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Policy

Sustainable Urban Development

Contents

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Introduction

We live in an era of urbanisation, with the entire future increase in the global population expected to take place in cities. Urbanisation is also occurring in Sweden.

The population of Stockholm County is expected to grow by approx. 20 000 per year, according to the region's planning and traffic authority (RTK). This is evident in the number of newly built houses and traffic infrastructure and in the widespread conversion of holiday cottages into permanent residences. Traffic is increasing, natural land is being exploited. The population increase may pose a threat to the County's environmental values, but may also provide an opportunity to create structures that benefit the environment. Above all, it is a reality that we must consciously address. Can growth be planned in a better way? The decisions are many and occasionally difficult. This policy provides some guidance.

At present, Stockholm County is increasingly functioning as a cohesive urban region with a population that travels across local authority boundaries. The concept of sustainable urban development is therefore relevant even in the more rural areas of the County.

The Swedish Society for Nature Conservation – Stockholm Branch (SSNC) is working towards the good city and we can take advantage of the fact that local and regional authorities are currently competing to attract and retain increasingly mobile businesses and households through offering an attractive environment. This includes a good urban environment, transport, services and nature. The SSNC can help local authorities create attractive environments for a growing population, i.e. to create environments for the future.

Aims

This policy is intended to support those engaged in urban development issues within the Stockholm branch of SSNC. It describes the challenges in urban construction and presents SSNC's suggestions for measures to deal with these challenges. The policy is intended for use in all physical planning and supports the SSNC's demands for good living environments, efficient and longsighted resource management and a green structure that is fit for purpose. The underlying attitude of SSNC is that it is always possible to improve the environment within all planning measures. This policy is intended to be an aid in this work.

The sustainability concept

This is how RTK describes the sustainability concept in its report 11:2008 (translated from the Swedish in greatly abbreviated form).

The concept of sustainable development became generally known through the publication of the Brundtland report in 1987 and its demands for 'development that meets the needs of the present without compromising the ability of future generations to meet their own needs'.

The Brundtland Report's definition of sustainable development has lasted for over 20 years. The concept can be regarded as comprising overall development in at least four dimensions: economic, ecological, social and cultural. The sustainability concept is based on the idea that certain fundamental characteristics in ecological and societal systems need to be managed in the long term.

This long-term management is determined primarily by three factors:

- How we manage the capital and demonstrate understanding for the sustainability-related limitations in different systems

- The extent to which we succeed in retaining and developing the desirable and essential qualities of the system

- Whether we can maintain the robustness and adaptability of the system.

Scope

Sustainable urban development spans a range of environmental challenges, but the main areas of interest for the SSNC are traffic and nearby nature. Therefore this policy focuses on these two areas. Traffic is of critical importance for both the local and the global environment.

Nearby nature is of critical importance for the people's well-being. There are measures that improve traffic and nearby nature, e.g. avoiding the expansion of roadways that facilitate urban sprawl. Other measures involve a conflict between objectives, e.g. a denser building pattern can decrease the transport requirements but risks the exploitation of important nearby nature. Such conflicting objectives should not be ignored, but should be managed deliberately with a clearly justified stance on how a balance is reached.

This policy applies on the condition that the county displays a long-term growth in population, which appears very likely at the present time. A decreasing population would give partly different preconditions. If or when it can be calculated/demonstrated that the load on the environment/people cannot be decreased without increasing the degree of land exploitation, then it is time to build/establish/convert in other ways.

The policy refers to planning of physical infrastructure and does not deal with the management, design or contents of individual buildings. The policy is intended for use as guidance in currently relevant concrete planning matters and therefore policy items that would require a change in the law or a different planning system have been omitted.

Environmental objectives – important in physical planning

National environmental objectives are an important support in physical planning. The national environmental objectives agreed by the Swedish Parliament are intended to act as guidelines for all the activities in society. This should be pointed out frequently and unambiguously. Some relevant environment objectives that should guide all planning are cited verbatim below.

(Source: Swedish Environmental Protection Agency: www.naturvardsverket.se/eng)

Reduced Climate Impact. The UN Framework Convention on Climate Change provides for the stabilization of concentrations of greenhouse gases in the atmosphere at levels which ensure that human activities do not have a harmful impact on the climate system.

Clean Air. The air must be clean enough not to represent a risk to human health or to animals, plants or cultural assets.

Sustainable Forests. The value of forests and forest land for biological production must be protected, at the same time as biological diversity and cultural heritage and recreational assets are safeguarded.

