This document is part of five keystone papers looking at current emerging topics in the building and city sector, focusing on energy efficiency and resilience. The keystone papers were developed within the framework of the Sino-German Urbanisation Partnership as a basis for the forthcoming working period and cover following topics:

01 Plus Energy Buildings and Districts
02 Energy Efficiency of Buildings and Districts in Urban Renewal
03 Transformative City
04 Climate Risk Management in Cities
05 Urban Renewal in Districts

Prepared by:

BUROHAPPOLD ENGINEERING

Happold Ingenieurbüro GmbH
Pfalzburger Straße 43-44
10717 Berlin, Germany
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<td>Federal Building Code</td>
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<td>BBauGB</td>
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<td>BMVBS</td>
<td>Federal Ministry of Transport, Building and Urban Development</td>
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<td>BRD</td>
<td>Federal Republic of Germany</td>
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<td>DDR</td>
<td>German Democratic Republic</td>
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<td>EFRE</td>
<td>European Regional Development Fund European Social Fund</td>
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<td>EnEV</td>
<td>Energy Saving Ordinance</td>
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<td>ESF</td>
<td>European Social Fund</td>
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<td>EU</td>
<td>European Union</td>
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<td>GHG</td>
<td>Greenhouse-gas</td>
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<td>IBA</td>
<td>International Architecture Exhibition</td>
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<td>LED</td>
<td>Local economic development</td>
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<td>PPP</td>
<td>Public-private-partnership</td>
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<td>SEKo</td>
<td>Integrated City Development Concept</td>
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EXECUTIVE SUMMARY

Policy for urban renewal in Germany underwent significant changes since the 1950s. Destructions of World War II led to massive rebuilding of housing and infrastructure. Planning principles guided by functionalism encouraged radical deconstruction of historic urban centres, aiming to separate urban functions such as housing, working, and motorised transport. From the 1970s onwards, a paradigm focusing on so-called cautious urban renewal emerged, supporting urban development through inclusion of local citizens and affected population in the planning process, respecting their needs and objections. Today, German cities and their neighbourhoods are experiencing urban change in a variety of ways. For instance, the ongoing economic transition from an industrial towards a service economy, which is resulting in structural transition and stagnating or growing population numbers in some regions, and climate change that requires action by municipal governments, are some of contemporary drivers of urban change.

German public administration is organised in three tiers: Federal, state, and municipal level, while being embedded within the legislative framework of the European Union. Through German Basic Law, exertion of state authority and functions are assigned to subnational states. Furthermore, municipalities enjoy financial autonomy, and are responsible for a number of self-government tasks, including urban land use planning, legislation on local community matters, as well as implementation of renewal schemes. Urban development planning in the country is regulated by Federal law, with the most important plank being the German Building Code (BauGB). BauGB comprises of statutory law regarding land use planning, building permissions, urban rehabilitation and development, as well as administrative and planning safeguards. Furthermore, it outlines the process for implementation of urban redevelopment measures. Such measures are defined as complex, comprehensive actions, significantly improving or reshaping a specifically delimited area, in order to remedy shortcomings in urban design. Urban redevelopment is usually carried out in a three-step approach, including a preparatory and implementation phase, while concluding with the dissolution of the renewal area and measures accompanying the completion. BauGB also includes provisions regarding public participation, as inclusion of residents and local stakeholders is considered as a crucial aspect for successful urban rehabilitation.

Since 1971, the Federal government provides municipalities with financial assistance through urban development schemes, for the realisation of renewal projects in districts and neighbourhoods. Every year, administrative agreements between the Federal and state governments set the budgetary support framework. Since introduction of the support programmes, the Federal Government provided assistance of around 16 billion Euro. For a renewal project, a third of the total cost is provided by the respective scheme, another third by the state government, and the remaining amount to be covered by the municipality. Urban development schemes are an important local economic factor, with one Euro of Federal subsidy triggering total public and private investments of approximately seven Euro. To enhance commitment of local residents throughout a renewal process, the Federal programmes foresee integration of contingency funds, providing finance for small projects initiated by communities. Here, the district level is considered as the most crucial level for implementation, providing a manageable complexity, with a large number of citizens experiencing impacts.

Federal urban renewal schemes are the prevailing instrument to shape urban development processes within the country. Their high flexibility, constant adaptation on emerging challenges, and accompanying research and monitoring, continuously broadened their scope over the years. They enable preservation and contemporary adaptation of historic urban centres, restructuring of public and open spaces, strengthening of social cohesion, and supporting networks of smaller cities and towns. Furthermore, they allow municipalities to react accordingly upon climate change, supporting integrated measures on climate mitigation and adaptation, as well as exploiting the full potential of green infrastructure within existing urban fabric. Integrated urban renewal enables a cross-sectoral approach, which is essential to tackle complex, multi-layered challenges at the district level.
Changing demographic, social and economic conditions are drivers of constants of urban change in Germany. Massive destruction after World War II confronted policy makers, local authorities and urban planners with reorganisation, reconstruction and redevelopment of the urban fabric, which was strongly influenced by modernist planning paradigms. Growing resistance and criticism against clearance and expansion strategies resulted in a fundamental reorientation of urban redevelopment in the 1970s. Focusing on the consolidation of existing buildings, reinforcement of social structures and increasing awareness of the environmental impact of urban planning, led to emergence of cautious urban renewal. Today, Germany is again is experiencing structural and economic transition with strong differences between geographical regions. Shrinking population numbers and population ageing, rural-urban migration, the transition from an industrial towards a service-oriented economy, as well as climate change, current shape urban change within the country’s neighbourhoods and districts.

