

NIEUWLAND SOLAR CITY

Amersfoort, Netherlands



Size: 173 acres, 5,000 units

Dates: 1995-2012

Team: Environmental supervisor BOOM, Novem, REMU

Description: Nieuwland Solar City is a neighborhood development that promotes innovative solar PV. The development is a pedestrian friendly neighborhood that also contains innovative water catchment areas

Intent: Produce 1 MW of solar PV, create case studies of innovative technology

S

Sit+Place

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

STRATEGIES: (Food) Not reported ; (Habitat+Biodiversity) Landscaping includes wetland areas around pond, parks, treelined streets ; (Transport) Public transportation, limitation on vehicles and parking, designated bike paths

W

Water

GOALS: Not defined

STRATEGIES: Stormwater infiltration through catchment, bioswales leading to ponds

E

Energy

GOALS: Promote solar technology, establish infrastructure for future cooperation between utilities and developers, 1 MW solar PV

STRATEGIES: Innovative solar PV that is integrated into roofing systems, solar hot water, daylighting access informed development, enhancing system performance through optimized design

E

Equity

Percentage of affordable units: Not defined
GOALS: Not defined

STRATEGIES: A diversity of housing types, cultural spaces, schools, services, connection to greater community, human scale design, parks, public art

M

Materials

GOALS: (Materials) Not defined ; (Waste) Not defined

STRATEGIES: (Materials) Standard construction practices with an emphasis on efficiency ; (Waste) Organized waste collection including compost, recycling, residual

SUSTAINABILITY MATRIX

		STANDARD	GOOD	BETTER	LIVING COMMUNITY	REGENERATIVE
S Site+Place	Limits to growth		Developed for density/limits growth, contains open space			
	Urban Ag	No garden space required				
	Habitat Exchange		Landscaping includes parks, landscaping, some emphasis on storm water management			
	Human Powered Living				Pedestrian oriented community, public transit linkage to services, public bike infrastructure	
W Water	Net Positive Water		Some stormwater reuse or infiltration, grey water recycling, conservation goals			
	E Energy	Net Positive Energy	Energy from grid, no renewable energy requirements greater than code			
H Health+Happiness		Civilized Environment		Community has some groups to promote social connections		
	Healthy Neighborhood Design				Dedicated walking trails, parks, plazas, squares, recreation areas, health plan for citizens	
	Biophilic Environment			Innovative landscaping using native plants, rain gardens, constructed wetlands, access to parks, waterfront, community gardening		
	Resilient Community Connections	Nothing considered/ not reported				
M Materials	Living Material Plan	Standard construction and material selection				
	Embodied Carbon Footprint	No embodied carbon measuring or offsetting greater than code				
	Net Positive Waste	Standard construction, material selection, and waste collection				
	Human Scale and Humane Places			Project is designed to create human-scaled places, promotes culture and interaction		
E 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		
	Equitable Investment	No contribution to charity				
B Beauty	Beauty and Spirit			Public art is incorporated into the community		
	Inspiration and Education	Standard development				

SOURCES:

http://www.pvupscale.org/IMG/pdf/Case_study_Nieuwland_final.pdf
http://www.pvdatabase.org/urban_view_detailsmore.php?ID=3
<http://ieeexplore.ieee.org/stamp/stamp.jsp?arnumber=535474>
 google maps



THE MCKNIGHT FOUNDATION



AIA
Minnesota