SEATTLE 2030 DISTRICT
MEMBER BUILDING CASE STUDY

EXPERIENCE MUSIC PROJECT

FAST FACT:
46% energy reduction
Project Background:
EMP is a leading-edge, nonprofit museum, dedicated to the ideas and risk-taking that fuels popular culture. With its roots in rock and roll, EMP serves as a gateway museum, reaching multigenerational audiences through its collections, exhibitions, and educational programs.

McKinstry’s Energy Services group was retained to conduct a Directed Engineering Study of the EMP facility. The team assessed the building’s existing systems to identify potential energy conservation measures that would help facilitate the upgrade and/or replacement of existing aging, failing, or inefficient infrastructures. The total guaranteed utility savings (gas, electric, water/sewer) amounts to more than $103,000, representing a 25% overall reduction and an annual operational savings of $55,000. EMP is currently undergoing the LEED EB certification process.

Innovative Measures:
Energy:
High efficiency condensing boiler, retrofitting one 350-ton chiller with a variable frequency drive. The replacement of specific lighting fixtures that currently operate inefficiently, including the replacement of incandescent, halogen or HID. The optimization of space temperature controls. Retro-Commissioning of the building’s mechanical systems, including airside and waterside systems. Installation of a heat recovery chiller for efficient heating water and chilled water generation

Participant in the Better Buildings Challenge, sponsored by the U.S. Department of Energy

Water:
Plumbing upgrades including changing the building water closet flushometers to dual flush valves, and the urinals to ultra-low flow fixtures.

BUILDING STATISTICS
Architect: Frank O. Gehry and Associates
As. Architect: LMN Architects
Owner: Privately Held Non-Profit
ESCO: McKinstry
Building Type: Education & Culture
Location: 325 Fifth Avenue
Built/Renovated: 2000 / 2012
Square Feet: 140,000
Structure: Steel

ENERGY
EUI: 152 KBtu/sf/yr
Baseline EUI: 281 KBtu/sf/yr
Reduction: 46%
Cost savings from lighting: $191,004 / yr

WATER
Reduction: N/A

TRANSPORT
N/A
Drive-Alone Trips District Average: 35%
Rideshare Trips District Average: 10%
Transit Trips District Average: 43%
Walk/Bike Trips District Average: 12%