1.1 DRIVERS OF URBAN CHANGE IN GERMANY

Germany is experiencing structural and economic transition with a strong divide between geographical regions. From the mid-19th century onwards, heavy industry largely based on mining, coal and steel production shaped Germany’s economy. Many regions and cities became industrial hubs, with local jobs and economies largely based on the sector. Since the late 1950s, the number of job opportunities and the economic significance of the industrial sector has been gradually declining, with the service sector today employing around three-quarters of the total German workforce.¹

Until 2035, especially rural regions located in the East are projected to further experience strong reduction of population numbers up to 20% compared to 2012. Growth in Western regions will slow down or stagnate, while a number of urban centres and their surroundings throughout the country are set to stabilise their

Figure 01: Distribution of residential building stock in Germany (BMU, 2014, adapted by BuroHappold)

population increase or continue to grow at a moderate pace of around 4%. Growth and shrinking cities and regions result in an increased demand for housing, enhancement of infrastructure in large and medium-sized metropolitan areas. Currently, Germany’s population is currently at around 83 million citizens. The overall population numbers are projected to shrink from 2020 or 2025 onwards, depending on scenarios regarding external migration.

A characteristic of urban and regional development in Germany is the country’s decentralised organisation with a polycentric spatial structure. In contrast to centralised organisation of some countries (e.g. France with Paris as central city), in Germany, several large and medium sized cities throughout the country incorporate different functions. For example, Berlin is characterised by its status as capital city, Frankfurt as a financial centre, or Hamburg as a port and media city, being home of a number of media companies and publishing houses.

In Germany, 2014 was the warmest year on record since 1881, with the number of days with temperatures above 30°C increasing by three days on average since the 1950s. In dense inner city neighbourhoods, impact regarding increased temperatures is especially significant, causing local urban heat islands, compared to rural areas with increased amount of green spaces. With climate change being one of the most significant drivers of urban change in Germany, measures targeting mitigation of greenhouse-gas (GHG) emissions and adaptation to the increased occurrence of weather extremes require targeted policies enhancing the urban built environment. "Keystone Paper #4: Climate Risk Management in Cities" provides additional information on Germany’s climate adaptation plans and risk management strategies.

Figure 02: Population Development Scenarios for Germany (BBSR, 2017 adapted by BuroHappold)

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1.2 HISTORY OF GERMAN URBAN RENEWAL POLICY

After World War II, more than half of the residential building stock in German cities was destroyed or heavily damaged. Furthermore, social and technical facilities, such as schools, hospitals, bridges and transportation infrastructure were in ruins. Massive destructions and influx of expellees and refugees confronted local authorities with challenges regarding reconstruction and reorganisation of urban development. Policies of the past were considered as completely inadequate for the task. In order to manage urban planning, building construction and land reallocation as well as to deal with the reorganisation of the devastated sites, so-called “Reconstruction Acts” were passed. Later on, the “Building Land Procurement Act” together with the former Federal Ministry of Housing, were created.

The Federal Building Act (Bundesbaugesetz - BBauGB), adopted in 1960, established the first unified urban development law across the Federal Republic of Germany (BRD) and provided standardised plans for control, use and organisation of urban land-use planning, following the objectives of modernist urban development. Guided by BBauGB, the model of comprehensive redevelopments was introduced. Such redevelopments then were common practice, and often entailed large-scale demolition of existing historic urban fabric, including buildings and other infrastructure, to create space for new housing developments. Other measures included the introduction of enhanced transport infrastructure, focusing on motorised individual transportation. Modernist ideas of the Charter of Athens further shaped this model of urban development from 1960 to 1970, establishing predominantly car-focused urban structures and facilitating new greenfield developments on cities’ periphery.

New planning paradigms, the prevailing economic crisis, ongoing insecurities of tenants as well as growing criticism regarding radical reconstruction and clearance strategies of urban development led to a shift of perspective in the late 1970s. Focusing on the consolidation of existing housing stock and enhancement of social structures, the concept of cautious urban renewal emerged. Instead of demolishing existing buildings in poor conditions, the principle encouraged refurbishments, also enhancing lighting and ventilation through e.g. carefully tearing down sheds in backyards. Furthermore, public spaces were enhanced through a focus on people-centred design. Projects embracing the concept were implemented more locally sensitive, with self-help strategies, enhancing living and working, in addition to integrating local residents into the renewal process through a participatory approach. The main principle intends a socially compatible preservation of existing buildings, following a strategy focusing on local residents. Through cautious urban renewal, living space and social infrastructures are developed and secured, integrating aspects regarding recreational areas, employment opportunities and educational facilities. A central feature of the planning paradigm is an active involvement of residents, integrating them into the planning process, through pro-active decision-making. The concept of cautious urban renewal was first presented as part of 1982s International Architecture Exhibition (IBA) Altbau in Berlin. IBA Altbau was a reaction to mass-demolitions and new constructions of historical centres in inner Berlin.

Figure 03 exemplifies this tendency, showing the original structure of Berlin’s Hansaviertel before World War II, and results of a post-war urban design competition. Further details regarding modernist principles in urban development are included in Keystone Paper #3: Transformative City.

