

# Braamwisch Ecological Settlement

Bramfeld, Germany



Photo © 2018 Google Earth

## Size:

3 acres, 40 units, 140 residents

## Dates:



1996 – 2000






## Project Team:

Federal Ministry of Science,  
Research & Technology; Hamburg  
Gas Works

**Braamwisch Ecological Settlement is a bedroom community that was designed as a pilot project to test solar municipal heating and energy efficient construction.** It is designed to supply the community with solar heating, and to create an innovative community dedicated to reducing CO2 emissions, water consumption, and energy usage.

## Goals & Strategies

 Place	
<b>Food</b>	<b>Goals:</b> Goals not defined. <b>Strategies:</b> Edible landscaping, community gardens.
<b>Habitat</b>	<b>Goals:</b> Goals not defined. <b>Strategies:</b> 30% edible landscaping, community gardens. Green roofs on sheds. Trees in landscaping. Reed wetland for greywater purification.
<b>Transportation</b>	<b>Goals:</b> Provide alternative transportation opportunities. <b>Strategies:</b> Car sharing. Walking paths, proximity to public transportation. Adjoining land was set aside as a park instead of parking for vehicles.
 Water	
<b>Water</b>	<b>Goals:</b> Conservation of water resources. <b>Strategies:</b> Separation of water circuits. Rainwater collection. Reduction in blackwater due to composting toilets. On-site plant-based greywater treatment system.

 <b>Energy</b>	
<b>Energy</b>	<p><b>Goals:</b> Energy demand: 30kBtu/ft<sup>2</sup> 0.31. 10 But/ft<sup>2</sup>, 100% solar heating. Reduce emissions by 85%.</p> <p><b>Strategies:</b> District solar hot water heating. 5,100 kWh solar panels that contribute to the community grid. Natural ventilation. Heat-recovery ventilation. Individual metering. Gas-fueled boilers providing backup heating. Passive solar design strategy. Lower energy approach to construction. Double wall cavity with natural material insulation.</p>
 <b>Health + Happiness (Details not provided by researchers)</b>	
 <b>Materials</b>	
<b>Embodied Energy &amp; Carbon</b>	<p><b>Goals:</b> Promote sustainable materials.</p> <p><b>Strategies:</b> Renewable, recyclable building materials, including cob walls and wood construction. Nontoxic materials selection.</p>
<b>Waste</b>	<p><b>Goals:</b> Goals not defined.</p> <p><b>Strategies:</b> Composting toilets. Greywater toilets. Waste separation. Greywater recycling.</p>
 <b>Equity</b>	
<b>Neighborhood &amp; Access</b>	<p><b>Goals:</b> Goals not defined.</p> <p><b>Strategies:</b> Shared open space. Walkable community.</p>
<b>Access to Nature</b>	<p><b>Goals:</b> Goals not defined.</p> <p><b>Strategies:</b> Biophilic design. Central courtyard with gardens. Edible landscaping.</p>
<b>Access to Community Services</b>	<p><b>Goals:</b> Goals not defined.</p> <p><b>Strategies:</b> Community areas.</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					
<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://masters.donntu.org/2013/feht/bardakova/library/article9.pdf>

[https://www.nationale-stadtentwicklungspolitik.de/NSP/DE/Werkstatt-Stadt/werkstattStadt\\_node.html](https://www.nationale-stadtentwicklungspolitik.de/NSP/DE/Werkstatt-Stadt/werkstattStadt_node.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.

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