

Royal Seaport Stockholm

Stockholm, Sweden



Photo from international.stockholm.se

Size:

586 acres, 10,000 new homes, 30,000 new jobs, prepared for increasing precipitation

Dates:


2009 – 2030







Project Team:

City of Stockholm, Fortum Energy Company

The Royal Seaport is an urban redevelopment and sustainable district that aspires to showcase state-of-the-art environmental technologies. The goal of the development is to support Swedish environmental technology and contribute to the development of new technologies. Within the project, by 2020 CO₂ emissions will be less than 1.5 tons per person. The development is designed to adapt to climate change and be fossil fuel-free by 2030.

Goals & Strategies

 Place	
Limits to Growth	Goals: Goals not defined. Strategies: Strategies not reported.
Food	Goals: Goals not defined. Strategies: 63 plots for urban gardening.
Habitat	Goals: Goals not defined. Strategies: Green space index tool for developers. Green roofs, green facades. Beekeeping. Soil remediation. Large parks to the north and south connected by pathways.
Transportation	Goals: Goals not defined. Strategies: Mobility index tool for developers. Biogas buses, subway, boat buses, trams, bicycle infrastructure. 2.5 bike spaces per apartment. Electric vehicle infrastructure. Planned carpool vehicles. 2.5-mile nature trail.

 Water	
Water	<p>Goals: Goals not defined.</p> <p>Strategies: Stormwater system organized under streets. Green space index for stormwater planning.</p>
 Energy	
Energy	<p>Goals: Fossil fuel-free by 2030. Reduce CO₂ emissions below 1.5 tons or 25% per inhabitant. Estimate 55 KWh/m² energy demand.</p> <p>Strategies: Adapt to future climate models. Monitoring of target achievements. Developers that worked on Hammarby Sjostad share knowledge. Plus-Energy Competition. Smart grid to balance energy and heating needs, planned combined heat and power biofuel plant will produce 10% electricity. 25% district heating needs. Heat recovery ventilation. Innovation competitions, solar PV. Waste management system that reduces energy use by about 30%.</p>
 Health + Happiness (Details not provided by researchers)	
 Materials	
Material Plan	<p>Goals: Goals not defined.</p> <p>Strategies: Extensive use of LCA analysis with the development of a calculation tool. Working with industry professionals to develop innovative solutions. Life cycle costing for innovative strategies. Material suppliers must declare toxicity of products. Collaboration between service providers resulting in efficient and organized development.</p>
Embodied Energy & Carbon	<p>Goals: Goals not defined.</p> <p>Strategies: Strategies not reported.</p>
Waste	<p>Goals: Goals not defined.</p> <p>Strategies: Strategies not reported.</p>
 Equity	
Neighborhood & Access	<p>Goals: Goals not defined.</p> <p>Strategies: Diversity of apartment options: tenant-owned, rentals, student housing. Green building tool Gold rating for indoor air quality must be achieved.</p>
Access to Nature	<p>Goals: Goals not defined.</p> <p>Strategies: 1% of investments committed to art, community involvement, outdoor public space.</p>
Access to Community Services	<p>Goals: Goals not defined.</p> <p>Strategies: Education on the designated sustainable district and enabling sustainable choices.</p>
Investment	<p>Goals: Goals not defined.</p> <p>Strategies: Strategies not reported.</p>
 Beauty	(Details not provided by researchers)

> See next page for Performance Levels achieved

Performance Levels Achieved:

	Standard	Good	Better	Living	Regenerative
Place					
Limits to Growth					
Food					
Habitat					
Transportation					
Water					
Energy					
Health + Happiness					
Civilized Environment					
Neighborhood Design					
Biophilia					
Resilient Connections	Not specified.				
Materials					
Material Plan					
Embodied Energy & Carbon					
Waste					
Equity					
Neighborhood & Access					
Access to Nature					
Access to Community Services					
Investment					
Beauty					
Beauty & Spirit	Not specified				
Inspiration					

Sources:

- <https://international.stockholm.se/city-development/the-royal-seaport/>
- <https://www.wsp.com/en-GL/projects/stockholm-royal-seaport>
- https://www.c40.org/case_studies/stockholm-royal-seaport

**Note: This case study was developed using found information.*

21st Century Development is a model for the creation of regenerative communities that strives to provide a healthy environment for all people and living systems now and in a dynamic future.

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