



2008 Healthcare
Energy Efficiency Indicator
Results

Background

As part of a broader survey of the North American business community to look at the impact of rising energy prices on organizations, Johnson Controls wanted to include a separate analysis of companies and organizations in the healthcare industry.

The survey examines what companies and organizations are doing in response to rising energy costs, what sort of payback they expect on investments in energy efficiency, to what extent they are motivated by concerns about the environment vs. purely economics, etc.

Methodology

An online survey was completed with energy management decision makers. Specifically, in order to qualify, respondents had to meet the following criteria:

- Job responsibilities included 'reviewing or monitoring the amount of energy used by their company's facilities, or proposing or approving initiatives to make their company's facilities more efficient.'
- They had 'capital- or operations-related budget responsibility' for their company's facilities.

The majority of the healthcare decision makers were ASHE members, and access was provided to them by partnering with that organization. Other decision makers in the healthcare industry came from an executive research panel and a small number were IFMA members, access by partnering with that organization.

Interviews were conducted in March 2008. A total of 335 interviews were completed with decision makers in the healthcare industry.

Throughout the survey, respondents were asked to consider energy as being specifically natural gas, electricity, and fuel oil.

Throughout the report, the responses of healthcare decision makers have been compared to those of all industries, to provide context. 'Don't know' responses have been excluded from some questions and, in those questions, responses may add up to less than 100%.

Who Were the Respondents?

Respondent Profile

- The vast majority of healthcare respondents were ASHE members.

| <u>Source</u> | (335) % |
|-----------------|------------|
| ASHE | 83 |
| Executive panel | 12 |
| IFMA | 5 |

- The majority of healthcare respondents were VP/Directors of Facilities or Facility Managers, which is a quite different composition from other industries, in which respondents were CEOs, Facility Managers, VP/Directors of Facilities, and General Managers.

| <u>Position</u> | <u>All Industries</u> (1145) % | <u>Healthcare</u> (335) % |
|----------------------------------|--------------------------------------|---------------------------------|
| | VP or Director of Facilities | 14 |
| Facility Manager | 19 | 39 |
| CEO | 28 | 4 |
| General Manager | 11 | 3 |
| COO or VP/Director of Operations | 6 | 3 |
| CFO | 3 | 1 |
| Other | 19 | 11 |

- Healthcare respondents represented larger facility sizes than the general sample. Relatively few were responsible for less than 100,000 square feet.

| <u>Area of Responsibility</u> | <u>All Industries</u> (1145) % | <u>Healthcare</u> (335) % |
|----------------------------------|--------------------------------------|---------------------------------|
| | Less than 100,000 sq. ft | 56 |
| 100,000 to 499,999 sq. ft | 19 | 33 |
| 500,000 to 999,999 sq. ft | 9 | 22 |
| 1 million to 1.99 million sq. ft | 6 | 16 |
| 2 million to 4.99 million sq. ft | 4 | 10 |
| 5 million or more sq. ft | 4 | 4 |
| Don't know | 2 | * |

- The vast majority of the healthcare organizations represented had between 100 and 10,000 employees, making them representative of considerably larger entities than the general sample.

| | <u>All Industries</u> | <u>Healthcare</u> |
|----------------------------|-----------------------|-------------------|
| | (1145) | (335) |
| <u>Number of Employees</u> | % | % |
| Less than 100 | 56 | 8 |
| 100 – 499 | 13 | 18 |
| 500 – 999 | 6 | 14 |
| 1,000 – 4,999 | 9 | 39 |
| 5,000 – 9,999 | 4 | 11 |
| 10,000 – 49,999 | 6 | 8 |
| 50,000 or more | 5 | 1 |
| Don't know | 1 | 1 |

- More than half the respondents did not know (or, perhaps, refused to provide) their company's revenue. From those that did though, it appears that they represented companies with higher revenues than the general sample. It is fair to say that they represented a broad array of revenue sizes.

