WHY BUILD GREEN?

LEED, or Leadership in Energy & Environmental Design, is redefining the way we think about the places where we live, work and learn. As an internationally recognized mark of excellence, LEED provides building owners and operators with a framework for identifying and implementing practical and measurable green building design, construction, operation and maintenance solutions.

LEED certification provides independent, third-party verification that a building, home, or community was designed and built using strategies aimed at achieving high performance in key areas of human and environmental health. Sustainable site development, water savings, energy efficiency, material selection and indoor environmental quality.

ENERGY
- In the United States, 41% of our energy is used by buildings. The transportation sector, by comparison, makes up 28% of our energy use.
- Compared to the average commercial building, a LEED gold building consumes approximately 25% less energy.

WATER
- Building occupants use 10% of the total water used in the United States per day.
- LEED buildings use 20% less water than a typical building.
- LEED buildings use 30% less water than a typical building.

HEALTH
- Green buildings use low VOC paints and products. VOCs are carcinogenic, emit toxins into the air, and have been known to cause many health problems including kidney disease.

LAND USE
- Sprawl segregates residential and commercial uses which increases vehicles and emits more pollution.
- Mixed use and infill contributes to community and public health by utilizing existing infrastructure and preserving natural and agricultural spaces.

MATERIALS + RESOURCES
- LEED buildings are responsible for diverting over 80 million tons of waste from landfills which is expected to grow by 540 million tons of waste diversion by 2030.

TAKING THE LEED

The Empire State Building, built in 1931, has recently undergone a comprehensive renovation, dramatically improving its energy performance.

- Uses 50% as much energy as the average US office building.
- Reduces energy use and greenhouse gas emissions by 38%.
- Capital cost of improvements = $20 million.
- Annual cost savings = $4.4 million.
- Simple payback period = 4.6 years.
- Return on Investment (ROI) = 22% (a moderate risk investment in the stock market has a 10% ROI).
- Building received LEED Gold for Existing Buildings and an Energy Star score of 90 (more efficient than 90% of US office buildings).

IN BILLINGS

As of 2013, we have 11 Certified LEED buildings.
- All new construction in the city limits is required to capture stormwater on site, saving taxpayers tens of millions of dollars in avoided infrastructural capacity increases.
- Bike lanes, bike paths, and pedestrian improvements are making it easier, safer and more enjoyable to leave your car at home.
- Recycling is available for metal, paper, plastic, and cardboard. Some local specialty collection services take electronics, styrofoam, glass and other recyclables.
- School District 2 has implemented energy conservation upgrades that save tax payers $1 million each year.

Guide to Green Building in Billings