

SONOMA MOUNTAIN VILLAGE

Rohnert Park, California, U.S



Size: (New construction) 200 acres, 1,900 homes, 5,000 residents

Dates: 2006-2025

Team: Coddling Enterprises

Description: The Sonoma mountain village is a mixed-use community that integrates sustainability in to the planning and lifestyle of the development. They received the GEELA Leadership award and were endorsed by One Planet Communities

Intent: LEED ND Platinum, community education and involvement, "Five minute lifestyle" where services are readily accessible

S
Sit+Place

GOALS: (Food) Source 65% of all food within 300 miles and 25% from within 50 miles by 2020 ; (Habitat+Biodiversity) 20% greenspace, 10% habitat ; (Transport) Reduce transportation emissions by 82%.

STRATEGIES: (Food) Community gardens, fruit trees, farmers market, grocery store, micro farm in community, daily farmers markets ; (Habitat+Biodiversity) 27 acres of parks, Prohibited use of pesticides and herbicides, edible landscaping ; (Transport) Walkable neighborhoods, bike paths, electric vehicles charged with solar power, services in walkable areas, biofuel filling station, carpooling and car sharing programs, alternative fuel shuttle to Sonoma State University

W
Water

GOALS: Reduction of consumption by 60% from norm

STRATEGIES: Efficient appliances, education, rainwater harvesting and reuse of water, reclaimed water used for irrigation, storm water used for habitat

E
Energy

GOALS: Carbon Neutral by 2020, 100% renewable energy for electricity by 2020 (currently 50%). Energy Demand: 27.3-50 kBtu/ft²

STRATEGIES: 1.14 MW solar array, data center, ground-sourced heat pumps, biomass, biogas

E
Equity

Percentage of affordable units: 25% affordable housing units will be made available for rent and purchase
GOALS: Not defined

STRATEGIES: Public art, murals, festivals, business incubator to promote live-work and community involvement, community gardens, walking and bike trails, dog parks, sports field, walkable and accessible streets, sustainability education

M
Materials

GOALS: (Materials) The construction uses 20% of materials from the site and 60% of materials from within 500 miles ; (Waste) Zero waste

STRATEGIES: (Materials) Low impact materials were selected, cradle-to-cradle accounting was used to calculate embodied carbon of all materials, resource efficiency ; (Waste) Composting, generating energy through waste. Construction waste reduction: 90% from demolition, 70% construction waste, and 25% from new construction

SUSTAINABILITY MATRIX

		STANDARD	GOOD	BETTER	LIVING COMMUNITY	REGENERATIVE
S Site+Place	Limits to growth			Built on greyfield of brown-field, developed for density, conserves habitat land		
	Urban Ag			Opportunity for every resident to have access to community garden, green-house, local farm education		
	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			Greywater purification & reuse, on-site treatment of some blackwater, constructed wetlands, stormwater prevention (green-roofs & impermeable surfaces)		
	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 organization and collaborates on 1-2 of the living community listed programs		
	Healthy Neighborhood Design			Access to walking and bike trails that connect to amenities, parks, recreation areas		
	Biophilic Environment			Innovative landscaping using native plants, rain gardens, constructed wetlands, access to parks, waterfront, community gardening		
	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			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 and interaction		
M Materials	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				
E Equity	Beauty and Spirit				Public art is incorporated into the community	
	Inspiration and Education				Educational website, brochures, education on buildings, landscaping & infrastructure, case study, metering, ongoing improvements	
B Beauty						

SOURCES:

<https://somovillage.com/>
<http://inhabitat.com/sonoma-mountain-village-north-americas-first-one-planet-community/>
<http://www.pressdemocrat.com/news/5036774-181/farmster-takes-root-in-rohnert?ref=menu>
<http://patch.com/california/rohnertpark-cotati/development-update-sonoma-mountain-village-plans-progress>



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AIA Minnesota