Figure 03: “Hansaviertel” area in Berlin, before World War II (left), and results of the urban design competition 1953 and 1956 (Source: Carsten Jonas, 2006)

city neighbourhoods, especially those located in the district of Kreuzberg. While they were first introduced for Western Germany, they were extended and included in the states of Eastern Germany after reunification.⁶

German reunification of BRD and the German Democratic Republic (DDR) in 1990 changed the spatial structure and priorities for urban development throughout the country. New demographic, social and economic conditions challenged planning paradigms. Furthermore, the awareness regarding politics of urban planning having a global environmental impact led to inclusion of more ecologically sustainable strategies for cities. In addition, consideration of the cultural and historical dimension as an important stimulant for urban regeneration encouraged another change of perspective. Here, the concept of integrated urban development emerged in the 1990s. It considers a cross-sectoral approach, interlinking a variety of sectors, breaking up silos and encouraging synergies between different stakeholders.⁷

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2. REGULATORY FRAMEWORKS

Germany’s federal structure requires an administrative system that enables policymaking on Federal, state and municipal level, with each level having an influence on each other. Furthermore, German legislation is embedded within the European Union (EU), and hence affected by supranational legislature. Regarding urban development planning, the most important guideline is the German Building Code (BauGB), incorporating all matters. A key instrument embedded within urban planning regulations, are public participation strategies, considering views, arguments, objections and recommendations of stakeholders, leading to a need-orientated planning process.

2.1 GERMAN GOVERNANCE SYSTEM

Germany’s national legislation is strongly influenced by regulations and laws issued by the EU. Its main instruments to influence national policy of its member states by issuing Directives or Regulations. Directives are a legal act, of which individual countries devise their own laws to reach a predefined goal, e.g. to enhance energy performance of buildings (see Keystone Paper #1: Plus Energy Buildings and Districts and Keystone Paper #2: Energy Efficiency in Buildings and Districts). Regulations issued by the EU are immediate enforceable as law in all EU member countries. Furthermore, the EU offers subsidy programmes for urban and regional development, for example, the European Regional Development Fund (ERF) to enhance structurally weak regions, or the European Social Fund (ESF), as a main tool for the promotion of employment and social inclusion throughout the EU.

Germany is administered in a federal structure of three main tiers, consisting of the Federal Government, Federal States, and municipalities. Through German Basic Law, exertion of state authority and discharge of functions is assigned to the subnational states, unless stated differently by the Basic Law. Municipal self-administration is conducted as laid down in the German Basic Law. Duties of municipalities are, for example, management of affairs regarding local community (self-government tasks) and urban land use planning, enactment of byelaws as general binding legislation for community matters, or the responsibility of the implementation of projects regarding Federal urban renewal programmes. Municipal governments “must be guaranteed the right to regulate all local affairs on their own responsibility, within the limits prescribed by the laws” and have responsibilities through their financial autonomy, including “the right of municipalities to a source of tax revenues based upon economic ability and the right to

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**Figure 04: Administrative Structure of Germany (Pahl-Weber, 2008, adapted by BuroHappold)**
establish the rates\(^1\). For matters of urban and spatial planning, the so-called principle of countervailing influence (also mutual feedback principle) is a guiding paradigm, where local, regional and supra-national planning each influences and in turn is influenced by other planning levels.\(^2\)

The principle of **equality of opportunity (gleichwertige Lebensverhältnisse)** aims to ensure that development of Germany is equally balanced, without leaving a region behind. It is highlighted in German Basic Law, to ensure **Equal provision of basic infrastructure throughout all regions and areas within the country\(^3\)**, and in the **Regional Development Act (Raumordnungsgesetz - ROG)**, aiming for **Balanced social, infrastructural, economic, ecological and cultural conditions** for the whole Federal Republic, as well as its sub-areas.\(^4\)

### 2.2 IMPLEMENTATION OF URBAN RENEWAL PROJECTS

Conceptualisation, planning and implementation of urban renewal projects in Germany follows a specified order as defined by the German **Building Code (BauGB)**. The formal process for implementation of **urban redevelopment measures** is stated in **BauGB § 136**, regarding **Special Urban Planning Law (Besonderes Städtebaurecht)**. Urban redevelopment measures are defined as **complex, comprehensive actions, which significantly improve or reshape a specifically delimited area, in order to remedy shortcomings in urban design, within a certain predefined timeframe**. An urban redevelopment project as a so-called **comprehensive complex measure (komplexe Gesamtaufnahme)** requires uniform preparation of several, diverse projects, which are coordinated and balanced between each other. To cover part of the cost of such urban renewal measures, financial support of **Federal Urban Renewal Schemes** (see subsequent chapter) is utilised by municipalities (see also **Keystone Paper #3: Transformative City**).\(^5\)

For a municipal authority to justify an urban redevelopment measure, so-called **urban shortcomings** must be present. Urban shortcomings exist when liveability and security for residents is at stake, as well as aspects of climate mitigation and adaptation are not represented.\(^6\) BauGB highlights that, **urban renewal targets the common good, requiring information and participation of owners, tenants, and other affected residents and stakeholders.**\(^7\)

In general, a formal urban renewal process is accompanied by transparent participation of public stakeholders throughout the whole process and conducted in three main phases:

i. preparatory phase (§ 140 BauGB),

ii. implementation phase (§ 146 BauGB), and

iii. completion and accounting (§§ 154, 162 f. BauGB).

