

# ADDING IT ALL UP:

## LOWER ENERGY BILLS AND MUCH, MUCH MORE

Energy efficiency initiatives deliver more than wallet wallop related to energy bills. For commercial and industrial organizations, they also come with productivity and operational benefits that outweigh energy-bill savings by a long shot. Those are called non-energy benefits, and they take many forms. Here are a few encompassing Productivity, Health & Safety, Image and Environment Benefits:

## Productivity + O&M savings

How much productivity and operational gains can add to energy-bill savings<sup>1</sup>

UP TO 250%

1 years

VS.

4 years

Payback with non-energy benefits

Payback without non-energy benefits<sup>2</sup>

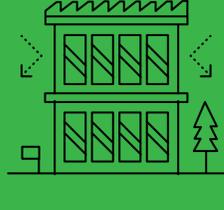


75%

Reduction in annual street light maintenance after 13,382 traffic light bulbs were replaced with LEDs in Portland, Oregon<sup>3</sup>

28%

Reduction in lighting maintenance costs from a building's lighting retrofit<sup>4</sup>



Analysis shows labor productivity typically rises by about 6–16% in energy efficient buildings<sup>5</sup>

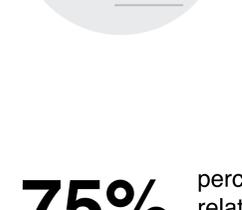
One year post-retrofit, buildings have seen a 17% reduction in maintenance costs<sup>6</sup>



## Health & Safety

Decrease In "stuffy air" due to upgrade ventilation<sup>7</sup>

5.3%



US \$400/employee/yr.

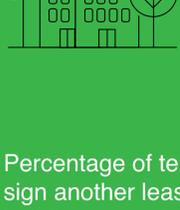
Value of increased productivity from ventilation upgrade<sup>8</sup>

75%

percent of non-energy benefits related to health and increased worker productivity<sup>9</sup>



## Enhanced image and comfort after a building retrofit

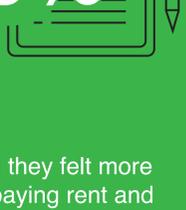


8%

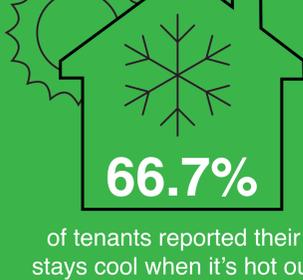
Increased marketability of rental units after a building retrofit<sup>10</sup>

Percentage of tenants who said they will sign another lease after apartment building upgrade<sup>11</sup>

70%



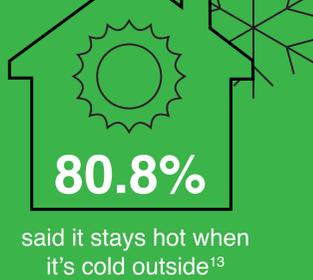
A third of tenants indicated they felt more confident and less stress paying rent and utility bills<sup>12</sup>



66.7%

of tenants reported their unit stays cool when it's hot outside

and



80.8%

said it stays hot when it's cold outside<sup>13</sup>

Reporting of difficulties in paying energy bills dropped from almost

75% to 58%<sup>14</sup>

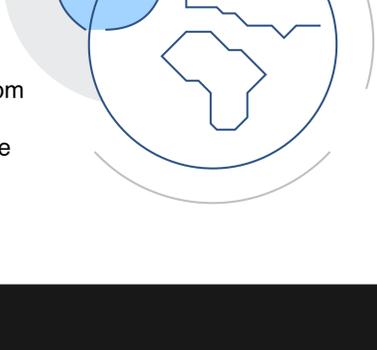


## Environmental benefit

40%

How much of the world's CO2 abatement targets could come from efficiency measures.

The goal: Limit global temperature increases to 2 degrees Celsius.<sup>15</sup>



## BRUCE POWER DIRECT

### About Bruce Power Direct

Bruce Power Direct is a division of Bruce Power, Ontario's largest nuclear generator. We deliver a cloud-based energy management solution that helps energy, facilities and finance managers understand their energy consumption, set energy conservation goals and identify cost savings. For more information, please visit our website at [www.brucepowerdirect.com](http://www.brucepowerdirect.com).

