Stockholm Royal Seaport

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Stockholm Royal Seaport: Key facts

Construction period: 2010-2030

Area: 236 hectares. Land owned by the City of Stockholm

Work in progress: Land remediation, infrastructure, homes, CHP plant, Northern road link, The Värta pier

First moving in: Autumn 2012

New apartments: 12,000

New work spaces: 35,000

Commercial space: 135,000 m2

Energy requirements: 55 kWh m2/year for residential buildings

Distance from city centre: 3.5 km

Infrastructure: Biogas buses, metro, tram, ferry, district heating, vacuum waste collection, new cycle and pedestrian paths and high-speed broadband, car share schemes.

In May 2009, Stockholm Royal Seaport was accepted by the Clinton Climate Initiative (CCI) as one of 18 international projects within the Climate Positive Development programme.
Stockholm Royal Seaport  
– a new environmental urban district

The Stockholm Royal Seaport urban development project runs from Hjorthagen in the north, across the port area, to Loudden in the south. Here, in what is one of Stockholm's prime locations, plans are under way to build about 12,000 new homes and create 35,000 new jobs. The development will largely take place in areas previously used for port operations and other industry.

In addition to new homes and workplaces, the port's operations will be modernised and concentrated on the piers, while container and oil handling will be moved elsewhere. This will release land that is important for the development.

The gasworks area will be developed and the City of Stockholm has plans for an international stage for guest performers, a museum, a pre-school, a school and a library on the site, as well as other facilities and meeting places.

Stockholm Royal Seaport is part of the City's vision of a world-class Stockholm by 2030, as set out in the Stockholm City Plan, A Walkable City, which outlines the strategies for a more cohesive and accessible Stockholm. The ambitious environmental objectives for the area will see the City, developers, architects and entrepreneurs working more closely together than ever before, putting in extra resources to realise the vision of a world-class environmental urban district – a sustainable society in a vibrant part of the city.

Stockholm Royal Seaport has been selected as one of 18 urban development projects that form part of the Clinton Climate Initiative's global Climate Positive Development Program.

Responsibility and cooperation between the City's administrations
The City of Stockholm is responsible for land remediation, infrastructure such as streets, public spaces, cycle paths, bridges and parks, and art. The City is also involved in the port redevelopment, work on Norra Länken (the Northern Link motorway) and planning the Spårväg City tramline.
Eco-profiling Stockholm Royal Seaport

• One of the largest urban development projects in Europe. Sustainability is embedded in the entire project from organisation and planning to turn key homes and premises. The district is to be built to high environmental standards to create a world-class sustainable district.

• Stockholm Royal Seaport will be a showcase for sustainable urban development, offering one of the most attractive and modern environments in which to live in Europe.

• The district borders unique historic landscapes, yet it only takes eight minutes to cycle into the city centre. A unique location in terms of transport and proximity to services, leisure activities and entertainment.
Eco-profiling: the process

- The Stockholm City Development Administration is leading the work on eco-profiling in close cooperation with the City’s other administrations and companies. Focus groups on different topics have been set up to make the most of skills and expertise in different specialist fields.
- A general environment and sustainability programme was adopted by the Stockholm City Council in 2010, and this steers the work on eco-profiling in Stockholm Royal Seaport. The programme underlies the requirements in the action programmes, which cover private developers and the City’s own administrations and companies.
- An extended dialogue with developers is carried out partly through skills programmes in which developers are given an opportunity, on a step-by-step basis, to attend seminars linked to the specialist areas and requirements in the action programmes, and partly through ongoing follow-up work carried out during the planning, production and commissioning phase.
- In addition to the collaboration that takes place within the City and with developers to whom land has been assigned, other stakeholders are also invited to contribute to the work, e.g. through various research and development projects. Often this involves cooperation between the City, education institutions and private companies.
Eco-profiling: Follow-up

• Experience from Hammarby Sjöstad shows the importance of **systematic follow-up** of the work to achieve the ambitious objectives. In Stockholm Royal Seaport the requirements of the action programmes are followed up at a number of points during the planning, production and operation phases.