| | <u>All Industries</u> | <u>Healthcare</u> |
|-----------------------------------------|-----------------------|-------------------|
| | (1082) | (318) |
| <u>Company Revenue</u> | % | % |
| Less than \$100K | 7 | 3 |
| \$100K – less than \$500K | 11 | 2 |
| \$500K – less than \$1 million | 5 | 1 |
| \$1 million – less than \$5 million | 9 | 2 |
| \$5 million – less than \$10 million | 4 | 3 |
| \$10 million – less than \$50 million | 7 | 8 |
| \$50 million – less than \$100 million | 2 | 3 |
| \$100 million – less than \$500 million | 4 | 12 |
| \$500 million – less than \$1 billion | 1 | 5 |
| \$1 billion or more | 5 | 4 |
| Don't know | 45 | 57 |

- The majority of the healthcare businesses represented were in the private sector.

| | <u>All Industries</u> | <u>Healthcare</u> |
|-------------------------|-----------------------|-------------------|
| | (1138) | (335) |
| | % | % |
| Private sector | 91 | 84 |
| Public/government-owned | 7 | 16 |
| Both (education only) | 2 | NA |

- Nearly all respondents' responsibilities were in a single state.

| | <u>All Industries</u> | <u>Healthcare</u> |
|----------------------------------------|-----------------------|-------------------|
| | (1118) | (1249) |
| <u>Number of States Responsible In</u> | % | % |
| One | 84 | 92 |
| More than one | 16 | 8 |
| All 50/Contiguous 48 | 2 | 2 |

Summary

Current Use, Expectations, and Plans

- Healthcare companies spend a smaller proportion of their total expenses on energy, suggesting that perhaps they are run more efficiently (in this respect) than other companies. Those in healthcare believe that an average of 7% of their total expenses are for energy; compared to 10% for other industries.
- Companies across all industries expect energy prices to rise in the coming year but healthcare companies are particularly likely to believe this. However, they are more optimistic about how much they expect those prices to increase. Those in healthcare expect an average increase of 10.6%, compared to an expectation of 13.8% across all industries.
- Healthcare companies are more likely than those in other industries to expect to make energy efficiency improvements using capital and operating expenditures but they do not expect to spend a higher proportion of either budget on these improvements than do companies in other industries. On average they expect to spend 8% of their capital budget and 6% of their operating budget on such improvements.
- The healthcare industry is somewhat less optimistic about the impact of energy efficiency investments on its energy use:
 - On average, healthcare companies expect a 6% reduction in consumption, which compares to 9% across all industries
 - Healthcare companies are somewhat more likely to believe that even with their investments, the amount they pay for energy per square foot of facility will increase.

Emphasis on Energy Management

- Energy management is more important to healthcare companies than to companies in other industries:
 - 65% of healthcare companies believe energy management is extremely or very important, compared to 57% in other industries
 - As a result, they review their energy consumption and usage forecasts considerably more frequently.
- Those in healthcare are no more likely to believe their company pays more attention to energy efficiency today than it did one year ago, suggesting that energy efficiency has been a longer-term concern in this industry.
- Healthcare companies will tolerate a longer payback on their energy efficiency investments (4.2 years on average, compared to 3.6 years across all industries) but are no more likely than companies in other industries to have become more tolerant of longer payback periods in recent years.
- Healthcare companies have even less interest in green building certification than companies in other industries. Only 4% claim to have any green buildings (compared to 8% across all industries) and few have green certification goals for new construction or retrofit projects. That is not to say that energy efficiency is not a design priority for those projects, because in the vast majority of cases it is. Companies simply don't seem to be interested in achieving certification.

Motivations for Energy Efficiency

- Across all industries, while the environment is a motivation for achieving energy efficiency, the primary driver is saving money. This is even more the case in the healthcare industry.
- The influence of climate change on energy efficiency decisions is less in the healthcare industry than in other industries, and those in healthcare also place less importance on minimizing dependence on traditional energies. Those in healthcare are also considerably less likely to believe that green buildings will be important in attracting and retaining future employees.
- However, government and utilities incentives are equally as influential in healthcare as they are in other industries.

