

The Walkable City – the Concept of Stockholm

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1 ABSTRACT

This paper shows how the City of Stockholm currently works on the implementation of its new City Plan “The Walkable City - Stockholm City Plan 2010”. The City’s planning is subjugated to the norm of sustainability, a human oriented approach and the goals to create an open, connected and healthy city. The City’s Vision 2030 provides the guiding thinking for important strategic planning issues¹ that laid the ground for the City Plan which contains four strategies for sustainable growth: strengthen central Stockholm, focus on strategic nodes, connect city areas and create a lively urban environment in all of Stockholm. Together with nine overarching focus areas of the plan, the strategies intend to make Stockholm denser, better integrated and functionally mixed. The City Plan has a new spatial approach in comparison to the former comprehensive plan of 1999 i.e. several previous planning principles had to be changed. The current implementation of the City Plan tries to find ways and acceptance of changing Stockholm’s former distinct spatial patterns and develop new spaces for 150,000 people as well as many new infrastructure investments.

Three examples of strategically important urban planning approaches seen from a helicopter perspective are illustrated:

- The Royal Seaport project as an environmentally “world class” extension of central Stockholm
- Collaboration in Kista Science City as one of nine strategic nodes with ICT as a development engine
- A programme for connecting the nodes of Högdalen and Farsta as new form of planning

2 STRONG GROWTH NEEDS NEW CONCEPTS

In 2008 the City Council of Stockholm decided that it was time for a new comprehensive plan to be prepared. The old comprehensive plan of 1999 should be replaced as a strong growth and new challenges urged politicians and planners to come up with a new concept for Stockholm’s future development. The City Plan “The Walkable City - Stockholm City Plan 2010” of course partly built upon the former plan but many guiding planning ideas have changed compared to former planning intentions. It also invents the form of continuous comprehensive planning i.e. thematic or geographic completions are made when necessary.

The comprehensive plan of 1999 was introduced as a plan that “has to build upon sustainable development and what was created by its inhabitants during several centuries”.² The planners’ intent was in first place to keep the city’s existing morphology consisting of inner city and its clear distinction from various forms of suburbs (e.g. garden cities, metro suburbs). “An important starting point for the millennium shift’s comprehensive planning is that the city shall develop with a maintained soul and its existing characteristics.”³ This rather conservative attitude has to be seen from a perspective of a decennium (1991-1999) of economic crisis and a modest population growth. Until that date Stockholm was internationally seen as a city with very clear spatial patterns. The overall planning goals of 1999 did not change that policy i.e. they did not require substantial spatial expansion. Existing built-up areas and infrastructure could be sustained without bigger extensions and new investments. The city should grow inwards and more or less keep its existing morphology.

In this respect, a very important decision of the City Council was made 1994 saying that brown field development has priority to the use of green areas.⁴ Hammarby Sjöstad⁵ has become a pioneering example for this planning perspective towards ecocycle thinking and sustainable development in Stockholm. With this guiding example, the planning approach of Stockholm has changed considerably compared to the 1990-context and principles. The new planning approach was also the starting point when preparing the current

¹ City of Stockholm: Vision 2030 – a guide to the future, Stockholm, 2007

² Kallstenius, Per: Utsikt från en bro, page 232-248, in: Synnemar (ed.): Stockholm blir en storstad, Stockholm, 1998

³ Dito, p. 236

⁴ Kallstenius, Per: Minne och vision, Stockholm, 2011

⁵ For more information on this city district development project (1995-2012): www.hammarbysjostad.se

City Plan. It became necessary in order to keep pace with high growth rates but also in order to implement the rising ambitions of sustainability and an increased influence of private stakeholders.

