



COPENHAGEN

DENMARK

KEY FEATURES OF THE CITY

Demographic Facts

- around 1.250.000 inhabitants in the urban area
- around 1.990.000 inhabitants in the metropolitan area
- around 25.340 inhabitants in the city centre

Urban figures

- “Five fingers” urban structure
- Dense and overlapped urban core as the “palm”
- Suburban growth as the “fingers”

Heritage

- Registered heritage: Amalienborg and its district
- Inscription: UNESCO Tentative List
- Date of submission: 1993

EXISTING GOVERNANCE MECHANISMS

Development and Management Plans

- Finger Plan 2007 (Regional scale)
- Eco-Metropolis Plan 2007 (Municipal scale)
- Metropolis for the People
- Copenhagen Climate Plan

Responsible Authorities

- Minister for the Environment (National level)
- Greater Copenhagen Authority (Regional level)
- Copenhagen Municipality (Municipal level)
- Denmark’s Heritage Agency within the Ministry of Culture
- Building Preservation Committee
- Building Preservation Fund

Legislation for the protection and management

- Danish Planning Act
- Act on Urban Renewal and Urban Development

MAIN ISSUES TO BE ADDRESSED

- Addressing the expected population growth
- Managing social cohesion and integration of minorities
- Promoting integration for distressed urban areas
- Reinventing densification and selecting new integrated urban renewal districts
- Fostering accessibility and developing green mobility



8.5. Copenhagen

Copenhagen is the capital city of Denmark, situated on the eastern coast of Zealand and connected to Sweden through the Oresund bridge reaching Malmö since 2000.

Starting from the turn of the 21st century, Copenhagen has seen strong urban and cultural development, facilitated by investment in its institutions and infrastructure. The city is the cultural, economic and governmental centre of Denmark, and one of the major financial centres of Northern Europe.

The coexistence of a well-preserved heritage and new contemporary elements makes Copenhagen an innovative model in city regeneration, rooted in the world renowned “Fingerplan” of 1947, currently in the process of being implemented by fostering the role of the relatively high spatial urban densities in the city scale and identity.

8.5.1 Key features of the city

Demographic facts

Copenhagen is the largest and most populated city of Denmark, with the 10% of the country's total population. Taking into account the larger metropolitan area, Greater Copenhagen has 1.99 million inhabitants, corresponding to 1/3 of the national population. For what concerns the proper city, the current population of 583.000 residents is expected to continue its growth, increasing to 715.000 in 2030.

Central Copenhagen has a dense urban core, with 25.340 inhabitants per km2.

Urban figures

The city's origin as harbor and commerce place roots in its foundation as a fishing village in the 10th century. In the early 15th century the city became the capital of Denmark-Norway.

In the 1920s the city has witnessed the emergence of urban transformation in response to massive growth and the need for coordination (Andersen, 1008).

From 1947, the “Fingerplan”, the five-finger structural plan for the regional development of the area around the city centre has represented the key image of the city's setting. This urban structure concentrates urban development over the traffic axes stretching toward suburban areas from the city of Copenhagen while keeping the areas between traffic axes as open spaces. The Fingerplan has formed the basis of the city's infrastructure planning, allowing to reread the five key steps of development of Copenhagen.

The city's core — or **the “palm” of the hand** — can be described through the first three phases: the development of the city centre in medieval times, rising as a small core with a population of around 130.000 until the mid 19th century; the expansion through the so-called “Tram City” starting in the early 20th century; the growth of the train system.

The fourth expansion relates to **the five “fingers”** of the plan, representing the effect of the rapid suburban growth occurred after World War II.

In the last ten years, a new phase of development has been connected to the decision of the planning authorities to increase the presence of **urban functions around rail stations** in order to reduce substantially the distances between the existing ones.

In the current configuration of Copenhagen, some key aspects defining the recognizable image of the city include:

- the presence of visible and overlapped historical layers;
- the relationship between land and water, characterized by the jagged coast line;
- the scale of the urban spaces and the green structure of the parks;
- the city's skyline, where a mainly uniform building height establish a peculiar relation with the spires, domes and turrets interrupting it at some points.
- the high degree of land-use diversity and integration of living and working spaces in the city centre.

