

INDEX

- annual energy baseline, 23
ASCE Policy 418, 19
ASCE Policy 556, 19
- base date, 1
baseline life-cycle water, 24
brownfield, 1
- carbon dioxide equivalent (CO₂e), 1–2
commissioning, 1
community, 1, 5, 17
constant dollars, 2
- earthwork considerations, 7, 23
electric vehicle (EV), 2, 23
embodied carbon, 11, 27
energy management plan, 7, 23–24
energy planning, 24
energy use intensity, 2
environmental product declarations (EPD), 2, 11, 27
Envision 3.0 Rating Tool framework, 17
EPD. *See* environmental product declarations (EPD)
equity, 2
EV. *See* electric vehicle (EV)
- flexible adaptation pathways, 2, 29
- GHG. *See* greenhouse gas (GHG) emissions
global warming potential (GWP), 1–2, 27
greenhouse gas (GHG) emissions, 2, 11; embodied carbon, 27;
embodied carbon reductions, 11; embodied carbon values, 11;
operational, 11, 27; reductions in, 27
greyfield, 2
GWP. *See* global warming potential (GWP)
- hazardous materials, 2, 23
hazards, 29
high performance building, 2
- IgCC (International Green Construction Code), 2
infrastructure, 2, 29; design, 23; resource allocation solutions, 7,
23; solutions, effects/impacts, 25
International Green Construction Code (IgCC), 2
ISO 14004 standard, 17
ISO 26000 standard, 17
- LCCA. *See* life-cycle cost analysis (LCCA)
leadership, vii; components, 3; GHG emissions, 11; by Natural
World Assessment, 9; resilience analysis, 13; resource
allocation, 7; sustainability, 3, 19
Leadership in Energy and Environmental Design (LEED)
programs, 24
life cycle, 2; assessments, 19; cost, 2
life-cycle cost analysis (LCCA), 2, 31; application, 15; cost
components, 15; durations of, 15; limitations, 15; purpose, 15;
scope, 15; use of, 17
long-term monitoring, 24
- mobility, 5
multi-hazard qualitative risk analysis, 2
- Natural World Assessment, 9; components, 9, 25; infrastructure
solutions, 9, 25
- O&M. *See* operations and maintenance (O&M)
on-site renewable energy, 2
operational carbon, 2
operational GHG emissions, 11, 27
operations and maintenance (O&M), 7, 23–24
owners, 2, 17; ASCE Policy 418, 19; ASCE Policy 556, 19;
principles, 19; and sustainability leadership, 19
Owners Commitment to Sustainability (ASCE Policy 556), 19
- photovoltaic modules, 27
pollutants, 25
procurement plan, 2, 23
- quality of life, 5, 21
- renewable energy, 24
resilience analysis, 2, 13, 29
resource allocation, 7; earthwork considerations, 7, 23; energy
management plan, 7, 23–24; infrastructure solutions, 7, 23;
purpose, 7; scope, 7; sustainable practices, 7, 24; waste
reduction, 7, 23; water management plan, 7, 24
retirement phase, 2
risk register, 2
- site biodiversity, 25
SMP. *See* sustainability management plan (SMP)
social and environmental management plans, 17
source energy, 2
stormwater infiltration, 25
sustainability, 2; leadership, 3, 19. *See also* leadership
sustainability management plan (SMP), 1–2, 17
sustainable infrastructure, 2, 19; acronyms, 2; components and
outcomes, 1; definitions, 1–2; limitations, 1; project team
composition, 1; project team leaders, 1; purpose, 1; quality of
life, 21; standard authority, 1; use of, 1
sustainable practices, 7, 23–24
- The Role of the Civil Engineer in Sustainable Development*
(ASCE Policy 418), 19
threats, 29
time scale analysis, 29
- vulnerability, 2
- waste reduction, 7, 23
water management plan, 7, 24
well-being, 5