededication of such land for built development or roads is generally irreversible. The Federal Government therefore aims to reduce land take for settlement and transport to 30 ha/day by 2020. Urban development is primarily to take the form of inner urban development with the use of brownfield sites, vacant buildings, vacant plots and other opportunities for infill development and redevelopment. Under a recently introduced requirement, special justification is now required for any rededication of farmland.

A specific challenge in inner urban development is ensuring that sufficient green spaces remain for the urban population. People increasingly want to grow their own food. Allotments, community gardens and urban agriculture projects are especially worth safeguarding as open spaces in the urban landscape and awareness of them needs to be improved through local public relations and communication platforms. Alongside fruit and vegetable production they also serve purposes of leisure, recreation, integration, social exchange and climate balance.

Urban mobility

Mobility and accessibility are locational factors for businesses and households in cities and their surrounding regions. It is thus important for cities to have or introduce high-capacity yet environment-friendly transport systems. These must also adapt to current population trends.

This works best when transport planning is coordinated with urban and regional planning. The strengthening of eco-mobility (well-developed, affordable local public transport, cycling and walking) combined with effective linkage between different modes of transport and new smart mobility solutions (such as public bike hire schemes and electric mobility) makes for more versatile, healthier, more climate-friendly, cleaner and quieter urban mobility. Urban tram systems are also undergoing a

renaissance cutting across urban regions, frequently in combination with urban light rail and regional and long-distance rail transport.

Electric vehicles powered by renewable energy sources are quiet and low on emissions. They can help establish distributed energy storage systems and be combined with smart energy approaches in buildings. The charging infrastructure needs to be expanded, however.

Efficiency can be boosted in freight transport by means such as improving transport capacity utilisation (in relation to quantities, packaging sizes and transport management). However, improvements in capacity utilisation often conflict with just-in-time logistics.

New governance approaches

Social and hence urban change can and should not be driven by the public sector alone. Germany's long tradition of urban development policy based on cooperation and strategic alliances must be sustained and built upon. This requires constant alertness to changing needs and changes in capacity and capabilities in civil society, the economy and government.

New governance and cooperation approaches have been tested for public acceptance, feasibility and effectiveness in some 100 pilot projects under the National Urban Development Policy platform. The majority of these consist of a wide range of innovative local governance approaches relating to issues such as the *Energiewende* (the transition to renewable energy) and local climate change mitigation and nature conservation. It is important not to lose sight of the fact here that many such initiatives are bound up with individual interests and unlike elected municipal officials are not obliged to furtherance of the common good.

Frequently changing needs requiring different facets of urban governance make it necessary to support the diverse currents of informal – meaning unregulated, grassroots – urbanism subject to effective balancing of interests and externally binding formal planning processes.

E-governance and e-participation are progressively more important in today's increasingly wired world. There is untapped potential here. Care must be taken, however, to ensure that people are not left out for want of access to new technologies.

14. Future challenges and issues in these areas that could be addressed by a New Urban Agenda

Ensuring sustainable urban planning and design

- Inner cities and historic town centres must be conserved and strengthened as mirrors of urban history and centres for culture, education, social contact, religion, retailing, administration and housing. The aim should be for a compact, functionally diversified and attractive city that fosters encounters and social and economic interaction.

- Urban environment and climate protection is an investment in quality of life. Protecting and conserving the natural environment is part of our responsibility to future generations and secures the attractiveness and long-term viability of what we want to develop into environment-friendly, liveable cities.

- The primary objective is the sustainable city, overcoming energy, resource and climate issues. Any action to achieve these objectives must take environmental, economic, cultural and social interests into account. Where necessary these different interests must be weighed against each other. This requires urban and regional development to be integrated across the sectoral, temporal, spatial and process dimensions, together with suitable procedures and opportunities for consultation and participation.

- An indispensable requirement for sustainable urban development is the development and implementation of economic innovations and smart technologies such as networked control, information and communication technologies.

- The increasing digitisation of the economy and society will redefine the relationship between the state and citizens, and also between cities and rural regions. Public infrastructure will take on a new form. The structure of urban and rural transport and mobility will likewise change. For business and industry, the smart city is a new market opportunity. Digitisation presents completely new challenges for local urban policies and democratic governance. It is important for cities to identify and tap the benefits of these new opportunities for the common interest.

- Cities need open spaces for recreation, as reservoirs of cool air and for urban agriculture. They also need attractive, safe and well-designed pedestrian-friendly streets, squares and green and open spaces.

Urban land management and urban sprawl

- Reuse or redevelopment of vacant buildings and derelict land must take precedence over building on greenfield sites wherever possible – including for economic reasons. Land that is no longer needed for housing should be taken out of circulation.

- Inner urban development should take precedence over greenfield development. Cities need to combine urban density with social, functional and architectural diversity. A good balance between density and openness helps create a healthy city. Inner urban development also has to take into account shifting needs as a result of climate change.

- Land is a scarce resource that should be used, but not used up. The Federal Government plans to limit land take to 30 ha/day by 2020.

- Building land must be developed in line with demand. Expansionary designation of building land in outlying areas for future use should be made a thing of the past. It would be logical and sustainable for zoning decisions to be based on verified demand. Local autonomy in the development of building land must not, however, be unduly constrained by *Länder*-level and regional stipulations.

- Formal regional planning should be enhanced to provide a framework for local overall planning and local development. Reserves of building land and scope for inner urban development should also be monitored at regional level. Cities and municipalities with large reserves of building land and substantial inner urban development potential should refrain from allowing greenfield development in outlying areas. This is in their own interest in view of the knock-on costs of such development.

Urban and peri-urban food production

- Environmental impacts are to be avoided. It is desirable to have a compensation arrangement for unavoidable impacts. Open spaces need to be protected. Infill development should take priority over designating new land.

- Suitable land should continue to be kept for farming. Farmland should only be rededicated as land for housing development in justified instances.
- Allotments and community gardens are important green spaces in the urban landscape. As well as supporting local production and climate balance, they also serve leisure, recreation, education and social purposes and provide habitats for biodiversity. They are an important element of a liveable city and should be replicated elsewhere.

Urban mobility

- High-capacity transport infrastructure is required that satisfies diverse mobility needs and intelligently resolves land use conflicts between passenger and freight transport and between different modes of transport (cars, local public transport, cycling and walking). Reliance on cars is to be reduced in favour of greener alternatives.

- From an environmental and economic perspective, reducing motorised private transport in favour of alternatives is among the key future challenges for local government. It also secures mobility and participation in urban life for socially less privileged groups.

- Sustainable urban transport also means adequately organising and meeting the varied mobility needs of the population while minimising adverse effects and environmental impacts.

- Adequate urban infrastructure and new forms of mobility require innovative construction and operating principles that come under the heading of smart infrastructure. Transport and mobility should be gradually decentralised and made into interconnected systems.

- The impacts of traffic must be reduced, for example by implementing noise action plans.

- The use of vehicles with alternative forms of propulsion is an important contribution to eco-mobility. Sustainable forms of mobility include public bike hire schemes, e-bikes and car sharing. Co-locating mobility stations and embedding them into the urban landscape is a future task of urban development.

- In rural areas, conditions need to be improved for the use of alternative forms of service such as dial-a-bus and people's bus services.

- The future of traffic management lies in integrating the various modes of transport and shifting more traffic to rail and water transportation.

New governance approaches

- Addressing the major challenges requires broad social alliances and transparent processes. Stakeholders from business, academia, trade unions, associations, foundations, culture, education, media, religion, sports, developers and planners are key partners in urban development. It is important to coordinate these alliances at all levels of action.

- Support must be given to the diverse currents of informal, grassroots urbanism and civic engagement.

III. Environment and Urbanisation

15. Addressing climate change

About 78% of global CO_2 emissions are generated by cities. Cities and urban regions harbour huge reduction potential. The effects of climate change are also felt particularly strongly in cities, partly because of their building density.

Across Germany, buildings currently account for about 40% of final energy consumption and about a third of CO_2 emissions. Improving building energy efficiency is therefore a key focus of urban climate change mitigation efforts. The Federal Government has set incentives for this purpose by means of the Energy Saving Act (EnEG), the Energy Saving Ordinance (EnVO), the Renewable Energy Heat Act (EEWärmeG), the CO_2 Building Rehabilitation Programme, the Market Incentive Programme, and the Urban Energy Efficiency Rehabilitation Programme.

As Germany's transition to renewable energy shows, sustainable and climate-friendly energy supplies will be far more locally distributed. Many cities and municipalities generate their own heat and power in municipal facilities. Smart grids are needed for efficient energy distribution, especially in conurbations. To leverage the available reduction potential, German cities measure emissions, increasingly set their own climate goals and are taking specific action.

German cities also follow the avoid-shift-improve (ASI) approach in transport policy, putting the emphasis on improving eco-mobility, encouraging cycling and walking, and reducing motorised private transport.[19]

As centres of population, built development, supply infrastructure, industry and services, cities are especially vulnerable to impacts of climate change. In Germany as elsewhere, there is already measurable proof of anthropogenic climate change: The last few years brought new heat records, several 'once in a century' floods and heavy rains with hail and storms. Urban infrastructure is particularly vulnerable to extreme weather events and must therefore adapt and be made resilient to projected climate change.

Taking precautions against the consequences of climate change is increasingly a basic part of municipal provision. A key element in this is the development of climate change-ready green and open spaces[20], with regional and local measures interconnected.[21] Urban green spaces can play an important part here. Green spaces, including green roofs, are important in water retention, and so reduce the pressure on sewers and help prevent flooding. They can have a positive impact on the urban microclimate and help prevent the development of urban heat islands, thus reducing risks of heat stress for vulnerable parts of the population.

On and around buildings, pale exterior surfaces, variable shading elements, gravel surfaces, drought-resistant planting, passive cooling systems and living walls help reduce heat sources. An urban,

[19] See also Section III 17
[20] See also Section II 8 and II 10

ageing population will demand more by way of an attractive, climate change-ready living and working environment and climate.

The policy framework for climate change adaptation activities is provided by the Federal Government's German Strategy for Adaptation to Climate Change (DAS). Spatial and urban land-use planning play a central part here. Further focuses of climate-friendly urban land-use planning include flood protection and prevention, local flood prevention in the event of heavy rains, municipal water management, urban climate mitigation with cool, fresh air corridors, climate-adapted preventive healthcare, climate change adaptation of the technical and social infrastructure, and climate-sensitive infill development.

The Federal Government takes an encourage-empower-educate approach in supporting municipal activities for climate change mitigation and adaptation:

a) **National Climate Initiative:** This covers a broad range of activities from the development of long-term strategies to specific assistance and investment support measures, and supports cities in climate protection.

b) **Urban development assistance:** Federal and *Länder* urban development assistance supports cities and municipalities in energy-efficient building refurbishment and development. Funding criteria include integrated urban development approaches that address the issue of energy efficiency in development. Activities to mitigate urban climate impacts can also be funded.

c) **DAS Climate Change Adaptation funding programme:** The BMUB Climate Change Adaptation funding programme is a major pillar of support for municipalities. Municipal beacon projects and inter-municipal or regional alliances are assisted in establishing collaborations and in developing and piloting solutions.

d) **Municipal Climate Protection Service Point at the German Institute of Urban Affairs (Difu)** Established by the Federal Environment Ministry, the Difu service point advises municipalities in compiling and implementing climate change policies.

e) **Act Promoting Climate Protection in Urban and Municipal Development:** This lays down climate policy principles, specifies requirements for urban redevelopment and links these with climate adaptation.

f) **Information and support activities:** These include the documentation and publishing of best practice examples and processes and communication platforms (such as the National Platform for the City of the Future) as services for municipalities together with the provision of supporting materials for specific stakeholder groups.

16. **Disaster risk reduction**

Extreme weather events and natural disasters – along with general debate about already visible signs of climate change – have sharpened awareness of risk prevention and disaster relief in recent years.

The past two decades brought a series of major floods that inflicted major damage and caused thousands to be evacuated. Flood risks are consequently a key issue for the public. Storms and heatwaves have also caused massive economic loss.

Risk-oriented planning, risk prevention measures and heightened public debate have led to resilience-building approaches being added to the sustainable integrated urban development model. These target the development of resilient cities and regions in interaction with stakeholders.

Cities and municipalities play a central part in flood management. Alongside the responsible ministries, a range of organisations with wide-ranging capabilities are involved in crisis management, including Technisches Hilfswerk (THW)[22], fire services and medical emergency services. Effective crisis management and efficient emergency response are critical in a crisis. Flood prevention geared at minimising flood risk requires an integrated approach in which the Federal Government and the *Länder* play an equal part and which gives due consideration to stakeholders in each river basin district.

This is the approach taken in Directive 2007/60 of the European Parliament and of the Council of 23 October 2007 on the Assessment and Management of Flood Risks (the Floods Directive), enacted in German law in the Federal Water Act (WHG). The objective of the Floods Directive is to establish a framework for the assessment and management of flood risks, aiming at reducing the adverse consequences of floods for human health, the environment, cultural heritage, economic activity and infrastructure. Experts have since identified flood risks and compiled flood hazard and flood risk maps for all river basin districts in the EU, covering areas susceptible to flooding and analysing potential adverse consequences. Internationally coordinated flood risk management plans are to be compiled by the end of 2015. These address all aspects of flood risk management (prevention, crisis management, regeneration and review), focusing on prevention, protection and preparedness, including flood forecasts and early warning systems. The plans include measures for achieving the established objectives and are reviewed and updated every six years. From 2018 they are required to take into account the impacts of climate change.

Supplementary to the Floods Directive, following floods in June 2013, the Federal Government and the *Länder* passed a resolution to compile a national flood control programme. This aims to address 'upstream-downstream' issues by increasing the amount of floodland available to the upper reaches of rivers. This will also benefit other countries downstream. Priority flood control measures were selected jointly with the applicable *Länder*, including flood polders for flood retention, dyke relocation and dyke reinforcement. The resulting national set of priority trans-regional flood control measures for the next 20 years is the first of its kind. Federal funding is available for up to 60% of the implementation costs. A special Flood Prevention framework plan was additionally established in 2015.

As extreme weather events become more common in Germany due to climate change, resilient urban development is an increasingly important focus, and not just in connection with floods. Federal agencies are already working in a strategic alliance to analyse such events and develop appropriate strategies for action.

A review is also being conducted of federal and *Länder* law to exploit the scope for accelerated planning and approval procedures for the construction of flood defences. The resulting procedural changes are to be complemented with substantive changes in flood control law.

17. **Reducing traffic congestion**

Due to suburbanisation, most city traffic in German cities is generated by commuters from the surrounding areas of cities. About three-quarters of workers from big city suburbs regularly travel to work by car – with adverse effects on the inner cities such as high traffic density and congestion at

[22] Technisches Hilfswerk (the Federal Agency for Technical Relief) is a German federal civil and disaster relief organisation.

peak times, noise and increased air pollution. Traffic loads are concentrated most of all along major axes in the outskirts and within the inner periphery.

German urban and transport policy deploys a combination of traffic avoidance, modal shift and traffic management policies to reduce congestion and the environmental impacts of traffic for residents and commuters. New approaches include truck tolls on autobahns and green zones in cities.

An established traffic avoidance approach in Germany is the ‘city of short distances’, achieved by planning and combining areas where people, live, work, shop and spend their leisure time for the right spatial mix. New technologies such as teleworking and videoconferencing also help reduce traffic volumes.[23]

In Germany as elsewhere, email is increasingly taking the place of letter mail, but parcel volumes are growing thanks to online retailing. Courier, parcel and express services add substantially to inner-city commercial traffic.

Many cities aim to reduce such traffic by pooling deliveries under city logistics solutions with greater cooperation between transport service providers. There are also signs of changes in passenger transport. Partly in response to high oil prices, online car pooling services are increasingly popular in Germany, resulting in better use being made of private cars. Commercial car sharing services also help reduce traffic as users only generally make use of them when needed and in place of personal car ownership.

Traffic congestion can be reduced by shifting people from cars to other modes of transport. A widespread approach is that of improving local public transport and bicycling infrastructure. This includes park/bike-and-ride stations, bike hire schemes and improved timetables. German companies, too, incentivise their workforces to use local public transport with employer-subsidised season tickets, free bicycles or even company-wide mobility management systems. Integrating the various transport systems makes for greater flexibility and allows door-to-door travel without people using their own cars.

The use of public transport in Germany saves some 19 million car journeys a day and makes a major contribution in reducing environmental, climate and health impacts. Reducing car use has a direct positive impact on inner cities especially, for example in terms of air pollution and pressures on human health and the environment.

A number of German cities use information and communication systems (telematics) to improve traffic flows and prevent congestion. Many towns and cities have parking guidance systems. Advanced systems are able to guide traffic flowing into and out of town. This is especially helpful when there are disruptions such as roadworks and accidents. Depending on the detail level implemented in such systems, traffic light phases can also be better coordinated for the different modes of transport.

Some 50% of municipal road bridges are affected by a maintenance backlog and need refurbishing or replacing. This is a cause of traffic bottlenecks and congestion in many cities.

18. **Air pollution**

[23] See also Section II 11 and III 15.

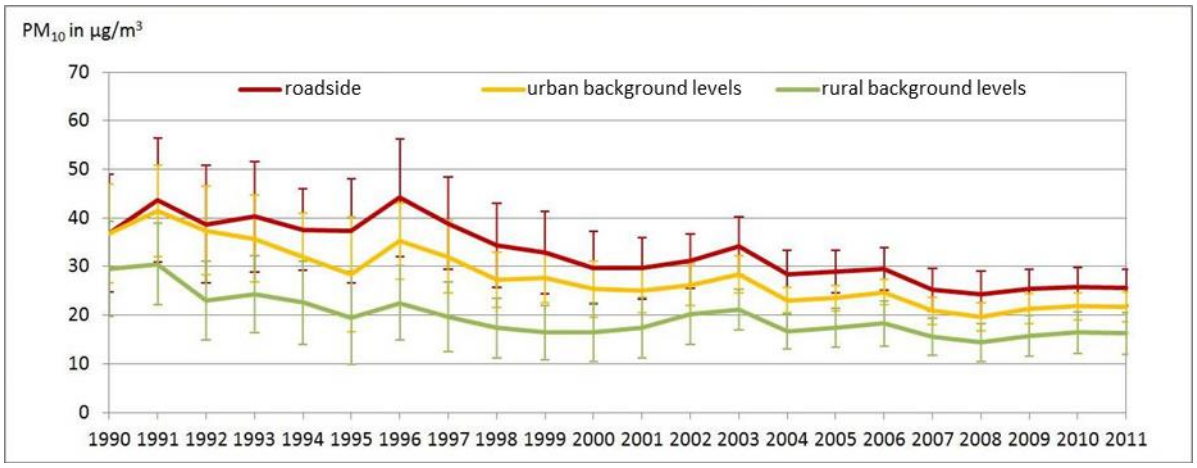
The main forms of air pollution in Germany today are nitrogen dioxide (NO_2), ozone, and nitrogen entering ecosystems. The biggest producers are stationary combustion, transport and farming. Emissions of specific air pollutants have been reduced considerably since 1990. Persistent hotspots aside, air quality in Germany is generally good on an international comparison.[24] In regular surveys, fewer and fewer people in German cities say they are affected by air pollution.[25]

For health protection purposes, the Directive on Ambient Air Quality and Cleaner Air for Europe sets limit values that must be complied with across the EU and in some cases are in excess of World Health Organization (WHO) recommendations. Air quality standards are also set for particularly harmful fine particles smaller than 2.5 µm in diameter (PM2.5).