A Varied Agricultural Landscape. The value of the farmed landscape and agricultural land for biological production and food production must be protected, at the same time as biological diversity and cultural heritage assets are preserved and strengthened.

A Rich Diversity of Plant and Animal Life. ..people must have access to a good natural and cultural environment rich in biological diversity, as a basis for health, quality of life and well-being.

A Good Built Environment. Cities, towns and other built-up areas must provide a good, healthy living environment and contribute to a good regional and global environment. Natural and cultural assets must be protected and developed. Buildings and amenities must be located and designed in accordance with sound environmental principles and in such a way as to promote sustainable management of land, water and other resources.

A Good Built Environment also includes the sub-objectives:

Land use and community planning will be based on programmes and strategies for:
- achieving a varied supply of housing, workplaces, services and cultural activities, in order to reduce transport demand and improve the scope for environmentally sound and resource-efficient transport
- preserving and enhancing cultural and aesthetic assets
- preserving, maintaining and enhancing green spaces and water bodies in urban and suburban areas for nature conservation, cultural and recreational purposes, and ensuring that the proportion of hard-surface areas in these environments does not increase
- promoting more efficient energy use - thereby reducing it over time - and promoting use of renewable energy resources and development of production plants for district heating, solar energy, biofuels and wind power.

The role of the SSNC is to work on the basis of the environmental objectives and other general interests for democratically anchored planning and an inclusive and vital discussion on the objectives and effects of planning.

Policy items

A number of policy issues that are critical for the work of the SSNC are presented below. The Society's views on the planning process are presented first, followed by a summary of ten critical fundamental principles for creating sustainable urban development. There is then a description of how the Society believes that the overall built infrastructure in Stockholm County should be developed. Finally, there is a more detailed description of the SSCN's two central areas of interest, traffic and nearby nature.

1. How physical planning should be carried out

In Sweden, physical planning is regulated through the Planning and Building Act (PBL). The country's municipal authorities have a planning monopoly, i.e. full responsibility for planning and controlling the physical development of the municipalities. The County Administration Boards are responsible for protecting state interests (including national interests, health and security, inter-municipality issues and environmental quality norms). The National Board of Housing, Building and Planning is responsible for overseeing planning activities.

According to the PBL, each municipality must have a politically accepted, municipality-wide and up-to-date comprehensive plan describing the main features of land and water use and future building development. In the case of concrete projects, the municipality then draws up detailed plans and/or makes a decision on building permission. The detailed plans and building permit must not contradict the contents of the municipality's overall plan without detailed justification for this contradiction.

The comprehensive plan is drawn up in a legally prescribed procedure whereby public consultation is guaranteed in the presentation stage and whereby environmental organisations often may, and must, be included in the consultation phase before presentation of the plan.

For detailed plans there is a similar process, but here the circle of consultation is restricted to stakeholders (residents, property owners and environmental organisations under certain conditions).

Since the detailed plans (or building permit) must not contradict the intentions of the comprehensive plan, it is important for an organisation to make its views known early in the process.

Today's planning culture is dominated by the interest in creating economic growth through physical planning. Environmental aspects need to be emphasised and integrated into all phases of the planning process so that we can achieve an approach within planning that leads to sustainable urban development. Experience shows that it is difficult, expensive, contentious and time-consuming to introduce the environmental aspects into the planning process retrospectively. Environmental interest groups are often accused of prolonging and increasing the cost of planning. The environmental aspects should therefore be fully integrated into planning and not simply raised in the impact assessment, as is usually the case at present.

In the major urban regions of Stockholm, Gothenburg and Malmö, there is a system of regional planning for dealing with regional and inter-municipality issues. The regional plans are not binding, but act as coordination tools where a region's planners and politicians attempt to deal with infrastructure issues such as building, traffic and green areas.

Physical planning means joint decision-making on what is good development through a democratic, politically rooted process. In order for this to function, the municipal authority must take its responsibility through having a transparent planning process where different interests are permitted to state their views, which are then weighed up to give a good outcome.

Individual developers can take powerful initiatives that can be both positive and negative for the environment, but – and this is important – it is the municipality and its politicians that have the full responsibility for the actual planning process and the permits that are required in accordance with the PBL to implement a project.

The SSNC has an important role to play by participating in the democratic process at the earliest stage possible in order to protect the interests of nature and help create well-rounded and good living environments. This should preferably take the form of proactively providing suggestions. The challenges and measures for promoting functional physical planning are presented below.

