

Hedebygade

Copenhagen, Denmark



Size:

1 urban block, 12 buildings, 115 apartments, 430 people

Dates:



Original construction: 1880s;
Renovation: 2004






Project Team:

Anders Pedersen

Hedebygade is an urban demonstration development that showcases ecological renovation while promoting innovative technologies.

Goals & Strategies

 Place	
Food	<p>Goals: Goals not defined.</p> <p>Strategies: Community gardens.</p>
Habitat	<p>Goals: Goals not defined.</p> <p>Strategies: Innovative air filtration through vegetation. Rainwater gardens incorporated into landscaping design. Plant trellises and green walls.</p>
Transportation	<p>Goals: Goals not defined.</p> <p>Strategies: Located in dense urban environment near public transportation and services. Internal courtyard, walking paths.</p>
 Water	
Water	<p>Goals: 20% reduction in water use to 23-31 gallons of water per person, per year.</p> <p>Strategies: Greywater and rainwater collection areas. Efficient appliances.</p>

 Energy	
Energy	<p>Goals: Increase efficiency of buildings by 35-45%. Pilot for low-energy housing research. Energy demand: 37.5 kBtu/ft². CO₂ tons: 1.2 tons per person, per year.</p> <p>Strategies: Passive solar strategies. Sun wall with heat exchanger. PV integrated into façade. Heat recovery ventilation. Light tunnels. District heating. Efficient appliances, extensive metering and tracking of energy consumption. Community laundry. Individual metering and overall consumption monitoring.</p>
 Health + Happiness (Details not provided by researchers)	
 Materials	
Material Plan	<p>Goals: Utilized Danish concept for eco-accounting to reduce CO₂ emissions and increase efficiency. Create a technical specification for future projects.</p> <p>Strategies: Strategies not reported.</p>
Embodied Energy & Carbon	<p>Goals: Goals not defined.</p> <p>Strategies: Select recycled and locally sourced materials. Renovate existing buildings.</p>
Waste	<p>Goals: Goals not defined.</p> <p>Strategies: Reduce construction waste. Waste sorting facilities, waste reduction, and recycling education for residents.</p>
 Equity	
Neighborhood & Access	<p>Goals: Goals not defined.</p> <p>Strategies: Mix of student, tenant-owned, rental units, low-income, elderly, and unemployed housing. Integrated approach to urban renewal. Involvement of residents in planning.</p>
Access to Nature	<p>Goals: Goals not defined.</p> <p>Strategies: Buildings surround open internal courtyard with walking paths and water features.</p>
Access to Community Services	<p>Goals: Goals not defined.</p> <p>Strategies: Community center including hall, café, kitchen, and laundry.</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					
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:

<http://sealevel.ca/lowimpact/housing/action.lasso?Response=search05.lasso&ID=1463>

**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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