Particulate and nitrogen dioxide pollution in German cities and conurbations is much higher than in rural regions. The highest levels are found close to source, in conurbations and places with heavy traffic. Road transport accounts for some 16% of particulate emissions in cities, other sources being industry and increasingly also private households due to the growing prevalence of wood and pellet fired heating systems. Ammonia emissions from farming also contribute substantially to 'secondary' particulate formulation and make up a large share of background levels. The level of nitrogen dioxide pollution in affected areas, on the other hand, is almost exclusively determined by road transport emissions, primarily from diesel powered vehicles.

It has not been possible to achieve any significant reduction in NO_2 air pollution in recent years. Concentrations exceeded the permitted annual average at over half of all German urban roadside monitoring stations in 2013. Cities are very limited however in their ability to reduce NO_2 concentrations. Limits for particulates likewise continued to be exceeded.

Fig. 9: PM10 pollution in Germany, 1990 to 2011



Source: Federal Environment Agency

Some 48 green zones had been established in Germany by 2014 to reduce air pollution from motorised transport and thus inner city pollution levels. High emission vehicles are not allowed to enter green zones. Green zones are important in complying with the limits on particulates and nitrogen dioxide under European law.

[24] OECD study (2014): http://www.oecd-ilibrary.org/environment/the-cost-of-air-pollution_9789264210448-en
[25] Source: German Socio-Economic Panel (SOEP)

Also to limit air pollution, European Union (EU) requirements have been made gradually more stringent since 1992 for all petrol or diesel cars, trucks, buses and motorcycles and for all construction machinery, tractors, diesel locomotives and inland waterway vessels. Tighter limits led to the introduction of catalytic converter and filter systems that have substantially reduced air pollution. The retrofitting of certain diesel cars with particulate filters was additionally subsidised in Germany to the end of 2006.

The European Union and the German Government have laid down comprehensive standards to reduce emissions from stationary plant and the application of certain products. The main provisions are contained in the EU Industrial Emissions Directive, legislation transposing that directive into German law, and the German Technical Instructions on Air Quality Control (*TA Luft*). Energy policy measures and instruments have also largely had beneficial side-effects on air pollution.

19. **Challenges experienced and lessons learned in these areas**

Addressing climate change

A town or city best meets the requirements of sustainability and climate compatibility if it is compact and has ample greenery, if development is focused on inner urban areas, and if there is a mix of housing, employment, services and recreational opportunities in a relatively small space. Other factors in municipal climate change mitigation and adaptation alongside urban planning include climate-adapted and energy-efficient buildings, low-carbon renewables-based energy supplies and energy-efficient infrastructure and transport systems.

Various points must therefore be considered from an early stage to exploit the scope for climate change mitigation and adaptation:

- The urban community – policymakers, administration, researchers, industry (most of all the building industry) and civil society – must work together towards sustainable solutions, with spatial and urban land-use planning playing a coordinating role.
- Tasks include climate risk analysis, climate impact assessment, sensitivity analysis, strategy formulation, and action prioritisation and implementation.
- Climate change mitigation and adaptation must be made an integral part of urban development. Planning is used to stipulate specific cost-effective adaptation measures (such as via minimum requirements).
- The four action areas of climate change, energy, environmental protection and demographic change must be better linked.
- The Federal Government should support regions and cities with legislation and funding and provide a platform for cities to share knowledge and experience.
- Climate research findings must be collated and publicised among local authorities, regions, architects and developers.
- Decision makers and the public must be sensitised to climate-friendly behaviours and lifestyles.

Disaster risk reduction

Risk prevention is increasingly important in Germany. Whereas the public and policy focus today is on flood preparedness, in future the public debate will have also to take in other risks and it will be necessary to highlight the added economic benefits of action and investment to counter them.

Despite its importance, risk prevention is not always a priority for decision makers. Measures to improve resilience are not always popular with policymakers as they entail spending money for 'prevention'. This puts long-term investment in competition with current needs – and financial resources are mostly limited.

Action needs to be stepped up in several areas in the medium term:

- Urban preparedness for severe risks from increasingly frequent extreme weather events with heavy rain and long heatwaves in the context of the ageing society, healthcare needs and maintaining urban quality of life
- Urban-focused research on climate impacts and on win-win climate change adaptation options
- Ongoing development of national risk and vulnerability analyses (based on an all-hazard approach) and greater inter-agency cooperation
- Further enhancement of efficient crisis management
- In flood control, engineering-based solutions should continue to be implemented subject to general economic viability
- Introduction of nationwide hazard monitoring and early warning systems
- Further enhancement of public awareness with regard to risk and individual preparedness
- Best practice examples need to be highlighted
- Establishment of a risk debate at national and international level

Reducing traffic congestion

In Germany as elsewhere, boosting local public transport, cycling and walking offers huge potential for reducing congestion and improving urban quality of life. More local authorities and employers need to develop innovative ways of shifting inner-city traffic, in particular from cars, to more city-friendly, greener forms of mobility. This also saves money and enhances accessibility.

Efforts should therefore be made to promote innovative, non-car-based services and mobility solutions such as public bike hire schemes and smart parking management systems. Flexible choice of transportation makes for city-friendly green mobility. This can be promoted by supporting car sharing schemes, coordinating different modes of transport and measures such as placing user-friendly bicycle stands in front of rail stations (park-and-ride/bike-and-ride/mobility stations).

City logistics must be further enhanced, studied and made more efficient. This entails establishing a network of interdisciplinary cooperation partners and improving public and business acceptance.

Air pollution

Making buildings, neighbourhoods and entire cities more energy-efficient saves energy and reduces pollution from energy and heat generation. Utility services, the housing industry and civil stakeholders must be involved in the modernisation process. Energy and climate strategies must be made an integral part of urban planning.

Urban development policies should promote local amenities accessible on foot or by bicycle and public bike hire schemes. Green zones are important in complying with the limits on particulates and nitrogen dioxide. Electric mobility using battery power and fuel cells should be promoted and extended in geographical reach. Such technologies should be supported equally for bicycles, cars and local public transport. Low-pollution electric mobility will be very important for cities, most of all for journeys that cannot be made within the city by foot, bicycle or public transport.

20. Future challenges and issues in these areas that could be addressed by a New Urban Agenda

Addressing climate change

- Climate change confronts cities with new challenges that need to be met by timely incorporation of climate change mitigation and adaptation into local policies and action. A joint, integrated approach to climate change mitigation and adaptation makes it possible to detect risks and goal conflicts early and make best use of synergies. This applies not just for regions, municipalities and urban neighbourhoods, but also for individual buildings.

- The urban environment must be made resilient to growing climate risks in order to reduce their potential impact on cities, city populations, the economy and urban ecosystems. This first of all requires climate impact assessment and the establishment of effective networks and information systems for urban stakeholders.

- Wasteland and derelict buildings can be used for climate regulation (fresh air, temperature reduction, ventilation and water retention) and renewable energy generation (solar and wind energy, geothermal energy and energy from biomass). At the same time they present opportunities for infill development.

- The transition to renewables requires a balance to be found between affordability, public acceptance, security of supply and environmental compatibility. It must aim at a development path that demonstrably leads to a climate-neutral outcome while allowing the necessary investment to be made and refinanced at low overall cost. Unbureaucratic funding models need to be enhanced to speed the conversion of existing urban infrastructure and buildings, which is held back in some cases by long payback periods on large-scale energy-efficiency improvements and by the need to comply with municipal debt limits.

- The key parameter in urban climate protection is overall efficiency at neighbourhood and metropolitan region level. Alongside better energy efficiency and use of renewable energy sources, the answer lies in an innovative mix of sustainable low-carbon energy generation, consumption, storage and feed-in arrangements. Conversion and development aiming at climate-adapted, energy-efficient buildings and neighbourhoods requires clear agreements, integrated and stakeholder-oriented approaches targeting overall urban efficiency and in some cases additional sources of funding. Reducing energy consumption by improving energy efficiency is economically, environmentally and socially essential. Living in the city must be kept affordable overall.

- Resource efficiency must be further improved with advice and subsidies for businesses and private households.

Disaster risk reduction

- Preventive measures for purposes such as adaptation to climate change form part of urban and regional risk management. They are often politically unattractive and need to be publicly debated together with their added economic benefits to elicit acceptance and understanding.

- Coping with major disasters requires fast-track mutual information and assistance. It is therefore important to have disaster relief agencies that cooperate and support each other from place to place and region to region. The legal framework must be in place to enable rapid and uncomplicated mutual assistance.

- The ability to quickly warn the population is vital to prevent lasting damage in the event of a disaster. Timely access to information and public awareness are further key elements of disaster relief.

- Establishing efficient urban crisis management is a crucial part of urban policy. This includes the use of nationwide warning and information systems based on text messaging, email and mobile apps.

Reducing traffic congestion

- Ensuring mobility is essential to the economic, social and cultural development of urban centres. The challenge lies in securing affordable and sustainable mobility while reducing traffic pollution and conventional motorised private transport.

- Traffic avoidance and reduction measures must be established to reduce congestion. Good parking management, city logistics/telematics systems and attractive public transport systems are helpful in this regard. Teleworking, videoconferencing and related technologies can help reduce commuter traffic.

- Organising city-friendly transportation adapted to differing mobility needs is a major task for the future. This requires increasingly flexible, interconnected, intermodal solutions to make inner cities more accessible. Public bike hire, park/bike-and-ride and car sharing schemes play an increasingly important part.

Air pollution

- Green zones are important in complying with the limits on particulates and nitrogen dioxide.

- Low-emission electric mobility will be very important for cities, most of all for journeys that cannot be made within the city by foot, bicycle or public transport.

- Roadwork congestion can be cut by mandatory use of efficient works management to accelerate completion.

- Urban air quality is an important public good. Innovative technology must therefore be used to reduce pollution at source. This includes improving energy efficiency in buildings and measures such as fitting motor vehicles with particulate matter filters.

- Reducing air pollution also involves cutting energy consumption. This makes it necessary to communicate the individual and societal benefits and the behavioural changes needed across all sectors of the population.

- Measures to improve energy efficiency must respect the architectural heritage and character of towns and neighbourhoods. Important ensembles and buildings thus need to be modernised in such a way that their appearance is preserved.

IV. Urban Governance and Legislation

21. Improving urban legislation

In Germany, the responsibilities of urban development and urban planning are linked to the guarantee of local authority autonomy. An upshot of this constitutionally guaranteed local authority autonomy is local planning autonomy. Local authorities coordinate their plans with spatial – meaning *Länder*-level and regional – planning goals. An overarching framework for urban planning is provided at federal and *Länder* level through legislation and the allocation of funding. At national level, the Federation has legislative power with regard to planning law, which is a major part of urban planning policy. 1960 saw the enactment of the Federal Building Act – today's Federal Building Code – the first legislative framework of its kind to provide a uniform set of instruments for all municipalities in Germany. The Federal Building Code, which has undergone several major revisions in the meantime, formulates urban development goals and guiding principles that are further elaborated by cities and municipalities under their own responsibility according to local needs.

The Federal Republic of Germany has always faced up to its responsibility for sustainable development at urban and municipal level and for the needs of nature and the environment. According to Section 1 (3) of the Federal Building Code, "Urban land-use plans shall ensure sustainable urban and housing development that reconciles social, economic and environmental needs, including with respect to future generations." The same principle is followed by nature conservation, soil conservation, waste recycling and pollution control legislation and by legislation safeguarding the needs of specific sectors of the population.

Recent revisions to planning law added provisions on climate protection and enhanced the emphasis on inner urban development.

To accelerate the transition to renewable energy, climate policy aspects and a climate protection clause were incorporated in the Federal Building Code in 2011. To aid the ongoing substitution of conventional energy sources with renewable energy, improvements were made to the planning law instruments for repowering, meaning the replacement of old wind turbines with new ones predominantly in wind farms. It is stipulated that municipalities should indicate renewable energy or combined heat and power installations in preparatory land-use plans and can designate sites for such installations in binding land-use plans. Informal municipal climate change and energy strategies can also be given greater legal force by being incorporated in formal urban land-use planning. Municipalities have also gained the scope to make stipulations in binding land-use plans that provide for and facilitate the use of renewable energy and combined heat and power installations in new buildings. The use of solar energy on roof and exterior surfaces was also made possible in undesignated outlying areas. With a view to built-up areas, climate change mitigation and adaptation concerns have also been incorporated into special urban planning law.

In 2013, the German Bundestag enacted amending legislation to promote inner urban development and continue the revision of urban planning law. Greater emphasis was placed on inner urban development, among other things to reduce land take. In consequence, the Federal Building Code now expressly places the priority in development on inner urban development. Central service areas are better safeguarded by allowing them to be expressly designated in preparatory land-use plans. The legislation also introduced simplified procedures for dealing with abandoned derelict buildings. Ownership issues sometimes create legal obstacles for inner urban development projects.

A new act concerning planning law measures to facilitate the accommodation of refugees entered into force on 26 November 2014. The act added clarifications and temporary exemptions to the Federal

Building Code making it easier to create accommodation for refugees. Its adoption was prompted by sharply rising refugee numbers and the resulting difficulties for municipalities in providing accommodation.

In the building sector, the Energy Saving Ordinance (*Energiesparverordnung/EnEV*) has been an important element of energy efficiency policy for many years. Among other things, it requires energy certificates to be issued for new buildings and when existing buildings are modified or extended. A major revision of the Energy Saving Ordinance in 2013 implemented a key part of the Federal Government's resolutions on the transition to renewable energy. The energy efficiency requirements for new buildings were made 25 percent more stringent from January 2016. From 2021 there is a fundamental obligation for new buildings to be constructed to the highest energy efficiency building standard.

22. **Decentralisation and strengthening of local authorities**

The smallest spatial and administrative unit in the German *Länder* is the municipality (*Gemeinde*). Municipalities do not however possess any attribute of statehood in their own right. Instead of being part of the state administration, they administer themselves. They are nonetheless assigned state functions such as registration. Local administrative autonomy is protected under German constitutional law. Municipalities therefore have substantive authority over all local affairs under the framework of spatial planning goals and principles. Local self-government is an expression of the subsidiarity principle.[26]

Under the German Basic Law, municipalities are territorial entities equipped with legal personality, internal organisation and a series of guaranteed powers (territorial, organisational, staffing, planning, financial, fiscal, by-law and cultural autonomy). Within their municipal territory, municipalities have the exclusive right to administer public affairs under their own responsibility. They cannot make their own laws, however. Instead, they administer themselves under the framework of state laws. Their legislative powers are derived powers and are essentially limited to issuing by-laws on taxes, fees, the budget, the use of public amenities and urban land-use planning.

Municipalities in Germany enjoy considerable autonomy compared with those in other federal states. Germany thus has a large degree of municipal devolution in terms of administrative powers granted to legally independent entities. The issue of local government reform is nonetheless raised time and again. Such reforms are initiated in some cases by the *Länder*. In many instances they are driven by the municipalities themselves.

In *Länder* where municipalities are too small, the relationship between population, administrative capacity, democratic legitimation and infrastructure provision is poorly balanced. Boundary reforms launched by individual *Länder* therefore aim to create efficient administrative units by enlarging municipalities. Most past territorial mergers between neighbouring municipalities were voluntary, although some were imposed against the will of those affected. Municipal boundary reforms were carried out in western Germany during the 1970s. In eastern Germany, such boundary reforms had to wait until after reunification.
Municipal boundary reforms are now under discussion once again in a number of western and eastern *Länder*. When increasing the size of administrative units, however, consideration must also be given to

[26] See introduction, Foundations of National Urban Development.

questions such as the accessibility of local government offices in the interests of participation processes and local civic engagement.

The public management movement led to wide-ranging reforms at municipal level in the 1980s and 1990s. The aim was to create administrative structures that performed better and were in closer touch with the public. Emulating private-sector management practices, local government was to be streamlined for greater effectiveness and efficiency. Local government was also to be brought closer to the public by cutting red tape and improving services. The reform process was mostly driven by municipalities themselves. Using the scope provided by local government autonomy, management structures were modernised and local government services better aligned with client needs.

The idea of local government as a business enterprise has since lost relevance in the face of new developments. A new reform vision is that of the citizens' community (*Bürgerkommune*). Here, the local council acts as the citizens' political representational body and decides on the affairs of the local community. Key objectives include strengthening civil society and improving participation by involving citizens in opinion forming, planning and decision making processes. Precedence is given to the vote of elected officials who act for the common good and do not follow individual interests. Citizens are also to be afforded greater involvement in the production of public services. Such activities are driven to a lesser extent by *Länder* and local government, however. Civil society initiatives play a key role. Progress has been achieved in the areas of youth work, aged care, neighbourhood community work, poor relief and the sports and leisure sector.

23. **Improving participation and human rights in urban development**

Germany has a long tradition of democratic participation, notably in planning procedures. Active involvement of residents, associations and initiatives affected by urban development plans began in connection with urban development assistance for selected areas in the 1970s. Boosted by 'gentle' urban renewal policies, a wide range of participation arrangements were developed over the years. A two-stage participation procedure – early public consultation and plans made available for public inspection – has been enshrined in German planning law since the late 1970s. This created a national framework for substantive public involvement in urban development plans.

The public participation laid down in Section 3 of the Federal Building Code aims to ensure that due consideration is given to all public interests affected by planning. The public must also be consulted in other construction projects subject to a special planning procedure (*Planfeststellungsverfahren*, or planning approval procedure). This includes federal road, rail and power line projects. Timeliness and openness are quality criteria for all formal planning processes. More than ever, citizens seek new avenues of involvement and political participation.

Formal urban planning has been supplemented in recent years by a diverse range of processes that need to be adapted according to the situation and the scale of planning (small-scale neighbourhood projects, major urban development projects or overall urban planning). Forms of participation can also be tailored to the stakeholders and interests involved. Examples include neighbourhood development or integrated development plans that lay down long-term goals for an entire city or parts of a city and, in their capacity as municipal planning instruments, set the strategic trajectory for the city's future. Their non-formalised nature is a strength when it comes to involving residents, leaving scope for locally adapted forms of participation.