Heritage

In the well-preserved city of Copenhagen, where the city's identity and scale interweave with a contemporary setting based on new elements of high architectural quality, many of Denmark's listed buildings are located. Furthermore, green structures, landscaping elements and also represent very aspects of the city's cultural heritage, as the fortification ring and the exterior park ring.

While the city's centre is not included in the World Heritage List, the site of "Amalienborg and its district" has been submitted to the Tentative List since 1993. Located in the 18th century extension of the medieval core of the city, the site comprises a central octagonal place with its two axial streets and a domed church.

8.5.2 Existing governance mechanisms

Development and management plans

The main tool to manage the development of the Greater Copenhagen Region is the **Finger Plan 2007**, formulated by the national government due to the Municipality reform of the same year. Together with 34 municipal plans — issued in 2009 — the new Finger Plan has replaced the Region Plan 2005, guiding the growth of the city through the extension of the town "fingers", with potential for new urban areas and the extent of the green wedges, fostering the infrastructural system, and working on the the "Station Proximity Principle", by promoting concentrated location of facilities to the train stations.

The unique aspect of the new Finger Plan — in comparison to former plans — is the great discretion given to the municipalities, as in the case of Copenhagen. Again in 2007, the 1993 Copenhagen's Municipal Plan has been updated with the **Eco-Metropolis Plan**, which directed growth to the main development locations, namely the "Action Plan Areas".

Further tools for the development and management of the city include the **Metropolis for the People** and the **Copenhagen Climate Plan**.

For what concerns specific instruments to guide urban regeneration, since 1971 the Danish Planning System has endorsed the **Kvarterløft programme** aimed at rehabilitating disadvantaged districts.

Responsible authorities

According to the special provisions of the existing Planning Act, at the national level, the **Minister for the Environment** establishes the overall framework for regional and municipal planning, establishing establishes national planning directives, initiatives and guidelines.

At the regional level, the **Greater Copenhagen Authority** revises the regional plans every 4 years.

At the municipal and local levels, the **Copenhagen Municipality** (Københavns Kommune) provides a strategic general structure with overall objectives for planning and land use in the city, and prepare a framework for local plans.

For what concerns the specific issue of the built heritage and its protection, Denmark has been witnessing a complete reorganization since 2002. Consequently, while the sites worthy of preservation officially fall under the purview of the Municipality, the responsible party for Listed Buildings and Sites and Monuments is the **Denmark's Heritage Agency** (Kulturarvsstyrelsen), formed within the Ministry of Culture. In addition, a number of other government bodies and nongovernmental actors contribute to and implement Danish heritage protection policy, such as the **Building Preservation Committee** — acting on architectural conservation issues — and the **Building Preservation Fund**, providing grants for the conservation of buildings of cultural value.

For what concerns urban development, the **Ministry of Housing, Urban and Rural Affairs** was established in 2011, and the **Urban Design Department** administers the building renewal schemes.

Further actors intervene in specific plans and projects, such as the Copenhagen City&Port development for the regeneration of the waterfront area, as well as private public partnerships, for example in the case of the URBACT project.

Legislation for the protection and management

The revised **Danish Planning Act** sets regulations for planning governing the 34 new municipal councils in Greater Copenhagen in 2006. The Planning Act is responsible of the decentralization of the decision-making authorities and the promotion of public participation in planning processes.

For what concerns urban development policy, the **Act on Urban Renewal and Urban Development** regulates urban and housing policy, and provides a financial subsidy to urban renewal activities — for both building renewal and area based renewal — whose scheme is administered by the local authority.

8.5.3 Main issues to be addressed

From a once congested and polluted city, Copenhagen has been already transformed into the paradigm of Danish leadership in livable centre. However — together with the issue concerning the management of climate changes — the integrated approach to the urban regeneration of the city faces some major challenges identified by four main aspects.