The **preparatory phase** forms the first stage of an urban redevelopment process for a predefined neighbourhood. The formal process of the first phase, as outlined in § 140 BauGB, is conducted as follows:

i. Preparatory analysis, consisting of the collection and assessment of existing data, as well as social, structural and physical conditions and connections, as well as potential adverse impacts. It aims to collect data, to be able to define the extent of the urban redevelopment area.

ii. Formal definition of redevelopment area, establishes regulatory statutes for the respective neighbourhood, including the exact limits of the area, procedural arrangements and time limits.

iii. Definition of goals and targets, to develop a concrete redevelopment concept, including specific goals regarding the physical or social structure of the area, to be achieved throughout the process, (e.g. a goal to conduct modernisation and enhancement of the buildings in the area in a cautious, and socially acceptable way, or to avoid gentrification processes triggered by the redevelopment)

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1. Grundgesetz für die Bundesrepublik Deutschland, Art. 28 (2). Source: https://www.gesetze-im-internet.de/gg/art_28.html
3. Grundgesetz für die Bundesrepublik Deutschland, Art. 72 (2)
7. BauGB § 136 (4)
iv. Urban development planning, including preparatory and binding land-use planning, project-based binding land-use plans, development concepts, and other informal modes of planning.

v. Opportunity to express views on redevelopment, publication of redevelopment, and possibility to give feedback by owners, tenants, leaseholders, and other stakeholders affected by the process.

vi. Social scheme planning, to develop a concept avoiding or minimising adverse socio-economic effects of the redevelopment, and define potential accompanying measures. It includes actions regarding the renovation of individual buildings and timeframes, options for tenants to remain in the buildings or temporarily move out, changes of floorplans, projected rent increase after the redevelopment, etc.

vii. Prerequired individual construction measures, that are required before implementation of the full redevelopment plan, to slow down negative development and enhance improvement of the area.

The implementation phase is the second period of a formal urban redevelopment process and defined in §§ 146 - 148 BauGB. It aims for a swift realisation of the redevelopment, based on the formal regulatory statues, and the redevelopment concept. It comprises of three stages:

viii. Regulatory measures, including all measures to enable subsequent construction measures, such as acquisition of land, resettlement of residents, adaptation on infrastructure, and enabling accessibility, or decontamination of brownfields, etc.

ix. Construction work, conducted in responsibility of the building owners, or municipal authorities, if the respective area is their property (e.g. public spaces, municipal housing, etc.).

x. Cost and finance overview, as an obligatory planning and management tool of the municipality for the redevelopment plan. It shows the financial viability of the measure, coordination of investments of the municipality and other public institutions, and is a decisive foundation of decisions regarding Federal subsidies.

An urban redevelopment project concludes with the completion of the redevelopment, as defined by § 154, 162 f. BauGB. It forms the formal conclusion of the renewal measures, which are often carried out over a period of a decade or longer. In general, the completion can include following aspects:

xi. Dissolution of statues for rehabilitation, after the finalisation of construction measures, and achievement of defined goals and targets. Not all measures need to be finalised, but it is important that private investments and projects are triggered to the extent, that they will continue after dissolution of the statutes.

xii. Final resolutions for individual sites, to declare finalisation of renovation measures for individual buildings without full dissolution of the redevelopment area.

xiii. Retransfer of property that the municipality might have acquired for the time of the redevelopment process, through the municipal pre-purchase right.

xiv. Accounting of rehabilitation measures, compensation fees, and potential exceptional financial compensation for affected individuals.

2.3 FRAMEWORK FOR PUBLIC PARTICIPATION IN URBAN RENEWAL OF DISTRICTS

The neighbourhood level is the concrete area where urban development strategies, redevelopment schemes, and new infrastructure of all kinds has immediate impacts on quality of life of residents and all local stakeholders. To ensure that all possible interests are considered, and the public is able to identify with needs and challenges in urban development processes, public participation is utilised as a strategy to involve affected citizens through a variety of ways.

In an urban development process, local authorities are required by law to inform the affected public on aims and purposes of the planned measures. It is further required that public opinions and arguments are listened to, which is regulated by BauGB § 137. It states that "renewal should be discussed with owners, tenants and other stakeholders as early as possible. The persons affected should be encouraged to participate in the renewal process and to the implementation of the necessary structural measures, as well as assessed in this matter to the further possible extent". In most cases, public participation following BauGB is conducted in a two-stage process. In the first phase, residents and stakeholders are informed at the earliest possible date by a public advertisement. It covers general aims and purposes, alternative proposals and anticipated possible impacts of the planned project. In the second stage, draft plans and explanatory memorandums are displayed for a period of one month. During both phases, public stakeholders are entitled to express their views and opinions, arguments, and recommendations regarding the planned measure.

Incorporating the principle of cautious urban renewal, redevelopment processes conducted within an existing urban fabric require design and implementation together with residents, business owners, and all relevant local stakeholders within the target area. Here, the redevelopment advisory board can also include representatives of local stakeholders. Other formats of participation include a cooperation through idea and design.