These various options for participation in urban planning are used in a wide range of local policy areas such as urban development, transport planning and open space planning. The main aims of participation measures are public information, more democratic involvement and greater public acceptance of municipal decisions. In some instances, however, the goal is for the public to join forces with experts in conceptualisation and planning so that urban development processes incorporate local knowledge to the greatest possible extent and the needs and ideas of the public are taken on board at an early stage. Means to this end include futures workshops and planning cells.

Web-based approaches such as online participation are also combined with outreach methods to ensure low-threshold access to planning procedures for the broadest spectrum of the population. Experience shows that applying a blend of different methods over a long period is the most effective way of involving the diverse groups that make up German urban communities.

Due to the country's dense urban structure and broad public interest in participation, urban development projects in many urban regions of Germany are increasingly a focus of public attention. The associated planning processes come under pressure of legitimacy. Outspoken calls for greater participation in planning and decision making have directed attention to the processes for the preparation of such projects and the interplay between local politics, local government, civil society and developers. The public sector, however, is the ultimate holder of community responsibility. It must ensure that decisions are democratically legitimised. It therefore has the task of empowering as many people as possible to participate in urban development. The interests of public and private stakeholders are therefore balanced against each other by democratically legitimised representatives acting for the common good.

24. **Enhancing urban safety and security**

One of the distinguishing features of cities is the diversity of their population. Diversity and tolerance are key resource pools and driving forces behind the establishment of creative milieus. At the same time, however, coexistence also poses problems.

Crime rates in German towns and cities, for example, are 1.8 times as high as in rural districts; in major cities with populations greater than 500,000 they are even 2.4 times as high. Large cities notably have above-average crime rates for crimes that directly relate to coexistence, such as break-ins, street crime and damage to property.

These objective crime levels create subjective insecurity. Poorly maintained public spaces are enough to instil fear in their own right. This impairs quality of life and restricts people's ability to take part in society. For this reason it is laid down in the Federal Building Code that urban land-use plans must give due consideration to the security of the residential and working population. Plans are also reviewed in consultation with police for issues such as intimidating spaces and lines of sight.

There are frequent calls for increased video surveillance, for example in metro stations and poor-visibility spaces, although many people are also critical of this idea. Police numbers have also been declining in many parts of Germany for some years. This means reduced police presence on the street. A frequent outcome is that increasing numbers of private and semi-public properties such as shopping centres are guarded by security firms.

Crime prevention has consequently gained in importance. The police respond to increased numbers of break-ins with a variety of educational campaigns. The German Forum for Crime Prevention (DFK) was launched in 2001. This calls for a culture of alertness, mutual help and responsiveness to

anything that raises suspicion. Crime prevention places strong emphasis on hate or bias-motivated crime. Numerous German towns and cities have joined forces in DEFUS, the German-European Forum for Urban Security, which is also a member of the European Forum for Urban Security and has the aim of advancing the cause of crime prevention.

Social deprivation should not be equated with higher delinquency. Analysis nonetheless shows that problems such as domestic violence, poor integration, low education levels and school truancy tend to be clustered in specific urban neighbourhoods. This can lead to increased crime, violence and subjective insecurity. Such neighbourhoods consequently also tend to have a poor image. A variety of programmes and activities counter this objective burden and stigmatisation.

Under the *Soziale Stadt* (Social City) urban development assistance programme, some 400 municipalities have taken action at neighbourhood level to reduce negative factors driving juvenile delinquency. An integrated approach has proved useful here. Lack of prospects and propensity to violence and crime can be addressed with education, sporting, leisure and communication activities. One success factor consists of cooperation between stakeholders ranging from government, social services, housing associations, police, schools and churches right through to businesses and residents willing to do their part.

Living conditions have been seen to improve in upwards of two-thirds of the areas targeted by the *Soziale Stadt* programme. Improvements in problem neighbourhoods benefit the entire city as well as people in the neighbourhoods concerned.

25. **Improving social inclusion and equity**

A distinguishing feature of German cities is the internationalism and diversity of their populations. Nationwide, a fifth of the population have immigration backgrounds; in cities the proportion is substantially higher. This diversity and tolerance towards different cultures are a key urban resource.

In many cities, however, neighbourhoods are increasingly distinguished according to the social status of their residents (segregation). There are thus neighbourhoods that predominantly feature low-price housing in poor locations and with below-average infrastructure, mainly populated by people at risk of poverty including above-average numbers with immigrant backgrounds. The spatial concentration of poverty in specific neighbourhoods adversely affects residents and their development opportunities. Such neighbourhoods therefore need extra support to enable integration to succeed at local level and prevent poverty from becoming structurally entrenched. The trend towards privatisation of public spaces also increasingly leads to the exclusion of specific groups in urban centres.

In the LEIPZIG CHARTER on Sustainable European Cities, the member states of the EU and a number of additional European countries agreed in 2007 to pay special policy attention to deprived neighbourhoods. This is in recognition of the fact that stark socio-spatial disparities can compromise the attractiveness, competitiveness, social integration capacity and security of entire cities. Efforts targeting social cohesion and integration will continue to gain in importance in urban development. The Federal Government, the *Länder* and civil society stakeholders have therefore laid down the foundations of sustainable integration policy in the National Action Plan on Integration.

With the *Soziale Stadt* (Social City) urban development assistance programme, the Federal Government supports developmental upgrading and social cohesion in deprived neighbourhoods. The programme links structural spending on urban renewal with measures to improve neighbourhood living conditions. This includes investment in housing quality, improvements in the living environment and

infrastructure such as education facilities, and support for local enterprise. These complex challenges are addressed on the basis of integrated development plans. The Federal Government plans to continue providing integrated support for such neighbourhoods and has consequently substantially increased the funding for the *Soziale Stadt* programme to €150 million from 2014. The *Länder* and local authorities generally contribute an equivalent amount.

Many local problems cannot be resolved with urban development assistance alone, and it continues to be necessary to enlist greater and more binding commitment to deprived neighbourhoods from business and civil society partners. This primarily entails forms of corporate citizenship on the part of companies and foundations, which show particularly strong commitment in the fields of education and integration. The Federal Government aims to secure more such commitment for socially inclusive neighbourhood development.

Social participation is strongly dependent on successful integration into the labour market. Some 225 labour market policy projects with the main focus on the *Soziale Stadt* have been implemented between 2008 and 2014 under BIWAQ, a federal programme on urban neighbourhood education, enterprise and employment supported by the European Social Fund (ESF). The programme has €184 million in funding and is aimed at groups who find it hard to enter the labour market: People in long-term unemployment, young people who have not completed vocational training or with low educational qualifications, and local small traders.

A new political understanding that has emerged in recent years recognises that integration of immigrants must be promoted in alliance with the indigenous population. Under the heading of active integration, many municipalities are already developing integration strategies and approaches that are adapted to local circumstances.

Globalisation and demographic change also make it necessary to rethink local integration policy. Municipalities will increasingly find themselves competing for residents, investment and skilled labour. Against this backdrop, strategic management of immigration and integration becomes a long-term, inter-agency challenge.

26. **Challenges experienced and lessons learned in these areas**

Improving urban planning law

The framework laid down at federal and *Länder* level has to be fleshed out in planning terms by municipalities in accordance with local needs. Local authorities are able to provide for all matters concerning the local community under their own responsibility. Model urban planning projects made possible by the Federal Government and the *Länder* and funding for innovative planning processes help create incentives in this connection.

Against the backdrop of constantly changing societal challenges, legislation must be reviewed, systematically improved and adapted in terms of policy instruments. In some instances the need for change follows from higher-level legislation and directives enacted by the European Union.

At the same time, the legislature has to respond to current national targets following from the requirements of policy, society and the environment. In consequence, various amendments to the Federal Building Code in recent years have related to areas such as addressing loss of urban function, promoting mixed use, regulating large-scale retailing and simplifying planning in the context of inner urban development.

Decentralisation and strengthening of local authorities

The greatest challenge facing German local authorities is that of dealing with demographic change. If demand for basic services falls, then municipal authorities have to scale back those services. This adjustment process presents a complex planning challenge that calls for a cross-cutting approach.

Local authorities are also affected by demographic change when it comes to staffing. Roughly a third of federal, *Länder* and local government employees work at municipal level. Staffing levels have been falling for many years as a result of recruitment freezes, spin-offs and privatisation.

Recruiting will be made more difficult in future with a growing shortage of young workers combined with uncompetitive public sector pay levels. To make local staffing policies sustainable, better allowance must therefore be made for demographic trends in municipal workforces. Local authorities also need to be made more attractive as employers. Otherwise they will be among the losers in the inevitable crisis with regard to skilled labour.

Civil participation in urban development

There is now awareness in Germany that success in urban planning tasks increases with the degree of civil participation and the involvement of new partnerships. Various examples show that collaboration with the public in urban development can be a key success factor. The aim in this is not solely for the public to be better informed about planning objectives and procedures, but greater public involvement in formulating and implementing proposals. Participation approaches also allow local land use conflicts to be addressed and negotiated. Standard consultation procedures cannot guarantee this on their own.

There are no universal answers when it comes to good participation and cooperation in urban development. There are merely local approaches adapted to prevailing circumstances and interests. This is confirmed by the 15 pilot projects in a call for projects on citizens' participation under the National Urban Development Policy platform. New participation formats have consequently been trialled in recent years. These relate to online participation, the involvement of educationally deprived groups, youth participation, immigrant participation and the strengthening of private initiatives. The aim is to enhance municipal participation structures, prevent individual interests from dominating, avert public opposition and improve planning procedures. Experience has shown a combination of methods to be the best means of securing the participation of diverse groups.

Urban safety and security

Integrated approaches combining structural, urban planning and social measures have proved instrumental in creating safe public spaces.

Structural measures relate to the orientation of buildings and the placement of windows. It is important in neighbourhood development to avoid intimidating spaces and poor-visibility spots that are difficult to survey. Social measures can include promoting a social mix. The many measures employed must be mutually compatible and combined at local level. Programmes with a long-term perspective are also important. The Families Ministry thus targets early, nonviolent problem resolution among children and adolescents with a programme to help them deal with problems themselves.
Measures to ensure safe and secure public spaces must be weighed against other factors. Structural and design needs and wishes, for example, often conflict with safety-relevant aspects. The freedoms enshrined in the German Basic Law (freedom of action and right of personality) often run contrary to the installation of large-scale surveillance systems. These basic rights can only be restricted by reason of an overriding common interest.

Social inclusion

Urban development policy promotes social cohesion with family-friendly and age-friendly infrastructure, energy-efficient and affordable housing in line with demand, and high-quality recreational and near-natural public spaces. This applies to all urban areas. Social urban development also has the task, however, of reducing urban disparities. This includes stabilising deprived neighbourhoods and supporting measures for better education and training, for the local economy and for successful integration. The medium and long-term aim is to promote a social mix in urban neighbourhoods. This range of tasks follows the basic goal of offering participation, integration, equal opportunities, and also a liveable environment for all. Urban development policy cannot attain these wide-ranging objectives on its own. It can, however, provide the impetus for stakeholders to work together across all parts of society. Social urban development policy must face up to major challenges: Strengthening social cohesion, overcoming social segregation and integrating immigrants.

27. Future challenges and issues in these areas that could be addressed by a New Urban Agenda

Improving urban planning law

- Sustainable housing and urban development policy is not achieved solely by enacting legislation. Legislation is only effective if it is put into practice and enforced. Monitoring systems are therefore important for verifying and safeguarding sustainable urban development.

- Legislation and guidelines must respond and adapt to changing policy, environmental and social needs. In suitable cases, legislative proposals should be tried out in practice before enactment. Legislation must be simple, understandable and accurately targeted in order to avoid or minimise red tape. Tools for critical review of existing legislation can lead to new and improved outcomes. Experimental clauses and legislation permitting exemptions from standard procedure are helpful approaches here. Proposed legislation, guidelines and investment spending should be subjected to intergenerational impact assessment.

Decentralisation and strengthening of local authorities

- Local self-administration is a cornerstone of citizen-friendly, demand-driven service and infrastructure provision. Administrative efficiency and streamlining are important in increasing the scope for municipal action. The introduction of strategic municipal management and the promotion of innovativeness and self-regulating capacity are important factors in the future sustainability of local government.

- To attract professional and innovative personnel, local authorities must be made attractive as employers and suitable incentive systems must be developed.

- Decentralisation is an ongoing process requiring continuous guidance, assistance and adjustment. In Germany, it needs to be reconciled with demographic change, shrinking communities and growing demands on local authorities in a globalised world.

- Local autonomy makes for locally targeted, citizen-friendly administration. However, it can only be achieved in joint action between all societal stakeholders. Private and public sector stakeholders must work together, commit together and accept responsibility together.

- A well-developed public service and information system is an important resource. Municipalities need to evolve into citizens' communities. Key objectives include strengthening civil society and involving citizens in decision making processes. Public participation must be adapted to ongoing developments and reformed, for example by the introduction of digital platforms.

Civil participation in urban development

- Local residents, and also neighbourhood churches, clubs and associations, businesses and initiatives must be involved in public planning and decision making processes. Timely and transparent public involvement brings in new ideas, better outcomes and better public acceptance for urban development policy projects and initiatives.

- The community is dependent on civil society and public engagement. New, important forms of civic engagement are emerging from social networks and neighbourhood initiatives. The conditions for

volunteering must be improved and a culture of recognition for civic engagement brought into being.

- New technologies can make it easier to participate. More should therefore be done to test the deployment of new technologies in public participation.

Urban safety and security

- Feeling safe is a facet of quality of life. Public spaces must therefore be accessible to all age groups without fear. Poorly maintained public spaces are enough to trigger fear and subjective insecurity.

- Collaboration with partners such as the police is a key element of crime prevention and needs to be increased in urban planning processes.

- The establishment of security and central surveillance systems must always be balanced with other interests. Alongside safety and security-related measures, consideration must be given most of all to basic personal freedoms and to needs and wishes relating to the quality and design of urban spaces.

Social inclusion

- Privatisation of public spaces leads to exclusion and should be avoided.

- Social urban development policy must face up to the challenge of promoting social cohesion and integration. Maintaining and improving the integrative capacity of cities entails protecting the weak, promoting intercultural and neighbourhood encounters, breaking down barriers and communicating opportunities.

- Social equity, justice and inclusion are key urban policy goals. Special focus must be placed on supporting people in socially deprived neighbourhoods. Alongside affordable and energy-efficient housing and social amenities, this also requires the provision and maintenance of high-quality recreational public spaces.

- Integration always goes hand in hand with improving and ensuring a sufficient supply of training opportunities to enable universal access to the labour market. Enabling participation, integration and equal opportunities for all is a fundamental goal.

- Deprived neighbourhoods need to be stabilised and supporting measures adopted for better education and training, for the local economy and for successful integration.

- A social mix must be maintained in urban neighbourhoods to counter gentrification.

- Infrastructure and services must be shaped in such a way that all population groups can use them as needed. Provision must be adapted to prevailing needs and barriers to access eliminated.

V. Urban Economy

28. Improving municipal/local finance

The state guarantee of local self-government in Germany includes basic elements of financial autonomy. Local authorities are fiscally speaking part of the *Länder*, which therefore govern municipal finance. No city or municipality is generally in a position to fund municipal services entirely out of its own revenue. Although cities and municipalities have their own taxes and levies (such as municipal trade tax) and other regular income (such as fees and charges for certain municipal services), on average these only cover about 50% of net municipal expenditure.

Municipalities receive further funding in the form of allocations from *Länder* budgets. Such allocations may or may not be purpose-linked. They account on average for about 60% of municipal expenditure. The average figures vary from place to place according to the economic or structural situation. To compensate for economic and structural differences, purpose-linked allocations are apportioned according to local needs. These are based on the size of the municipality and on specific needs as measured by figures such as school numbers or poverty levels.

The municipal financial equalisation system aims to decouple municipal service provision from local revenue-raising capacity. Any funding shortfall left over after *Länder* allocations must be met by capital market borrowing. Some such borrowing is incurred for long-term investment in social and technical infrastructure. A salient feature of the municipal debt situation is that a relatively small number of cities and municipalities account for a very large amount of borrowing. In western Germany, per-capita borrowing well above the average – and rising – is mostly a phenomenon of many large cities. This is particularly worrying in regions with shrinking populations.

Despite a well-established municipal finance and equalisation system, an appreciable number of cities and municipalities in Germany are in dire financial straits. Persistent structural imbalances on the labour market, infrastructure burdens and resulting high debt levels severely limit the options available to local government in many regions of Germany. Years of municipal funding shortfalls make themselves widely felt and the investment backlog can no longer be overlooked. Key economic and labour market policy stimulus is lacking as a result. No less than two-thirds of public construction spending comes out of municipal budgets.

Alongside this, the greying society, maintaining public service provision and climate-friendly, energy-efficient urban renewal present municipal treasuries with entirely new challenges and demands for action. Further adjustments may be needed here in the medium term, including with regard to the overall financial regime.

Although the *Länder* are responsible for their financing, the Federal Government also does its part to secure dynamic cities and municipalities. This policy in favour of the local level is reflected in numerous Federal Government activities across almost all policy areas. Within the scope of its constitutional abilities, the Federal Government provides municipalities with ongoing support in improving the structure of regional economies and in urban development and renewal. The aim is to strengthen cities as business centres and places to live. To this end, funding is concentrated on urban and rural regions with pronounced structural deficits. Additional measures are adopted on an ad-hoc basis, primarily in the form of federal financial assistance for municipal investment spending projects to give local authorities greater freedom of scope.

The policy direction is right, but the road to sustained balanced budgets in all cities and municipalities is a long one, calling for further financial exertion and priority-setting by the Federal Government, the *Länder* and municipalities on the basis of a policy of local responsibility.

29. Strengthening and improving access to housing finance

Germany has a well-functioning housing market with a strong rental sector and a sound residential property market. The home ownership rate is approximately 46%, which is relatively low by European standards. This has historical reasons and partly reflects the high quality of the rental property market. More than 60% of owners of rental property in Germany are private landlords. The remaining approximately 40% are professional landowners such as housing associations, private-sector commercial owners and cooperatives. Germany does not have a public housing sector of the kind that exists in the Netherlands or the Nordic countries.

The German housing stock is generally characterised by high levels of persistency and good condition, as older properties and notably the large quantities of pre-war properties are regularly modernised and kept up to market standards. There are a wide range of quality levels resulting from differences in age, size and layout, location and interior appointment. Both the rental property market and the ownership sector cover a wide quality and price range.