Addressing the expected population growth. Copenhagen's population is expected to grow by 100.000 people in the period to 2025. To accommodate this, policy and investment frameworks for land and infrastructure development are prioritizing mixed-use, inner-urban and brownfield development areas.

Managing social cohesion and integration of minorities. As a consequence, further efforts are related to the managing of the social and spatial aspects of new populations moving into the city (Jan Vranken), in the awareness that social cohesion sometimes leads to social exclusion (Jan Vranken).

Promoting integration for distressed urban areas. Further efforts are oriented towards the objective of encouraging awareness of areas surrounding regeneration areas (Mart Grisel) and getting distressed urban areas into contact with the rest of the city (Asger Munk). The fostering of pedestrian and cycling culture, as well as of public spaces, plays a fundamental role to address this issue.

Reinventing densification and selecting new integrated urban renewal districts. The optimization of space use, involving integration of functions, planned use of space, creative application of public space and urban features represent some key challenges to maximize the value of density in the city. At the same time, through the Socio-Economic Map of Copenhagen (SØK) — a web-based housing and socio-economic map of the city — some physical and social indicators have been identified. With respect to physical indicators, the map analyzes the areas with a high proportion of: small flats; flats which lack basic installations; residents who live in few square meters.

Fostering accessibility and developing green mobility. One of the key issues addressed by the city regeneration programmes concerns the re-envisioning and plan for cities without auto dependence. In order to address this aspect, the Copenhagen Finger Plan is in the process of being updated for high-density mobility, by creating a finer-grain finger plan, giving rise to transit-oriented developments and re-developments, mainly based on public and commercial mobility system, the innovation and promotion of green mobility, and the development of more and innovative, integrated roles for walking, cycling, transit, and car-share.

8.5.4 Key aspects of the culture-based regeneration strategies

European capital of culture in 1996, Copenhagen shows a long-time process of regeneration strategies based on the role of culture.

Over the past 10-15 years, this trend has been further promoted in the development of completely new neighborhoods — currently transforming many former industrial sites, such as harbor, railway and stock areas and production facilities — by taking a broad approach to culture in architectural and urban regeneration.

Another aspect for the regeneration of the city concerns the transnational cooperation with Malmö, in order to promote a shared vision between smaller cities. In order to address this goal the vicissitudes of the Øresund Bridge should be taken into account.

Among the many recent and ongoing projects for area renewal — including Sjællandsgade (2006), Spydspidsen (2006), Haraldsgade district (2007), Sundholm district (2008), Gl. Valby (2009), Husum (2009), Skt. Kjelds district (2010), Central Vesterbro (2011) — three main experiences can be highlighted for the role of culture in urban regeneration meant in a broader sense.

Nordhavn District Redevelopment. It is Scandinavia's largest and most ambitious urban development project to date, providing space for 40,000 residents and 40,000 jobs. Nordhavn — situated like a peninsula adjacent to the Copenhagen district of Østerbro — is a former industrial area and a port of call for cruise ships and container traffic which is currently being transformed into an entirely new, sustainable neighborhood. As the industry moved away, this created a unique opportunity to invest the old industrial area with a brand new identity and function. A consortium consisting of Cobe, Slet, Polyform and Rambøll were responsible for the winning proposal for Nordhavn, which will progress over the next 40-50

years. The winning proposal is based on six themes; among them — Islets and Canals; Identity and Cultural Traces; Five-Minute-City; Blue and Green City; CO2-Friendly City; and Intelligent Grid — particular relevance is held by the role of “identity and cultural traces” for a culture-based regeneration. As a matter of facts, the new district will be based on the original road structure, incorporating existing buildings and using local natural resources as a basis for new green areas. Focusing of the history of Nordhavn, the project also entrusts the traces of the harbor industry with a fundamental role: large cranes, old warehouses and silos and worn cables and wires give evidence of the identity of this area. In the development of the Århusgade quarter, many of the existing buildings will be preserved, and when — in a more remote future — the container terminal will be moved further to the north-east, the new district will literally be built on the old Copenhagen.