2.1 Demographic and economic growth – a reality to deal with

Stockholm is a strongly growing city, from 0.86 million inhabitants (density: 4,580 inh/km²) today to probably one million in year 2025, i.e. a growth rate of approximately 1.5 percent/year. This corresponds to the high growth rate in the Stockholm County in general, which is expected to grow from 2.1 million inhabitants (2011) to 2.6 million people in 2030.⁶ Half the population growth is based on natural growth and half on an immigration surplus whereof immigration from abroad clearly dominates. Planning institutions on both within the county and the City of Stockholm recognise this development and handle it in an affirmative way in its planning efforts. This means that the City's planning has to assure 100,000 new housing units until 2030 i.e. approximately 5,000 units/year. Although this is a high figure it will not be enough due to an accumulated lack of housing. There have been big shortcomings in new production rates during the last 20 years where only one third of the needed new accommodations were built. The consequences are strongly raising prices for owner occupied flats (around 6 500 Euro/m² in central areas),⁷ new production of mostly expensive housing projects, long queues to rental flats (currently 5-20 years waiting time depending on the list!), lack of ten thousands of student rooms, segregation and growing commuting distances.⁸ The City's planning recognises these problems and has approximately 11,000 housing units in its current detailed plans ready for building. However the private stakeholders do not keep pace due to their foremost economic principles of starting building projects only where high profits are to be expected. The City uses different tools to adjust that: dialogue, negotiations, different forms of contracts, using the own power as real estate owner. The City also tries to get a better geographical balance of new housing projects i.e. to start more projects in less attractive areas (suburbs, economically weak southern parts) and not only in central parts of Stockholm.

The immigration pressure is high due to a very positive economic development during the last few years where the global and European crisis luckily was not very marked in Stockholm. Stockholm can be described as the economic engine of Sweden, where the service sector strongly dominates (> 90%) and the innovation potential is high. Many head quarters of international enterprises, Governmental functions, big and stable clusters (ICT, clean-tech, life-sciences, financial sector, creative industries, tourism, etc.), high-quality universities and a well developed R&D sector but also stable framework conditions create good conditions for business and new jobs. It is estimated that the number of working places will grow from 1.1 million (2010) to 1.3-1.4 million in 2030 in Stockholm county⁹ whereof 40-50 percent will occur in Stockholm (today 480 000 working places). This growth is mainly expected to take place in the service sector. The challenge for planning in Stockholm is to establish new business locations, mainly to achieve Stockholm's goal to have mixed urban areas, thus providing high-quality business locations that can be combined with housing and good public transport and logistic offers. Here also the question of creating urban density comes in. How can higher densities of housing and business be established when at the same time e.g. traffic disturbances, access to high-quality green areas and health have to be considered?

A third overarching challenge, as in most European cities, is the growing road traffic due to enhanced economic activities, higher incomes and changes in leisure attitudes. Despite the fact that 60 percent of the City's inhabitants use public transport in order to go to/from the inner city parts and nearly 70 percent walk or bike when moving within the inner city parts of Stockholm,¹⁰ road traffic causes severe problems regarding bad air quality, congestion, noise and accidents. Especially the strong and enduring increase of goods transports is important to tackle. Moreover, public transport and walking/bicycling have to be given even more priority in order to be able to solve the massive road traffic problems of a growing city region. This is the case in Stockholm's new Accessibility Plan¹¹ which gives clear priority to public transport,

⁶ SLL Tillväxt, miljö och regionplanering: Befolkning, sysselsättning och inkomster i Östra Mellansverige, Stockholm, 2012

⁷ Pezzeri, Kristina: Das schwedische Volksheim ist zu klein geworden, in: Immobilien Wirtschaft, 12-01/2012, p.44-46

⁸ Regional Planning Office Stockholm: Stockholm - OECD-report, 2006 and follow-up report 2011, Stockholm 2006/2011

⁹ Dito fotenote 3

¹⁰ Stockholm Transport: Facts on SL and Stockholm County, Stockholm, 2009

¹¹ City of Stockholm: Accessibility strategy (draft), Stockholm, 2011

walking and biking. Other efforts to reduce road traffic are high parking fees, low parking norms in new projects (0.7 parking lots/housing unit), new city logistic concepts, more exclusive bus lanes, many new bicycle lanes and new pedestrian friendly infrastructure. This will help to reduce car dominance within the city, to give space to public transport, to connect the cities' various districts and to create a more functionally mixed, human friendly city with high quality of public spaces.