State support is therefore mainly directed at modernisation and improving the energy efficiency of the housing stock with the aid of low-interest loans and grants, and at helping households who are unable to obtain sufficient living space out of their own resources. Securing affordable housing is increasingly important, most of all in large and growing cities with housing market shortages. Benefits for poorer households include financial assistance with obtaining family-suitable housing, as with the federal and *Länder*-funded housing benefit, and municipal-level assistance with accommodation and heating costs for benefit recipients (accounting for the larger share).[27] These social housing support instruments benefit a total of 12% of German households in the amount of approximately €16 billion, of which roughly €10 consists of municipal funding.

Financial assistance is also provided in Germany as part of social housing promotion. Since 2007, social housing promotion has been the responsibility of the *Länder*, which receive federal funding in the amount of €518 million per year. The *Länder* are thus able to respond to differing market needs with targeted funding programmes. Funding directed at the existing housing stock is mainly focused on energy efficiency improvements and disabled-friendly/age-friendly conversion. Funding is also provided for new builds in the rental property segment and owner-occupied residential property. The *Länder* and municipalities also provide funding of their own.

Municipal housing associations are key partners to cities and municipalities in the provision of affordable housing. Nearly 30% of municipalities work closely with such housing associations to cater for households that have difficulties finding housing on the open market. The proportion of housing accounted for by municipal housing varies widely from place to place, ranging from 5% in small municipalities[28] to as much as 12% in large cities.[29]

Owner-occupied property is also an important feature of the German housing market, and in small towns and municipalities especially it accounts for a major share of housing provision. The trend

[27] Under Book II and Book XII of the German Social Code
[28] 5,000 to 10,000 inhabitants
[29] Upwards of 100,000 inhabitants

towards home ownership is unbroken and is favoured by the current low interest rates. Some 77% of young people would like to own their own home. Germany has various options for subsidising home ownership, such as building premiums, savings premiums and low-interest loans.

30. **Supporting local economic development**

Social and economic change begins in cities. Cities are often key centres of employment and they serve important general economic functions. They generate the added value that makes a country internationally competitive.

Improving the structure of regional economies is a joint task of the Federal Government, the *Länder* and local authorities and serves the purpose of promoting structurally weak regions. Municipalities contribute with their range of attractive business locations and by providing suitable infrastructure, support services and the organising framework. Local economic development services are firmly established in German cities and have the task of shaping municipal and regional conditions so that they positively influence municipal or regional living and working conditions. They are the main contact and service point for the needs of enterprise. Under business attraction and retention policy, for example, they help develop business-friendly infrastructure, encourage innovation and knowledge transfer, foster startups and promote sectoral networking.

In the transition to the knowledge economy, cities are increasingly recognising that high value added services are a cornerstone of their economic future. Extra effort is therefore put into promoting university spin-offs and industries such as IT and the cultural and creative sectors.

Cities also have numerous projects to address the skills shortage. Some of these are about enhancing skills in the existing labour pool, while others support activities to attract highly qualified talent from elsewhere in the country and abroad. These efforts will only succeed where urban living standards are high. Local economic development services therefore also have the task of promoting soft location factors as well.

Retailers, small traders and small to medium-sized businesses in the industrial and service sectors lay the basis for the economic stabilisation of neighbourhoods and the urban fabric as a whole. In recognition of this fact, city and neighbourhood marketing and economic development services work jointly with retailers and other local enterprise to promote neighbourhood economic development. Areas that miss out on economic growth and prosperity tend to suffer a concentration of negative symptoms such as vacant properties, income differentials and other down-trading effects. Experience shows that socio-spatially concentrated problems of this kind cannot be tackled with conventional economic and urban planning policy instruments.

Urban development assistance is joint federal, *Länder* and municipal financial assistance that aims among other things to promote growth and employment by focusing on urban and rural areas with enhanced structural deficits. At neighbourhood level, funding is provided for comprehensive urban planning projects. Alongside their programme-specific objectives, the various individual funding programmes also share a broad-based integrated approach. They aim to eliminate urban development deficits, counter social polarisation and strengthen the local economy. One urban development assistance programme that deserves special mention is *Aktive Stadt- und Ortsteilzentren* (Active City and District Centres). This helps municipalities overcome loss of economic function in central service

areas by supporting them in maintaining and developing such areas as centres for business, culture, housing and employment.

BIWAQ, the federal ESF programme on urban neighbourhood education, enterprise and employment, also directs funding at specific communities to strengthen their local economies. The programme supplements the district-focused approach under the *Soziale Stadt* (Social City) urban development assistance programme with the person-by-person approach of labour market policy. An example is assistance for startups to set up in deprived neighbourhoods. Neighbourhood-level microfinance is another successful project approach and is now used by various municipalities across Germany. Tools such as this can help secure local business in inner cities and district centres.

Neighbourhood labour markets have limited potential, however. Successful approaches do not stop at neighbourhood boundaries but reinforce functional relationships with the city as a whole and the wider region. Regional and national funding programmes are usually involved in strengthening local economies. Successful and 'adaptive' implementation of the approaches therefore requires goal-oriented cooperation between the different federal levels. Such approaches should therefore increasingly be developed under the framework of inter-municipal cooperation.

In efforts to promote local economies, it is important not to lose sight of potential problems relating to public acceptance and inner-urban or possibly regional distortions of competition. Consideration must also be given to the danger of inner-urban or regional displacement processes.

31. **Creating decent jobs and livelihoods**

Germany had an average of some 41.2 million people in employment in 2011 – an increase of 1.9 million on ten years earlier.[30] Half of the Germany resident population is thus employed. Although only a third of the population lives in *kreisfreie Städte* – independent cities that do not come under an intermediate regional administration – such cities account for half of the increase in the number employed. The five largest German cities alone account for one-fifth of the growth in the number of people employed. This underscores the importance of cities for a prospering labour market – and how closely national development is linked to the development of a small number of large cities. Across Germany there has been disproportionate growth in the number of people employed in the tertiary sector, and this is especially pronounced in cities. Manufacturing nonetheless retains its economic powerhouse status as many services depend on the development of industry.

At the same time, urban unemployment, at 9.3% (2012), is about three percentage points higher than rural unemployment. Cities must therefore be seen from two sides, as both job creators and centres of high unemployment. The long-term unemployment rate – long-term unemployed as a share of total unemployed – is likewise higher in cities at 35%, four percentage points more than in rural districts. In cities with more than 500,000 inhabitants it is as much as 38%. The Federal Employment Agency has many measures to bring unemployed people into employment, including training measures, startup grants and special measures to help people with disabilities. These apply nationally and do not have a specific urban focus.

The dichotomy of strong employment growth and high unemployment tends to play out in different parts of a city. Alongside affluent neighbourhoods there are developmentally, economically and socially disadvantaged neighbourhoods with large percentages of people in long-term unemployment,

[30] See also Section I 1 for more on population trends.

low-income families and poorly qualified young people, often in combination with immigrant backgrounds. To supplement the national measures and prevent social and local problems from becoming entrenched, the Federal Government has therefore launched the city and neighbourhood-focused BIWAQ labour market programme. The aims of BIWAQ include getting people in long-term unemployment into jobs, improving the transition from school to employment, and strengthening local economies with outreach business and startup advice. The planned introduction of a minimum wage likewise counters divisions that are especially noticeable in cities.

Notwithstanding the many new jobs created in major cities and the resulting migration to them, the many smaller German towns and cities with populations between 5,000 and 100,000 remain important regional labour market centres. In their capacity as service, economic and labour market centres they also drive regional development in Germany. One in two larger medium-sized German towns (50,000 to 100,000 population) and one in six smaller medium-sized towns (20,000 to 50,000 population) have a university. Universities can generate enterprise spin-offs and are important in transferring knowledge to local business.

Surveys show that most small and medium-sized towns offer residents high quality of life. Highly qualified workers especially attach value to good quality of life in their living and working environment. In combination with good tertiary education institutions, an innovative scene can thus evolve that has a positive influence on economic value added, including for small and medium-sized businesses. Funding programmes for this purpose, such as the Central Innovation Programme for SMEs (ZIM) and the federal ERP Innovation Programme[31], support cooperation between industry and researchers. These programmes can be especially effective in an urban context because proximity to research institutions facilitates cooperation and fosters a future-ready urban labour market.

32. **Integration of the urban economy into national development policy**

Germany is internationally regarded as an outstanding example of success in achieving competitiveness and high employment by means of high levels of industrial value creation, structural reform and innovation policy. National-level policy aims to reinforce and build on this healthy development. This is attained by future-focused investment, targeted promotion of innovation, establishing high-capacity infrastructure, labour force integration and improving the prevailing conditions for German industry to do business. In this way, on the basis of close consultation and collaboration with the public, industry and unions, renewed vigour is to be given to social market economy[32].

Germany's cities today juxtapose industrial and post-industrial elements that respectively place very different demands on their surroundings. The growth of services and knowledge-based jobs combined with advanced environmental technology and the spread of electronic media is likely to make it easier in future to integrate places of work into the urban context. This does not render traditional location factors such as space availability and accessibility obsolete, but it does make them less important. Soft location factors associated with attractive urban surroundings come to the fore, and these need to be promoted using targeted, regionally adapted strategies.

Urban development assistance will be focused on cities that are adversely affected by economic structural change, demographic change and unemployment. Such financial assistance is highly

[31] The ERP Innovation Programme provides long-term low-interest funding for market-oriented research and the development of new products, production methods and services.
[32] Source: BMWE

effective in stimulating follow-on investment. That and the new jobs secured as a result will stabilise and reinvigorate the cities targeted.

The National Urban Development Policy platform also helps cities and urban regions to serve as incubators of economic development and forge tailor-made solutions for current and future economic challenges. Alongside promoting talent, tolerance and technology, the aim is to nurture and tend a communicative enabling environment to support innovation and creative scenes in the pioneer phase as well as when they are already successful. This also includes creating space for experimentation. That can be achieved with pilot projects where diverse participants try out innovative approaches such as crowd funding or corporate social responsibility for replication in other cities.

Through the National Platform for the City of the Future, researchers and municipal and business representatives have launched an initiative for the carbon-neutral city of tomorrow. The aim of the Platform is to develop an interdisciplinary strategic research agenda and bring together urban planning with technology management, and ideas for how cities can best be further developed and administered along carbon-neutral, energy-efficient, resource-efficient and climate-adapted lines. Cities must act locally to help drive the transition to renewable energy.

The 80 chambers of commerce and industry and chambers of crafts and trades in Germany provide liaison between the state, local government and industry. They perform self-administrative functions on behalf of regional industry and advise state agencies. Successful urban development and a well-tended urban environment are key factors for chambers as they strengthen local competitiveness. Urban development is also an important focus area for major players in the electronics and computer technology sectors. Many companies have developed their own research focuses and platforms, such as Bosch Global, Siemens Infrastructure & Cities, and IBM TheSmarterCity.

33. **Challenges experienced and lessons learned in these areas**

Municipal finance

Healthy local finances are what breathe life into the constitutional guarantee of local authority autonomy and hence local democracy. The main onus here is on the *Länder*. At the same time, there are various policy areas in which local government has freedom of scope. Examples include various areas of municipal basic services (economic, social and cultural services) and municipal works.

Practice shows that it is indeed possible to find individual answers even where local authorities face the same financial challenges. Cities and municipalities in many regions have forged alliances. Regional responsibility-sharing alliances have emerged as a rational model of compensating for infrastructure provision. The adoption of business tools in municipal budgeting has helped make costs visible for decision making.

Finally, there are new forms of partnership between private-sector and municipal institutions. The financial squeeze has significantly boosted civic engagement and there is greater sensitivity with regard to large-scale local projects that, for example, might be at risk of rejection if put to referendum.

Investment in affordable housing

A number of cities face the task of improving the enabling conditions for investment in housing construction by making building land available in line with market needs. Large, growing cities especially need greater quantities of specific forms of housing such as for the aged and single

households, and also general-purpose apartment housing. There is consequently renewed market interest in apartment buildings. Municipal housing associations need to be strengthened to secure additional options for cities and municipalities.

To ensure provision of social housing, the Federal Government and the *Länder* must make social housing promotion funding available in line with requirements. Social housing measures will need to be reviewed in terms of reach and adjustments made as necessary.

Neighbourhoods can upgrade socially, developmentally and economically by increasing the amount of property available for owner-occupied housing. Such processes have a strong chance of success in retaining households within municipalities and of securing an attractiveness advantage over surrounding areas.

Neighbourhood economy

Federal, *Länder* and municipal activities to promote economic development in Germany are highly successful, although the instruments used need to be subjected to ongoing review. At the level of towns and cities, it is increasingly important to treat urban and economic development as an integrated policy area. This requires close cooperation among stakeholders. At the same time, policy instruments and objectives such as the ‘city of short distances’ need to be brought together in a pragmatic approach. The positioning of urban regions in the knowledge economy has become an important factor in exploiting growth potential to best effect.

The vitality of inner cities and district centres is shaped by the retail sector. Retailing space continues to grow in Germany while retail sales stay flat. Large shopping centres are influential in this regard but pose risks for urban vitality. It is often hard to find suitable alternative uses for vacant space. Bricks-and-mortar retailing also competes increasingly with online retailing. A very close watch must be kept on online retailing because it is difficult to predict how it will develop. Important considerations when reviewing measures and programmes to boost local economies are neutrality with regard to competition and the inclusion of local potential.

Creating decent jobs and livelihoods

Cities are highly important to national and regional labour markets as they offer a favourable environment for innovation. Growth policies must therefore aim to capitalise on this strength and develop cities in their capacity as creativity and innovation hubs.

Cities must not stake everything on jobs for the highly qualified, however. Integrating specific groups such as low-qualified Germans and immigrants into the labour and training market is also an important aim. This is not solely a labour market policy issue, as the resulting social problems are also reflected in specific neighbourhoods. Integrated measures must be adopted using social, economic and urban planning approaches to prevent problems from becoming locally entrenched and from holding back good overall urban development.

National labour market policy is also important alongside measures at city and regional level. Certain problems tend to be focused in cities, such as long-term unemployment, temporary work, low-paid labour, and lack of proficiency in German preventing people from finding jobs. The gender wage gap is also among these problems.

Integration of the urban economy into national development policy

Economic development in Germany is driven by the investment and success of private enterprise. State subsidies and control only come in where intervention is needed for the purposes of social equity or macroeconomic objectives.

Specific action in connection with sustainable urban development is taken at municipal level. This is the level at which, for example, retail development plans are compiled that designate suitable sites for specific forms of retailing, thus attracting investors and promoting positive economic development. By compiling other urban development plans and making stipulations in urban land-use planning, too, municipalities guide their own development while creating planning certainty for investors and business – a key criterion in any decision to locate. The Federal Government takes various measures to promote quality development. The central importance of this thematic area is reflected in one of the priorities for action under the National Urban Development Policy platform: “The Innovative City: The driving force of economic development.”

34. Future challenges and issues in these areas that could be addressed by a New Urban Agenda

Municipal finance

- The municipal level needs an enduringly solid and secure financial base in order to breathe life into the constitutional guarantee of local government autonomy. This strengthens local democracy and gives municipalities the scope to provide citizen-friendly services. New challenges such as demographic change and climate-friendly, energy-efficient refurbishment make stable and secure financing mechanisms all the more important.

- Municipal debt must be scaled down in order not to burden future generations.

- The financing of municipal activities must be made more efficient with priority-setting on the basis of policies of local responsibility. Local-level action areas present opportunities for local government initiative but must be subject to the principle of sustainability. Financing must be based on a life-cycle approach to be sustainable.

- New forms of partnership should be sought between private-sector and municipal institutions while keeping sight of the risks involved. The private banking sector is also called upon to take a greater part than ever in facing wider societal challenges.

- Regional responsibility-sharing alliances have proven effective as a rational model of compensating for infrastructure provision. Cooperation between cities and municipalities is an important factor.

Investment in affordable housing

- Growing housing demand, the need for energy-efficient refurbishment and demographic and social challenges must all be met. The focus is on boosting investment, reinvigorating social housing construction and balanced tenancy law policy and social policy. Due regard must be given at the same time to inner urban development and sparing use of land.

- Developments on the housing markets must be closely watched and intervention recalibrated as necessary to secure adequate housing for all segments of the population.

- Suitable instruments such as social housing promotion must be deployed to guarantee social housing for financially weaker households. A supply of affordable and adequate housing must be secured for all social strata.

- Appropriate incentive systems must be put in place for private investment in the housing market.

- Forms of housing that are less in demand need to be improved in architectural, environmental and functional terms.

Neighbourhood economy

- Key focus must be placed on promoting structurally weak regions to achieve equivalent living conditions and reduce regional economic differences.

- Cities need to be competitive and introduce suitable instruments to foster their local economies and competitive advantage. A coherent location marketing strategy must be formulated and supported with the involvement of all important stakeholders. More should be done to promote startups.

- Competition with other municipalities can also have a negative impact on a municipality's sustainable development. Competition between municipalities as business locations often leads to the designation of commercial land that in many cases then remains vacant.

- Urban and economic development must therefore be treated as an integrated policy area. Successful instruments include a cross-cutting approach and cooperation with neighbouring communities and private-sector stakeholders. Public-private partnerships and municipal or regional business associations are helpful in this connection.

- Economic policy must also be focused on soft location factors. These include the local economic operating climate, the image of a place and of the surrounding region, the prevailing social scene, educational, cultural and leisure opportunities, and housing.

- Maintaining what is already there and promoting endogenous potential form a key pillar of sustainable local economic development activities.

- A further important element of local economic development activities relates to high value-added services in growth industries, the knowledge-based economy and the creative sector.

- Knowledge transfer needs to be encouraged between industry, universities and research institutes in order to promote practical innovation and train new talent.

- High-capacity transport infrastructure is the basis for the competitiveness of the economy as a whole.

Creating decent jobs and livelihoods

- Urban development policy must make allowance for and designate suitable locations for office, commercial and industrial developments. With a view to the digital age, models for the future include new forms of workplace such as integrated living and working environments.

- To lay the foundations for employment, the focus must be placed on individually tailored programmes for people in long-term unemployment, families from socially deprived settings and poorly qualified young people. People with disabilities need special measures to help them integrate into the labour market.

- Young entrepreneurs and startups are key facilitators who help generate new jobs. Incentive systems and local support measures are therefore important instruments.

- Attracting new skilled labour calls for an active culture of welcome and recognition. More must therefore be done to expand and open up professional language courses for new groups.

Integration of the urban economy into national development policy

- Public investment in urban infrastructure is essential to promote sustainable building and urban development. At national level, instruments therefore need to be put in place that provide active support in the direction of sustainable cities under changing conditions.

- Addressing the challenge of sustainable development in terms of housing and settlement calls for close cooperation between the Federal Government, the *Länder* and municipalities. The impacts of globalisation can lead to heightened locational competition and increased dependence on the world market. Such impacts must be closely watched.