Carlsberg's District Urban Regeneration. The 2009-2020 project for Carlsberg — an area located straddling the border of Valby and Vesterbro districts in central Copenhagen — is the result of an international competition, awarded to Danish Entasis Architects for the master plan and Vogt Landscape Architects as the consultant about public spaces. When Carlsberg Group decided to move their large brewery activities located on their historic premises in Copenhagen outwards, this made room for a whole new urban area to be created in the centre of Copenhagen. A comprehensive programming phase was held initially involving neighbors, in order to receive an overall input of ideas on the future of their site before running a formal competition on the area. In 2007, after the international ideas competition, further public dialogues and meetings with neighbors were carried on, leading to a shared overall district plan based on the re-creation of a dense city in an updated version. The idea of mixing of the classical approach with newly conceived public spaces and density has been developed through the reuse of the old industrial facilities for cultural activities — such as galleries, connect halls, etc. —, the focus on pedestrian bicyclists and public transportation by hiding cars in large underground parking silos on the outskirts of the city, and designing some tall towers that define a new identity for the district. The core of the strategy is providing a share of apartments for residents with low-income that will be given local administration tasks, as a chance to create diversity and tighten a sense of community. On the other hand, the paved squares and gardens are set to attract participants to activities and events, as the 800,000m² will be divided to accommodate various functions: 45% housing, 45% retail and 10% culture and sports. The regeneration initiative is currently being developed further through new programmes, such as the project for a new station.

Superkilen Master Plan. Another project worth to be mentioned — though it is not in the core of the city historical centre — is the 355,000 square foot urban park opened in 2012 in Copenhagen, an innovative urban space with a strong identity on a local and global scale. The Master Plan is the result of a partnership established by the Copenhagen Municipality with the Realdania Foundation, and it was designed through an intense public participation process with the surrounding community, made of the different nationalities in a very ethnically and economically diverse neighborhood, so as representing an example for the condition of many European cities.

8.5.5 *Outcomes and lessons learnt*

Big urban development projects — such as Nordhavn and Carlsberg — involve a close dialogue between the City, building clients, consultants and relevant authorities, taking into

account the role of special local plans drawn up by the City of Copenhagen to preserve features or elements of particular cultural history or architectural value in certain areas. The common goal is to create outstanding new neighborhoods while preserving buildings and urban spaces that hold special qualities and exemplify Copenhagen's industrial culture. These are listed as preservation-worthy in the local plans but may be converted and developed in close collaboration with the authorities. Thus, the cultural heritage of the industrial era helps develop the character of Copenhagen and link the new neighborhoods architecturally and historically to the existing city.

In the case of Carlsberg, to tackle the problem of increased demand for housing units, the city stretched its limits towards its wild, green outskirts. Nevertheless, there was a vertical growth, adding more floors on top of existing buildings and filling urban gaps, by reorganizing dead industrial areas. Carlsberg district is one particular case officially awarded for its effervescent, down-to-human scale urban revival strategies.

In the case of Nordhavn, the "Intelligent Grid" allows to develop and expand the project over a 50 years time frame, thus facing an unpredictable future. On one hand, the design of the area provides fixed boundaries for the urban development; on the other hand, it is sufficiently open to be able to absorb future impacts without weakening the main structure, providing an urban structure able to develop and change both appearance and function in the course of time.

8.5.6 Perspectives for the future

In various respects Copenhagen is a role model for many of the world's big cities when it comes to sustainable town development. As the first carbon neutral capital in the world and having received the top rank among 30 cities evaluated for the European Green City Index in 2009, Copenhagen intends to become carbon neutral by 2025.

In the perspective of interpreting the Copenhagen case as a model for other European cities with analogous urban conditions, the Kvarterloeft reveals its potentiality as a transferable model.

On the other hand, with respect to the future perspectives for the Copenhagen itself, the City of Copenhagen plans to make significant investments in two urban renewal projects in the coming years in a bid to integrate troubled districts into the rest of the city. The municipality is thus in the process to transform the area around Nørrebro Station, where a common complaint has been that the overhead railways only serve to separate the district from the rest of Copenhagen.