Measures Already in Place

- Consistent with energy efficiency being even more important to them than to those in other industries, healthcare companies are more likely to have adopted numerous measures to help them achieve greater energy efficiency:

Staff-related: They are more likely to send staff to energy management seminars and more likely to have hired an energy manager

Equipment and Systems: They are more likely to have replaced inefficient equipment before the end of its useful life, to have upgraded or installed a building management system, and installed VSVF drives. Although only a minority have done it, healthcare companies are also more likely to be capturing waste energy.

Lighting: The vast majority of healthcare companies have switched to energy efficient lighting and they are considerably more likely to have installed lighting sensors than companies in other industries.

Building Design: More healthcare companies have installed energy-saving glass and re-roofed with white roofing.

Energy Supply: Considerably more healthcare companies have negotiated energy contracts and put energy price hedging strategies in place. Although still a minority, more healthcare companies are also self-generating power during demand peaks.

- Yet, for all its energy-efficiency-mindedness, the healthcare industry is less open than other industries to the use of renewable energy sources and hardly any healthcare companies have a publicly-stated carbon reduction goal - perhaps further evidence of the relative importance of saving money versus saving the environment?

Detailed Findings

Current Energy Use, Expectations and Plans

- The healthcare companies represented in the survey spend considerably more on energy than the companies in other industries.

| | <u>All Industries</u> (1090) | <u>Healthcare</u> (318) |
|---------------------------------------|---------------------------------|----------------------------|
| <u>Amount on Energy Last Yr</u> | % | % |
| Less than \$100K | 28 | 4 |
| \$100K but less than \$500 | 8 | 10 |
| \$500K but less than \$1,000,000 | 4 | 10 |
| \$1,000,000 but less than \$5,000,000 | 7 | 31 |
| More than \$5,000,000 | 5 | 14 |
| Don't know | 49 | 31 |

- But healthcare decision makers typically believe a smaller percentage of their total expenses are for energy. On average they believe 7% of their total expenses are for energy, while those across other industries estimate 10%.

| | <u>All Industries</u> (1143) | <u>Healthcare</u> (335) |
|------------------------------------------------|---------------------------------|----------------------------|
| <u>% of Total Expenses Energy Accounts for</u> | % | % |
| Less than 1% | 7 | 7 |
| 1% - 4% | 17 | 31 |
| 5% - 9% | 24 | 15 |
| 10% - 14% | 17 | 11 |
| 15% - 19% | 8 | 5 |
| 20% - 24% | 6 | 3 |
| 25% or more | 6 | 3 |
| Don't know | 15 | 25 |
| <i>Average</i> | <i>10%</i> | <i>7%</i> |

- As with other industries, healthcare energy efficiency decision makers expect energy prices to increase significantly over the next year. In fact, this belief is even greater in healthcare.

| | <u>All Industries</u> (1146) | <u>Healthcare</u> (335) |
|----------------------------------------|---------------------------------|----------------------------|
| <u>Believe Price of Energy Will...</u> | % | % |
| Increase over the next year | 80 | 88 |
| Decrease over the next year | 4 | 3 |
| Not change significantly | 16 | 10 |

- A higher proportion of healthcare respondents are likely have an opinion as to how much energy prices will rise in the next year, and they are typically more hopeful than respondents in other industries. Among healthcare decision makers the average anticipated price increase is just under 11%, compared to almost 14% among those in other industries.

| | <u>All Industries</u> (909) | <u>Healthcare</u> (292) |
|----------------------------------|--------------------------------|----------------------------|
| <u>Anticipated Increase</u> | % | % |
| 1% - 5% | 16 | 21 |
| 6% - 10% | 24 | 34 |
| 11% - 20% | 24 | 23 |
| 21% - 40% | 8 | 4 |
| More than 40% | 2 | 1 |
| Don't know | 26 | 17 |
| <i>Mean anticipated increase</i> | <i>13.79%</i> | <i>10.62%</i> |

- Companies in the healthcare industry are more likely to make energy efficiency improvements with capital expenditures in the coming year

| | <u>All Industries</u> (1146) | <u>Healthcare</u> (335) |
|------------------------------------------------------------------------------------------|---------------------------------|----------------------------|
| <u>Expectations – Capital Budget</u> | % | % |
| Expect to make energy efficiency improvements with capital expenditures in the next year | 56 | 67 |
| Do not expect to make improvements with capital expenditures in the next year | 23 | 23 |
| Don't know | 21 | 10 |

