GREEN NEW DEAL PLAN

ENVIRONMENT  ECONOMY  EQUITY
L.A.’s 5 Zeros

Emissions must decline everywhere, as soon as possible. L.A.’s GND puts our city on the road to a zero carbon future across the board.

Zero Carbon Grid
Achieve 100% renewable energy by 2045

Zero Carbon Buildings
100% net-zero carbon new buildings by 2030 & all buildings by 2050

Zero Carbon Transportation
100% zero emission vehicles in the city by 2050

Zero Waste
100% landfill diversion rate by 2050

Zero Wasted Water
100% of our wastewater recycled by 2035
DESIGN INTENT:

- West Los Angeles Yard is an essential services facility designed to survive the “Big One” and immediately get to work restoring power for the City of Los Angeles.
- Regenerative Energy with a combination of Energy Conservation, efficient systems and extensive PV array that supplies 154% of the modeled EUI.
- Using the available excess energy to power EV charging for 60% of the Fleet and staff vehicles.
- Grey Water treatment and other water conservation strategies reduce potable water use by over 50%.
- Healthy workplace with access to daylight and connection to nature.
- Significant Community benefits included a Shared Training/Meeting Room, landscape and public art.
- LEED Gold on pathway to Platinum.
Designed as an Essential Services Facility.

Regenerative On-Site Renewable Energy PV array produces 154% of modeled building EUI.

Electrochromic Glazing reducing heat gain and glare.

Solatubes provide daylight to achieve LEED credit level of glare free daylight.

Thermally broken, insulated Precast Concrete Panels enhance human comfort with thermal mass.

Hybrid natural ventilation + Displacement HVAC mechanical system gives users control and reduces energy consumption in the offices.

Solar Chimneys with fan assist + radiant heating = code compliant air changes & addresses worker comfort.

On-site treatment of shower and sink grey water is re-used for landscape and to flush toilets.

Site design manages 85 percentile storm event and the 25 year, 24 hour peak underground system flows.

Off-site run-off from the street is treated in the parkway bio-swale to reduce pollution.

Urban Heat Island effect is reduced by utilizing 100% concrete paving + extensive shading with PV arrays and landscape.

Installing EV chargers for 60% of the fleet vehicle, public and staff parking contributes to the electrification of transportation and the reduction of GHGEs.

Healthy Materials selected to eliminate harmful chemicals and minimize adverse impacts to human health.

Active Stairs + free employee Fitness Center enhance staff wellness.

Extensive Green Roof provides views to nature for the office users.

Community Benefits include enhanced service + access to the Community/Training Room + Public Art (Artist tbd) + enhanced landscape buffer.
HEALTH & WELLNESS

- Interior material selections eliminate chemicals of concern; including those identified by LEED Healthcare credits, WELL feature X08, the Six classes list of harmful chemicals and the Red List Chemicals.
- Wellness is enhanced by attractive stairs to use in lieu of elevators, a free staff fitness center and a generous roof deck for breaks and celebrations.
- Glare-free daylight is provided from a combination of electro-chromic glazing and solatubes.
- Comfort is enhance by allowing individual control of underfloor HVAC or the choice to open windows for natural ventilation.
WATER CONSERVATION

- While this yard focuses on the Power Infrastructure, the Owner cares about water. Unlike a typical facility, most of the crew who work here work out in the field and come back for daily showers before heading for home.
- On-site grey water treatment of the water from the showers and the sinks is reused for drip irrigation and flushing of toilets.
- Low-flow fixtures minimize potable water consumption
- Potable water and fire suppression water is stored on-site for emergencies
- LID measures help to treat and detain stormwater from the 85th percentile storm event on-site.
- Off-site run-off from the street is cleaned in a bio-swale to better protect the Pacific from pollution.

Design Water Use

- 2411 gallons/yr provided for landscape
- 782 gallons/yr provided for w.c.

Provided with Gray Water on Site

- 67,000 gallons/yr provided for landscape
- 715,000 gallons/yr provided for w.c.

Design Water Use

- 100% Drought tolerant plants
- 85th Percentile rainwater management using LID
REGIONAL BENEFITS

- Electrification of Transportation.
- EV Charging at 60% of both the Fleet and personal vehicles.
- Exploration to specify Carbon Cure sequestration in the Concrete = +/-725,000 lbs of CO2 or the equivalent to 380 acres of trees for one year.
- Use of concrete paving = + durability, reduce the Urban Heat Island Effect, reducing the need for cooling throughout the region.

RESILIENCE IS A SUSTAINABLE STRATEGY

- After any major disaster, the Yard will become a 24/7 Emergency Response Center w/ 3 days backup.
- Essential services level structure designed to meet Risk Level 4 to withstand seismic events & remain operational.
- On-site Emergency generators supply power with extended capacity from PV array and back-up battery storage.
- Food and Water rations stored for 150% staff level.
- Fire suppression water stored on-site.
- Limited potable water + grey water for toilet flushing
- Sufficient power for mechanical ventilation + extended comfort provided by natural ventilation
- Ability to convert key functions to sleeping dormitories
- This facility will support the crews who will restore power to the City of Los Angeles.