

Hammarby Sjöstad

Stockholm, Sweden



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Size:

495 acres, 9,000 units

Dates:

1995 - 2015

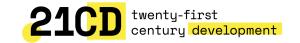
Project Team:

Eskil Sundahl, Arthur von Schmalensee

Hammarby aspires to develop an innovative sustainable urban greyfield development with closed-loop resource systems and a pedestrian-friendly design. It unifies energy, water, and waste infrastructure, reduces vehicle use, and develops concepts of efficient infrastructure.

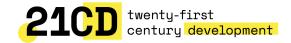
Goals & Strategies

Place	
Habitat	Goals: Goals not defined. Strategies: Green roofs and rooftop gardens for stormwater retention. Tree plantings. Lake with wetland habitat.
Transportation	Goals: Goals not defined. Strategies: Tramline. Biogas-fueled public transportation. Ferries, carpooling. Pedestrian pathways, bicycle infrastructure.
Water	
Water	Goals: 53 gallons of water per person, per day. Hazardous substances in water reduced by 50%. 95% of phosphorus separated and returned to agriculture. Strategies: Water to biogas. Stormwater runoff cleaned locally. Rainwater collected in a landscaped canal purified through constructed wetlands and delivered to Lake Hammarby Sjö. Wastewater test facility for innovative technologies.
4 Energy	

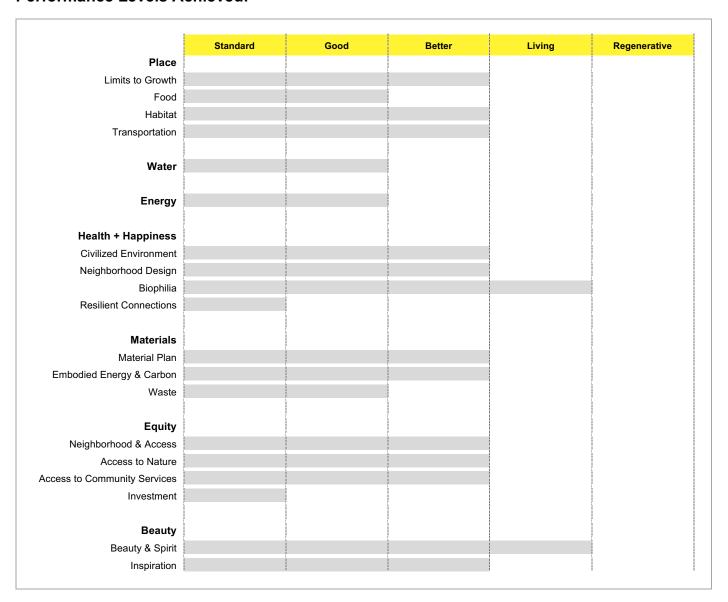


Energy	Goals: 50% reduction in energy consumption. Strategies: Solar PV and battery storage. Solar hot water heating. Hydropower. Biogas for transportation. District heating. Cogeneration for heat and electricity. Metering.	
日 Health + Happiness (Details not provided by researchers)		
 		
Material Plan	Goals: Goals not defined. Strategies: Products must be recyclable at the end of their life. Contractors required to follow material specifications. Selection of nontoxic materials.	
Embodied Energy & Carbon	Goals: Selection of sustainable materials. Strategies: Double-glazed facades. Low-energy appliances.	
Waste	Goals: 20% waste reduction. Strategies: Solid waste sorting through underground vacuum system. Fertilizer from biogas digestion. Wastewater from cogeneration plant circulates in city cooling network.	
吕 Equity		
Neighborhood & Access	Goals: 50% rental, 50% owner-occupied units. Promote a sense of community. Strategies: Social sustainability principles. Balanced public and private mixed-use community. Walkable.	
Access to Community Services	Goals: Goals not defined. Strategies: Accessible services. Public art, cultural activities. Environmental education.	
Beauty	(Details not provided by researchers)	

> See next page for Performance Levels achieved



Performance Levels Achieved:



Sources:

 $\frac{https://www.thenatureofcities.com/2014/02/12/hammarby-sjostad-a-new-generation-of-sustainable-urban-eco-districts/https://ourworld.unu.edu/en/hammarby-swedens-gold-medal-winning-eco-town$

*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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