Challenge	Measure
Municipal politicians occasionally excuse themselves from their right to decide by blaming developers. However, the politicians are responsible for granting building permits that do not contravene the relevant detailed plan. Permitting deviations from the detailed plan is not the responsibility of the municipal authority. The development contract is an important part of the detailed plan. It can contain demands on the developer in terms of e.g. measures to decrease the environmental load, improve the opportunities for pedestrian and bicycle traffic and, in certain cases, bring about compensatory measures.	Point out that according to the law, municipal politicians have full rights to decide over all planning of what may be built within municipal boundaries and then no developer can force the municipal authority to approve a planning proposal. In the process relating to the detailed plan and the development contract, we should set far-reaching environmental requirements, according to Swedish Environmental Code at the very least.
It is important that objective documents such as local environmental objectives have an effect in practice.	All objectives should be followed up with a concrete plan for where and how they should be achieved within all relevant areas, for example within physical planning.
Building projects often have an impact outside the boundaries of the municipality that approves the plans. At present, many municipalities plan without regard to the effects at regional level. Two examples are new building projects that sever green connecting links and out-of-town shopping centres that affect commerce and transport over a wide area. Municipal authorities are obliged to coordinate their planning with neighbouring municipalities. The County Administration Board is obliged to intervene when such coordination does not succeed. Environmental quality norms and health and safety are other grounds for intervention However, the County Administration Board often refrains from intervening.	All measures that have regional effects should be dealt with from a deliberate regional perspective. Point out to the municipality, the County Administration Board and the mass media when coordination between municipalities is inadequate or when there are other grounds for intervention by the County Administration Board.
Democratic societal planning must accommodate many different perspectives, e.g. the social and ecological. There must be a public consultation process (in the consultation phase and the presentation phase).	Take part in communication to protect the interests of nature and help create well-rounded and good living environments. For best results, this involvement should occur early in the planning process, in the work on the overall plan, before too much has been locked in place. We should also continually work with our solutions in the detailed plan.
Many feel overridden by political decisions on land use that destroys the environment.	Physical planning follows certain frameworks that can help protect the environment, but in controversial projects it is mainly the political process that determines the final outcome. Building projects and environmental measures are approved through proposals that politicians find attractive. The challenge is to present alternative proposals that in a reasonable way meet the development demands and the environmental demands from a sustainability perspective, and attempt to win political approval for such a well-balanced approach. It is thus not about negotiated planning but about open, democratic 'asset planning' anchored among residents through user dialogue.

2. Ten fundamental principles for a better urban region

The following ten general principles are given as guidance for all measures that alter physical infrastructure:

1. Protect good living environments for humans, animals and plants.

2. Use green and blue values as central assets in attractive urban construction.

3. Develop already existing structure – avoid major new exploitations of natural land and green, undeveloped land (virgin land) and of areas of water (lakes and water bodies) and create nature reserves.

4. Create nearness – not distance and a reliance on transports.

5. Conserve wild nature and continuous green areas and create new green areas.

6. Environmental consideration must permeate all stages of new urban building and encompass all participating actors.

7. Promote pedestrian, bicycle and public transport and develop smart congestion charges.

8. Mix areas for working, living, shopping and service, but concentrate activities with many visitors to central locations.

9. Satisfy the needs of children for places to play and exercise. The traffic environment should make it possible for children to move around without having to be driven by car.

10. Avoid creating new low density building projects that increase the reliance on transport and decrease the utility and aesthetic values of nearby nature.

3. What we would like urban infrastructure to look like

Stockholm County has expanded in a star-like pattern along rail bound traffic routes. This has created a functional pattern of urban infrastructure with good access to public transport and green wedges of nature between the built-up areas.

The challenges and measures for positive development of the County's urban infrastructure are presented below.

Challenge	Measure
The current functioning star pattern is under threat from motorways and urban sprawl that is eating into the green wedges.	Place new building developments alongside railbound traffic and the existing star pattern instead of exploiting new areas. Concentrate on public transport, to the greatest extent possible railbound transport, and avoid new motorways that facilitate urban sprawl. Safeguard the green wedges.
People's travel pattern is extending to an increasing extent throughout the entire county, increasing the environmental impact.	Concentrate the growth of population and activities mainly to those parts of the region that are already developed and that already have good opportunities for e.g. good public transport and successful commercial and social functions. This will decrease the transport requirement and facilitate for pedestrians, bicyclists and for public transport. Coordinate the building of new urban infrastructure with high capacity public transport. Create more public transport interconnections, but with consideration given to the green wedges, in order to link together the public transport routes in the star pattern.
Having the Polluter Pays Principle applied in urban planning.	Those causing the environmental impact must pay for the costs arising. Economic tools must be used in urban development. Developers must pay the cost of new infrastructure such as access roads. Connection charges to the sewage system must reflect the actual costs of the new pipes.
Landowners can allow or counteract sustainable urban planning	Use the planning rights of the municipal authorities as much as possible, i.e. plan everything from residential areas with good access to public transport to allowing and encouraging the remaining agricultural land to be used in a way that is good for the population and for biological diversity. However, there are difficulties: A plan that restricts the rights of landowners cannot always be forced through without compensation, a plan can only partly be compulsory for landowners.