2.2 The City Plan's main intentions

The City Plan of 2010 is both a "traditional" comprehensive land use plan and at the same time a strategic navigation instrument that guides the city's various administrations and companies. The City Plan and the Regional Development for the Stockholm Region 2030¹² were elaborated simultaneously (2007-2010) which guarantees the continuity of principal development strategies and principles for both the region and the city: polycentricity, density and functional mix, priority to public transport, sustainable land use (brown field development) and a careful interplay between green and built-up areas. Social and economic aspects are well integrated parts of both plans. The City Plan also points out 21 major urban development areas and the 30 most important transport infrastructure projects in the coming 20 years. The City Plan is well in line with current urban planning theory, European standards and important guiding documents such as ESDP and the Leipzig Charter on sustainable European cities. Sustainable thinking is well established in the City Plan.

The City Plan has been worked out by broad dialogue and stakeholder processes with a particular focus on the involvement of academia, the private sector, schools and associations. The exchange with property developers and construction firms has been quite important to make realistic suggestions for the city's future. Another initiative towards citizens was "Phone and we will be there" which resulted in over 200 meetings throughout the city. The work was even accompanied by an EIA, an analysis of social effects and a report showing the most important conflicts between goals in the implementation of the plan's strategies. The City Plan also specifies principles and guiding development orientation for underlying programme work, detailed planning and building permits. NB that the City Plan is a guiding plan and not a legally binding document.

The City Plan presents four strategies for sustainable growth: strengthening of the central parts of Stockholm, a particular focus on nine strategic nodes, the connection of city areas which until now have been separated and the creation of a vibrant urban environment in all of Stockholm. This is illustrated in the figure below. Together with nine overarching focus areas/goals of the plan the strategies are intended to make Stockholm denser, cleaner, safer, better integrated and more functionally mixed. Generally, Stockholm's major landholdings increase the opportunities to achieve the goals of Vision 2030 and the City Plan.

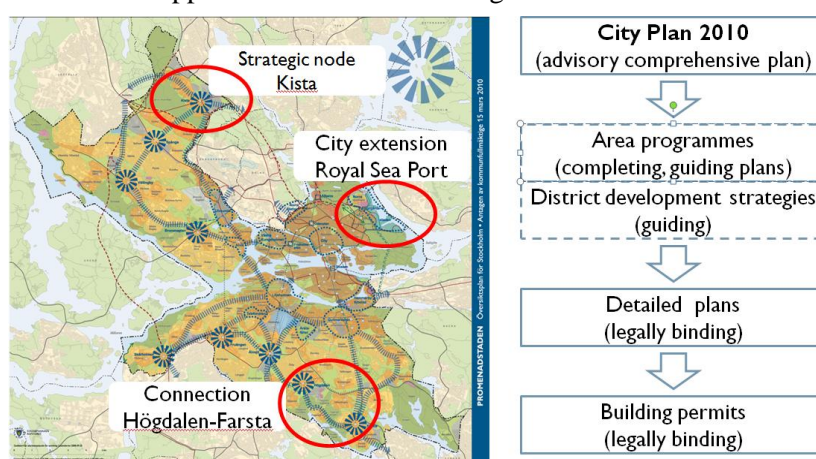


Fig. 1: Stockholm City Plan, chosen examples of strategic planning areas and hierarchy of plans in the Swedish system.

The central area of Stockholm will be extended along several strategic development areas which are all brown field areas or former industrial zones/harbors e.g. the Royal Seaport. This will provide new diverse city areas that support Stockholm's competitiveness, sustainable mobility i.e. walking/cycling and connect

¹² Regional Planning Office Stockholm: Regional Development for the Stockholm Region - RUF 2030, Stockholm, 2010

hitherto isolated areas. In practice, this means expanding the inner city beyond its historic borders which is a big change in Stockholm's planning philosophy. The current distinct morphology is disappearing.

