

GREAT RIVER ENERGY

Bismarck Office

Agenda:

- Project Overview
- LEED-CS Certification
- The big questions
- Building tour

Project Overview

- GRE Regional Office
- 30,000 SF
 - 8,600 SF GRE
 - 21,000 SF Speculative
- 100% Leased
- Completed: April 2007
- Construction Cost: 3.4 Mil
(not including tenant improvements)

LEED Certification

- LEED for Core and Shell Certification
 - LEED CS 2.0 (Current v3)
 - First LEED-CS project in North Dakota
 - First LEED project in ND to receive Gold or better Certification
 - Process Began in 2006 with Design
 - Process was completed with certification in 2009
 - Achieved 36 credits (34–44 required)

Certification: Topics

- **Sustainable Sites:** Achieved 6 of 15
 - Prerequisite: Construction Activity Pollution Prevention
 - Site Selection
 - Alternative Transportation
 - Bike Storage; Changing Rooms
 - Low-Emitting & Fuel Efficient Vehicles
 - Parking Capacity
 - Heat Island Effect, Non-Roof
 - Heat Island Effect, Roof

Certification – Topics

- **Water Efficiency:** Achieved 4 of 5
 - Water Efficient Landscaping
 - Water use reduction
 - Reduction of 35.4%

Certification Topics

- **Energy and Atmosphere:** Achieved 9 of 14
 - Prerequisite 1: Fundamental commissioning
 - Prerequisite 2: Minimum energy performance
 - Prerequisite 3: Fundamental refrigerant management
 - Optimize Energy Performance
 - 34.8% Energy Cost Savings relative to baseline bldg.
 - Enhanced Refrigerant management
 - Green Power (35% min.) 108% for this bldg.

Certification Topics

- **Materials and Resources:** Achieved 7 of 11
 - Prerequisite 1: Storage and collection of recyclables.
 - Construction Waste Management
 - 94.4% of site generated waste diverted
 - Recycled Content
 - 27.6% of building materials
 - Regional Materials
 - 20.2% of building material
 - Certified Wood
 - 59.9% of total wood, harvested from certified forests

Certification Topics

- **Indoor Environmental Quality:** Achieved 5 of 11
 - Prerequisite 1: Minimum IAQ Performance
 - Prerequisite 2: ETS Control
 - Outdoor Air Monitoring
 - Construction IAQ Management Plan
 - Low-Emitting Materials
 - Thermal Comfort and Design

Certification Topics

- **Innovation and Design Process:** Achieved 5 of 5
 - Education Program
 - Low Mercury Lamps
 - Exemplary Performance
 - 108% Green Power for 2 years
 - Fly ash replacement
 - 40% replacement, 49.2% reduction in cement
 - LEED AP Participation

The Big Questions

Questions

- How much more did the project cost?
- How much did the certification process cost?
- Did the certification process at time to the design and construction schedule?
- What is the payback?

Answers

- Don't know!
- Less than 1% of the total construction cost
- None.
- 5–7 years