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8 BauGB § 137
workshops. Main aim of a public participation process is a needs-based planning approach, and inclusion of public stakeholders throughout the preliminary planning until realisation of the project. By that, responsibilities are taken over, and commitment towards the redevelopment process raised.\textsuperscript{10}

The redevelopment of Klausenerplatzkiez in Berlin Charlottenburg is considered as a best practice example for consideration of residents’ needs within the framework of an urban renewal process. Following a cautious renewal approach, local citizens were included throughout all steps of the process. As Figure 06 shows, the original density of the neighbourhood (1939), barely affected through bombings of World War II, was planned to get reduced sharply (1974). Instead of completely demolishing the built up structures in the inner yards of the blocks, following resistance of residents, local initiatives were heard and included in the planning considerations. By that, only buildings and sheds with subordinate functions (e.g. former workshops, garages, etc.) were deconstructed, and existing buildings carefully refurbished (1977). Measures carried out were based on consensus regarding aspects of professionals and residents, also avoiding rent increases and displacements. As a result, the neighbourhood developed towards a green urban district, offering high quality of life and maintaining a well-balanced social mix.

\textsuperscript{10} STERN Behutsame Stadterneuerung (2012): Civic Participation in Berlin - Urban Renewal.

Figure 06: Urban structure of Klausenerplatzkiez in Berlin Charlottenburg of 1939, 1977 and 2017 and redevelopment concept of 1974 (Source: Senator für Bau- und Wohnungswesen Berlin, 1980; Apple Maps)
To enhance the built environment in cities and strengthen local social structures, federal urban development schemes are the main instrument for renewal of districts and neighbourhoods in Germany. First established in the early 1970s, they have been adapted and improved gradually, providing a high amount of flexibility towards emerging issues in urban development. Since their introduction, they also became an important factor to support local economic development and triggering local civic engagement.

### 3.1 ENERGY-EFFICIENT URBAN REFURBISHMENT PROGRAMME OF KFW FOR DISTRICTS

Inner centres and neighbourhoods of cities fulfil a number of functions for residents and commuters, comprising of homes, workplaces, leisure areas, and many more. In order to keep neighbourhoods well balanced in their physical and socio-economic structures, the Federal Government introduced so-called urban development schemes or urban renewal schemes (Städtebauförderung), to support municipalities in their ambition to enhance the urban environment. The Federal schemes are Germany’s fundamental instrument for urban rehabilitation and reconstruction. They target a socially, economically, ecologically, and demographically sustainable urban renewal process in cities and towns.

The foundation and targets of the schemes are defined in German Basic Law, where the possibility for the Federal Government to provide financial assistance to states and municipalities is highlighted. The first subsidy programme was introduced in 1971 through the Programme for Urban Rehabilitation and Development. The programmes have been restructured and refined since, with currently six different strands, including the Programme for Green Urban Areas (Zukunft Stadtgrün), Smaller Towns and Municipalities (Kleine Städte und Gemeinden), Centres Programme (Aktive Stadt- und Ortsteilzentren), Urban Reconstruction Programme (Stadtumbau), Social City (Soziale Stadt), and Conservation of Historic Monuments (Städtebaulicher Denkmalschutz). For detailed description of a number of programmes, see Keystone Paper #3: Transformative City.

In general, urban renewal schemes are enhancing the built urban environment, improving housing and strengthening local social cohesion, through dedicated strategies and projects. Nonetheless, they also are an important factor regarding local economic development (LED) as a co-benefit. It has been shown, that on average, 1 Euro of subsidy through an urban renewal scheme triggers further public and private investments of around 7 Euro. Co-benefits of urban renewal enhances LED through commissions for construction firms and craftsmen, as well as other local businesses.

### 3.2 FINANCIAL DISTRIBUTION AND CO-BENEFITS OF URBAN DEVELOPMENT SCHEMES

Since introduction of the first programme in 1971, the Federal Government provided public funds of approximately 16 billion Euro. The annual Federal budget has gradually increased, providing 740 million Euro of Federal financial support in 2017. In accordance with German Basic Law, the Federal Government guarantees federal states financial assistance of at least one third of the total cost of the renewal project. Another third is to be provided by state governments, and the remaining amount to be covered by municipal authorities. The distribution of Federal funds for the schemes and the share regarding individual states is based on annual Administrative Agreements on Urban Development (Verwaltungsvereinbarung Städtebau).

In general, urban renewal schemes are enhancing the built urban environment, improving housing and strengthening local social cohesion, through dedicated strategies and projects. Nonetheless, they also are an important factor regarding local economic development (LED) as a co-benefit. It has been shown, that on average, 1 Euro of subsidy through an urban renewal scheme triggers further public and private investments of around 7 Euro. Co-benefits of urban renewal enhances LED through commissions for construction firms and craftsmen, as well as other local businesses.

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2. Grundgesetz für die Bundesrepublik Deutschland, Art.104b
3.3 CONTINGENCY FUNDS FOR PUBLIC PARTICIPATION

For successful implementation of urban renewal projects, commitment and inclusion of local stakeholders throughout the whole process is key. To encourage and activate commitment of residents to participate with their own projects in their neighbourhoods, the Federal programmes provide an additional instrument called a contingency fund (Verfügungsfonds). It is an important tool for the development of local civic engagement. Through a contingency fund, an additional budget for an urban neighbourhood is provided, to encourage realisation of projects by residents, business people, associations, etc. in their immediate surroundings. Furthermore, it functions as an incentive system for public-private cooperation on neighbourhood level.

