

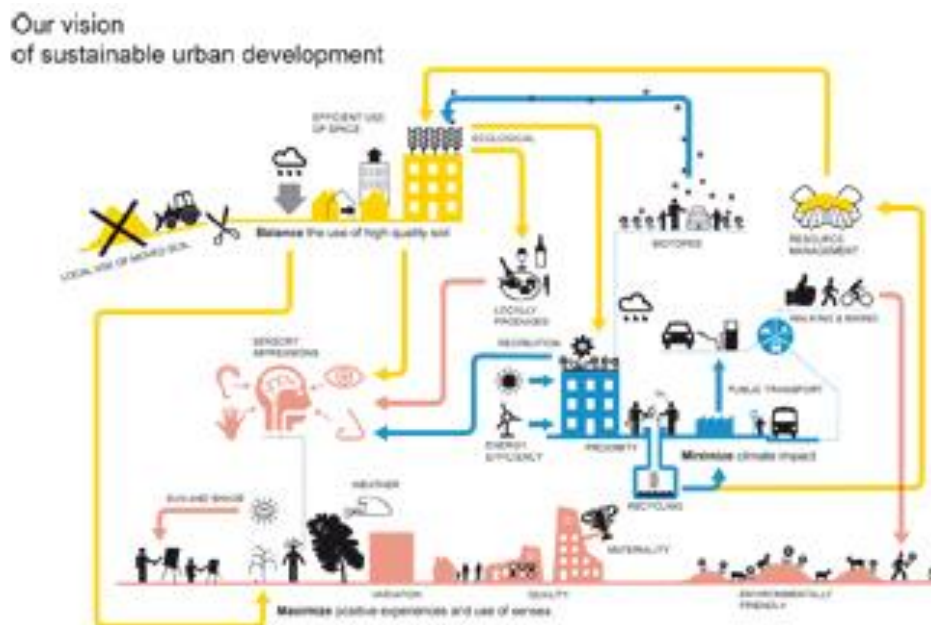


City of Lund

Sustainable Brunnshög/ Lund NE

Around the highest point in the City of Lund a new neighborhood, Brunnshög, is growing in Northern Europe's most attractive environment for enterprise, research and education. North east of the University Building in central Lund you find some of the world's foremost institutions of research and education, side by side with leading companies in IT, pharmacology and food.

In the Ideon Science Park, with the new landmark Ideon Gateway, the companies of the future are growing to new heights. The first buildings are already in place. In the middle of a vibrant metropolitan region, beside the biggest university in Scandinavia, the Ideon Science Park, and many leading international companies this new city development is going to be established.



The development of Brunnshög is a project with high sustainability aims. The City of Lund has set clear targets for reducing GHG-emissions over the next decades and Brunnshög aims to contribute to that goal. A sustainability profile for the area is also one of the goals for the development, and the ambition with Brunnshög is to showcase technical and planning solutions for sustainability.

In the Brunnshög planning process, work is being done to improve sustainability across ecological, economic and social aspects.

The catchphrase of the project is to **minimize** climate impact, **balance** the use of high-quality soil, and **maximize** positive experiences of the urban life.

Balance use of soil



Balancing the use of high-quality farmland is one of the main challenges in the planning of Lund NE/Brunnshög. Arable land is a global resource that could become in short supply when more food and energy crops need to be grown. Seven percent of Sweden's area is used for agriculture today, and half of food production in Sweden takes place in Skåne. The soil around Lund is of very high-quality, and the loss of it is something that is taken very seriously in the Brunnshög project. How can a city development balance the loss of farmland?

Early in the Brunnshög development, methods need to be implemented to retain valuable cropland. These methods can include strategies for restoration and compensation, improvements to soil in other places or new types of agricultural practices. Some of the visionary goals in Lund NE/Brunnshög is that the area should have 30% building surfaces that can be turned back into farmland again should the need arise, 50% agricultural productivity (compared to today) retained even in the fully urbanized parts of the area, and 100% retention of nutrients in soils that are transported away.

In order to achieve these goals, Lund NE/Brunnshög cooperates with nearby universities in various research projects.

Maximize



Maximizing positive experiences means focusing on the human senses in order to create environments that are pleasant for people. The goal in Brunnsbög is to plan for a city where meetings between people can take place, where there is room for the unexpected, for variety and impressions but also for relaxation. Lund NE/Brunnsbög is to be a comprehensible and useful city landscape for people.

