

# Quartier Vauban

Freiburg, Germany





**Size:**  
94 acres, 5,000 residents






**Dates:**  
1993 – 2006

**Project Team:**  
Forum Vauban, the City of Freiburg, Common & Gies Architects

**Quartier Vauban is an energy-efficient residential community with some services onsite.** All buildings must achieve a minimum energy standard. 100 units are built to passive house standards or plus-energy standards (producing more energy than they consume).

## Goals & Strategies

 <b>Place</b>	
<b>Limits to Growth</b>	<p><b>Goals:</b> Goals not defined.</p> <p><b>Strategies:</b> Strategies not reported.</p>
<b>Food</b>	<p><b>Goals:</b> Cooking with biogas instead of natural gas.</p> <p><b>Strategies:</b> Access to farmers markets in the area.</p>
<b>Habitat</b>	<p><b>Goals:</b> Goals not defined.</p> <p><b>Strategies:</b> Preserve existing trees. Landscaping practices avoid using herbicides and fertilizer. Reed bed water filtration garden.</p>
<b>Transportation</b>	<p><b>Goals:</b> 40% of residents live without owning a vehicle.</p> <p><b>Strategies:</b> Transit oriented development. Car sharing system. Bicycle infrastructure. Walking paths. Proximity to public transportation.</p>
 <b>Water</b>	
<b>Water</b>	<p><b>Goals:</b> Goals not defined.</p> <p><b>Strategies:</b> Rainwater capture and storage. Greywater purified and used in houses. Water infiltration into the ground. Blackwater separated by vacuum toilets connected to biogas plant.</p>

 <b>Energy</b>	
<b>Energy</b>	<p><b>Goals:</b> All buildings to achieve 65 kWh/m<sup>2</sup> heating energy. Reduce CO<sub>2</sub> emissions by 60%.</p> <p><b>Strategies:</b> 100 units built to passive house standard or plus-energy standard. Solar hot water, solar PV. Cogeneration plant operates with 80% woodchips and 20% natural gas. District heating. Biogas plant.</p>
 <b>Health + Happiness (Details not provided by researchers)</b>	
 <b>Materials</b>	
<b>Material Plan</b>	<p><b>Goals:</b> Goals not defined.</p> <p><b>Strategies:</b> Strategies not reported.</p>
<b>Embodied Energy &amp; Carbon</b>	<p><b>Goals:</b> Goals not defined.</p> <p><b>Strategies:</b> Thermal bridge-free construction. Renovation of existing buildings. Prefabricated elements. Triple-pane windows. Designed for adaptability over time. Preference for recycled materials.</p>
<b>Waste</b>	<p><b>Goals:</b> Goals not defined.</p> <p><b>Strategies:</b> Strategies not reported.</p>
 <b>Equity</b>	
<b>Neighborhood &amp; Access</b>	<p><b>Goals:</b> Goals not defined.</p> <p><b>Strategies:</b> Public access to streets. Human-scale design. Community house, playgrounds. Community engagement in planning and operation.</p>
<b>Access to Nature</b>	<p><b>Goals:</b> Goals not defined.</p> <p><b>Strategies:</b> Strategies not reported.</p>
<b>Access to Community Services</b>	<p><b>Goals:</b> Goals not defined.</p> <p><b>Strategies:</b> Strategies not reported.</p>
<b>Investment</b>	<p><b>Goals:</b> Goals not defined.</p> <p><b>Strategies:</b> Strategies not reported.</p>
 <b>Beauty (Details not provided by researchers)</b>	

> See next page for Performance Levels achieved

**Performance Levels Achieved:**

	Standard	Good	Better	Living	Regenerative
<b>Place</b>					
Limits to Growth					
Food					
Habitat					
Transportation					
<b>Water</b>					
<b>Energy</b>					
<b>Health + Happiness</b>					
Civilized Environment					
Neighborhood Design					
Biophilia					
Resilient Connections	Not specified				
<b>Materials</b>					
Material Plan					
Embodied Energy & Carbon					
Waste					
<b>Equity</b>					
Neighborhood & Access					
Access to Nature					
Access to Community Services					
Investment					
<b>Beauty</b>					
Beauty & Spirit	Not specified				
Inspiration					

**Sources:**

<http://www.passivhaus-vauban.de/idee.en.html>

*\*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.