- But, while they are more likely to make energy efficiency investments with capital expenditures, healthcare companies expect to invest a slightly smaller percentage of their capital budget in such initiatives.

| | <u>All Industries</u> (636) | <u>Healthcare</u> (224) |
|---------------------------------------------|--------------------------------|----------------------------|
| <u>% of Capital Budget Expect to Invest</u> | % | % |
| Less than 1% | 7 | 11 |
| 1% - 4% | 25 | 34 |
| 5% - 9% | 26 | 21 |
| 10% - 14% | 18 | 11 |
| 15% - 19% | 7 | 7 |
| 20% - 24% | 5 | 3 |
| 25% or more | 5 | 6 |
| Don't know | 6 | 8 |
| <i>Mean expectation</i> | <i>9%</i> | <i>8%</i> |

- Healthcare companies are also more likely to make energy efficiency improvements with operating budgets.

| | <u>All Industries</u> (1146) % | <u>Healthcare</u> (335) % |
|--------------------------------------------------------------------------------------------|--------------------------------------|---------------------------------|
| <u>Expectations – Operating Budget</u> | | |
| Expect to make energy efficiency improvements with operating expenditures in the next year | 61 | 68 |
| Do not expect to make improvements with operating expenditures in the next year | 18 | 19 |
| Don't know | 21 | 13 |

- But again, while they are more likely to make energy efficiency improvements with expenditure of operating budgets, healthcare companies expect to invest a smaller proportion of this budget in energy efficiency improvements than do companies in other industries.

| | <u>All Industries</u> (698) % | <u>Healthcare</u> (225) % |
|-----------------------------------------------|-------------------------------------|---------------------------------|
| <u>% of Operating Budget Expect to Invest</u> | | |
| Less than 1% | 8 | 16 |
| 1% - 4% | 33 | 38 |
| 5% - 9% | 27 | 21 |
| 10% - 14% | 13 | 10 |
| 15% - 19% | 5 | 2 |
| 20% - 24% | 3 | 4 |
| 25% or more | 2 | 1 |
| Don't know | 8 | 8 |
| <i>Mean expectation</i> | <i>7%</i> | <i>6%</i> |

- On average, healthcare companies expect to see a reduction in energy consumption of 6% as a result of their energy efficiency investments, which means they are considerably less optimistic about the impact of their investments than are respondents in other industries, who expect to see a 9% consumption reduction as a result of their investments.

| | <u>All Industries</u> (1034) % | <u>Healthcare</u> (311) % |
|----------------------------------------------------|--------------------------------------|---------------------------------|
| <u>Anticipated Resultant Consumption Reduction</u> | | |
| Less than 1% | 6 | 9 |
| 1% - 4% | 23 | 35 |
| 5% - 9% | 27 | 27 |
| 10% - 19% | 17 | 9 |
| 20% - 29% | 6 | 5 |
| 30% or more | 2 | 1 |
| Don't know | 18 | 15 |
| <i>Mean expectation</i> | <i>9%</i> | <i>6%</i> |

- Healthcare companies are also somewhat less optimistic when it comes to their expectations for the cost of energy per square foot of facility space. 43% expect the cost per square foot to increase, even taking into account their investments in energy efficiency.

| | <u>All Industries</u> | <u>Healthcare</u> |
|------------------------------------------------------------|-----------------------|-------------------|
| | (850) | (264) |
| | % | % |
| Dollars paid per square foot will increase | 37 | 43 |
| Dollars paid per square foot will decrease | 33 | 29 |
| Dollars paid per square foot will not change significantly | 31 | 28 |

Company's Emphasis on Energy Management

- Energy management is of somewhat greater importance to healthcare companies, as more companies in the industry consider it *very* important.