• An *environmental database* is being built to follow up the objectives. This work will be carried out within the remit of a research and development project to develop an interactive real-time database and is a collaboration between the City, academia, developers, technology development companies and research institutions.
A climate-adapted, green outdoor environment

• Climate change adaption is reflected in the physical design of the area: preserving and increasing green spaces. Stormwater stored and used as a resource for watering trees.

• A calculating tool for “green area factor” is being developed (greenery for biodiversity, stormwater treatment, mitigating negative climate impacts, recreation, gardening, beauty). The R&D project aims to make urban ecosystem services visible and quantifiable, develop actual planning and follow-up tools, and produce data demonstrating the link between urban ecosystem services and resilience.
Energy

- High energy requirements are set. Energy based on renewable sources as far as possible, to reduce emissions of greenhouse gases. Part of the energy used must be based on self-generated renewable energy produced at the building (solar etc).

- Long-term aim: to create “energy-plus” buildings that generate more energy than they use. Smart energy grids capable of handling variation in consumption and production are required (R&D project).
Recycle solutions

• The overall aim: create closed ecocycles to a larger extent than in conventional systems.
• Chutes for vacuum waste collection systems for packaging, paper and general waste are planned for homes and businesses. Waste disposal units in the kitchens: food waste collected to produce biogas. Combined with waste sorting facilities in all buildings, the waste solution will help to reduce the amount of transport in the area.
• A development project is being planned with the City of Stockholm to further improve the efficiency of the vacuum waste collection system.
• Increasing the recovery of nutrients such as phosphorus, nitrogen and potassium to reduce eutrophication of the Baltic Sea, is an important objective. For this reason, the nutrients from sewage should be returned to productive agricultural land. This would also result in the potential to reduce use of fossil-fuel based artificial fertiliser.
Sustainable transports

• Planned on the basis of a traffic hierarchy in which walking, cycling and public transport are afforded the highest priority. Walking and cycling must be easy and safe on well-designed pedestrian and cycle paths. Public transport such as the metro, bus, light rail and ferry must be available. The aim is for public transport to be guaranteed priority by measures including separate lanes. Provision will be made for car pools using electric cars with charging facilities. The number of parking spaces will be kept low, corresponding to the number in the city centre.

• On the basis of experience from Hammarby Sjöstad, the City has set up a construction logistics centre to reduce the amount of transport into the area and consequently environmental impact during the construction period.
Green buildings and facilities

• Requirements set to achieve a good indoor environment include damp prevention, the sound environment, daylight and air quality.

• Construction material must not contain dangerous substances that are on the Swedish Chemicals Agency’s list of chemicals to be phased out. When a construction solution is chosen, its environmental impact throughout its whole lifecycle is to be taken into account. Similarly, the costs of energy-intensive installations must be considered across their entire lifecycle.

• A research project for resource-efficient building will be carried out. Its purpose is to reduce environmental impact and production costs through efficient logistics.
Living and working

• An attractive and modern environment with a good range of services, culture and entertainment. The area is designed with a focus on quality of life, accessibility, safety and close to services, relaxation and entertainment.

• Our consumption and living patterns are the cause of the largest source of greenhouse gas emissions. The City is attempting to create as good a platform as possible to enable everyone who wants to live sustainably to do so. This largely involves the City providing information and conducting a dialogue with people living and working in the area to increase awareness of how everyone’s use of resources affects the environment.

• Stockholm Royal Seaport runs and participates in several projects aimed at visualising environmental impact for the people who live and work in the area. The motto is “it should be easy to do the right thing”, with a focus on technological solutions being easy to use.

• Public sector facilities in Stockholm Royal Seaport, such as preschools, schools and libraries, are eco-profiled, contributing in the long term towards greater involvement in and motivation for sustainability issues.