

Hammarby Sjöstad

Stockholm, Sweden



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Size:

495 acres, 9,000 units

Dates:




1995 – 2015





Project Team:

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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 | <p>Goals: Goals not defined.</p> <p>Strategies: Green roofs and rooftop gardens for stormwater retention. Tree plantings. Lake with wetland habitat.</p> |
| Transportation | <p>Goals: Goals not defined.</p> <p>Strategies: Tramline. Biogas-fueled public transportation. Ferries, carpooling. Pedestrian pathways, bicycle infrastructure.</p> |
|  Water | |
| Water | <p>Goals: 53 gallons of water per person, per day. Hazardous substances in water reduced by 50%. 95% of phosphorus separated and returned to agriculture.</p> <p>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.</p> |
|  Energy | |

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

> 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 | | | | | |
| Materials | | | | | |
| Material Plan | | | | | |
| Embodied Energy & Carbon | | | | | |
| Waste | | | | | |
| Equity | | | | | |
| Neighborhood & Access | | | | | |
| Access to Nature | | | | | |
| Access to Community Services | | | | | |
| Investment | | | | | |
| Beauty | | | | | |
| Beauty & Spirit | | | | | |
| Inspiration | | | | | |

Sources:

<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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