| | | <u>All Industries</u> | <u>Healthcare</u> |
|---------------------------------------------------|-----|-----------------------|-------------------|
| | | (1145) | (334) |
| <u>Importance of Energy Management to Company</u> | | % | % |
| <u>Extremely/very important</u> | | <u>57</u> | <u>65</u> |
| Extremely important | (5) | 20 | 18 |
| Very important | (4) | 37 | 47 |
| Somewhat important | (3) | 35 | 31 |
| Not very important | (2) | 7 | 4 |
| Not at all important | (1) | 2 | * |
| <i>Mean</i> | | <i>3.66</i> | <i>3.78</i> |

- Those in the healthcare industry review energy *consumption* on average more than twice a month; considerably more than their counterparts in other industries.

| | | <u>All Industries</u> | <u>Healthcare</u> |
|------------------------------------------------|-------|-----------------------|-------------------|
| | | (1145) | (335) |
| <u>Frequency of Reviewing Consumption Data</u> | | % | % |
| Daily | (265) | 2 | 6 |
| Weekly | (52) | 5 | 8 |
| Monthly | (12) | 47 | 57 |
| Quarterly | (4) | 17 | 12 |
| Twice a year | (2) | 9 | 4 |
| Annually | (1) | 11 | 7 |
| Less than once a year | (0.5) | 6 | 4 |
| Don't know | | 3 | 2 |
| <i>Avg. times per year</i> | | <i>15.0</i> | <i>28.8</i> |

- And on average, those in healthcare review energy usage *forecasts* about once a month, which is also a little more often than other industries.

| | | <u>All Industries</u> | <u>Healthcare</u> |
|-----------------------------------------|-------|-----------------------|-------------------|
| | | (1141) | (333) |
| <u>Frequency of Reviewing Forecasts</u> | | % | % |
| Daily | (265) | 1 | 2 |
| Weekly | (52) | 2 | 4 |
| Monthly | (12) | 22 | 23 |
| Quarterly | (4) | 24 | 22 |
| Twice a year | (2) | 13 | 10 |
| Annually | (1) | 21 | 30 |
| Less than once a year | (0.5) | 10 | 2 |
| Don't know | | 6 | 7 |
| <i>Avg. times per year</i> | | <i>7.2</i> | <i>10.8</i> |

- On average companies are paying a little more attention to energy efficiency than they were one year ago and this is true for the healthcare industry too.

| | | <u>All Industries</u> | <u>Healthcare</u> |
|---------------------------------------------------------|-----|-----------------------|-------------------|
| | | (1146) | (335) |
| <u>Attention Paid to Energy Efficiency Vs. Year Ago</u> | | % | % |
| Paying a lot more attention now | (5) | 30 | 23 |
| Paying a little more attention now | (4) | 42 | 47 |
| Paying about the same attention | (3) | 24 | 27 |
| Paying a little less attention now | (2) | 1 | 1 |
| Paying a lot less attention now | (1) | * | - |
| Don't know | | 2 | 2 |
| <i>Average</i> | | <i>4.03</i> | <i>3.92</i> |

- Companies in the healthcare industry will tolerate a slightly longer payback period on energy efficiency investments than those in other industries. They will allow an average of just over 4 years; about 6 months longer than the average for all industries.

| | | <u>All Industries</u> | <u>Healthcare</u> |
|----------------------------------------------------------|--------|-----------------------|-------------------|
| | | (1136) | (335) |
| <u>Tolerance for ROI on Energy Efficiency Investment</u> | | % | % |
| Less than a year | (0.75) | 5 | 1 |
| 1 but than 2 years | (1.5) | 16 | 7 |
| 2 but less than 3 years | (2.5) | 22 | 22 |
| 3 but less than 4 years | (3.5) | 16 | 21 |
| 4 but less than 6 years | (5.0) | 18 | 27 |
| 6 but less than 10 years | (8.0) | 6 | 11 |
| 10 years or more | (10.0) | 3 | 2 |
| Would not require ROI | | 4 | 2 |
| <i>Average Maximum ROI period</i> | | <i>3.6 years</i> | <i>4.2 years</i> |

- About one-fifth of companies in the healthcare industry will allow a longer payback on their investment than they would have done five years ago, which is consistent with other industries.