The financial assistance issued for a district through a contingency fund ranges between 5,000 and 25,000 Euro per year. Specific projects are supported with subsidies ranging from few hundred up to 5,000 Euro, with some exceptions. Local stakeholders are required to provide a minimum of 50% of the total project cost, while funds through the respective urban development programme (including finance from Federal, state and municipal level) provides a maximum of 50% (with exceptions in the Social City programme, where subsidies are provided up to 100% of the total project cost). A local decision-making committee consisting of political and private actors rules on allocation of funds for the respective initiative. Projects financed by contingency funds include, for example:

- Investment measures, such as establishment of green infrastructure and public space design, playgrounds and benches,
- Preparatory and supportive measures for investments, regarding surveys, assessments, preliminary designs, and public participation measures,
- Non-investment measures, for instance, local district and neighbourhood events, newspapers, informational brochures and leaflets, language courses, round table discussions, etc.

While contingency funds are not explicitly mentioned within a regulatory framework, they are still addressed by § 137 BauGB which is emphasising on participation of affected residents in renewal and implementation of concrete measures. With regard on the Social City programme, § 171 BauGB (5) highlights that actors involved should be included in design and implementation of the local urban development concept.

Figure 08: Financial Assistance provided through Contingency Funds

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4. BEST PRACTICE

CASE STUDY

4.1 HISTORIC CENTRE OF UNESCO WORLD HERITAGE QUEDLINBURG

The City of Quedlinburg, located in Saxony-Anhalt, has a history of more than 1,000 years and consists of approximately 2,000 timber-framed houses, including churches, palaces, monasteries, parks and residences. The Old Town of Quedlinburg consisting of buildings from more than six centuries represent an exceptional model of a medieval European city and Romanesque architectural heritage.\(^1\)

In contrast to other urban centres within the region, Quedlinburg’s Old Town, being strategically and militarily insignificant, was not considered a target and therefore surviving bombings during World War II. Between 1949 and 1990, the building policy of the DDR regime promoted demolition of existing and construction of new buildings rather than refurbishment. Also due to lacking economic capacities to maintenance of the historic building stock, the city’s old town was completely redesigned beginning from 1960. Large-scale demolition projects were implemented in the 1980s, and was stopped after German reunification in the 1990s. Preliminary studies for the rehabilitation of Quedlinburg’s Old Town were carried out in 1990 and led to the definition of a rehabilitation area, which comprises 180 ha, including the medieval city centre (ca. 80 ha). Based on the results of the preliminary studies, Quedlinburg participated in different federal support programmes, including Conservation of urban historical monuments, Urban refurbishment and development, Urban Reconstruction, and the Centres Programme. Public funds of around 112 million Euro have been raised for the city’s upgrading and refurbishment.

In 1994, Quedlinburg’s medieval city centre was inscribed on the UNESCO World Heritage List. The UNESCO World Heritage Management Plan specifies information about ways of preserving the urban core, as well as details of future projects and how to integrate them into a sustainable urban development policy. An urban design framework plan was developed for the rehabilitation of the city, with the main intent of committing to the rehabilitation of the medieval city, preserving valuable historic buildings and increasing the number of residents. The plan included concepts regarding land use planning, mobility, and the urban landscape. Measures regarding the enhancement of an existing pedestrian area as a main commercial zone, the promotion of tourism, creation of sustainable modes of transportation and the enhancement of traffic safety, were included. The development plan further specified the reconstruction and demolition of direct road connections within the city’s ring road, to re-establish the centres historic appearance, also including the preservation of the historic city wall and waterways, as well as the integration of new and formerly existing green infrastructure.\(^2\) Despite all efforts, however, there are still a large number historic buildings waiting for their refurbishment or in danger of being demolished. Preservation of the medieval centre thus remains a challenging task.

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The City of Görlitz, barely destroyed during World War II, is characterized by its historic urban structure. With over 4,000 architectural and cultural monuments, the city is considered as one of the largest continuous landmarks in Germany. Nevertheless, the region around Görlitz is one of the structurally weakest in the country, due to shrinking population numbers. Moreover, the city’s building stock deteriorated sharply during the DDR regime. For several years, the once multifunctional neighbourhood of Gründerzeit – Brückenpark has lost specific characteristics and been developing towards mono-functionality. In 1991, Görlitz was incorporated in the Federal support programme Conservation of urban historical monuments (Städtebaulicher Denkmalschutz). The redevelopment area of Gründerzeit – Brückenpark comprises 90 ha, including both the historical city centre from the Wilhelminian period of the late 19th century, the central business district and adjacent villa neighbourhoods along the river Neisse with many green and open spaces.¹

The current urban rehabilitation process, which is planned to be completely implemented by 2020, includes the modernisation, revitalisation and restoration of numerous historic buildings, as well as the preservation of the historical structure of the urban fabric. Furthermore, the renewal strategy aims to increase the living conditions in residential buildings, enhancing the surroundings, infrastructure such as transportation, and revitalising green and open public spaces.

By the river Neisse, Görlitz is split in two parts, with one being located in Germany, and the other part named Zgorzelec, in Poland. An increase in cooperation between the two cities forms an essential part of the renewal process and is considered as a central task in order to overcome national borders, while creating functional and structural connections between the two cities.

