

HEDEBYGADE | Copenhagen, Denmark



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

Dates: Original construction: 1880s; Renovation: 2004

Team: Developer: Anders Pedersen

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

Intent: Create a demonstration project of environmental urban renovation, contribute to knowledge base on ecological solutions, and promote new energy efficient technologies

S
Sit+Place

GOALS: (Food) Not defined ; (Habitat+Biodiversity) Not defined ; (Transport) Not defined

STRATEGIES: (Food) Community gardens ; (Habitat+Biodiversity) Innovative air filtration through vegetation, rainwater gardens incorporated into landscaping design, plant trellises and green walls ; (Transport) Located in dense urban environment located near public transportation and services, internal court- yard walking paths

W
Water

GOALS: 20% reduction in water use to 23-31 gal/yr./person

STRATEGIES: Grey water and rainwater collection areas, efficient appliances

E
Energy

GOALS: Increase efficiency of buildings by 35-45%, pilot for low energy housing research.
Energy Demand: 37.5 kBtu/ft²
CO₂e tons: 1.2 tons/person/ year

STRATEGIES: Passive solar strategies, sun wall with heat exchanger, PV integrated into facade, heat recovery ventilation, light tunnels, district heating, efficient appliances, extensive metering and tracking of energy consumption, community laundry, individual apartment metering and overall consumption monitoring

E
Equity

Percentage of affordable units: Not specified though indicated in development

GOALS: Not defined

STRATEGIES: Mix of student, tenant owned, rental units, low income housing, elderly housing, and unemployed housing. Integrated approach to urban renewal, involvement of residents in planning, community center including hall, cafe, kitchen and laundry. Buildings surround open internal courtyard with walking paths and water features

M
Materials

GOALS: (Materials) Utilized Danish concept for eco-accounting to reduce CO₂ emissions and increase efficiency, create a technical specification for future projects ; (Waste) Not defined

STRATEGIES: (Materials) Select recycled and locally sourced materials, renovate existing buildings reduced construction waste ; (Waste) Waste sorting facilities, waste reduction and recycling education for residents

SUSTAINABILITY MATRIX

		STANDARD	GOOD	BETTER	LIVING COMMUNITY	REGENERATIVE
S Site+Place	Limits to growth		Developed for density/limits growth, contains open space			
	Urban Ag		Some community garden space			
	Habitat Exchange		Landscaping includes parks, landscaping, some emphasis on storm water management.			
W Water	Human Powered Living				Walkable streets, bicycle infrastructure, public transit links, car sharing, EV charging stations, easy access to services	
	Net Positive Water		Some stormwater reuse or infiltration, grey water recycling, conservation goals			
	Net Positive Energy				2030 standards of efficiency, advanced construction techniques, ongoing monitoring to meet goals, net +ve energy, carbon neutral goals, 100% renewable energy	
E Energy	Civilized Environment		Community has some groups to promote social connections			
	Healthy Neighborhood Design		Some access to walking trails that connect to amenities, parks, recreation areas			
	Biophilic Environment				Innovative landscaping using native plants, rain gardens, constructed wetlands, access to parks, waterfront, community gardening	
	Resilient Community Connections	Nothing considered/ not reported				
H Health+ Happiness	Living Material Plan				Project is designed to create human-scaled places, promotes culture & interaction	
	Embodied Carbon Footprint				Diversity of services available in community easily accessible by different modes of transportation	
	Net Positive Waste		Material selection for recycled/recyclable materials, waste collection facilities, reduction standards			
	Human Scale and Humane Places				Project is designed to create human-scaled places, promotes culture & interaction	
M Materials	Universal Access to Nature and Place		Access to parks, promotes sense of place, some daylighting strategies for buildings			
	Universal Access to Community Services		Some services and community centers in development accessible by bike or walking			
	Equitable Investment	No contribution to charity				
B Beauty	Beauty and Spirit					
	Inspiration and Education		Some education on the developments attributes, some opportunities for community events			

SOURCES:

<http://www.cardiff.ac.uk/archi/research/cost8/case/holistic/hedebygade.html>
<https://www.bshf.org/world-habitat-awards/winners-and-nominees/twelve-urban-ecology-projects-in-hedebygade/>
http://www.kulturarv.dk/1001fortaellinger/en_GB/hedebygade
<http://sealevel.ca/lowimpact/housing/action.lasso?-Response=search05.lasso&ID=1463>



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