VI. Housing and Basic Services

Internationally speaking, Germany has very high standards of living, housing and infrastructure. There are no slums of the kind found in developing countries. All the same, Germany does have areas with increasingly deprived living conditions. In large cities especially, affluent and deprived areas tend to develop further and further apart. Nonetheless, not only do all Germans have a roof over their head, they have a right to adequate housing. All housing has sanitation and a developed water supply and sewerage system. Household tap water has very good drinking water quality and is subject to constant health controls. Wastewater generated in towns and cities is universally channelled to and treated in wastewater treatment plants.

Energy is generated from coal (45.5%), gas (10.5%), nuclear power (15.4%), renewable energy sources (23.4%), and fuel oil, pumped storage and other sources (5.2%).[33] Germany plans to phase out nuclear energy and increase the share of renewable energy sources.

Germany has a modern waste management and recycling sector with nationwide coverage at the highest technical standards, funded out of fees and disposal prices in accordance with the polluter pays principle. The 2012 Circular Economy Act (*Kreislaufwirtschaftsgesetz/KrWG*) introduced a five-level waste hierarchy and laid down a general order of precedence comprising waste avoidance, preparation for reuse, recycling, other forms of recovery (including energy recovery), and waste disposal. Precedence is given to the environmentally preferable option. This includes technical, economic and social implications as well as environmental impacts. An important instrument of German recycling law is product responsibility for manufacturers and vendors. Products must thus be designed to minimise waste in production and in use, and to allow environment-friendly recovery and disposal of post-use materials. Germany aims to develop waste and closed cycle management in future years into sustainable, resource-efficient materials flow management. Substances and materials in waste are to be fully exploited by rigorous separate collection, pretreatment, recycling and energy recovery. A strict ban on landfilling untreated household and residual commercial waste from 1 June 2005 represented a major environmental step forward and a major contribution to climate change mitigation. Germany supports sustainable waste management approaches enabling material or energy recovery from waste. With very high recovery and recycling rates – 83% and 65% respectively for municipal solid waste – the German waste management industry already contributes substantially to sustainable development and climate protection. Closed cycle management accounts for about 20% of Germany's attainment of its Kyoto targets.

The basis for maintaining, developing and expanding transport infrastructure is provided by Federal Transport Infrastructure Plans. These ensure high-capacity national transport infrastructure and a large road and rail network. Urban transport is characterised throughout Germany by sophisticated local public transport systems. These connect all cities and municipalities and are organised beyond city boundaries under various forms of cooperation.

Housing provision is generally balanced across Germany. The diverse housing markets show strong regional variation, however. The ratio of housing supply to housing demand can vary substantially within cities and regions. This is reflected in corresponding property and rental prices. Rising rents increasingly lead to gentrification in cities where housing is in short supply. Everyone in Germany fundamentally has access to adequate living space, although prospering regions may encounter supply bottlenecks. Difficulties gaining access to the housing market are mainly experienced by low-income households, the aged, single parents, large families and homeless people. Certain groups have market access difficulties regardless of income.

[33] Source: German Association of Energy and Water Industries (BDEW) Working Group on Energy Balances; 2013 data

Demographic change in Germany, characterised by migration away and ageing, has its greatest impact in eastern Germany, but increasingly also in structurally weak western German regions such as Saarland, parts of Lower Saxony, North Rhine-Westphalia, and North and East Bavaria. An adequate supply of housing is ensured in such regions due to high vacancy rates, but rural areas in particular have difficulty maintaining basic services. Given the moderate price levels, problems in housing availability in these regions mainly arise solely with regard to housing for specific target groups, as the housing market no longer meets all needs in terms of structure and quality. New residential construction therefore continues in such regions and accounts for nearly a quarter of build-to-own residential properties nationwide. In structurally weak regions, build-to-own properties substantially exceed the construction of apartment buildings. These regions notably have a shortage of age-friendly and small affordable (rental) apartment accommodation, most of all because the number of single and two-person households is set to increase considerably. However, there is generally only limited scope for refinancing investment expenditure or for new developments in weak markets. Providing specific forms of accommodation in line with demand (such as age-friendly conversions) is the task of owner-occupiers, private landlords and the housing sector. In terms of accommodation for mobility-restricted senior citizens alone, for example, there is expected to be demand for three million residential units in Germany by 2020. It makes sense to combine age-friendly conversion with the removal of barriers in residential surroundings and the provision of suitable infrastructure. Such changes are also appreciated by families and mobility-restricted younger people. Young people often have market access difficulties in structurally weak regions. On the one hand, existing housing on offer does not correspond with what starter households and young families have in mind. On the other, few such households are able to raise the capital for a deposit to buy property of their own.

In urban and rural settings alike, the provision of basic services is heavily dependent on demographic trends. If demand falls, services must often be cut. If it rises, services must be expanded. In many cities, cuts and expansion run in parallel as the aged population grows while the number of children falls. Whether services are to be reduced or expanded, adjustment processes always present a complex planning challenge. Costs must be reduced, amenities economically adapted to changing demand, future public service shortfalls avoided, and distances to amenities not made unreasonably large – all with due regard to efficiency and environmental criteria. In many cities, cross-sectoral planning of basic services is still at an early stage. Each sector of basic services is administered by specialist planners more or less separately from others. In practical terms this can result, for example, in school locations being planned independently of local public transport provision.

35. Slum upgrading and prevention

There are no slums in Germany.

36. Improving access to adequate housing

The majority of cities and municipalities in Germany have a quantitatively sufficient supply of housing. Access to adequate housing is secured in Germany with the exception of a number of large cities and university cities. No information is available on the percentage of the population unable to find affordable housing in large cities and thus forced to remain in existing accommodation or to move into surrounding regions.

37. Ensuring sustainable access to safe drinking water

There is universal access to high-quality, regularly monitored drinking water.

38. Ensuring sustainable access to basic sanitation and drainage

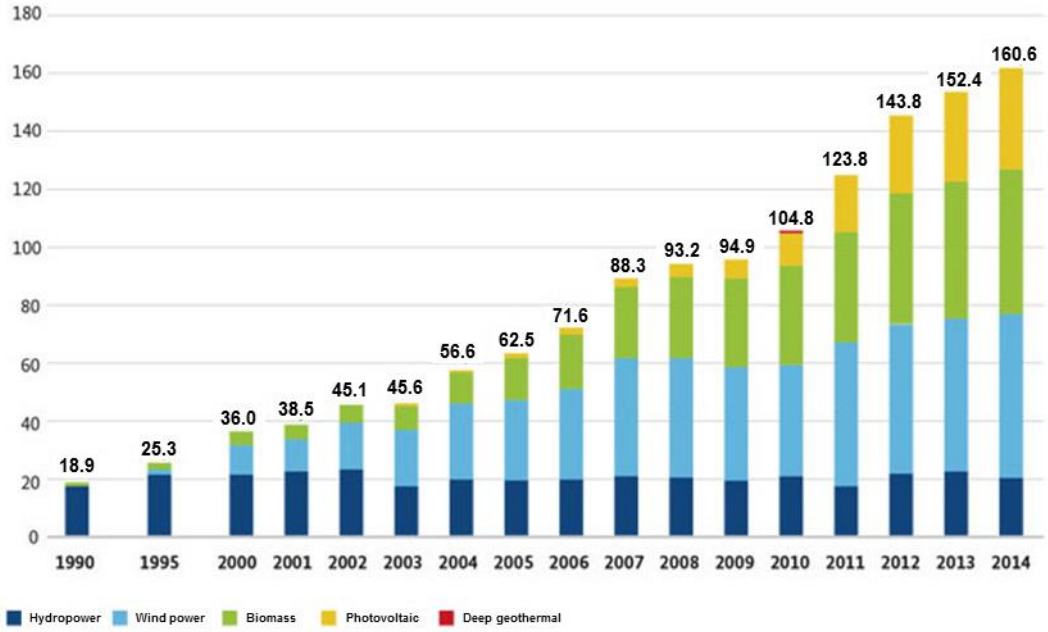
There are universal systems of sanitation and wastewater disposal.

39. Improving access to clean domestic energy

The German *Energiewende* (‘energy transition’) aims to ensure secure, economic and environment-friendly supplies of energy. The transformation of the country’s energy supplies is based on the two pillars of energy efficiency and expanding the use of renewable energy. The use of renewable energy is increasing across the three sectors of heating, transportation and electricity generation. Under the Renewable Energy Heat Act (EEWärmeG), the proportion of heating and cooling energy accounted for by renewables is to be increased to 14% by 2020. The renewable energy share in the transportation sector was 5% in 2013.

There is especially dynamic growth in the electricity sector on the basis of the Renewable Energy Sources Act (EEG), which lays down a range of feed-in tariffs and priorities for various generation technologies (see chart). The most recent major revision and the 2014 Renewable Energy Sources Act target a more planned expansion of renewable energy, setting out a statutory expansion path for the various renewable energy technologies and new instruments for quantitative management. Under the new Act, renewable energy is to account for between 40% and 45% of power generation by 2025. This figure is to increase to between 55% and 60% by 2035. Renewable energy was the largest electricity generating source for the first time in 2014, with a 27.7% share.

Fig. 10:
Growth in electricity generation from renewable energy sources in Germany, 1990 – 2014
(gross electricity generation in billion kilowatt hours)



Geothermal power generation not shown due to small quantities generated.
* Biomass including solid and liquid biomass, biogas, biomethane, sewage gas and landfill gas, plus the biogenic portion of waste, including sewage sludge from 2013.
Source: Centre for Solar Energy and Hydrogen Research Baden-Württemberg (ZSW); data as of February 2015; chart: BMWi (available on www.bmwi.de)

A major challenge for the integration of renewable energy sources is the development of electricity grids to meet future needs. Transmitting the large quantities of electricity to be generated onshore and offshore in future in the windy northern and eastern regions of Germany requires transmission lines to population centres in the centre and south of the country. New challenges also arise for the systems serving end consumers. Due to the increase in distributed power generation, the grid must be adapted to receive electricity from more sources and to better balance supply and demand. Federal, *Länder* and local policymakers must work to gain public approval for the construction of new infrastructure. Public consultation in planning is an important part of this. Successful grassroots energy projects show how the transformation of the national energy supply can be made a whole-of-society challenge that is actively shaped by the public.

Municipalities and regional planning authorities have key influence over the use of renewable energy sources. Wind power is a case in point. The development of wind power is guided by stipulations in regional plans, municipal preparatory and binding land-use plans and in individual planning approval procedures. All such planning must therefore take place in consultation with municipalities and with due regard to municipal interests. Some 130 rural districts, municipalities, regional associations, towns and cities in Germany have already adopted the goal of 100% renewable energy sources, and their ranks are constantly growing. The German 100% RES Regions project (*100ee-Regionen*) identifies, supports and brings together regions, municipalities and cities that aim to go 100% renewable in the long term. The project supports committed regional stakeholders with communication, knowledge transfer and networking

services. A further example among numerous funding programmes is the *Kommunalrichtlinie*, a directive on the promotion of climate change projects in social, cultural and public amenities in which the Federal Government supports local authorities in climate change mitigation.

40. Improving access to sustainable means of transport

Germany has a well-developed national transportation network. The main modes of transport are motorised private transport (43%), travel as car pooling passengers (15%), walking (24%), cycling (10%) and local public transport (9%).[34]

41. Challenges experienced and lessons learned in these areas

From an urban planning perspective, it is necessary to stabilise or reinvigorate local centres in shrinking regions and avoid vacancies. Vacant housing is a sign of demographic and structural problems in neighbourhoods, town or cities characterised by falling population or household numbers and economic deficits. Empty homes are a current problem in rural regions as they stand out more in a village or small-town setting than do vacancies in city apartment buildings.

Widespread vacancies can lead to falling residential property prices and rents, thus worsening the market situation on the supply side. Houses are then likely to sell at a loss. A lack of exterior maintenance and neglect also adversely affects the appearance of a neighbourhood. Systematic collection of statistics on vacancy rates in the various types of building is a future task for policymakers and academics in order to localise regional problems in housing markets.

Coping with the consequences of demographic change has also been a central issue in federal and *Länder* infrastructure and spatial planning policy for some time. The political challenge lies in how to adapt the existing stock of social and technical infrastructure to altered demand and service needs in a way that is socially acceptable while avoiding soaring costs. Basic services are services whose provision is in the public interest. They entail universal provision with certain essential goods and services of a specified minimum quality at socially acceptable prices and acceptable conditions of accessibility. This includes the provision of energy, water, telecommunications, public local and long-distance transport, postal services, waste and wastewater management, a basic level of provision with social and cultural amenities, and the provision of low-income groups with affordable housing.

The process of adapting basic services to demographic change needs to be planned in cities from an integrated perspective in order to avoid negative impacts on the population. How cross-sectoral basic service planning can be organised at the level of municipal associations, rural districts and planning regions is demonstrated by the MORO Programme of Action for the Regional Provision of Public Services, which is being carried out jointly with 21 model regions in eastern and western Germany.

Integrated planning of basic services first of all requires an inventory of the current stock and of the capacity utilisation of basic service facilities and infrastructure in a city or region. A range of adaptation scenarios are then developed, users surveyed and joint strategies formulated in moderated working groups involving a range of specialists from public administration, policymaking and the private sector. Each proposed measure or organisational alternative is subjected to accessibility modelling and cost-benefit analysis to assess its implications in terms of service quality for the public and cost to the public purse. It is important for the subsequent steps to be agreed on at municipal level and a binding

[34] Source: Federal Ministry of Transport, Building and Urban Development (BMVBS), Mobility in Germany survey, 2008

resolution to be adopted so that the adaptation strategy has political legitimation and measures can be taken for its implementation.

Municipalities must be supported by federal and *Länder* governments in this very effort-intensive process of adapting their social and technical infrastructure, with state funding programmes to prevent structurally weak regions from going into a downward spiral due to adverse changes in the economy, demographics and infrastructure. Alongside the various federal and Länder urban development assistance programmes – such as *Stadtumbau* (Urban Redevelopment), *Aktive Stadt- und Ortsteilzentren* (Active City and District Centres) and *Kleinere Städte und Gemeinden* (Small and Medium-Sized Towns) – there are already a wide range of Länder social housing promotion activities targeting housing market participants.

42. Future challenges and issues in these areas that could be addressed by a New Urban Agenda

- Universal basic services – water/sanitation, waste management, energy, housing, mobility, etc. – establish equivalent levels of provision. This is important to prevent neighbourhoods from falling into neglect and decay.

- Due to demographic change, housing markets must be closely watched so that problems can be addressed as needed.

- Regions with high levels of outward migration and ageing have problems providing basic services. These need to be countered by suitable means such as cooperation and amalgamation of existing facilities.

- Local centres need to be stabilised in shrinking regions.

- Special attention must be placed on age-friendly housing and smaller affordable rental apartments. Age-friendly conversion must be combined with the removal of barriers in residential surroundings.

- Vacant housing and dilapidated exteriors must be avoided. Vacancy reporting tools are useful, as is the systematic collection of statistics on vacancies by building type.

- Towns and cities should be made attractive to families.

- Solutions need to be developed to adapt the existing stock of social and technical infrastructure to altered demand and service needs in a way that is socially acceptable while avoiding soaring costs.

- More needs to be done to organise cross-sectoral basic service planning at the level of municipal associations, rural districts and planning regions and to support municipalities with federal and *Länder* funding programmes.

- Efforts should continue for the strategic development of civic engagement in the decentralised provision of basic services and platforms need to be established for exchange of experience.

- Work should be done on an ongoing basis to identify new organisation forms and stakeholder networks (public and private sector/civil society) and to analyse them in relation to their success factors (collaborative solutions as examples to learn from).

VII. Sustainable Urban Development Indicators

i. Percentage of people living in slums

There are no slums in Germany.

ii. Percentage of urban population with access to adequate housing

Access to affordable housing is secured in Germany with the exception of a small number of large cities. No information is available, however, on the percentage of the population unable to find affordable housing in large cities and thus forced to remain in existing accommodation or to move into surrounding regions.

iii. Percentage of people residing in urban areas with access to safe drinking water

The percentage of people residing in urban areas with access to safe drinking water is 100%.

iv. Percentage of people residing in urban areas with access to adequate sanitation

The percentage of people residing in urban areas with access to adequate sanitation is 100%.

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

The percentage of people residing in urban areas with access to regular waste collection is 100%.

vi. Percentage of people residing in urban areas with access to clean domestic energy

Germany has a universal energy supply system. This is part of basic services.

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

The percentage of people residing in urban areas with access to public transport is 100%.

viii. Level of effective decentralisation for sustainable urban development

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

On account of the federal structure of the Federal Republic of Germany, this is the case in 100% of instances.

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

About one quarter of all federal, Länder, municipal or municipal association income and expenditure is collected or disbursed by municipalities and municipal associations. This figure varies considerably however between the over 11,000 cities and municipalities in Germany and crucially depends on the economic strength of a city or municipality and on the current economic situation. There is a steep gradient between eastern and western German municipalities.

(iii) Percentage share of local authorities expenditure financed from local revenue

Alongside the effective mechanisms of Länder and municipal financial equalisation[35], about 50% of net municipal spending relates to own municipal revenue (taxes, levies and other regular income). This figure varies considerably however between the over 11,000 cities and municipalities in Germany and crucially depends on the economic strength of a city or municipality and on the current economic situation.

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

The percentage of city, regional and national authorities that have implemented urban policies supportive of local economic development and creation of decent jobs and livelihoods is 100%.

x. Percentage of city and regional authorities that have adopted or implemented urban safety and security policies or strategies

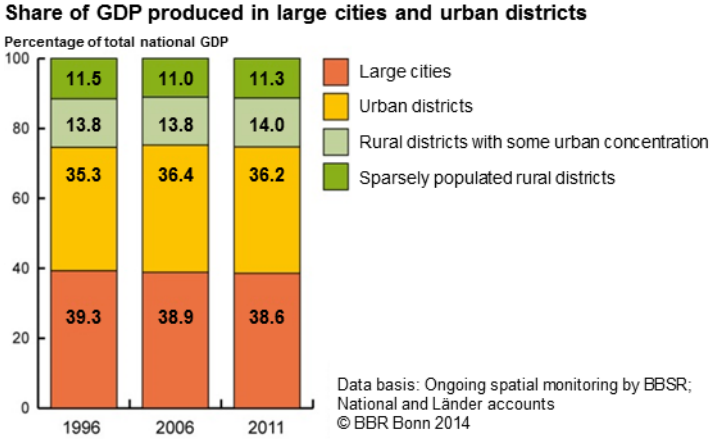
The percentage of city and regional authorities that have adopted or implemented urban safety and security policies or strategies is 100%. There are no lawless areas in Germany.

[35] See also Section V 28.