| | <u>All Industries</u> | <u>Healthcare</u> |
|------------------------------------------------|-----------------------|-------------------|
| | (1136) | (332) |
| <u>ROI Tolerance Compared to 5-Years Ago</u> | % | % |
| Company will allow longer payback period today | 21 | 20 |
| Allowable payback period has not changed | 38 | 43 |
| Company allowed longer payback 5-years ago | 10 | 10 |
| Don't know | 31 | 27 |

- Few companies across all industries have any green certified buildings but those in the healthcare industry are less likely to do so than those in other industries. However, healthcare companies are more likely to have buildings with green elements, but that are not green certified.

| | <u>All Industries</u> (1144) | <u>Healthcare</u> (334) |
|---------------------------------------------------|---------------------------------|----------------------------|
| <u>Current Status Vis-à-vis Green Facilities</u> | % | % |
| Have at least one green certified building | 8 | 4 |
| Have buildings with elements but no certification | 40 | 50 |
| Have no buildings that incorporate green elements | 43 | 40 |
| Don't know | 9 | 6 |

- About 85% of healthcare companies with new construction or retrofit projects say that energy efficiency was or will be a priority in the design. This is consistent with the response from other industries.

| | <u>All Industries</u> (482) | <u>Healthcare</u> (246) |
|-------------------------------------------------------------|--------------------------------|----------------------------|
| <u>Consideration of Efficiency in Construction Projects</u> | % | % |
| Energy efficiency was/will be a design priority | 88 | 85 |
| Energy efficiency was not/won't be a priority | 10 | 13 |
| Don't know | 2 | 2 |

- Companies in the healthcare industry appear to have little interest in green certification of their buildings. They are less likely than those in other industries to seek green certification of either new construction or retrofit projects. They are also more likely to have no particular goal for them to be green buildings.

| | <u>New Construction Projects</u> | | <u>Retrofit Projects</u> | |
|-----------------------------------------------------------|----------------------------------|----------------------------|--------------------------------|----------------------------|
| | <u>All Industries</u> (245) | <u>Healthcare</u> (172) | <u>All Industries</u> (301) | <u>Healthcare</u> (130) |
| <u>Goal for 'Greenness' of New Construction/Retrofits</u> | % | % | % | % |
| To be certified to a recognized green standard | 34 | 20 | 20 | 10 |
| To have green elements but not green certification | 48 | 52 | 59 | 52 |
| No goal for them to be green buildings | 12 | 24 | 18 | 37 |
| Don't know | 5 | 3 | 3 | 1 |

Motivations for Energy Efficiency

- As is the case in other industries, cost savings are a greater motivation for energy efficiency than is the environment. In fact, in healthcare, cost savings are an even greater motivator than in other industries. Having said that, in healthcare, as in other industries, cost savings rarely account for 100% of the motivation.

| | | <u>All Industries</u> (1130) | <u>Healthcare</u> (325) |
|-------------------------------------------------------|-----|---------------------------------|----------------------------|
| <u>Relative Influence of Cost Savings/Environment</u> | | % | % |
| 100% cost savings | (7) | 6 | 7 |
| Mostly for cost savings | (6) | 20 | 26 |
| Somewhat more for cost savings | (5) | 21 | 26 |
| 50% cost savings/50% environmental | (4) | 36 | 32 |
| Somewhat more for environment | (3) | 10 | 6 |
| Mostly for environmental responsibility | (2) | 5 | 2 |
| 100% environmental responsibility | (1) | 1 | * |
| <i>Mean</i> | | 4.57 | 4.88 |

- Climate change is less influential on energy efficiency decisions in the healthcare industry than it is in other industries.

| | | <u>All Industries</u> (1143) | <u>Healthcare</u> (332) |
|-------------------------------------------------------------------|-----|---------------------------------|----------------------------|
| <u>Influence of Climate Change on Energy Efficiency Decisions</u> | | % | % |
| <u>Extremely/very significant</u> | | 28 | 20 |
| Extremely significant | (5) | 9 | 3 |
| Very significant | (4) | 19 | 17 |
| Somewhat significant | (3) | 31 | 30 |
| Not very significant | (2) | 24 | 29 |
| Not at all significant | (1) | 14 | 17 |
| <i>Mean</i> | | 2.84 | 2.59 |