Structurally the efforts to strengthen nine strategic nodes and to create new connecting corridors, containing housing, improved green areas and infrastructure, between to date non-integrated city areas shall contribute to restrengthen the city's suburban context e.g. planning programme for the connection "Högdalen-Farsta". Even this is a planning effort that leaves behind the former concepts of clearly defined areas and form new mixed and better interrelated areas. Examples of strategic nodes such as e.g. "Kista Science City" provide evidence for the need of working together over sector borders, public-private partnerships and involving academia in order to create new vital, well-functioning and resilient city areas.

Another new approach in Stockholm is to work with "continuous comprehensive planning" i.e. to leave behind the former idea of creating a completely new city plan every now and then. This concept creates flexibility and clear planning intentions, but it does not restrict innovations and necessary new arrangements. It includes to producing guiding planning documents which deepen the City Plan i.e. a new energy plan, a new green plan and a new concept of what good quality architecture should stand for in Stockholm (called "Architecture Stockholm"). It also means to work out various area programmes and district development strategies. It even comprises intensified collaboration processes, especially in the early planning stages.

3 THREE EXAMPLES OF STRATEGIC PLANNING APPROACHES

Three cases will show how the City Plan is implemented. For more detailed information on these development areas a visit to the City of Stockholm's website¹³ is recommended.

3.1 Royal Seaport project - an environmentally "world class" extension of central Stockholm

One example of the city's extension is the Stockholm Royal Seaport project¹⁴ on a harbour brown field area (236 ha) which will comprise 10,000 dwellings and 30,000 working places i.e. mixed urban functions. It will offer a new entry point from the Baltic Sea. Transport options are subway, tram (to be built), biogas bus and boat. The new district shall be fossil-free in 2030 and adapted to climate change effects. Another goal is to achieve 1.5 ton CO₂ emissions/district inhabitant in 2020. The area is a test bed for new urban technologies, business models and commercial concepts: ICT solutions i.e. substituting and optimizing transportation, smart grid systems, combined energy systems, resilient green planning, eco-cycle solutions and climate-neutral lifestyle concepts. This is to be done in close cooperation between the City, the port, academic institutions and private stakeholders as well as the Clinton Climate Initiative.¹⁵

The work is guided by a general vision for the entire district which will be built up in 2030. Three development programmes for the three different district parts are successively worked out in order to clarify the vision's targets. In order to achieve the high environmental ambitions each developer and company involved has signed a particular contract with the City to guarantee that best (new) techniques and very high standards are applied. Detailed plans and exploitation contracts combined with action programmes then set severe and differentiated sustainability goals (building standards, transport solutions, green areas, urban technical solutions such as energy, water, sewage, streets/public spaces) for every real estate. These goals and standards require much more than demanded by current laws and rules. The increased expenditures of these efforts will result in costs of 7,000-7,500 Euros per square meter of a new owner occupied flat which excludes many people from buying a flat and live there. A measure of the City to dampen this negative cost effect is to guarantee a high number of rental flats.

The Royal Seaport extends the borders of the inner city. Dense mixed use is a major criterion to achieve a lively urban environment.¹⁶ High urban density in this area means mid-rise blocks (4-10 storeys) integrated with small parks, green facades and roofs. Also the street network is crucial to succeed in connecting the new dense area to the existing inner city parts. It links the city's public spaces and is a basic prerequisite for integration and exchange. Barrier free mobility for pedestrians and cyclists is an important planning aim, too.

¹³ City development issues: <http://international.stockholm.se/>. Look for: Future Stockholm

¹⁴ City of Stockholm: Stockholm Royal Seaport, Vision 2030, Stockholm 2009

¹⁵ Information on CCI: <http://www.clintonfoundation.org/what-we-do/clinton-climate-initiative/cities/climate-positive>

¹⁶ Regionplanekontoret: Tätare Stockholm, rapport 8:2009, Stockholm, 2009

How all this will work out will depend on the success of the chosen integrated planning approach and on how rather restricting EU-norms (air quality, noise) can be handled.