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

The 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 is 100%.

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



75% of national GDP is generated in urban areas. This proportion has remained virtually constant over the period 1996 to 2011. Approximately 40% is generated in the 69 large *kreisfreie Städte*[36] and about 35% in urban districts[37].

xiii. Other urban-related data relevant to the National Report

Annexes:

Original text of the Memorandum “URBAN ENERGIES – Urban Challenges”
Original text of the LEIPZIG CHARTER on Sustainable European Cities

[36] Large *kreisfreie Städte*: Independent cities that do not come under an intermediate regional administration, with at least 100,000 inhabitants

[37] Urban districts: Administrative districts in which at least 50% of the population live in medium to large cities and which have a population density of at least 150 per km², and districts whose population density without medium to large cities is at least 150 per km²

VIII. Case Studies and Policy Documents

Practice examples and action/funding programmes

Urban development and urban planning have long been subject to a multi-level approach in Germany as a shared concern of federal, *Länder* and local public institutions and of civic and private-sector stakeholders. In the course of horizontal and vertical cooperation, a basic social consensus has evolved in urban development policy issues that holds good across institutional and even party-political boundaries. At the same time, a culture of discourse and collaboration has emerged in urban and regional development between researchers, policymakers and practitioners that harbours considerable potential for innovation and synergies for sustainable urban development. This urban development policy culture of discourse and cooperation is founded not least on the interplay of urban and housing research and development programmes with information and exchange platforms for good urban development and housing practice and with urban development policy action and funding programmes.

Urban development policy in Germany is also linked into international and notably European urban development work processes. Within such processes, Germany makes available its experience and expertise with regard to urban planning approaches, instruments and projects. Germany in turn seeks to benefit from international cooperation with new knowledge and ideas in the area of urban development. This international cooperation has found expression among other things in the URBAN 21 Global Conference on the Urban Future, held in Berlin in 2000. At European Union level, the German EU Council Presidency in 2007 launched the process for the LEIPZIG CHARTER on Sustainable European Cities. This led to the establishment of the process, network and platform for a concerted National Urban Development Policy. In European urban development cooperation, Germany currently takes part in networks and platforms such as URBACT/Reference Framework for European Sustainable Cities (RFSC), the European Urban Knowledge Network (EUKN), and EUROCITIES. National networks, platforms and programmes relating to urban, housing and regional development include the following:

- The National Urban Development Policy platform (NSP)
- Urban development assistance programmes (StBauF)
- The Experimental Housing and Urban Development research programme (ExWoSt)
- The Demonstration Projects of Spatial Planning action programme (MORO)
- The Werkstatt-Stadt internet platform (WS)
- General departmental research
- Research and funding programmes under the Energy and Climate Fund (EKF), which fund activities in the following areas:
    - Promotion of research on renewable energy sources
    - Energy storage and grid technologies
    - Energy efficiency advice programmes
    - CO_2 building modernisation
    - Electric mobility
    - The electricity price equalisation scheme for energy-intensive industries
    - Promotion of national and international climate and environment protection
- The National Platform for the City of the Future (NPZ)

These research, development, funding and action programmes contain a wealth of professional expertise and accumulated practical experience, as can be seen in the following overview. Basic information is first given on each platform and programme with links to additional information sources.

Examples and projects reflecting good urban development practice are then set out in brief under the five main thematic areas of the German HABITAT III National Report.

National Urban Development Policy
www.nationale-stadtentwicklungspolitik.de

The National Urban Development Policy (*Nationale Stadtentwicklungspolitik*) is a platform and also a network to support local government in addressing the challenges of urban development moving forward. Jointly supported by the Federal Building Ministry, the Standing Conference of *Länder* Ministers of Urban Development, Building and Housing, the German Association of Cities and the German Association of Towns and Municipalities, the network provides opportunities to reflect on current challenges and to test new instruments. The National Urban Development Policy is a central urban policy task for the Federal Government, the *Länder* and local government and is equally an important Federal Government instrument for structural policy in the public interest.

A key aim of the National Urban Development Policy is to secure exchange of experience between those involved in urban development. Practical solutions already exist for many problems but in many cases they are not sufficiently well known. Events such as the Federal Congress on National Urban Development Policy, publications, support for innovative projects and the website therefore serve to promote networking between urban development policy stakeholders and the onward development of funding instruments. These activities for the collation and transfer of practical knowledge are to be further enhanced. A major part of this consists of testing innovative approaches in pilot projects under the National Urban Development Policy. Further information on pilot projects and action programmes under the National Urban Development Policy is available on a web-based information platform.

Urban development assistance programmes
www.stadtebaufoerderung.info

In urban development assistance, the Federal Government and the *Länder* support local government in maintaining and developing sustainable urban development structures. So that cities can better address this challenge, the Federal Government grants financial assistance to the *Länder* that is supplemented with *Länder* and municipal funding and serves the purpose of area-based urban renewal. The federal financial assistance is provided on the basis of annual administrative agreements with the *Länder* on urban development assistance.

The overarching objectives of urban development assistance are as follows:

- Strengthening the urban function of city centres and local sub-centres, paying special attention to the preservation and conservation of buildings of historic interest
- Establishing sustainable urban structures in areas affected by severe loss of urban function, for example with empty housing and derelict sites
- Urban planning measures to mitigate social deficits.

Current problem-oriented programmes targeting these funding objectives:

- *Soziale Stadt* (the Social City programme)
- *Stadtumbau Ost* (Urban Redevelopment East programme)
- *Stadtumbau West* (Urban Redevelopment West programme)
- *Aktive Stadt- und Ortsteilzentren* (Active City and District Centres programme)
- *Städtebaulicher Denkmalschutz* (Urban Architectural Heritage programme)
- *Kleinere Städte und Gemeinden* (Small and Medium-Sized Towns programme)

Information on the objectives and strategies of each programme and practical examples of funding measures and use of the instruments is provided on the urban development assistance website linked above.

Experimental Housing and Urban Development
www.exwost.de

Experimental Housing and Urban Development (ExWoSt) is a federal departmental research programme under the charge of the Federal Institute for Research on Building, Urban Affairs and Spatial Development (BBSR) in the Federal Office for Building and Regional Planning (BBR). The BBSR cooperates in the programme with other relevant institutions and research centres. Under the research and development programme, the Federal Government funds innovative forms of planning, methods and activities relating to future-relevant challenges in urban development and housing. The methodological core of the programme is made up of model urban development and housing projects for the design, testing and analysis of neighbourhood development instruments, measures and methods. Further information on the programme and the various research areas under Experimental Housing and Urban Development is provided on the BBSR website.

The demonstration projects serve as urban planning practice labs that produce new findings for the enhancement of urban planning and housing policy. The demonstration projects also contribute to practice-based and application-oriented transfer of experience and information. More than 700 demonstration projects have been carried out in the ExWoSt programme since 1989 in over 40 different areas of urban planning and housing research. Findings from ExWoSt demonstration projects are presented regularly in publications and online and discussed with urban planning practitioners. The demonstration projects offer a wealth of experience for transfer to housing and urban planning practice. Information, experience and findings from some 200 demonstration projects in the ExWoSt programme are available online (in German).

Demonstration Projects of Spatial Planning
www.bbsr.bund.de/BBSR/DE/FP/MORO/moro_node.html

Demonstration Projects of Spatial Planning (MORO) is a federal action programme in which the Federal Government supports the practical trial and implementation of innovative spatial planning approaches and instruments in collaboration between researchers and practitioners in the regions. MORO is a key instrument for implementation of a process, action and project-oriented planning and policy approach. The action programme is under the charge of the BBSR.

In supervising the programme, the BBSR has the tasks of identifying promising new approaches for practice as demonstration projects, supervising the projects and deriving transferable findings, organising the transfer of the findings into practice and recommending changes in the state legislative and financial framework. Special mention should be made of urban-rural partnerships as a series of

spatial planning demonstration projects of relevance to urban development. Covering five model regions, these projects related to conceptual approaches concerning energy, transport and public services in cooperation between urban and rural stakeholders and bodies.

Werkstatt-Stadt
www.werkstatt-stadt.de

The Werkstatt-Stadt website serves the transfer of information and experience from urban neighbourhood development projects and processes. Sustainable urban development requires good practice examples in urban planning. Recognition of this need permeates the international debate on sustainable urban development, from Habitat and URBAN 21 through to the LEIPZIG CHARTA. Werkstatt-Stadt presents a collection of good practice examples from urban planning across Germany. The idea is to share experience from urban planning practice and to transfer information from practitioners for practitioners. Linked with this is the aim of turning innovative exceptions over time into standard practice. The project portfolio is continuously updated and supplemented with this aim in mind.

Werkstatt-Stadt thus provides information about projects that are not yet standard practice in urban planning. It presents urban planning projects that have already been implemented or are at an advanced implementation stage in order to pass on tried and tested experience. The focus of interest is both on comprehensive projects and individual measures and on participation and cooperation processes. Recognising that important ideas for sustainable cities and communities emerge from everyday urban development planning and practice, example projects are generated from practice-oriented research programmes that are subject to scientific evaluation. The project presentations are based on original information and sources connected with each project. The Werkstatt-Stadt website currently presents more than 230 good practice examples of urban planning in Germany.

Funding for climate change adaptation measures

In this programme, the Federal Ministry for the Environment, Nature Conservation, Building and Nuclear Safety funds projects to enhance the ability of regional or local stakeholders (such as local authorities and businesses) to adapt to the impacts of climate change by way of initiatives involving awareness-building, dialogue and participation, networking and cooperation.
Under the funding announcement, funding is solely available for projects that address climate change adaptation. Projects that undermine efforts to combat climate change – 'win-lose' examples such as air conditioning – are not accepted, however. Projects that leverage win-win potential, on the other hand, are an express focus.
https://www.ptj.de/folgen-klimawandel

National Platform for the City of the Future (NPZ)
www.bmbf.de/de/21394.php#

The National Platform for the City of the Future brings together some 90 experts in four working groups to identify action and research needs for the sustainable transformation of our cities. The experts representing local government, research, business and civil society resolved to formulate a strategic research agenda by spring 2015. Ongoing programmes are to be better coordinated and research projects linked together at various levels. New research areas are also to be developed. Key issues comprise energy and resource efficiency, climate change adaptation and urban governance.

These are to be approached from a system-wide perspective. Future users of new technologies are involved from an early stage to ensure that outcomes are transferred into practice.

Based on the above range of networks, platforms and programmes spanning urban planning, policy and practice in the Federal Republic of Germany, a number of action areas and projects illustrating good urban development practice are set out in the following under the main thematic areas of the German HABITAT III National Report, with links to further information online.

Good urban development practice: Action areas and projects

Urban Demographic Issues and Challenges for a New Urban Agenda

Various research areas and demonstration projects have been carried out in relation to urban demographic change as part of the Experimental Housing and Urban Development programme. Notable research areas in this connection include:

- Elderly people and their neighbourhoods
- The living situation of single parents
- Innovations for urban areas suitable for families and elderly people
- Adolescents in urban neighbourhoods
- Senior-friendly conversion of residential buildings, neighbourhoods and municipal and social infrastructure (study evaluating KfW senior-friendly conversion and infrastructure investment funding programmes)

Numerous practice examples from the demonstration projects have been collated and documented that address age-related and target group-specific approaches and intergenerational projects in urban neighbourhood development. The following online project presentations serve as examples:

- Multigenerational projects in urban renewal in the Nauwieser Viertel district of Saarbrücken

  Diverse measures for the benefit of the elderly and intergenerational coexistence were implemented in the Nauwieser Viertel redevelopment area. Many activities were combined with vocational training for young people. The neighbourhood gained new housing, businesses and social amenities.

- Community life and living with children in Bickendorf, Cologne

  This intergenerational project began in Cologne in the early 1990s. Prospective residents and later users had a wide range of participation opportunities, giving them a major say in shaping the development. Single mothers in particular were able to improve the housing and living situation for themselves and their children.

- Child and youth involvement in remodelling public spaces in Drispenstedt, Hildesheim

  Urban renewal measures in a large 1960s housing development revealed notable deficits with regard to public spaces. In an integrated action strategy, spaces were specially remodelled in consultation with and for use by children and adolescents.

- Young people turn derelict site into youth sports park, MellowparkCampus in Treptow-Köpenick, Berlin.

  Based on a proposal developed for MellowparkCampus, the young users and operators of a youth sports park relocated it to a derelict site. At the same time, the new start at the new location gave the opportunity to turn a temporary use that was merely tolerated into a legally secure project.

Land and Urban Planning

With increasing areas under built development and increasing land use pressure, a major focus in land-use planning and urban development is on the sparing and considerate use of land. A key part is played here by environment and city-friendly mobility and by regional food production to cut distances travelled and secure a local supply base and circular economy. The various research and development projects and practice examples in this connection include the following:

- ExWoSt research area: Land in a Cycle – circular land use management in urban settings and urbanised regions

  In a very densely populated country such as Germany, land is a scarce resource subject to competing uses. In the ExWoSt research area on circular flow land use management, an integrative policy and management approach was investigated on the basis of an altered philosophy of land use and land take. The methodological focus was on experimental games. A range of stakeholders from the public and private sectors jointly developed circular flow land use management strategies in five experimental game regions.

- ExWoSt research area: Urban Neighbourhoods in Transition

  Demonstration projects in this research area developed and tested strategies to secure the future of urban neighbourhoods in transition where severe population decline had led to vacant buildings and derelict sites. The projects targeted urban development approaches and neighbourhood-specific measures to remove infrastructure that was no longer needed. A special focus was on the removal of municipal infrastructure and regaining urban open spaces. The demonstration projects showed that spatial structural change can indeed be shaped and guided. Such change presents long-term challenges but also opens up diverse opportunities.

- A practical example of how options can be exploited in urban structural change is to be found in Neuschönefeld, Leipzig. In the Rabet Local Park project, a park was redesigned and extended with cleared land. The project involved demolishing empty residential buildings, turning residential building land into green spaces, and undedicating previously paved areas for extension of the local park.

- Good practice examples of integrated development approaches were evaluated and documented in the ExWoSt Local Supply and Local Mobility study.

  Retail concentration has had a major impact on shopping-related mobility, with increasing numbers of people travelling by car to large food retailers often located outside of residential areas. The purpose of this ExWoSt study was therefore to develop transferable approaches for the promotion of local supply centres and hence local mobility.

- Bremen mobil.punkt: roadside car sharing stations

  Bremen's 'mobil.punkt' stations bring together public transport, car sharing, cycling and taxis in a user-friendly, integrated system. Special permission was obtained to dedicate spaces in public streets as car sharing stations.

- Promotion of local provision and local mobility with KOMM-IN service centres, Sternenfels

Rural areas have growing difficulty securing basic services. Alternative and collaborative approaches are needed to maintain quality of service in neighbourhoods and to prevent increased traffic due to the loss of amenities in walking distance. The KOMM-IN service centres in Sternenfels combine public and private products and services in terms of space, organisation and staff.

Environment and Urbanisation

The main environmental concerns in the urban environment relate to pollution, and most notably air pollution and climate impacts from the energy and transport sectors. Compared with suburban areas, the compact urban structures typical of European cities offer favourable conditions for energy saving and the use of renewable energy. Via the optimisation of transport routes, urban structures contribute to energy and resource efficiency.

Findings relating to various aspects of urban environmental quality have been generated from a range of action areas and demonstration projects. These include:

- National Urban Development Policy: Pilot projects on climate change and global responsibility

  The thematic areas covered by the National Urban Development Policy include energy efficiency and renewable energy sources. The objective in this connection is to support best practice projects for clean, sustainable and healthy cities. As elsewhere, the National Urban Development Policy is directed here at cooperation with the public, industry and other civil society organisations. A range of practice-oriented projects come under the heading ‘Climate Change and Global Responsibility: Building the City of Tomorrow’.

- ExWoSt research area: Energy-Efficient Urban Renewal

  Demonstration projects have been supervised in this research area in 15 towns and cities in the states of Brandenburg and Saxony-Anhalt. Systematic analysis and evaluation of experience in implementing strategies and projects showed the possibilities and limits of typical energy-efficient urban renewal projects and gave pointers for future priority-setting in this area. The energy-efficient urban renewal research area and demonstration projects bring together urban planning and technical and economic aspects of urban development in the interests of saving energy and improving energy efficiency.

- ExWoSt research area and demonstration projects: Urban Development and Transport

  In this research area, strategies have been identified to address the as-yet unresolved problems of urban transportation. Focuses have included public transport planning on the basis of prevailing urban development and mobility strategies and management with the aim of developing practice-oriented approaches to limit motorised road traffic and promote the alternatives.

- ExWoSt research focus on Urban Strategies for Adapting to Climate Change and klimastadtraum.de information portal

  The research focus on Urban Strategies for Adapting to Climate Change included a total of nine demonstration projects for the development of specific approaches, strategies and measures. The work of the demonstration projects was supported by in-depth assessments on individual issues. Findings from this research focus and other research outcomes are presented on

klimastadtraum.de. The website also includes practical project examples and event announcements. A range of guidance is provided on practical implementation of climate change mitigation and adaptation in cities, regions and the housing sector.

Governance and Cooperation

Effective management of sustainable city development processes requires active participation and partnership for all affected by and involved in housing and urban development decisions and measures. Various research and development projects relating to participation and cooperation have been carried out and practice examples evaluated and documented. A number of approaches explicitly relate to specific target or age groups.

- National Urban Development Policy: Pilot projects on participation

  The National Urban Development Policy strengthens civic engagement for cities and urban issues. To this end, it supports programmes and projects that show how the future lies in engagement for and in cities. The focus is on regional and urban initiatives that are primarily driven and implemented by civil society. Promising forms of participation are trialled in 15 pilot projects which were selected from 230 entrants and which started work at the end of 2011.

- ExWoSt research area: Adolescents in Urban Neighbourhoods

  This ExWoSt research area separately tested the effectiveness of youth participation in practice. The project, Putting Youth Participation to the Test, evaluated the success and sustainability of youth participation instruments in urban development.

- ExWoSt research area: Gender Mainstreaming in Urban Development

  This ExWoSt research area targeted the practical implementation of gender mainstreaming in municipal planning. Cities should provide an equally attractive living environment for women and men. Gender Mainstreaming in Urban Development aims to make gender equity a reality in urban planning. The research outcomes showed that gender mainstreaming can boost the quality of planning processes and the built environment, enhance transparency when balancing competing interests, and make for a better fit in urban planning measures and hence more effective resource use in spatial planning.

- Neighbourhood-level cooperation within an interest group was trialled in ExWoSt research on local owners' associations in urban redevelopment.

