

Gårstaden

Gothenburg, Sweden


Size:

4-building blocks, 2,700 apartments, population 7,500 – 8,500

Dates:

Original buildings built 1969 – 1972; renovated 1998 – 2004

Project Team:

Gårdstens Bostäder

The solar housing project Gårstaden re-envisioned existing buildings into a community that practices energy-efficient living. The project revitalizes community and building infrastructure, improves integration of renewable energy, and increases energy efficiency in construction.

Goals & Strategies

 Place	
Food	<p>Goals: Goals not defined.</p> <p>Strategies: Community greenhouses, gardening locations.</p>
Habitat	<p>Goals: Goals not defined.</p> <p>Strategies: Landscaping, internal courtyards, gardens.</p>
Transportation	<p>Goals: Goals not defined.</p> <p>Strategies: Access to public transportation. Electric vehicles for rental. Bicycle infrastructure.</p>
 Water	(Details not provided by researchers)
 Energy	
Energy	<p>Goals: 40% energy savings. 35% renewable energy for heating. Energy demand: 50kBtu/ft² heating and electricity, 18kBtu/ft² household energy.</p> <p>Strategies: Innovative wall solutions for solar thermal. Energy efficiency strategies. Window replacement. Insulated basement slab. Energy efficient appliances. Solar hot water. Individual metering. Ventilation with heat recovery. Solar PV. District heating. Solar air heating double walls. Wind turbines. Energy management monitoring and annual reports.</p>

 Health + Happiness (Details not provided by researchers)	
 Materials	
Embodied Energy & Carbon	Goals: Increase existing buildings' energy efficiency. Strategies: Renovation of existing buildings to increase energy efficiency.
Waste	Goals: Streamline separation of waste types. Strategies: Composting facilities. Recycling facilities. Resident education on waste types. Biogas creation from compost.
 Equity	
Neighborhood & Access	Goals: High-quality public housing. Strategies: Community engagement in redevelopment and ongoing decision-making.
Access to Community Services	Goals: Goals not defined. Strategies: Resident education and online resources for sustainable living. Unemployment services for residents. Acces to services, including schools and shops.
 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					
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://www.gardstensbostader.se/?doing_wp_cron=1578498305.7196180820465087890625
- https://www.formas.se/download/18.462d60ec167c69393b91e53c/1549956093043/Formas_SB11_brochure.pdf
- <https://www.government.se/contentassets/c499a64c636542989f295e75bdd126a2/towards-an-eco-efficient-economy---12-swedish-examples>

*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.

The initiative is created and supported by a partnership of AIA Minnesota, the Center for Sustainable Building Research, Colloqate Design and The McKnight Foundation.

