

# Triple bottom line boosts building returns.

At the recent World Economic Forum in Davos, Switzerland, a tabled report suggests that companies with fiscal goals tied to environmental and social platforms outperform those without a “triple bottom line” by more than 7% – and that the gap will increase as energy costs rise. As a result, companies around the world are realizing that future corporate growth will require emphasis on sustainability, and that adopting renewable energy makes good business sense on many fronts.

Wal-Mart Stores Inc., for instance, is committed to environmental sustainability: *“At Wal-Mart we know that being an efficient and profitable business and being a good steward of the environment are goals that can work together.”*

In November 2005, Wal-Mart opened its second experimental store as it tests sustainable technologies. A SolarWall® heating system was included so the sun’s energy could be used to pre-heat the fresh make-up air entering the building before reaching the heating ventilation system. The long-term cost savings potential factored into the decision to use SolarWall. According to Don Moseley, Special Projects Engineer for Wal-Mart, *“If you aren’t going to look at energy as part of your business case, and some people don’t, you’re missing out on ways to reduce costs.”*

## Solar key to commercial success.

Perkins+Will, an internationally recognized design firm founded in 1935, and advocate of sustainable design, states, *“Sustainably-designed commercial buildings can routinely see a 30-35% reduction in operating costs over buildings designed to minimum code standards.”*



John Michaels, a green architect from Arkansas adds, *“Soon the most efficient commercial buildings, the ones to boast the best returns, will include some form of solar power or heating. Their lower operating costs will make them attractive on many levels. There’s no question; solar power is the key to future commercial success.”*

A Canadian inn owner expands on this thought: *“With solar heaters and solar PV panels, SolarWall is well-positioned to help commercial enterprises harness [that] free power.”*

## Lower long term costs outweigh the upfront ones.

Long-term savings were a key consideration in BigHorn Home Improvement Center’s decision to integrate renewable energy sources when building its new multi-purpose facility in Silverthorne, CO.

The designers used a whole building approach, looking at how the floors, windows, walls, electrical and mechanical systems could work best together. The SolarWall transpired solar collector was an integral part of a final design that also included photovoltaics, clerestory windows and radiant floor

heating. Of their decision to install a SolarWall heating system, owner Don Sather says, *“We evaluated the costs and decided it would be worth doing. It was new construction so, incrementally, it wasn’t much more in the way of cost. We also installed several area gas-fired heaters, but very seldom is it necessary to use them, so there have been savings.”*

Wal-Mart’s Don Moseley also believes in the cost-benefit analysis approach: *“You have to look at the values associated with energy use. When they look at it, many people are surprised at the inefficiencies that might be there. Some don’t bother to make the changes, but even if you have to borrow the money to make the changes, it will be well worth it down the road.”*

According to Natural Resources Canada, the value ‘down the road’ can be significant: *“Energy-efficient buildings yield long-term energy savings. Lower operating costs increase the resale value of the building and provide a competitive leasing advantage over standard buildings.”*

And, as asked one commercial building owner, *“Given the benefits to the bottom line, and the ease of including a SolarWall, why wouldn’t you?!”*

## A happy worker is a productive worker.

No “triple bottom line” discussion is complete without mentioning employees. Employees tend to be happier in a comfortable environment, making it easier to recruit and retain skilled staff. Studies show that with proper lighting, good air flow and even temperatures, people show up at work more



regularly and get more done. In addition to lower absenteeism and increased productivity, many companies find that accident rates drop when the physical work environment improves – and fewer claims may result in lower insurance premiums.

Installing a SolarWall transpired solar collector has been shown to dramatically improve indoor air quality. SolarWall systems let in lots of fresh air in a very controlled manner (and use the sun’s rays to pre-heat that air in the cooler months), so the

problems of negative pressure and heat stratification disappear, along with most causes of employee malaise.\* Result: A healthier indoor environment and lower energy costs, too.

Employee comfort was important in BigHorn’s decision to install a SolarWall heater. Says Sather, *“Our use is in a drive-thru warehouse application. Even though it’s insulated, it can get cold with the doors open. The SolarWall is adding a level of comfort for our employees and our customers and keeping the building warmer. Overnight, when the doors are closed it’s maintaining the temperature over freezing so that it’s comfortable in the morning.”* When you consider the bitter cold of the Rocky Mountain winter months, this is no mean feat!

## But I want it to look good!

What building owner doesn’t?! Wal-Mart was no exception. Says Moseley, *“We changed the appearance of the SolarWall on our store. The bottom is kicked out to create a shadow on the bottom. Our architects thought it would be more aesthetically pleasing because metal cladding can be quite cold. This way, there is more character to its appearance.”*

There is a lot of flexibility in how SolarWall paneling gets incorporated. It comes in a wide range of colors, can be shaped to almost any design and, in some cases, can even become an architectural focal point. Sweden’s Kristinehamn Museum of

\*Please see brochure and the “Fans and Ventilation” insert for details.

Modern Art and Germany’s Metallbau Eisenach manufacturing facility are two such gorgeous instances.

It’s not surprising that SolarWall’s clients span the globe as the need to reduce fossil fuel energy use and greenhouse gas emissions is now essential to our long term survival – and SolarWall’s products help solve both problems.

## SolarWall adds to commercial cachet.

Solar air heating has one of the best ROI and payback periods of all the renewable technologies, so installing a SolarWall system (thermal alone or PV/thermal) can be an easy and affordable way to enhance the triple bottom line: Improved ventilation and even inside temperatures help with productivity, free solar heat reduces operating expenses and some manufacturing costs, and being a “green building” can add to the real estate cachet.

Two added bonuses: 1) SolarWall technologies can provide up to 6 LEED points. 2) Government grants and other financial incentives are available in the U.S., Canada and elsewhere in the world to help offset costs associated with “going green”.

To echo our earlier advocate, *“Given the benefits to the bottom line, and the ease of including a SolarWall, why wouldn’t you?!”*

To learn how you can easily put renewable solar energy to work for you, please call us.



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