4. Nearby nature and biological diversity must be promoted

Access to parks and green areas are very important for people's health and wellbeing. The distance to a green area is highly important for whether people use it in their everyday life. In order to promote beneficial and experience-rich encounters between people and nature, there is a need to give space to nature and have a varied composition and interconnected structure.

Many of the environmental and health problems that are typical of cities are effectively relieved with the help of the ecosystems in nearby nature, for example temperature regulation and air and water purification.
The challenges and measures for promoting nearby nature and biological diversity are presented below.

Challenge	Measure
Every decision to change the built environment is an opportunity to increase diversity, create new nature and provide the conditions for many different plant and animal species. Make use of the ability of nearby nature to supply ecosystem services.	Upgrade nature to being a habitat element in the good city. This can be done through active landscape planning that demonstrates where the different aspects of green structure can be improved. Integrate nature with urban development. Vary the choice of plants. Plant trees along streets. Set up butterfly gardens, nests, boxes, patches of wild flowers, ponds, wetlands and vegetation on different levels such as roofs and walls. Use the green to decrease noise and lower particle concentrations. The municipal authority must place demands on the area, content and qualities of periurban nature through the specification of clear local norms.
Valuable nature is often viewed today as 'currently undeveloped land', which means that it is under constant pressure of exploitation.	Prioritise new building projects on existing brownfield sites. If greenfield sites are used for new building, compensation must be made so that the remaining green areas acquire increased 'asset density' and become more accessible and more useable for all those affected by the change. Attempt via the municipal authority to bring about collaboration between developers and landowners in order to save valuable nature and position buildings so that the links in the green structure are strengthened. Nature reserves or similar strong protection should be established to create distinct and stable boundaries to the spread of the urban development.
Broken ecological links should be restored.	Nature environments in which important links have been broken should be recreated. This may mean accepting that some green areas are exploited if the overall situation can be improved and can also be seen as a type of compensation for lost green areas. An example can be the conservation of high nature values.
Make use of nature's ability to improve health and quality of life.	There must be space for different experiences of nature in all urban environments, with views from windows and green courtyards, green school and nursery playgrounds, nature and park chains through different parts of the city. Try to collaborate with the municipal authority and housing management companies in designing a joint park and nature policy and green maintenance plans.
It is important to have continuity and links in green living environments.	Establish green corridors through built-up areas to link these with surrounding nature and recreation areas. Decrease road barriers. Continuous green corridors improve the air quality and make it easier for residents to use the green areas. They are also important as ecological connections by which plants and animals can spread. Use concepts such as green structure and green wedges to create understanding of that fact that a successfully functioning ecosystem requires connections and transport corridors for animals and plants
Protecting periurban forests and preserving experiential values such as silence and the feeling of being out in nature.	Periurban forests should have management plans. A considerable proportion of periurban forests should be completely excluded from high yield commercial forestry through reserves or other form of long-term protection.
Closing the recycling loops between town and country.	Encourage periurban food production that can recycle urban waste products. Make space for small livestock farms, allotments, cropping and activities.
Stormwater is a resource that can enrich the immediate environment.	Avoid underground pipes for stormwater to the greatest possible extent. Design all surfaces for intentional stormwater management. Create open watercourses and water bodies. These improve the conditions for a diversity of plant and animal species, while also helping to purify the water.
There is much building in valuable shore areas, which has an impact on diversity and on outdoor life. Municipal authorities issue many dispensations on shore protection and now have the autonomous right to make decisions on shore protection dispensations and exceptions from shore protection in their detailed plans. As before, the work of the County Administration Board in inspecting and reviewing the dispensations and exceptions issued by municipalities risks being inadequate	The shore protection legislation must be observed. Dispensations to shore protection should only be issued in special cases.

5. The reliance on transport must decrease

Careful urban planning can decrease the environmental impact of transport. The starting point for this should be to decrease the transport requirement and promote pedestrians, bicyclists and public transport.

