

2009-2025 Accomplishments

80,000,000 gallons Waste water reclaimed

1,338,750 lbs. Carbon dioxide (CO2) saved

796,875 kWh Energy produced via solar panels

63,000 people Took an OCSL building tour Net Zero kWh. Energy used from the grid

Building Sq. Ft.

6,250

Site Acreage 45

Water Reclamation Capacity



Maximum Design Flow

gallons per day (GPD) Estimated annual flow 5 million gallons

Sustainability Metrics

he project is certified as LEED Platinum and has earned 'living' status in Living Building Challenge[™] 1.3.

Embodied CO2

-1,387

metric tons (+/- 25%) (Estimated using buildcarbonneutral.com)

Embodied carbon is the carbon released when a product is manufactured, shipped to a project site and installed. The new wetlands plant area greatly offset the embodied CO₂ of the construction project, which resulted in a negative number.

The Construction Carbon Calculator estimates embodied carbon. This calculator looks at an entire project and takes into account the site disturbance, landscape and ecosystem installation or restoration, building size, and base materials of construction.

Rainwater Use for Toilet Flushing

40

gallons. Average Daily

1,800

gallon cistern stores enough water for 45 days

Generation Capacity (Electricity)



Demand

sq. ft. of photovoltaic panels, 211 panels in 3 arrays

134.2 Kw/day

(48.53 Kw/hour max output)

Electricity Demand

132.77 Kw/day (average)

Electricity Usage





PROJECT FACT SHEET: Omega Center for Sustainable Living (OCSL)

Material Sourcing (based on Living Building Challenge)

More info at: eOmega.org/ocsl & issuu.com/bnim/docs/bnim flow



9,000

miles Renewable Energy Technologies (PV systems)

1,000

miles Lightweight Materials (insulation, carpet, fabrics)

Construction Waste Recycling and Diversion (from landfill)

99% of metal

scraps

recycled

99%

recycled

of cardboard scraps and waste

99% of rigid foam waste was reused elsewhere or recycled

99% of wood

waste was

shredded

stored for

future use

500

products)

Medium Weight

Materials (wood

miles

100%

250

Heavy Materials

(brick, stone,

concrete)

miles

of food waste was composted for mulch or

100% of glass waste, paper, and plastic packaging waste was recycled.

Wood Sourcing

All wood is either from FSC Certified Forest sources or reclaimed sources. Plywood roof and wall sheathing was reclaimed from the 2009 Presidential Inaugural Stage. Framing lumber was reclaimed from several deconstructed buildings in New York State.

Reclaimed Wood

1,198 cu. ft. Volume

52,703 lbs. Weight (plywood, framing lumber, siding, doors, trim, paneling)

FSC Certified Wood

111 cu. ft. Volume

3660 lbs. Weight (windows, exterior doors, glu-lam structure, roof sheathing)

Red Materials Avoided (based on list from the Living Building Challenge)

Cadmium, Chlorinated Polyethylene and Chlorosulfonated Polyethlene, Chlorofluorocarbons (CFCs), Chloroprene (Neoprene), Formaldehyde (added), Halogenated Flame Retardants, Hydrochlorofluorocarbons (HCFCs), Lead, Mercury, Petrochemical Fertilizers and Pesticides, Phthalates, Polyvinyl Chloride (PVC), Wood Treatments containing Creosote, Arsenic or Pentachlorophenol

Project Team

Owner: Omega Institute

Architect: BNIM Architects, Steve McDowell, Laura Lesniewski, Brad Clark, Sarah Hirsch, Ramana Koti

Civil Engineer: Chazen Companies, Jim Beninati

Construction: David Sember Construction, David Sember

Ecological Design: John Todd Ecological Design, Dr. John Todd, Chloe Starr, Conor Lally, Kim Robinson, Jonathan Todd

Landscape Architect: Conservation Design Forum, David Yocca, Tom Price, Gerould Wilhelm, Trish Beckjord, Jason Addington Mechanical/Electrical/Plumbing Engineer: BGR Engineers, Katrina Gerber, Erin Zirjacks, Jim Basquette

Structural Engineer: Tipping Mar + associates, David Mar, Marc Steyer

Water Systems Engineer: Natural Systems International, Michael Ogden, Erin English, Pete Munoz, Olin Christy, Rachel Arrieta