Sustainable Performance Design Recommendations

Guidelines for New County Buildings

This is a working document subject to periodic updates. Categories are ordered by priority and impact; the highest priorities within each category are indicated in turquoise. References to requirements in the Santa Fe County Strategic Plan (SFCSP), Sustainable Land Development Code (SLDC), and Santa Fe County Resolutions are in the green text boxes to the right of each category.

1) Onsite Renewable Energy Generation

- a. Orient building and parking lot for favorable solar gain
- b. Involve solar contractors from the beginning. Install conduits for photovoltaic (solar) system during construction (as opposed to retrofitting post-construction)
- c. Include add alternate for photovoltaic system as both roof mount and parking canopy with EV charging station(s) powered by solar array
- d. Ensure adequate load bearing capacity for solar array (on both facility roof and carport)

✓ SFCSP Strategy: Install solar generation
✓ Required by the County’s SLDC commercial building code
✓ Resolution 2013-7: Lead-by-example in renewable energy generation

2) Energy Efficiency

- a. Build to ASHRAE 90.1-2016 specifications
- b. Use LED lighting and sensors throughout that are eligible for PNM rebates
- c. Maximize use of natural daylight
- d. Use HVAC systems that are eligible for PNM rebates
- e. Build all-electric facility (e.g. electrical heat pumps; solar + battery storage for backup energy in the event of a power outage)
- f. Use all Energy Star appliances

✓ Required by the State adoption of 2018 IECC and County SLDC 2021 update
✓ SFCSP Strategy: Energy efficient facilities
✓ Resolution 2013-7: Lead-by-example in energy efficiency
3) **Indoor Water Use**

   a. Use touchless WaterSense-labeled fixtures
   b. Install touchless dual-flush toilets
   c. Install touchless water bottle filling stations with drinking fountain

   ✓ Resolution 2013-41: Water conservation

4) **Waste**

   a. Allow space for two dumpsters in disposal area, for garbage and recycling
   b. Allow space for food waste collection carts in locations that serve food

   ✓ Resolution 2013-7: Waste reduction

5) **Transportation**

   a. Provide at least one Level 2 electric vehicle charging station in solar parking structure, powered by solar array
   b. Provide easily accessible bicycle parking
   c. Provide walking paths if not within walkable area
   d. Provide priority parking for carpooling

   ✓ SFCSP Performance Measure: Electric vehicle charging stations
   ✓ SFCSP Strategy: Alternate transportation
   ✓ Resolution 2017-68: Reduce GHG emissions
   ✓ Item (c) per SLDC 7.10.6

6) **Site Planning and Drainage**

   a. Passively capture site water (roof and hardscaping) for irrigation of landscaping
   b. Install water catchment system for irrigating landscaping/cistern and solar powered pump for irrigation
   c. Recommend installing permeable pavement for parking surfaces

   ✓ Item (b) per Resolution 2013-41: Lead-by-example in water conservation
   ✓ SLDC 7.13.11.7: Water catchment
7) Landscaping

a. Plant xeric and heat-tolerant landscaping, designed to foster favorable microclimates (e.g. deciduous tree shading on southern and western aspect) and local food production
b. Plant drought-tolerant trees and pollinator plants on site, in locations where will not conflict with planned solar systems

8) Construction Resources and Materials

a. Use materials with low volatile organic compounds
b. Utilize wood-based products and materials that are comprised of at least 50% certified wood in accordance with the Forest Stewardship Council’s principles and criteria
c. As much as possible use natural materials sourced locally/regionally
d. Use durable, maintenance-friendly materials
e. Require rubberized asphalt for parking lot
f. Require recycled glass as aggregate in concrete

9) Post-Construction Health and Livability

a. Install video conferencing capabilities
b. Provide Energy Star dishwasher in break rooms
c. Provide low flow showers (for bicycle commuters)
d. Reduce noise and improve work space acoustics
e. Centralize copying, mailing, etc. to promote collaboration and movement
f. Increase indoor-outdoor connection with outdoor gathering space/community garden area
g. Install building dashboard to showcase electricity use, water use, PV generation, and weather

✓ Item (a) per Resolution 2017-68: Reduce GHG emissions
✓ Item (b) per SFCSP Objective: Increase consumption of healthy foods

✓ Item (a) per Resolution 2017-68: Reduce GHG emissions
✓ Item (c) per SFCSP Objective: Promote economic development
✓ Items (d) and (f) per Resolution 2013-7: Waste reduction

✓ Item (a) per SFCSP Objective: Wise use of technology
✓ Resolution 2017-68: Reduce GHG emissions
✓ Item (e) per Resolution 2013-7: Waste reduction
✓ SFCSP Strategy: Alternate transportation