- Consistent with other industries, incentives are *extremely* or *very* influential on energy efficiency decisions for just over one-third of healthcare companies. On average they are *somewhat* influential.

| | | <u>All Industries</u> (1143) | <u>Healthcare</u> (333) |
|------------------------------------------------------------------------------|-----|---------------------------------|----------------------------|
| <u>Influence of Utilities/Gov. Incentives on Energy Efficiency Decisions</u> | | % | % |
| <u>Extremely/very influential</u> | | 38 | 37 |
| Extremely influential | (5) | 13 | 11 |
| Very influential | (4) | 25 | 27 |
| Somewhat influential | (3) | 37 | 39 |
| Not very influential | (2) | 14 | 16 |
| Not at all influential | (1) | 8 | 5 |
| <i>Mean</i> | | 3.22 | 3.23 |

- The healthcare industry places little importance on minimizing dependence on traditional energies such as gas, oil, and electricity.

| | | <u>All Industries</u> | <u>Healthcare</u> |
|------------------------------------------------------------------|-----|-----------------------|-------------------|
| <u>Importance of Minimizing Dependence on Traditional Energy</u> | | (1139) | (333) |
| | | % | % |
| <u>Extremely/very important</u> | | <u>38</u> | <u>17</u> |
| Extremely important | (5) | 12 | 2 |
| Very important | (4) | 26 | 14 |
| Somewhat important | (3) | 39 | 40 |
| Not very important | (2) | 15 | 30 |
| Not at all important | (1) | 5 | 11 |
| <i>Mean</i> | | <i>3.26</i> | <i>2.66</i> |

- Similarly, the healthcare industry does not currently believe that green buildings will be very important in attracting and retaining future employees.

| | | <u>All Industries</u> | <u>Healthcare</u> |
|--------------------------------------------------------------------------------------|-----|-----------------------|-------------------|
| <u>Perceived Importance of Green Buildings in Attracting and Retaining Employees</u> | | (1136) | (332) |
| | | % | % |
| <u>Extremely/very important</u> | | <u>31</u> | <u>17</u> |
| Extremely important | (5) | 11 | 5 |
| Very important | (4) | 20 | 13 |
| Somewhat important | (3) | 36 | 44 |
| Not very important | (2) | 20 | 27 |
| Not at all important | (1) | 9 | 7 |
| <i>Mean</i> | | <i>3.05</i> | <i>2.79</i> |

- Those in the healthcare industry are somewhat less likely than others to expect significant legislation mandating energy efficiency or carbon reduction in the next two years. However, close to one-third of those in healthcare believe such legislation is *extremely* or *very* likely.

| | | <u>All Industries</u> | <u>Healthcare</u> |
|---------------------------------------------------------------------------------------------------------------|-----|-----------------------|-------------------|
| <u>Expectation of Significant Legislation Mandating Energy Efficiency or Carbon Reduction in Next 2 Years</u> | | (1140) | (334) |
| | | % | % |
| <u>Extremely/very likely</u> | | <u>39</u> | <u>32</u> |
| Extremely likely | (5) | 11 | 6 |
| Very likely | (4) | 28 | 26 |
| Somewhat likely | (3) | 37 | 38 |
| Not very likely | (2) | 16 | 23 |
| Not at all likely | (1) | 3 | 4 |
| <i>Mean</i> | | <i>3.29</i> | <i>3.07</i> |

Energy Management Measures Already in Place

- Companies in the healthcare industry are as likely as those in others to have educated staff on how they can reduce energy usage and they are considerably more likely to have attended or sent others to energy management seminars. One-fourth of healthcare companies have hired an energy consultant, which is more than in other industries.

| | <u>All Industries</u> (1144) | <u>Healthcare</u> (334) |
|---------------------------------------------------------------------------------|---------------------------------|----------------------------|
| <u>Staff-Related Measures Adopted</u> | % | % |
| Educated staff or other facility users on what they can do to reduce energy use | 72 | 67 |
| Attended or sent staff to energy management seminars | 26 | 44 |
| Hired an energy consultant to find ways to improve energy efficiency | 14 | 25 |
| Hired an energy manager | 7 | 8 |
| None | 20 | 13 |

