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

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 courtyard walking paths

GOALS: 20% reduction in water use to 23-31 gal/yr/person
STRATEGIES: Grey water and rainwater collection areas, efficient appliances

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

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

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

**Sources:**

http://www.cardiff.ac.uk/archi/research/cost8/case/holistic/hedebygade.html
http://www.kulturarv.dk/1001fortaellinger/en_GB/hedebygade
http://sealevel.ca/lowimpact/housing/action.lasso?Response=search05.lasso&ID=1463