1. [http://www.iea.org/publications/freepublications/publication/Captur\\_the\\_MultiBenef\\_ofEnergyEfficiency.pdf](http://www.iea.org/publications/freepublications/publication/Captur_the_MultiBenef_ofEnergyEfficiency.pdf)  
2. [http://www.iea.org/publications/freepublications/publication/Captur\\_the\\_MultiBenef\\_ofEnergyEfficiency.pdf](http://www.iea.org/publications/freepublications/publication/Captur_the_MultiBenef_ofEnergyEfficiency.pdf)  
3. [http://www.esmap.org/sites/esmap.org/files/CS\\_EECIPortland\\_final.pdf](http://www.esmap.org/sites/esmap.org/files/CS_EECIPortland_final.pdf)  
4. <http://aceee.org/research-report/ie1502>  
5. <http://www1.udel.edu/igert/JournalClub/JC5.pdf>  
6. [http://www.elevateenergy.org/wp/wp-content/uploads/Preserving\\_Affordable\\_Multifamily\\_Housing\\_Through\\_Energy\\_Efficiency.pdf](http://www.elevateenergy.org/wp/wp-content/uploads/Preserving_Affordable_Multifamily_Housing_Through_Energy_Efficiency.pdf)  
7. [http://psb.vermont.gov/sites/psb/files/projects/EELU/screening/Urge-Vorsatz\\_Counting\\_Good.pdf](http://psb.vermont.gov/sites/psb/files/projects/EELU/screening/Urge-Vorsatz_Counting_Good.pdf)  
8. [http://psb.vermont.gov/sites/psb/files/projects/EELU/screening/Urge-Vorsatz\\_Counting\\_Good.pdf](http://psb.vermont.gov/sites/psb/files/projects/EELU/screening/Urge-Vorsatz_Counting_Good.pdf)  
9. <https://thinkprogress.org/18-trillion-windfall-health-and-productivity-benefits-of-efficiency-top-energy-savings-5011c78c0845#wvzyde5h0>  
10. [http://www.iea.org/publications/freepublications/publication/Captur\\_the\\_MultiBenef\\_ofEnergyEfficiency.pdf](http://www.iea.org/publications/freepublications/publication/Captur_the_MultiBenef_ofEnergyEfficiency.pdf)  
11. <http://aceee.org/research-report/ie1502>  
12. <http://www.elevateenergy.org/wp/wp-content/uploads/NEB-boulevard-case-study-2014-01-27.pdf>  
13. [http://www.elevateenergy.org/wp/wp-content/uploads/Preserving\\_Affordable\\_Multifamily\\_Housing\\_Through\\_Energy\\_Efficiency.pdf](http://www.elevateenergy.org/wp/wp-content/uploads/Preserving_Affordable_Multifamily_Housing_Through_Energy_Efficiency.pdf)  
14. [http://www.elevateenergy.org/wp/wp-content/uploads/Preserving\\_Affordable\\_Multifamily\\_Housing\\_Through\\_Energy\\_Efficiency.pdf](http://www.elevateenergy.org/wp/wp-content/uploads/Preserving_Affordable_Multifamily_Housing_Through_Energy_Efficiency.pdf)  
15. [http://www.iea.org/publications/freepublications/publication/Captur\\_the\\_MultiBenef\\_ofEnergyEfficiency.pdf](http://www.iea.org/publications/freepublications/publication/Captur_the_MultiBenef_ofEnergyEfficiency.pdf)  
16. [http://www.iea.org/publications/freepublications/publication/Captur\\_the\\_MultiBenef\\_ofEnergyEfficiency.pdf](http://www.iea.org/publications/freepublications/publication/Captur_the_MultiBenef_ofEnergyEfficiency.pdf)  
17. <http://www.nrcan.gc.ca/energy/efficiency/buildings/capacity-building-resources/publications/18406>