

New Construction Program

Benefits of High Performance Buildings

FACT SHEET

To learn more about Focus on Energy, call 800.762.7077 or visit focusonenergy.com



Achieving high performance starts in the design phase and continues through construction.

INTRODUCTION

Every day, more research supports the idea that high performance buildings are good investments for business owners. Compared to conventional buildings, high performance buildings can reduce energy costs by up to 40 percent and provide a superior indoor environment that improves employee productivity and morale.

WHAT IS “HIGH PERFORMANCE”?

High performance is a collection of design strategies and technologies that reduces the energy consumption and environmental impact of a building, improves the indoor environment (from lighting and air quality to thermal comfort), and even increases the building’s aesthetic appeal. High performance strategies, which include energy efficiency and sustainable building practices, can be affordably incorporated into both new construction and renovations to existing buildings.

But achieving high performance means going beyond the normal design process. It is a crucial decision to change “business as usual” and requires thorough planning, smart design, and quality construction.

IS HIGH PERFORMANCE ONLY FOR NEW CONSTRUCTION?

No. High performance can also be incorporated on a system level/multi-system upgrade, major renovation, or space use change. Depending on the type of project—office space, warehouse, classroom, manufacturing facility, healthcare or retail facility—there exist key strategies whose benefits can be realized at any time.

WHAT ARE THE BENEFITS OF HIGH PERFORMANCE BUILDINGS?

High performance buildings provide many financial benefits in addition to their well-known environmental benefits. For example, high performance commercial buildings can:

Save money

High performance buildings use less energy and can reduce peak demand charges. Downsized equipment and better controls frequently enable a high performance building to reduce energy use and peak demand when utility prices are at their highest. Over the lifetime of a building, savings in operating costs far outweigh most initial investments in energy efficiency.



An experienced design/construction team is important when developing a high performance building.

Reduced maintenance

The selection of durable, quality equipment results in reduced operating and maintenance costs. Often the integrated design process necessary to achieve a high performance building produces better designs with properly sized equipment that require less maintenance.

Marketing benefits/media attention

High performance buildings generate positive attention from the media as well as the general public as interest in “green” and sustainable building grows. This favorable attention can translate into greater recognition of your company.

Reduced liability and risk

Rising energy costs are creating greater awareness of the financial liability of poor-performing buildings. By building a high performance facility, you are reducing future risk associated with rising operating costs.

Improved health and productivity

Studies show that high performance buildings reduce absenteeism due to illness while increasing occupant productivity and morale. Such gains in health and productivity can produce financial savings several times greater than the savings achieved by reduced energy and operating costs in a high performance building.

Help win neighborhood and local government approval

Often the largest barrier to a project is the approval process. By incorporating high performance building strategies, you demonstrate a commitment to high-quality construction as well as a higher quality of life in the community.

HOW DO I ACHIEVE HIGH PERFORMANCE?

Once you have made the decision to build a high performance facility, the next step is to contact Focus on Energy. Focus will provide technical assistance and work with you and your design/construction team to identify strategies and technologies that can benefit your project.

Focus recommends the following steps to help ensure the success of your high performance building project:

- Meet with the entire team at the beginning of the project to ensure everyone understands the high performance goals for the project
- Select design, engineering and construction firms that have experience in high performance buildings (this includes the sub-contractors who will be installing energy efficient equipment)
- Set energy efficiency goals for your project in addition to budget and schedule goals
- Incorporate commissioning into the design and construction process
- Identify technical and financial resources available to your project

Features of high performance buildings typically include:

- Proper siting and orientation
- Attention to insulation values and use of passive solar heating and cooling
- Daylighting and energy efficient lighting with control systems
- High efficiency heating, cooling and ventilation systems
- Geothermal heating and cooling
- Water efficiency and storm water management
- Use of durable and recycled content materials
- Ventilation system that provides high indoor air quality

WHAT IS MY NEXT STEP?

Contact Focus on Energy to learn more about the benefits of high performance building. We can provide you and your design team with technical assistance and financial incentives to help you achieve increased building value through incorporating energy efficient design and technologies. Our technical assistance staff will work with your design team to implement these opportunities. Call 800.762.7077 or visit focusonenergy.com/newconstruction to get started.