The urban renewal process is financed by a number of different programmes, showcasing possibilities in combination of funding by EU and the Federal Government. The schemes providing support include the above-mentioned programme Conservation of urban historical monuments, also Urban Reconstruction East, the currently phasing out Urban redevelopment and development programme (Städtebauliche Sanierungs- und Entwicklungsmaßnahmen), and the EU’s EFRD scheme.²

Located right between the Eastern and Western part of Berlin, the area around Heidestrasse was considered a “no man’s land” for decades. The former brownfield, once characterised by the Berlin Wall, a number of storage depots and a container terminal, called Europacity today, currently is the largest, centrally located, development area of the city. It is planned for around 6,000 inhabitants, and 10,000 employees in the business areas. The development of Europacity District is guided by the principle of creating a compact, sustainable and climate-protective neighbourhood of future standards. The Master Plan Berlin Heidestrasse of 2008, developed by ASTOC, Cologne, Studio Urban Catalyst, Berlin, and ARGUS, Hamburg, shapes the redevelopment concept for the design of the approximately 40 ha between the areas of Nordhafen, Humboldthafen, and Heidestrasse. In addition, it benefits due to its central location and accessibility, as well as its proximity to Berlin’s main railway station. The master plan aims for a mixed-use development, combining residential buildings, offices, retail and commercial uses, while providing leisure facilities.1

As part of the master plan, a key aspect of the strategic redevelopment of the district is the elaboration of a future-oriented energy supply concept, including heating, cooling and electricity for the whole area. In this matter, BuroHappold, Berlin, realised a feasibility study for the energy supply concept, concerning the requirements of planning and utilisation of buildings, in addition to integrating economic, environmental and socio-political aspects. Within the feasibility study, different scenarios were analysed in order to determine the best possible options for energy supply, under consideration of technical aspects, cost efficiency, flexibility and adaptability to changing needs, the possibility of utilisation of existing infrastructure, in addition to predominantly integrating renewable energy sources. Another aspect of the study was the determination of minimum requirements regarding energy use of buildings. For the district, the so-called “Europacity Standard” was developed, falling below the standardised requirements of the current Energy Saving Ordinance (EnEV). The Europacity Standard is equivalent to a spectrum between the KfW Efficiency Standards 55 and 40 (for KfW’s Efficiency Standards, see Keystone Paper #1: Plus Energy Buildings and Districts and Keystone Paper #2: Energy Efficiency of Buildings and Districts). The full implementation of the master plan for the area will take around ten to fifteen years. While the State of Berlin is in charge of the development plan and the public participation procedures, the landowners (Vivico, a real estate firm, and Deutsche Bahn AG, a German railway company), administrate the site development management.2

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5. EMERGING TRENDS

5.1 HISTORIC URBAN Districts AND THEIR ROLE FOR CLIMATE PROTECTION

Historic urban neighbourhoods are characterised through their compact settlement structure, a broad variety of different uses with high built up densities and heterogenic ownership and user structures. This results in comparably high energy and resource efficiency, due to reduced transmission heat losses of buildings within dense settlement structures, small land footprints, and low share of motorised transport. With many different functions located within close distances to each other, sustainable forms of mobility, such as walking and cycling, is encouraged. In addition, historic neighbourhoods are often well connected to public transport, due to their often strategically central location. They also incorporate a comparably low amount of embodied energy, as existing buildings are constantly reused and adapted over decades, with only sporadic new construction activity. Hence, use of construction materials is mostly limited to refurbishments and modernisations.

Despite their favourable preconditions regarding climate protection, historic districts require actions to secure their attractiveness over long term, and continue to enhance their potential regarding energy performance, and implementation of measures targeting climate adaptation. The former Federal Ministry of Transport, Building and Urban Development (BMVBS) identified five main action areas for climate protection in historical districts while preserving their unique characteristics:

i. Management and organisation of a renewal process, including the establishment of a comprehensive development strategy and the incorporation of integrated urban development concepts, with a focus on coordination between public and private stakeholders.

ii. Urban development and urban design should target utilisation of empty lots between buildings for new construction while avoiding vacancies in existing buildings, improvement of thermal performance of public and private buildings, enhancement of street lighting as well as integration and refurbishment of green and open spaces.

iii. Technical infrastructure and energy efficient electricity and heat systems require comprehensive baseline analyses, assessment of potential for renewable energy and establishment of energy use plans.

iv. Traffic and mobility planning includes integration of transportation plans taking all forms of mobility into account, reducing motorised transport while improving walking and cycling infrastructure, and ensuring attractive public transportation networks.

v. Communication and activation targets information, participation and engagement of local residents and affected stakeholders. This is a crucial factor for all forms of redevelopment of historically grown urban neighbourhoods. Measures include transparent information of the public via printed and digital media, events and exhibitions, counselling services for owners to assist in building renovations, two-stage participatory processes, and other forms of direct engagement of local stakeholders in a renewal process (see also section 2.3 and 3.3 of this paper). Improvement of thermal insulation of buildings in many cases have an impact on a building’s structure, and can influence the appearance of the building and surrounding urban streetscape. In historic urban neighbourhoods, protection of the original appearance of buildings is of particular importance. In implementation of climate mitigation and adaptation measures, thus an approach considering not only individual properties, but measures targeting the neighbourhood-level is required. Careful renewal measures embedded in an integrated development concept are required, respecting the historically grown urban fabric, cultural aspects and the architectural heritage, as well as requirements of local residents.