The city should be accessible even without a car.
The challenges and measures for decreasing the transport requirement and promoting environmentally friendly means of transport are presented below.

Challenge	Measure
Vehicle traffic leads to considerable emissions, noise and land consumption.	Prioritise public transport, walking and cycling, and measures for decreasing the reliance on transport. Smart congestion charges should be developed and applied. Traffic jams are the most important driving force behind the construction of new roads. Without smart charges, traffic congestion will not be solved. Therefore congestion charges are a central component in any strategy for combining a growing city with nature conservation, low energy consumption, high accessibility, etc.
New roads disperse urban development and increase the reliance on transport, causing exploitation and fragmentation of nature areas.	Avoid the construction of new roads.
Separation of housing, shopping, service and workplaces leads to increased reliance on transport.	Integrate societal functions and mix workplaces, housing, shops, service, education, institutions and leisure. However, the central regional core and connecting points for public transport should have a much higher concentration of workplaces.
Planning for public transport.	New building should be concentrated around connecting points for public transport and public transport routes. Public transport should be in place from the start in order to create environmentally friendly travel patterns. Avoid building housing on sites that are difficult to supply with regular public transport.
Planning for muscle-powered means of personal transport.	Pedestrians and cyclists should be provided with an attractive environment. It should be easy for people to travel with trolleys, pushchairs and wheelchairs. Cycle pools for residents and workers should be encouraged. Norms should exist for weatherproof cycle shelters.
Planning for decreased reliance on transport.	Build shops, schools, services and other facilities that receive many visitors in places that are easy to reach without a car. Avoid out-of-town shopping centres.
Make use of the fact that much building takes place near water.	Where opportunities exist to increase the environmental benefit: Press for ferry lines as a complement to land travel.
Many actors are working to ensure that people choose car travel, but there are few actors actively encouraging environmentally friendly methods of travel and increased efficiency of transport.	Set up mobility offices at regional, municipal and local level, e.g. in expansive urban areas. Mobility offices work to encourage environmental consideration and increased efficiency of transport of passengers and goods. Information and coordination regarding environmentally friendly transport should be provided continuously and in good time before occupation of newly built housing and business premises. Make car sharing easier.
If an area is deprived too strongly of car traffic, there is a risk of local shops being starved out.	Car traffic can be allowed to filter through the area, but should not dominate.
Parking spaces are traffic-generating and occupy valuable space in the urban environment.	The number of parking spaces should decrease. Those parking spaces that exist or are built should not be subsidised. New parking spaces should normally be created in the form of garages Parking norms can be used as guidance.

Conclusions

People are different. We live, work, shop, carry out leisure activities and want to give our children a good upbringing, but all in slightly different ways. This means that there is no simple answer on how cities should be built. However, there is extensive knowledge on how to counteract the negative environmental effects of urban development. The way in which cities are built is important for both the global environmental impact and for everyday environment. This means weighing up factors and occasionally dealing with conflicts of interest. Sustainable urban development, which covers everything from urban traffic issues to nearby nature matters, provides a good arena for holistic solutions. Three important statements are provided below:

Increased traffic should be opposed. It is obvious that vehicle traffic is a major environmental problem in towns and cities and that the continual increase in traffic is exacerbating the problem. Increased reliance on transport should be opposed, e.g. by deliberate physical planning and increased access to IT and telecommunications.

Green areas should be protected. It is now generally recognised that experiences in nature have a positive effect on people's health. Nearby nature is important in promoting physical activity. Research has shown that patients recover more quickly if they can see or can be out in nature. The need for children's play at home and in school and opportunities for the elderly to exercise in an attractive immediate environment place particular demands on nearby nature. Green areas should therefore be protected and nearby nature improved and enriched.

It pays to get involved. The work of the Swedish Society for Nature Conservation, Stockholm branch is yielding results. The Society is an important actor within physical planning and can help municipalities create attractive and sustainable environments for a growing population, i.e. to create environments for the future. The earlier we enter into the planning process the better, before decisions become locked in place. Ideally, we should get involved back at the consultation stage for the overall plan. Then we should monitor the issues throughout the entire process from detailed plan and building permit to completion. This provides good opportunities to achieve results. It is also useful to bear in mind that planning is the physical manifestation of politics. Good contacts with local politicians, combined with the ability to create publicity if matters are not to the Society's liking, pave the way for success. The starting point should be a clear overall picture of how the Society views urban development in the future, based on the conditions that are likely to arise.

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