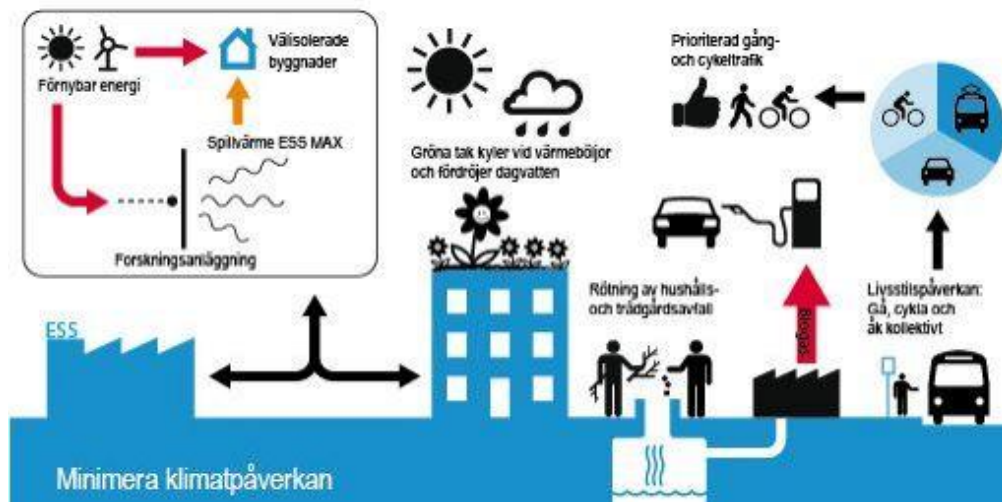
A mixed urban area

The planning philosophy focuses on creating a mixed urban area, where office buildings and living places share blocks and streets and where different building heights and materials create an interesting city. The planning will encourage different types of building-ownership solutions, from rental housing to owner-built. Mixing offices and living places will create a city filled with people most hours of the day, which creates a safer atmosphere.

Linked with history

Brunnsbög has a number of old farmyard buildings today and a majority of these are to be preserved in further development. These beautiful buildings provide a link to the area's history and will also be great sources of variety and greenery in Brunnsbög in the future.

Minimize climate impact



Minimizing the climate impact caused by city development is seeing the bigger picture. From utilizing locally produced renewable energy to constructing buildings with low energy use to planning for a city where transport doesn't lead to GHG emissions – the puzzle needs to fit.

The City as a power plant

The City of Lund has set the goal to halve carbon emissions until 2020 (baseline year 1990) and Lund NE/Brunnshög needs to contribute to reaching that goal. In order to do that Brunnshög needs to act as a power plant, produce its own energy and thus help the surrounding city cut its emissions. An important part of this process will be the usage of excess heat from the two research facilities MAX IV and ESS to warm up buildings in northeastern Lund. The “city as a power plant” concept is further enhanced through prioritizing local renewable energy such as wind power, solar power, and biogas.

Transport and Infrastructure

In order to reduce GHG-emissions related to transport the aim in Brunnshög is to plan the area in such a way that not more than one third of all transport to and from the area is done by car. At least one third should be covered through public transport and at least one third through walking and biking. The strategies for achieving this goal are outlined in Strategy for Transportation and involve planning of bicycle roads and tramways, prioritizing pedestrians and striving to create a pleasant urban landscape that encourages people to walk or bike.

Climate adaptation

Current prognoses for southern Sweden predict more heat waves and heavy rains. New urban areas such as Brunnshög need to be shaped in order to deal with this changing local climate. In Brunnshög this adaptation will be done through focusing on creating a blue-green urban landscape where water and greenery breaks up the hard urban surfaces and helps cool the city down. Furthermore, green roofs and walls can delay rain water and new trees in the area reduce wind speeds and provide.

Future walk in Brunnsög

Film 1

<https://www.youtube.com/watch?v=dIIBwpc3SOM&list=UUI4cihFIUknr6ziGVNA8wIw&index=14>

Film 2

<https://www.youtube.com/watch?v=s7vQ4Kg2tXY&index=15&list=UUI4cihFIUknr6ziGVNA8wIw>

Film 3

<https://www.youtube.com/watch?v=QfLiNqDfmQk&index=13&list=UUI4cihFIUknr6ziGVNA8wIw>

Film 4

<https://www.youtube.com/watch?v=vq4lpNfbB2U&index=12&list=UUI4cihFIUknr6ziGVNA8wIw>

Film 5

<https://www.youtube.com/watch?v=NW1LhB5sm9s&list=UUI4cihFIUknr6ziGVNA8wIw&index=11>

Film 6

<https://www.youtube.com/watch?v=XvlaHGsz-eY&list=UUI4cihFIUknr6ziGVNA8wIw&index=10>

Film 7

<https://www.youtube.com/watch?v=Bs5f99tcNGA&list=UUI4cihFIUknr6ziGVNA8wIw&index=8>

Film 8

<https://www.youtube.com/watch?v=rfsfXMF6a-Y&list=UUI4cihFIUknr6ziGVNA8wIw&index=9>

Film 9

https://www.youtube.com/watch?v=ONd0CD_NyA4&list=UUI4cihFIUknr6ziGVNA8wIw&index=7

Film 10

<https://www.youtube.com/watch?v=jHgLv6GcV5s&index=6&list=UUI4cihFIUknr6ziGVNA8wIw>