3.2 Kista – a role model for other strategic nodes in Stockholm

Since the year 2000 the strategic node Kista Science City¹⁷ has been developed (115,000 inhabitants) from a merely industrial area into a mixed urban district. The area is part of a new regional city core and borders on four municipalities, all of which have agreed on a shared vision for Kista. It involves joint initiatives as housing, transport networks, public transit, economic development and higher education. Totally 65,000 people work in Kista's 8,500 companies. Kista is by now a world leader in ICT providing 23,000 high quality work places in 1,100 ICT companies which is an extreme concentration of expertise and innovation potential. A science city (currently 7,000 students, 1,000 researchers) is being created where many different sectors interact: academia, real estate and housing, culture, recreation, services and high tech businesses. Thus the specialty of Kista is its progress in working together. "Cooperating, networking, influencing!" this is the device of Kista's business and research communities. Different networking platforms are established where individuals from different companies can meet in the area. In terms of the implementation of the City Plan's intentions this is a sort of role model of processing for other strategic nodes in Stockholm.

In Kista land prices are generally high which makes it possible to construct a dense and mixed district.¹⁸ Spatially, Kista's development is supported by heavy investments in infrastructure, increased accessibility and improved links to the surrounding municipalities and districts. Work is done to join street networks, focus on central corridors and develop new buildings in order to strengthen the area's cohesion and attractiveness. Even the values of the nearby situated Järva nature reserve are integrated in Kista's development.

3.3 Connection programme Högdalen – Farsta: a trial to use a new planning tool

As a means to fill the gap between the City Plan and detailed planning a new tool is tested: a planning programme for connecting the nodes Högdalen and Farsta.¹⁹ The City Council's commission to work on this started in 2009, which means that the programme was elaborated parallel to the City Plan. The programme follows the planning law's steps and rules. It shall render possible to smoothen detailed planning and to improve the understanding of local communities for the overall development needs. The intention is to establish a new thinking what a connection between two so far isolated areas can contain. Of course it comprises new transport infrastructure, but foremost the ambition to establish new green passageways of walking/cycling, better public transport links, new housing and urban corridors as well as new functions for recreation and improved ecological values of these the "in-between-areas". At the same even this trial to connect two so far distinct areas will change the urban morphology, in this case in a suburban area.

The consultation phase in 2011 however showed that people in these areas are not so keen on being spatially more connected. NIMBY effects aroused, too. There were critical voices concerning the suggested intrusion into green areas, exploitation too close to shore areas and housing forms (e.g. semi-detached houses) that are regarded as inappropriate. Another problem is to find ways of financing the suggested new corridors and improved green areas.

4 CONCLUSION

Urban planning is a complex issue. Coming up with new spatial development concepts as in the City Plan means that planners have to be prepared to convince many different stakeholder groups. This requires different and partly new communication forms and processes in order to reach people and create necessary insights. New forms of planning (e.g. connecting urban areas) is a way to implement sustainable ideas. However urban planning cannot continue to be investment driven only. It must deliver suggestions which open up for a dynamic, creative and attractive city development based on user driven solutions. The form of continuous comprehensive planning unlocks for that. It is flexible and can react on new global requirements.

Stockholm's political goals of a sustainable, dense, healthy city with resilient ecosystems and high living qualities are transferred into spatial planning concepts. The chosen examples above are piloted projects. They

¹⁷ More information on Kista Science City: <http://en.kista.com/>

¹⁸ Regionplanekontoret: Tätare regionala stadskärnor, rapport 4:2011, Stockholm, 2011

¹⁹ City of Stockholm: program för sambandet Högdalen-Farsta, samrådsförslag, Stockholm, 2010

show that planning solutions must include ecocycle approaches, the use of local resources, all kind of networks, improved interfaces and collaboration between sectors, amplified stakeholders processes, interdisciplinaire teams, new business models and of course holistic longterm thinking in order to form a city that does well in a world of a prospective nine billion people.

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