5.2 ENHANCING GREEN NETWORKS ON NEIGHBOURHOOD LEVEL

Large cities have less green space per square metre than smaller towns, while dense inner city neighbourhoods and districts have a comparably lower amount of green per capita than low-density areas. Cities with a high proportion of accessible green infrastructure are characterised by their quality of life, a factor often confirmed by international rankings. In addition, it has been shown that residents of areas with many parks and green areas are on average more satisfied with their surroundings compared to those living in neighbourhoods with little green. To secure parks and networks of green spaces throughout a city, cross-sectoral approaches considering the conurbation area, the city level, as well as the district and neighbourhood level are needed.

In urban renewal and densification of inner city districts, integration of new and enhancement of existing green spaces is a crucial factor to ensure liveability and attractiveness of the respective neighbourhood over long-term. At the district level, green spaces are fundamental elements forming the core of superordinate green ecosystems. Here, green infrastructure is used
for recreational purposes, sustainable mobility, and biodiversity. Brownfields can enable "urban wilderness", accommodating fauna and flora while providing possibilities to experience nature for locals. Apart from their regulative function regarding microclimates, retention areas and provision of fresh air, green corridors in residential areas can encourage people to walk and cycle, further reducing the ecological footprint. Allotment gardens and spaces for community gardening and urban agriculture have potential to function as local sources of food, further structuring a superordinate green biotope network. Furthermore, they are local meeting places, encouraging communication between residents and strengthening communities.5

The Programme for Green Urban Areas (Zukunft Stadtgrün) launched in 2017 is a new component of the Federal Government’s urban development programmes. It aims to increase the share of green spaces in German cities and towns, providing dedicated financial assistance for creation of interlinked networks of parks and green infrastructure throughout urban areas (see also Keystone Paper #3: Transformative City).

6. DISCUSSION

Germany’s cities and towns have a long history regarding urban reconstruction, renewal and new urban extensions. Since the mid-1950s, several paradigms have been dominant in urban renewal of districts. They range from modernist strategies focusing on drastic demolition of existing structures and new construction, to inclusion of local residents, and utilisation of integrated planning methods since the 1990s. Despite varying emphasis regarding challenges and focal areas, still, current issues in urban transition require constant physical rehabilitation and adaptation, as well as reactions towards emerging socio-economic changes.

The country’s decentralised, federal administrative system, deduces large parts of planning authority to municipalities. This also includes financial opportunities and commitments for the respective administrative body. Through Germany’s polycentric structure, modes of self-government are required to support independent, local decision-making processes. Here, the principle of countervailing influence ensures that decisions on the municipal level are not taken in isolation, but are dependent on superordinate administrative levels, and vice-versa.

While the Federal government issues policies, strategies and legislation regarding urban development, municipalities as the local level are required to implement it. The same accounts for Federal urban development programmes, which are issued on Federal level, while further supported by state and municipal budgets, though implemented locally, under participation of all kinds of affected stakeholders. For urban renewal in existing neighbourhoods, municipalities are the key stakeholders to initiate and steer the process. The planning and implementation process can be further broken down to neighbourhood level, lowering complexity of strategies, showing concrete measures that can be experienced by a large number of the respective neighbourhood’s residents.

The long-term success of Germany’s urban development programmes, which are prevailing nearly since half a century, is triggered through their consistency, while still incorporating adaptability and flexibility regarding emerging urban challenges. For example, the increased importance of green spaces in cities, not only for recreational purposes but also to adapt towards climate change, is reflected in new focus programme, embedded within the existing subsidy framework. Another distinctive factor of the urban development schemes are their emphasis on not only the physical environment but also considering socio-economic impacts, and providing dedicated support programmes.

Regarding economic development, the Federal programmes have been widely successful, by triggering further public and private investments. Construction measures involving local craftsmen, builders and planning firms, the provision of educational programmes, or realisation of public events further enhances local economic development. Impacts of urban development programmes are measurable, with the schemes undergoing a constant assessment and monitoring process, quickly adapting towards emerging challenges. This also enhances possibility of knowledge transfer between regions and municipalities implementing renewal projects.

Participation of residents and local stakeholders is key for urban renewal projects, and also required by Federal law. Involvement and engagement should be carried out in a moderated process, to weigh out positions and requirements. Local counselling offices within neighbourhoods provide an accessible point of contact for local stakeholders in renewal processes. Here, information is disseminated, objections are heard and discussed, and involvement of residents can be steered. To include civil society further in a renewal process, contingency funds providing financial assistance for small, local projects are a valuable instrument to actively engage citizens through implementation of small-scale neighbourhood projects. With urban renewal being a cross-sectoral approach that targets multi-layered local challenges, collaboration and integration of all stakeholders in a transparent process from the beginning is fundamental to enable acceptance and success of rehabilitation measures over long-term.
7. REFERENCES


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Editor:
Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH
Sitz der Gesellschaft
Bonn und Eschborn
Sunflower Tower
Maizidian Str. 37, Chaoyang District
100125 China, Beijing
T +86 10 85275180, F +86 10 85275185
E giz-china@giz.de

Editorship:
Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH
Peter Sailer, Xueling Liu, Jia Fu, Yunqing Bi

Main authors:
Happold Ingenieurbüro GmbH
Pfalzburger Straße 43-44
10717 Berlin, Germany
Thomas Kraubitz, Peter Scheibstock, Gabriela Guillen, Joachim von Bergmann

Coordination and Responsibility:
Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH
Peter Sailer

Layout, graphics:
Happold Ingenieurbüro GmbH
Pfalzburger Straße 43-44
10717 Berlin, Germany

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URBAN RENEWAL IN DISTRICTS

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