

ECOQUARTIER | Pfaffenhofen, Germany



Size: 21.5 acres

Dates: 2010-2050 ongoing development

Team: Ministry VROM

Description: Ecoquartier is a planned residential community with a separate commercial district. The walkable development utilizes energy efficient construction and storm water management wetlands.

Intent: 100% renewable energy, carbon neutrality, walkable community with a schools, stores, and other services.

S

Sit+Place

GOALS: (Food) NA ; (Habitat+Biodiversity) NA ; (Transport) NA

STRATEGIES: (Food) Ecoquartier is located in an agrarian area with access to local produce, gardening ; (Habitat+Biodiversity) Open space design for landscaping, tree planting, constructed wetlands, retention basins for flood prevention, gardening is allowed ; (Transport) Car sharing, public transportation access, electric vehicles, bi-cycles, limited parking spaces, train station within 0.5 miles, limited vehicle access.

W

Water

GOALS: NA

STRATEGIES: Two water circuits for potable and hot water, greywater filtered through constructed wetlands.

E

Energy

GOALS: Carbon neutral by 2050, 100% renewable energy.

STRATEGIES: Solar PV on roof tops required to maximize roof utilization, PV in field to cover demand, district solar thermal heating, energy efficiency.

E

Equity

Percentage of affordable units: NA

GOALS: NA

STRATEGIES: Different architecture styles, plots can be purchased within the village for a new house to be built within the requirements, walking paths, community buildings and services, biophilic design and landscaping, a community services and schools within 2 mile radius of the community

M

Materials

GOALS: (Materials) NA ; (Waste) NA

STRATEGIES: (Materials) Cradle-to-cradle philosophy for material selection, Carbon footprint calculations and LCAs conducted on material selection, non-toxic materials ; (Waste) Recycling infrastructure, education on recycling, material selection that reduces CO₂

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				Constructed wetlands, land set aside, native plantings, 25% + of developable space is undeveloped	
	Human Powered Living				Walkable streets, bicycle infrastructure, public transit links, car sharing, EV charging stations, easy access to services	
W Water	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					
	Biophilic Environment					
	Resilient Community Connections	Nothing considered/ not reported				
H Health+ Happiness	Living Material Plan				Rigorous material selection standards, material plan made available to public	
	Embodied Carbon Footprint		Some proxy standards for reducing CO2 in material selection and construction			
	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	Vehicle travel dependent to services and community centers				
	Equitable Investment	No contribution to charity				
E Equity	Beauty and Spirit					
	Inspiration and Education		Some education on the developments attributes, some opportunities for community events			
B Beauty						

SOURCES:

http://www.nelsonelson.com/sustainable_implant_erasmusveld.pdf
<http://www.nelsonelson.com/portfolio/sustainable-implant-erasmusveld/>
<http://www.pbl.nl/sites/default/files/cms/publicaties/PBL-2015-Adaptation-to-climage-change-1632.pdf>

