

## SOLAR CITY | Linz, Austria



Size: 89 acres, 2,700 residents

Dates: 1994-2006

Team: READ-Gruppe, Municipality Linz, Atelier Dreiseitl

Description: Solar City is a neighborhood development that utilizes solar access for the orientation of the buildings

Intent: Promote innovative solar and water management technologies

S

Sit+Place

GOALS: (Food) Not defined ; (Habitat+Biodiversity) Not defined ; (Transport) Not defined

STRATEGIES: (Food) Not reported ; (Habitat+Biodiversity) Habitat preserved between development and river, wetlands, bioswales, landscaping with native habitat, 1,500 trees planted ; (Transport) Walking paths, shared vehicles, bicycle infrastructure, underground parking, limited surface level parking

W

Water

GOALS: Not defined

STRATEGIES: Water infiltration, pilot program for decentralized water purification set up for 88 homes and a primary school, separation of water types

E

Energy

GOALS: Energy consumption demand not to exceed 44kWh/m<sup>2</sup>a

STRATEGIES: Solar hot water, solar PV, district heating, solar access for buildings influenced design of settlement, 2-4 stories high to minimize shading, 3 homes are passive houses, heat recovery ventilation

E

Equity

Percentage of affordable units: Not defined  
GOALS: Promote community interaction

STRATEGIES: Human scale development, walkable neighborhood, access to services, schools, compact construction

M

Materials

GOALS: (Materials) Not defined ; (Waste) Low energy construction, pre-fabrication, encourage use of local resources

STRATEGIES: (Materials) Not reported ; (Waste) Compost, recycling infrastructure, in the 88 pilot program waste is turned into compost and fertilizer

SUSTAINABILITY MATRIX

		STANDARD	GOOD	BETTER	LIVING COMMUNITY	REGENERATIVE
<b>S</b> Site+Place	Limits to growth			Built on greyfield of brown-field, developed for density, conserves habitat land		
	Urban Ag	No garden space required				
	Habitat Exchange			Constructed wetlands, land set aside, native plantings, 25% + of developable space is undeveloped		
	Human Powered Living		Promotes walkable streets, bicycle infrastructure, access to some services			
<b>W</b> Water	Net Positive Water		Some stormwater reuse or infiltration, grey water recycling, conservation goals			
	<b>E</b> Energy	Net Positive Energy		2030 standards goal of efficiency, some reduction goals for energy & carbon, some renewable energy, solar PV ready		
<b>H</b> Health+ Happiness		Civilized Environment			Community has some organization and collaborates on 1-2 of the living community listed programs	
	Healthy Neighborhood Design			Innovative landscaping using native plants, rain gardens, constructed wetlands, access to parks, waterfront, community gardening		
	Biophilic Environment			Innovative landscaping using native plants, rain gardens, constructed wetlands, access to parks, waterfront, community gardening		
	Resilient Community Connections	Nothing considered/ not reported				
<b>M</b> Materials	Living Material Plan		Some material selection standards, passive house standards used			
	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 and interaction		
<b>E</b> Equity	Universal Access to Nature and Place			Access to parks, innovative landscaping, promotes sense of place, community agriculture, daylighting in buildings		
	Universal Access to Community Services			Diversity of services available in community easily accessible by different modes of transportation		
<b>B</b> Beauty	Equitable Investment	No contribution to charity				
	Beauty and Spirit					
	Inspiration and Education		Some education on the developments attributes, some opportunities for community events			

SOURCES:

<http://www.urbangreenbluegrids.com/projects/solar-city-linz-austria/>  
[http://www.oikodomos.org/workspaces/app/webroot/files/references/text/sozcelik\\_15\\_solar\\_city.pdf](http://www.oikodomos.org/workspaces/app/webroot/files/references/text/sozcelik_15_solar_city.pdf)  
<http://www.ramboll.com/projects/germany/solar-city>



THE MCKNIGHT FOUNDATION



AIA Minnesota