  The formation, operation, activities and successes of local owners' associations were investigated in 15 demonstration projects. The ExWoSt research area showed that private property owners can make an important contribution in neighbourhood development by coordinated or joint action. This experience provided the basis for an ongoing ExWoSt research area, Cooperation in the Neighbourhood with Private Owners for Preservation of the Value of Inner City Real Estate.

- In research on New Forms of Cooperation in Urban Development, five demonstration projects were carried out to test and evaluate inter-institutional cooperation approaches in urban neighbourhoods between the public sector, private investors and civil society.

- The Integration and Neighbourhood Policy research area was directed at linking up overarching integration strategies structurally and methodologically with their implementation in urban neighbourhoods. Integration policy measures, programmes and structures were previously poorly coordinated between the municipal and the neighbourhood levels, which are the two main levels of action in this policy area.

Urban Economy

Local value creation, economic viability, employment and skills in cities and urban neighbourhoods are the subject of various research, development and funding approaches. Examples include the following:

National Urban Development Policy: Pilot projects on urban development and the economy

Cities and municipalities need to be strengthened as places to live and work. Creative and innovative research, production and marketing need to be supported and linked together within the urban economy. The National Urban Development Policy platform aims to help cities and urban regions reinforce such economic development approaches and forge tailor-made solutions for current and future economic challenges. A project announcement on the subject of urban development and the economy in 2013 generated 160 proposals, from which 20 pilot projects were selected.

- ExWoSt research area: Neighbourhood Impulses – New Ways to Strengthen the Local Economy

  The primary focus in this ExWoSt research area was on supplementing renovation and social stabilisation with approaches to strengthen local economies. A total of eight demonstration projects were carried out in the two main thematic areas of the local economy and microfinance.

- A funding programme targeting local economic development is available under BIWAQ, a federal programme on urban neighbourhood education, enterprise and employment (www.biwaq.de).

Alongside the national campaigns and programmes, sustainable urban and regional development is also the subject of a wealth of standalone activities, programmes and projects at *Länder*, regional and municipal level.

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Annex 1

Memorandum

“URBAN ENERGIES – Urban Challenges”

Rising to their responsibility for the urban and regional future, the participants of the international conference have developed this memorandum in full and open participation of national and international partners from the private sector, academic institutions, civil society and various political levels.

Although we will mainly focus on Europe, sustainable urban development remains nonetheless a global necessity

I. Preamble

(1) The LEIPZIG CHARTER on Sustainable European Cities was adopted five years ago. It builds on the results of the Global Conference on the Urban Future URBAN 21 held in 2000. The challenges identified at the time are still valid today: demographic change, social inequality and integration, shortage of affordable housing as well as environmental and traffic problems. Since then, climate change has become more serious and its impacts more significant, the era of cheap fossil energy is nearing its end, food production has become more vulnerable to crises, and the financial system’s turmoil has not only burdened public finances but is also a threat to social peace. These developments affect cities, but increasingly also rural areas.

(2) Policy makers, the civil society and the private sector must provide answers to these challenges – international, national, regional and municipal answers. Cities of all sizes hereby have a particular responsibility and obligation. The major strategic task for the future is the local and regional implementation of the energy transition. Only with greater energy efficiency and the use of renewable energies can the era of cheap fossil energy be left behind. And only by doing so will an effective contribution be made to fight climate change. Cities are once again called upon. The *Energiewende* (energy transition) can only be successful if it is not considered as an isolated task but rather if it is embedded in integrated urban development strategies. This requires extraordinary economic, social, ecological and cultural sensitivity.

(3) In many states, drastically reducing greenhouse gas emissions and energy consumption is a stated objective. In Europe, the housing stock should be almost climate-neutral by 2050. In Germany, withdrawing from nuclear energy and enacting the energy transition has created a new framework and imposed new constraints. In addition to increasing energy efficiency, an extensive conversion to renewable energy sources is essential. The use of regenerative energy resources will not only change urban utilities infrastructures but also affect buildings as well as city- and landscapes. With its enormous dimension, the form of this change brings new tasks in the renovation and new construction of buildings and neighbourhoods as well as in urban, transport and landscape development.

(4) European cities provide good conditions to address these challenges. Cityscapes, public spaces, streets, green spaces and buildings offer a sense of local identity and homebuilding in times of accelerated globalisation. Their respective singularity must be considered. Thanks to their architectural and social qualities, cities can make a significant contribution to the implementation of the energy transition.

(5) The social energies for a sustainable urban development are concentrated in cities. Urban energies come first and foremost from creative people, their skills and commitment to accompany sustainable urban renewal, but also from education and science institutions. Cities are “energetic catalysts” of key social, economic, ecological, technological and cultural innovations. They concentrate initiative and willingness to participate as well as committed and competent citizens. Regarding foreigners and minorities, the vast majority of citizens is tolerant and shows solidarity with social issues.

(6) This memorandum coins requirements for political inspiration, innovation, creativity and civic engagement to ensure an environmentally responsible, socially balanced and economically robust – in short, a sustainable urban development.

II. Key tasks for sustainable urban development

(7) Four major tasks are on the agenda: firstly, the cautious ecological renewal of buildings and neighbourhoods, secondly, the technological regeneration of urban infrastructures, thirdly, developing a new mobility and fourthly, social integration. These four major tasks have been discussed at length but are usually separated from one another, moreover in various professional and political circles. They must be brought together. The energy transition and the fight against climate change requires not only renewing cities and regions, changes in urban infrastructures, new mobility and social integration but also new economic and financial bases and respect for cultural identity. And only when the city and its surrounding hinterland are brought considerably closer can the necessary conversion be successful.

(8) Increased energy efficiency starts at the level of the single house. Buildings are gradually moving away from being energy consumers (Plus-Energy-House). Renovation and energetic retrofitting of housing buildings are however more important than good new building. Energetic rehabilitation is one point, although as an increasingly significant component of extensive renovation it also includes good design and a socially fair distribution of costs. The key to a successful energy transition is the overall efficiency at neighbourhood and metropolitan level. In addition to energy efficiency and using renewable energies, an innovative mix of sustainable, low-CO_2 energy production, consumption, storage capacity and input is also essential. The renewal and construction of buildings and neighbourhoods requires clear agreements, integrated as well as actor-focused concepts in order to achieve overall urban efficiency and draw any additional forms of financing.

(9) Our cities can remain fit for the future with a need-driven adaptation of existing, and by developing new, urban utilities infrastructure systems. This requires considerable investment, especially in developing local renewable energy production systems. A considerable effort is needed to find suitable locations as well as a good design for these renewable energy systems. The use of modern technology allows for a multidisciplinary optimization and linking of energy and mobility systems. Intelligent systems and networks can improve urban life.

(10) Another key task is a new mobility culture based on innovative technology and a new balance between pedestrian, bicycle traffic, public transport and an altered automobile traffic. The aim is to achieve a city-compatible, multi- and intermodal transport, to develop new transport offers such as bike- and car-sharing systems. Mobility management and mobility cards improve local mobility. The rising shift of values in many cities, especially among the young adult population, supports this development. The use of vehicles with alternative forms of propulsion is an important contribution to eco-mobility if the energy comes from renewable sources and noise emissions are reduced. The freight and commercial transport must be organized so as to be compatible with the city. Inter-net individualisation of demand for goods and services requires an innovative reorganisation of the

courier, express and parcel delivery services with decentralized freight distribution centres and hubs as well as small, electric or hybrid delivery vehicles for urban areas. The aim is to relieve cities of noise and pollution and improve main streets, public spaces and squares.

(11) Social integration is the fourth major challenge of future urban policies. Growing polarisation between rich and poor as well as between cultures has led to a deeper socio-spatial division of cities. In order to preserve and improve the city's ability to integrate, the weak must be protected, intercultural interaction promoted, barriers broken down and opportunities promoted. This calls in particular upon civic engagement. Social equity, justice and inclusion in the context of the energy transition are also key goals. In addition to affordable and efficient housing as well as social facilities, it is also necessary to promote crucial behavioural changes in all social groups to reduce energy consumption. The energy transition cost will have to be economically distributed and socially fair. With their particular focus on human development in deprived neighbourhoods, the objectives of the LEIPZIG CHARTER become even more relevant in the case of the necessary integrated approaches to energy-efficient neighbourhood development.

(12) Cities, with their various educational and training opportunities, offer an outstanding potential for social integration. They thus contribute to the competitiveness of our entire economic system in a globalised world. Young people in particular can contribute with their ideas and commitment to making cities better places to live in. Their participation in all areas of urban development is to be promoted. It is essential to support not only early-childhood development and better education in schools and universities, but also to provide an atmosphere that offers young people and families attractive working and living conditions in cities, a culture of openness and tolerance as well as social and cultural diversity. A specific challenge is to integrate young people from disadvantaged backgrounds – also because social change requires any creative force. It has proven useful for schools and day care centres to open up to their neighbourhoods and become local social centres for families.

(13) Demographic change, in particular in terms of ageing as well as fragmentation of lifestyles and widening disparities, requires modifying, converting, extending or dismantling buildings and neighbourhoods. This is a smart way to combine it with the cautious ecological transformation of cities. Especially in societies facing population decline, we will only be able to deal with future challenges if senior citizens remain active longer – both professionally and with voluntary work. Social housing policies are also responsible for new housing constructions taking into account age- and family-specific needs as well as modernisation of existing age-friendly buildings. Mixed urban structures, easy access, affordable rents and age-friendly housing are essential conditions for senior citizens to stay as long as possible in their familiar surroundings. It is also important for their families that they can live in the city. Demographic and environmental goals are best combined in compact building and urban structures. Security is a basic need for citizens of all ages whose importance to the quality of life increases with age. Beyond objective security, the subjective feeling of security is also of great value – an individual who does not feel safe is impaired in his or her quality of life and limited in his or her participation in society. Public spaces must therefore be accessible to all age groups without fear. It should be noted that the neglect of public spaces triggers fear and insecurity.

(14) Urban and historic centres create identity in the city and region. They must be strengthened as an image of urban history as well as centres for culture, education, religion, retail, administration and housing. The careful handling of architectural heritage is also required for the ecological renewal. In this case, deprived inner city neighbourhoods in particular deserve special support.

(15) Large-scale housing estates on the urban fringe, insofar as they are needed for housing, should be improved in social, architectural, ecological and functional terms. They definitely also have some advantages which can be exploited: building density that favours energy efficiency as well as being often easily accessible by public transport. In the suburbs and surrounding urban areas, there is a

need for action to stabilize and possibly dismantle simple and no longer adjusted to the demand areas of single-family detached housing areas lacking adequate social infrastructure and facilities as well as an extensive access to public transport.

(16) The long-term redevelopment of cities requires a new balance of density, openness and diversity. Cities need open space for recreation, cold air storage and urban agriculture, attractive, pedestrian-friendly streets and spaces, green and open spaces perceived as safe and well-designed. They also need to be densely built as well as socially, functionally and architecturally diverse. A good relationship between density and openness will help create a healthy city. The compact urban development with well-balanced open spaces paving the way to a “walkable city and region” is the goal of ecological renewal. Development within cities is still the main task.

(17) Resource efficiency, climate protection and dealing with consequences of climate change can only be achieved by engaging the city with its surrounding hinterland and rural areas. This implies above all an intensive and inclusive development coordination with the metropolitan areas’ different municipal authorities. A balance between town and countryside – a new regional balance – is thus sought after. A keystone is the establishment of regional transportation systems that reduce transport costs for people and goods. Cities and their surrounding hinterland should cooperate more in order to strengthen regional economic activity, improve cities’ food supply from the countryside, set up regional energy and water authorities, open up the region to local recreation and strengthen metropolitan public transport.

(18) An overall shrinking population facilitates a considerable reduction of additional land-use. However, there are other large savings potentials, especially in areas of trade and transport. The reuse of vacant buildings and derelict land for economic purposes must prevail over building on greenfield sites. Wastelands and derelict buildings can also be used for climate regulation (generating cold air, reducing temperatures, ventilation, water retention) and renewable energy production (solar and wind energy, geothermal energy, energy from organic matter). There are also large energy recovery potentials in industrial areas.

(19) A pre-condition to good building, adequate urban infrastructure and new forms of mobility are innovative construction and operating principles, known as smart infra-structures. Water supply and drainage, power and heat supply, transport and mobility should be gradually decentralised, but should also be at the same time restructured into networked systems. These allow for a multiple use of resources (energy, water, buildings, land) and include their users. Surplus energy from buildings can be a source of energy for other uses – electric vehicles for example. Decentralised organisation of the infrastructure and local and regional responsibility are inextricable.

(20) Structural economic change is mainly taking place in the city. Knowledge-based economies and the creative industry – knowledge, education, research and development, culture – have an inclination for urban locations. They contribute to the economic “urban renaissance”. Urban environments are important for innovation and knowledge sharing, and attract young people. This makes the buzzword of creative participation tangible: experts are needed to promote, support, readjust and secure the economic, energetic but also social transformations in an innovative way. Competition for talent will influence the future of any city.

(21) Culturally, the challenges of the energy transition are considerable. The architectural heritage and character of towns and neighbourhoods need to be acknowledged. This means that identity-forging ensembles and buildings need to be restored in such a way that their appearance is preserved. This principle should also be applied to everyday architecture: no energy efficiency improvement without quality design. New buildings can comply with future resource and energy standards. The aim should be to increase the beauty of, as well as the identification to and responsibility for, the city alongside its

necessary reconstruction. Sustainable construction, improved urban infrastructures, new mobility and changing behaviours improving energy efficiency and conservation are essential for long-term, sustainable urban development. They must however be consistent with the preservation and further development of cities' cultural qualities and characteristics. *Baukultur* (building culture) is an important location factor.

III. An alliance for a sustainable city: urban energies

(22) A competent and responsible policy and administration at all levels can pave the way to sustainable buildings, sustainable neighbourhoods and the sustainable city. Addressing the major challenges requires broad social alliances and transparent processes. Stakeholders from the economy, academia, trade unions, associations, foundations, culture, education, media, religion, sports as well as promoters and planners have always been important partners in urban development. Today more than ever, civic participation and private initiatives are also needed to implement urban development projects successfully.

(23) Stakeholders in the city and the region follow their own logic and rules. It is important to activate and focus their strengths to innovation, community engagement and entrepreneurial initiative for a future-oriented urban development.

(24) The economy shows entrepreneurial initiative, and has user-friendly and marketable products for a future-oriented and climate-conscious building and urban development. Research and development, especially education and training, are the foundations supporting this success. Businesses are increasingly recognizing the potential of urban development and playing a part in concrete projects.

(25) The cultural and creative economy, with its innovative power, takes part in the design of our cities. Its social relevance allows it to embrace the current social challenges in its actions and developments.

(26) Science compiles knowledge in fundamental research and applicable implementation strategies for sustainable building and urban development. It should make greater use in teaching and research of the principles and demands laid by the memorandum as a foundation for inter-disciplinary (further) education and training of the current and the next generations. Future-oriented building and urban research should be promoted.

(27) Citizens are increasingly involved in their neighbourhoods and cities and, as experts of their own living environment, thus help provide the necessary measures to establish a broad social basis. Appropriate forms of participation, co-decision, involvement and co-design should be further developed for this purpose.

(28) Promoters and owners (investors and project developers) have to be evaluated according to the principles of sustainable building and of the sustainable city. Supporting economic frameworks conditions and setting clear efficiency targets can foster willingness to change.

(29) Media are important public discussion forums and have a special responsibility in communicating the major challenges and the necessary efforts for sustainable urban development. Mew media can provide effective platforms through open dialogue forums, online simulation games and other formats.

(30) Architects, engineers and planners must use their knowledge in closer cooperation in a creative, timely and responsible manner. Holistic approaches to planning are essential as well as early involvement of experts from other disciplines and citizens.

(31) It is important to establish international, national, regional and local alliances between policy, administration, economy, sciences and citizens. Such alliances do not occur by themselves, but rather in the pursuit of joint programmes, plans, and key projects for the sustainable city – for example, under the National Urban Development Policy (of Germany). They create new forms of negotiations of strategic goals and projects. Political and administrative institutions are thereby in charge of bringing all stakeholders together in terms of procedure and content as well as triggering essential coalitions. These alliances must be stable, reliable and transparent.

(32) Local self-government is a key factor to the sustainable development of cities, communities and the nation as a whole. In the light of the rapid changes related to globalization processes, the principle of subsidiarity rather than a centralized structure is proving to be a particularly successful model. The public sector plays a key role in designing the sustainable city. Committed local councils have held a central role in urban development. In addition, it will also require a reliable and technically competent administration holding long-term and transparent programmes. Its aptitude for organisation is therefore essential. Better organisational and operational structures are required, as well as a sufficient number of staff. Only by merging the topics of ecological urban renewal, urban infrastructure, new mobility and social integration will sustainable building and urban development be possible.

(33) Several good – but often selective and sectoral – proposals for a sustainable city are already available. The direction is clear regarding practical means, however, a public debate must be held in every city. The primary objective is the sustainable city, overcoming energy and climate issues. Programmes and projects that meet this objective must be negotiated and implemented on site. They have to take into account environmental, economic, cultural and social aspects. They therefore require an integrated urban and regional development in regard of sectoral, temporal, spatial and process-related purposes to which European Ministers have committed themselves in the LEIPZIG CHARTER and the TERRITORIAL AGENDA. Concepts as well as projects must be built upon paths for action and long-term considerations.

(34) Urban development plans of a new generation carry a special importance, including integrated social and economic issues and especially energy and climate duties and responsibilities. A major task of urban development plans will be to develop efficiency potentials in a creative way and foster urban energy production. This implies enabling the existing infrastructure to produce energy, generate energy across urban areas and develop new means of storage. Efforts must also be made to make a closer connection between climate and energy concepts of urban development and urban development planning and urban regeneration. After amendment, the Federal Building Code (of Germany) would for example provide good options.

(35) Pilot projects are needed to implement urban development plans. They experiment new approaches and show how sustainable development can be arranged. Their findings must be quickly and extensively implemented. In parallel, quality assuring methods and procedures need to be conducted, for example through planning workshops, competitions and discursive processes. Such methods also make the establishment of local, project-based alliances easier.

(36) Funding opportunities of programmes in the future must be constantly adjusted to and coordinated with the current challenges of the energy transition, climate protection and management of the climate consequence. Goal orientation, technological openness and integrated neighbourhood approaches to energy supply and building renovation must remain the main criteria when designing programmes. The private banking sector is also invited to be more involved in the financing of the energy transition as a societal responsibility. Competitions are effective means to decide of funding for the best ideas in ecological urban development and cooperation in the neighbourhood, the city and region. A sustainable financing must be based on life cycle assessments. Local authorities face major challenges in the financial and infrastructure management as well as in the real estate policy.

