About PAE
PAE’s services include:

- Mechanical Engineering
- Electrical Engineering
- Sustainable Design
- Lighting Design
- Technology Services
- Commissioning
- Energy Modeling
- Comfort Modeling
PAE Key Markets

Government/Civic
Healthcare
Laboratories
Education K-12
Industrial
Cultural/Spiritual
Colleges/Universities
Commercial/Non-Profit
Leaders in Sustainable Design

Living Building 4

Net Zero Energy 10

LEED Platinum 25

LEED Gold 80
CO2 Emissions
From Fossil Fuels

Transport 33%
Buildings 39%
Industry 29%

Source: US Green Building Council
The Bullitt Center
Seattle, WA

$18 million
50,000 sf
6 story

Living Building Architecture 2030

83% Saved
10 EUI
Net Zero

80% Saved
Rainwater
Greywater
Green Roof
Bioswale

PV
Geothermal
Radiant Floor
Natural Ventilation
Day Lighting

Architect: Miller|Hull
Energy Use + Solar Budget

- Average Building (Energy Star Score = 50)
- Seattle Energy Code Building
- LEED Platinum Building (19 Energy Credits)
- PV Budget
- Proposed Building

- 83% Savings

Energy Use + Solar Budget

- 92 kWh/sf/year
- 52 kWh/sf/year
- 32 kWh/sf/year
- 230,000 kWh
- 229,000 kWh

- PV ROOF
- DOMEST HOT WTR
- ELEVATOR
- VENT FANS
- PUMPS & AUX
- SPACE COOLING
- SPACE HEATING
- PLUG LOADS
- IT SERVER
- LIGHTS
Rocky Mountain Institute: Innovation Center
Basalt, CO

| STATISTICS | 15,000 sf | 2 story |
| BENCHMARKS | Living Building Petals | LEED Platinum | Architecture 2030 |
| FEATURES | Net Zero Energy | 75% Saved | 17.2 EUI |
| ENERGY | Rainwater Reclamation | Greywater Infrastructure | Low-Flow Fixtures |
| WATER | “Hyper” Chair | Passive Design | 83kW PV |
Lane CC: Downtown Campus Building
Eugene, OR

Architect: Robertson Sherwood / SRG Partnership

Stats
- $35 million
- 90,000 sf
- 6 story

Benchmarks
- LEED Platinum
- Architecture 2030

Features
- Geothermal
- Daylighting
- Radiant Panels
- Metering
- Passive Ventilation
- Solar Hot Water

Energy
- 63% Saved
- 33.4 EUI

Water
- 78% Saved
- Rainwater Reclamation
- Low-Flow Fixtures
Lane CC: Titan Court
Student Housing
Eugene, OR

Architect: Robertson Sherwood Architects

ENERGY
- LEED Gold

WATER
- Low-Flow Fixtures

FEATURES
- Central Heat Recovery
- Daylighting
- Domestic Hot Water
- Solar Hot Water Array

STATS
- $20 million
- 75,000 sf
- 5 story
- 255 Beds
Lane CC: Center Building
Eugene, OR
PLUG LOADS | 2007

20” CFL-LCD: 75 watts

20” CFL-LCD: 75 watts

250 watts
PLUG LOADS | 2009

22” CFL-LCD

40 watts

22” CFL-LCD

40 watts

160 watts
PLUG LOADS | 2010

22” LED-LCD
14 watts

22” LED-LCD
14 watts

90 watts

62 watts
First Cost Trend

Average Price of PV

USD ($)