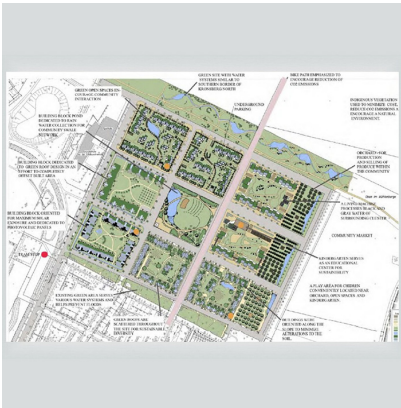


KRONSBERG | Hannover, Germany



Size: 395 acres. 6,000 units
 Dates: Planning 1990-1994, first phase 1996-2000, ongoing
 Team: City Council, 30 different developers
 Description: Kronsberg is a new residential eco-district on a former greenfield site
 Intent: Accommodate 15,000 residents and commercial areas in an ecological way

S
Sit+Place

GOALS: (Food) Not defined ; (Habitat+Biodiversity) Not defined ; (Transport) Public transportation oriented community
STRATEGIES: (Food) Market, proximity to services, composted food waste for gardens ; (Habitat+Biodiversity) Green-roofs, courtyard gardens, central park, constructed wetlands, every building has access to open spaces ; (Transport) High density development with access to tram line connecting neighborhoods to greater community, walkable neighborhoods, bicycle infrastructure, traffic minimization strategies, 0.8 parking space ratio per apartment

W
Water

GOALS: Water retention and infiltration into the ground
STRATEGIES: Water-saving fixtures, storm water retention and collection, 42-50% infiltration of rainwater, green-roofs, landscaped drainage and retention ponds

E
Energy

GOALS: Reduced CO2 emissions by 60%.
 Average: Heating demand: 56 kWh/m²
STRATEGIES: Low-energy construction to meet LEH standard, designed to meet energy efficiency targets, energy saving appliances, district solar heating, 32 passive houses, 3.6 MW wind turbines, 2 decentralized combined heat and power plants

E
Equity

Percentage of affordable units: 50%
GOALS: Ensure a mix of income levels can live in the development
STRATEGIES: Non-toxic certified materials, high density development, pedestrian friendly, community centers including schools, day care centers, health center, commercial area, art center, shopping, religious centers

M
Materials

GOALS: (Materials) Not defined ; (Waste) 80% of construction waste not landfilled
STRATEGIES: (Materials) Low energy construction methods, non-toxic certified materials used ; (Waste) Waste management innovations, home composting, organized waste facilities, 80% pre-sorting of waste and recyclables from construction

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 goal of efficiency, some reduction goals for energy & carbon, some renewable energy, solar PV ready			
E Energy	Civilized Environment		Community has some groups to promote social connections			
	Healthy Neighborhood Design				Access to walking and bike trails connecting amenities, parks, recreation areas	
	Biophilic Environment				Innovative landscaping using native plants, rain gardens, constructed wetlands, access to parks, waterfront, community gardening	
	Resilient Community Connections				Emergency planning, access to facilities in case of emergency	
H Health+ Happiness	Living Material Plan				Rigorous material selection standards, material plan made available to public	
	Embodied Carbon Footprint				Material selection requirements, proxy standards for reducing CO2 in material selection and construction on-going energy monitoring	
	Net Positive Waste				Reduction in construction waste, material selection for recycled/recyclable materials, innovative waste collection facilities, waste to energy	
	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, innovative landscaping, promotes sense of place, community agriculture, daylighting for buildings	
	Universal Access to Community Services				Diversity of services available in community easily accessible by different modes of transportation,	
	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			

SOURCES:

http://www.energy-cities.eu/IMG/pdf/Sustainable_Districts_ADEME1_Kronsberg.pdf
<http://www.rudi.net/node/7346>
<http://www.unil.ch/files/live/sites/ouvdd/files/shared/Colloque%202006/Communications/Eco-urbanisme/Bonnes%20pratiques/K.%20Rumming.pdf>
<http://www.slideshare.net/liyanarusman/presentation-task-4-p61498>
<https://www.hannover.de/content/download/221467/3496513/file/Kronsberg---a-model-for-sustainable-urban-development.pdf>



THE MCKNIGHT FOUNDATION



AIA Minnesota