(37) The need for energy policy transformation and environmental development of cities and regions must be actively promoted and advertised. The opportunities for wide citizens' participation and co-decision with citizens are essential to a successful outcome. It is important to raise public awareness regarding its responsibility, using few resources and an intelligent use of urban space. New potentials and local knowledge for a sustainable city can subsequently be activated. Clear agreements and rules help create explicit responsibilities and regulate in decision-making powers in participation.

(38) Public investments in urban infrastructure are essential to promote a sustainable building and urban development. European Structural Funds should be increased with regards to the support of the urban dimension. After decades of successful urban development promotion programme, Germany has developed a powerful instrument which, despite changing conditions, also need to actively support the path towards sustainable cities. The federal level, *Länder* and local authorities have achieved this in close cooperation. In the future, the federal level should take more responsibility for model-based urban development projects relevant at national level.

IV. Call for collective action

(39) We call upon those responsible in cities, regions, states and international organisations as well as associations, businesses and initiatives to undertake their own programmes and projects to foster a sustainable urban development taking into account the cultural, social, economic and environmental dimensions of cities.

(40) A first step has been made. A sense of optimism can be felt throughout all social groups. The different social groups must cooperate as alliances and partnerships to achieve the common objectives for sustainable cities. It is important to coordinate these alliances at all levels of action – as in Germany with the National Urban Development Policy which is already a success. This requires a national and international experience and knowledge transfer.

(41) Political institutions should provide the legal framework for a sustainable urban renewal including the implementation of the energy transition and initiating broad-based alliances for a sustainable city. This requires a disposition for an extensive public dialogue: actors from all sectors are already looking for ideas and projects as well as setting priorities, and are not only willing to be involved in their implementation through transparent procedures but wish to become active creators.

(42) The public administration should be fair in its structures, functioning and contents in order to meet sustainable urban development requirements. This means overcoming the sectoral division of architecture, urban development, infrastructure planning, transport development and social planning as well as cooperation with other actors in the programme and project development. Furthermore, it is absolutely necessary to set clear priorities in favour of a local energy transition.

(43) EU Institutions and other international organisations should focus and support integrated and sustainable urban development more than they have in the past and take into account all relevant policy areas. This requires a cross-sectoral and place-based approach.

(44) Economic, private sector and trade unions should deal more with the conditions and options for sustainable building and urban development. The economy must take responsibility for the implementation of the energy transition at municipal level.

(45) Education and science should engage more intensively in a critical and constructive dialogue on the sustainable city. Universities and research institutions as well as schools should demonstrate a

special effort in their commitment and endorse a more advisory role, provide platforms for public dialogue and spread to the public the knowledge acquired. Vocational and further education and training should be intensified.

(46) Promoters and owners as well as planners and experts should make the concept of a sustainable city the core of their work. They should not underestimate the growing awareness of necessary changes and should actively advocate for change. Integrated and holistic planning approaches, life-cycle-oriented plans and construction are a top priority.

(47) Citizens from all social groups should commit themselves more and more to the common good – in the social as well as in the individual sense. This means not only their streets or neighbourhoods, but also the entire city and region. The aim is to support the traditional form of volunteering wherever is possible, as well as through a public recognition of its outstanding achievements. It is also important to enable new project-based and temporary forms of civic engagement.

(48) Media should address more issues of sustainable urban development in their re-porting and responsibly report on the cultural, social, economic and environmental dimensions so as to expose the discourse on these central issues in the public realm. With regard to new partnerships and alliances, the media have a multiplier function.

(49) The new social media are increasingly important as a platform for the discourse on sustainable urban development and its future trends. They can start and support a variety of activities. Integrating social media will allow to dialogue with all social groups.

(50) The sustainable city is climate-conscious and energy-efficient, adaptable and socially just, economically efficient and, last but not least, creatively unique and beautiful. The sustainable city of tomorrow is the result of our actions today. Conditions, means as well as outcomes of this action are URBAN ENERGIES

Annex 2

LEIPZIG CHARTER on Sustainable European Cities

Agreed on the occasion of the
Informal Meeting of Ministers for Urban Development and Territorial Cohesion
in Leipzig on 24 / 25 May 2007

Preamble

The “LEIPZIG CHARTER on Sustainable European Cities” is a document of the Member States, which has been drawn up with the broad and transparent participation of European Stakeholders. In the knowledge of the challenges and opportunities as well as the different historical, economical, social and environmental backgrounds of European cities, the Member States’ Ministers responsible for Urban Development agree upon common principles and strategies for urban development policy. The Ministers commit themselves

- to initiate a political debate in their states on how to integrate the principles and strategies of the Leipzig Charter on Sustainable European Cities into national, regional and local development policies,
- to use the tool of integrated urban development and the related governance for its implementation and, to this end, establish any necessary framework at national level and
- to promote the establishment of balanced territorial organisation based on a European polycentric urban structure.

The Ministers thank the German Presidency for having prepared the report “Integrated urban development as a prerequisite for successful urban sustainability” and the studies “Strategies for upgrading the physical environment in deprived urban areas”, “Strengthening the local economy and local labour market policy in deprived urban areas”, “Proactive education and training policies on children and young people in deprived urban areas” and “Sustainable urban transport and deprived urban areas” with their examples of good practice in Europe. These studies will help cities of all sizes in the effective implementation of the principles and strategies set out in the Leipzig Charter on Sustainable European Cities.

The Ministers declare:

We, the ministers responsible for urban development in the Member States of the European Union, consider European cities of all sizes which have evolved in the course of history to be valuable and irreplaceable economic, social and cultural assets.
With the objective of protecting, strengthening and further developing our cities, we strongly support the EU Sustainable Development Strategy, building on the Lille Action Programme, the Rotterdam Urban Acquis and the Bristol Accord. In doing so, all dimensions of sustainable development should be taken into account at the same time and with the same weight. These include economic prosperity, social balance and a healthy environment. At the same time attention should be paid to cultural and health aspects. In this due attention should be paid to the institutional capacity in the Member States. Our cities possess unique cultural and architectural qualities, strong forces of social inclusion and exceptional possibilities for economic development. They are centres of knowledge and sources of growth and innovation. At the same time, however, they suffer from demographic problems, social inequality, social exclusion of specific population groups a lack of affordable and suitable housing and environmental problems. In the long run, cities cannot fulfil their function as engines of social progress and economic growth as described in the Lisbon Strategy unless we succeed in maintaining the social

balance within and among them, ensuring their cultural diversity and establishing high quality in the fields of urban design, architecture and environment.
We increasingly need holistic strategies and coordinated action by all persons and institutions involved in the urban development process which reach beyond the boundaries of individual cities. Every level of government - local, regional, national and European - has a responsibility for the future of our cities. To make this multi-level government really effective, we must improve the coordination of the sectoral policy areas and develop a new sense of responsibility for integrated urban development policy. We must also ensure that those working to deliver these policies at all levels acquire the generic and cross-occupational skills and knowledge needed to develop cities as sustainable communities.
We strongly welcome the statements and the recommendations set out in the Territorial Agenda of the European Union and the work of the European Institutions which promotes an integrated view of urban issues. We recognize the Aalborg Commitments as a valuable contribution to strategic and coordinated action at a local level and the conclusions of the European Forum for Architectural Policies on Building Culture on 27 April 2007. We take note of the European Charter “Network Vital Cities”.

We recommend:

I. Making greater use of integrated urban development policy approaches

For us, integrated urban development policy means simultaneous and fair consideration of the concerns and interests which are relevant to urban development. Integrated urban development policy is a process in which the spatial, sectoral and temporal aspects of key areas of urban policy are co-ordinated. The involvement of economic actors, stakeholders and the general public is essential. Integrated urban development policy is a key prerequisite for implementing the EU Sustainable Development Strategy. Its implementation is a task of European scale, but it is one which must take account of local conditions and needs as well as subsidiarity.

The reconciliation of interests facilitated by an integrated urban development policy forms a viable basis for a consensus between the state, regions, cities, citizens and economic actors. By pooling knowledge and financial resources, scarce public funds can be more effectively used. Public and private investments will be better coordinated. Integrated urban development policy involves actors outside the administration and enables citizens to play an active role in shaping their immediate living environment. At the same time, these measures can provide more planning and investment certainty. We recommend that European cities consider drawing up integrated urban development programmes for the city as a whole. These implementation-oriented planning tools should

- describe the strengths and the weaknesses of cities and neighbourhoods based upon an analysis of the current situation,
- define consistent development objectives for the urban area and develop a vision for the city,
- coordinate the different neighbourhood, sectoral and technical plans and policies, and ensure that the planned investments will help to promote a well-balanced development of the urban area,
- coordinate and spatially focus the use of funds by public and private sector players and
- be co-ordinated at local and city-regional level and involve citizens and other partners who can contribute substantially to shaping the future economic, social, cultural and environmental quality of each area.

Coordination at local and city-regional level should be strengthened. An equal partnership between cities and rural areas as well as between small-, medium-sized and large towns and cities within city-regions and metropolitan regions is the aim. We must stop looking at urban development policy issues and decisions at the level of each city in isolation. Our cities should be focal points of city-regional

development and assume responsibility for territorial cohesion. It would therefore be helpful if our cities would network more closely with each other at European level.

Integrated urban development policy offers us a set of instruments which have already proved their worth in numerous European cities in developing modern, co-operative and effective governance structures. These are indispensable for improving the competitiveness of European cities. They facilitate early beneficial co-ordination of housing, economic, infrastructure and services development by taking account, inter alia, of the impact of existing ageing and migration trends and energy-policy conditions.

Within the scope of an integrated urban development policy, we consider the following strategies for action to be of crucial importance for strengthening the competitiveness of European cities:

- **Creating and ensuring high-quality public spaces**
  The quality of public spaces, urban man-made landscapes and architecture and urban development play an important role in the living conditions of urban populations. As soft locational factors, they are important for attracting knowledge industry businesses, a qualified and creative workforce and for tourism. Therefore, the interaction of architecture, infrastructure planning and urban planning must be increased in order to create attractive, user-oriented public spaces and achieve a high standard in terms of the living environment, a “Baukultur”. Baukultur is to be understood in the broadest sense of the word, as the sum of all the cultural, economic, technological, social and ecological aspects influencing the quality and process of planning and construction. However, this approach should not be limited to public spaces. Such a “Baukultur” is needed for the city as a whole and its surroundings. Both cities and government must make their influence felt. This is particularly important for the preservation of architectural heritage. Historical buildings, public spaces and their urban and architectural value must be preserved.

  Creating and safeguarding functional and well-designed urban spaces, infrastructures and services is a task which must be tackled jointly by the state, regional and the local authorities, as well as by citizens and businesses.

- **Modernizing infrastructure networks and improving energy efficiency**
  An essential contribution to the quality of life, locational quality and the quality of the environment can be made by sustainable, accessible and affordable urban transport with coordinated links to the city-region transport networks. Particular attention should be paid to traffic management and interlinking transport modes, including cycling and pedestrian infrastructure. Urban transport must be reconciled with the different requirements of housing, work areas, the environment and public spaces.

  Technical infrastructure, especially water supply, waste-water treatment and other supply networks, must be improved at an early stage and adapted to changing needs in order to meet future requirements for high quality urban living.

  Key prerequisites for sustainable public utility service are energy efficiency and economic use of natural resources and economic efficiency in their operation. Energy efficiency of buildings must be improved. This concerns both existing and new buildings. The renovation of housing stock can have an important impact on energy efficiency and the improvement of a resident’s quality of life. Particular attention must be paid to pre-fabricated, old and low quality buildings. Optimized and performant infrastructure networks and energy efficient buildings will lower costs for businesses and residents alike.

An important basis for efficient and sustainable use of resources is a compact settlement structure. This can be achieved by spatial and urban planning, which prevents urban sprawl by strong control of land supply and of speculative development. The strategy of mixing housing, employment, education, supply and recreational use in urban neighbourhoods has proved to be especially sustainable.
Cities must contribute to ensuring and enhancing their residents' quality of life and their attractiveness as business locations by making use of sophisticated information and communication technologies in the fields of education, employment, social services, health, safety and security, as well as means for improving urban governance.

Our cities must also be able to adjust to the threat posed by climate change. Well designed and planned urban development can provide a low carbon way of accommodating growth, improve environmental quality and reduce carbon emissions. Cities can achieve these outcomes through innovative prevention, mitigation and adaptation measures which in turn aid the development of new industry and low carbon business.

- **Proactive innovation and educational policies**
  Cities are places where a lot of knowledge is created and also imparted. The full exploitation of a city's knowledge potential depends on the quality of its pre-school and school education, and on the transfer opportunities provided within the education and training systems, as well as by social and cultural networks. The opportunities for lifelong learning, the excellence of the universities and non-university research institutes and the transfer network between industry, businesses and the scientific community.
  Integrated urban development policy can contribute to improving these factors, for example by bringing the stakeholders together, by supporting networks and optimizing locational structures. Integrated urban development promotes social and intercultural dialogue.

  Integrated urban development strategies, cooperative urban development management and good governance can contribute towards a purposeful use of the potential of European cities particularly with regard to competitiveness and growth, as well as to reducing disparities within and among neighbourhoods. They provide citizens with an opportunity for social and democratic participation.

II. That special attention is paid to deprived neighbourhoods within the context of the city as a whole.

Cities are faced with major challenges, especially in connection with the change in economic and social structures and globalisation. Specific problems, among others, are especially high unemployment and social exclusion. Within one city, considerable differences may exist in terms of economic and social opportunities in the individual city areas, but also in terms of the varying quality of the environment. In addition, the social distinctions and the differences in economic development often continue to increase which contributes to destabilization in cities. A policy of social integration which contributes to reducing inequalities and preventing social exclusion will be the best guarantee for maintaining security in our cities.

In order to achieve the objectives of social cohesion and integration in cities and urban areas, well-conceived social housing policies can be effective tools. Healthy, suitable and affordable housing can make these neighbourhoods more attractive for both young and old people. This is a contribution to stability in the neighbourhoods.

It is better to spot early warning signs and take remedial action in a timely and effective way. This saves resources. Once an area has begun to decline, the cost of and difficulty in turning it around can be many times more expensive.

Government must offer an outlook and incentives for improvement to residents in affected areas. Active involvement of the residents and a better dialogue between the political representatives, the residents and the economic actors is essential to find the best solution for each deprived urban area.

Against this background, we consider the following strategies for action, embedded in an integrated urban development policy, to be of crucial importance for deprived urban neighbourhoods:

- **Pursuing strategies for upgrading the physical environment**
  Economic activity and investments on the one hand and high-quality urban structures, a sound built environment and a modern and efficient infrastructure and facilities on the other are closely interlinked. For this reason, it is necessary to improve existing building stock in deprived neighbourhoods with regard to their design, physical conditions and energy efficiency. Improvements in housing standards in new buildings as well as in existing large prefabricated, old and low quality buildings bear the biggest potential for increasing energy efficiency within the EU and thereby combating climate change.
  In order to increase the sustainability of investments in upgrading the physical environment, they must be embedded in a long-term development strategy which also includes, inter alia, public and private follow-up investments.

- **Strengthening the local economy and local labour market policy**
  Measures to secure the economic stabilisation of deprived neighbourhoods must also exploit endogenous economic forces in the neighbourhood themselves. In this context, labour market and economic policies which are tailored to the needs of the individual neighbourhoods will be the appropriate instruments. The objective is to create and secure jobs and to facilitate the start-up of new businesses. In particular, access opportunities to local labour markets must be improved by offering demand-oriented training. Increased use must also be made of the employment and training opportunities in the ethnic economy.

  The European Union, Member States and cities are called on to create better conditions and instruments to strengthen the local economy and thus the local labour markets, in particular by promoting the social economy and providing citizen-friendly services.

- **Proactive education and training policies for children and young people**
  A crucial starting point for improving the situation in deprived neighbourhoods is the improvement of the education and training situation in the local community in conjunction with proactive policies focused on children and young people.
  More possibilities for education and training must be provided and improved in disadvantaged neighbourhoods which are geared to the needs of, and address deficiencies in provision for children and young people living there. By means of a policy focus on children and young people which is tailored to the social area they live in, we must contribute to improving the prospects of the children and young people living in deprived neighbourhoods to participate and realize their ambitions and to ensure equal opportunities on a long-term basis.

- **Promotion of efficient and affordable urban transport**
  Many deprived neighbourhoods have the additional burden of poor transport connections as well as poor environmental influences which further reduce their attractiveness. The development of an efficient and affordable public transport system will give residents in these

neighbourhoods equal opportunity to have the mobility and accessibility of other citizens – which they have a right to expect.
In order to achieve this aim, transport planning and traffic management in these areas must increasingly aim to reduce the negative impacts of transport on the environment and to organise transport in a manner which will better integrate these neighbourhoods into the city and region as a whole. This will also require appropriate networks for pedestrian and cycle traffic.

The better we manage to stabilize deprived neighbourhoods economically, to integrate them socially and to upgrade their physical environment and transport infrastructure, the better the chances are that our cities will remain places of social progress, growth and innovation in the long term.

We emphasize that:
Urban development policy should be laid down at national level and the stimuli for innovative solutions should also be created at national level, as well as at other levels.

Our cities need enough scope for action in order to perform local tasks in a responsible manner and a sound financial basis which provides long-term stability. Therefore it is important too that Member States have the opportunity to use the European structural funds for substantial integrated urban development programmes. The use of these funds should be focused closely on the specific difficulties and potentials as well as take into consideration the opportunities, difficulties and specificities in the Member States. If not already provided for, local authorities should develop the necessary skills and efficiency to implement integrated urban development policies, also with a view to achieving overall quality and sustainability in the built-up environment.

The new EU initiatives, JESSICA and JEREMIE, supporting the establishment of urban development funds and funds for SME, using financial engineering instruments to leverage private capital into the implementation of integrated urban development strategies, offer promising opportunities to enhance the effectiveness of conventional national and European funding sources.
At national level, Government Departments need to recognise more clearly the importance of cities to deliver national, regional and local ambitions, and the impact of their policies upon them. The efforts of different sectoral Government Departments working or having an impact on urban issues need to be better aligned and integrated so they complement rather than conflict.

We emphasize the importance of systematic and structured exchange of experience and knowledge in the field of sustainable urban development. We ask the European Commission to present the outcome of the exchange of good practice on the basis of the guidelines of the Leipzig Charter at a future conference under the auspices of the “Regions for Economic Change” initiative. Alongside this we need a European platform to pool and develop best practice, statistics, benchmarking studies, evaluations, peer reviews and other urban research to support actors involved in urban development at all levels and in all sectors. We will continue to promote and intensify the exchange of knowledge and experience between policy makers, practitioners and researchers at local, regional, national and European level in the future in order to reinforce the urban dimension of the EU Sustainable Development Strategy, the Lisbon Strategy and the European Employment Strategy.

Europe needs cities and regions which are strong and good to live in.

Imprint

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