- Companies in the healthcare industry are also considerably more likely than others to have adopted a number of systems-related measures to improve energy efficiency. Most notably, the majority of healthcare companies have installed VS/VF drives or upgraded an existing building management system.
- The healthcare industry is also more likely to have replaced inefficient equipment, installed a new building management system, re-commissioned building systems and equipment, and captured waste energy.
- Almost all the healthcare companies had adopted at least one of the listed items.

| | <u>All Industries</u> (1143) | <u>Healthcare</u> (334) |
|------------------------------------------------------------------------|---------------------------------|----------------------------|
| <u>Equipment and Systems-Related Measures Adopted</u> | % | % |
| Adjusted HVAC temperature controls to reduce time that heating/AC runs | 61 | 55 |
| Replaced inefficient equipment before the end of its useful life | 41 | 48 |
| Increased preventive maintenance schedules | 34 | 26 |
| Increased frequency of monitoring consumption | 31 | 34 |
| Upgraded or improved an existing building management system | 28 | 60 |
| Installed variable speed/frequency drives (VSD/VFD) | 20 | 67 |
| Installed a building management system where there was not one | 14 | 28 |
| Captured waste energy (such as heat & steam) | 8 | 16 |
| Re-commissioned building systems and equipment | 8 | 16 |
| Other | 6 | 8 |
| None | 14 | 4 |

- Most in the healthcare industry have switched to energy efficient lighting and over half have installed lighting sensors, which is considerably more than seen in other industries.

| | <u>All Industries</u> (1146) % | <u>Healthcare</u> (334) % |
|----------------------------------------------------------------------------|--------------------------------------|---------------------------------|
| <u>Lighting-Related Measures Adopted</u> | | |
| Switched to energy efficient lighting | 78 | 87 |
| Installed lighting sensors so lights come on and off as needed | 38 | 56 |
| Installed or adjusted time clocks to turn lights on/off at specified times | 29 | 27 |
| Other | 2 | 4 |
| None | 12 | 5 |

- Companies in the healthcare industry are also more likely to have installed energy-saving glass and re-roofed with white roofing, although it is a minority of companies that have done either of these.

| | <u>All Industries</u> (1119) % | <u>Healthcare</u> (322) % |
|--------------------------------------------------------|--------------------------------------|---------------------------------|
| <u>Building Design-Related Measures Adopted</u> | | |
| Installed energy-saving glass in windows | 26 | 35 |
| Increased building insulation | 24 | 19 |
| Re-roofed with white roof covering to reduce heat gain | 15 | 27 |
| Installed a green roof | 5 | 2 |
| Other | 3 | 3 |
| None | 50 | 43 |

- Half the companies in the healthcare industry have negotiated energy contracts with suppliers, which is double the proportion of companies in other industries. Those in healthcare are also a lot more likely to have energy price hedging strategies in place and (although still accounting for a minority of companies) to self-generate power during demand peaks.

| | <u>All Industries</u> (1118) % | <u>Healthcare</u> (330) % |
|---------------------------------------------------------------------------------------|--------------------------------------|---------------------------------|
| <u>Energy Supply-Related Measures Adopted</u> | | |
| Negotiated energy contracts with suppliers | 25 | 52 |
| Put energy price hedging strategies in place | 12 | 35 |
| Installed renewable energy systems (such as solar, wind, geo-thermal, or methane gas) | 9 | 4 |
| Self-generate power during demand peaks | 8 | 15 |
| Converted to using alternative fuels | 8 | 6 |
| Other | 2 | 3 |
| None | 54 | 30 |

- The healthcare industry is not yet sold on renewable energy though, and almost two-thirds are neither utilizing nor considering utilizing any type of renewable energy in construction or retrofit projects.

| | <u>All Industries</u> | <u>Healthcare</u> |
|---------------------------------------------|-----------------------|-------------------|
| | (483) | (244) |
| <u>Renewables in/Considered in Projects</u> | % | % |
| Solar electric | 38 | 14 |
| Solar thermal | 24 | 11 |
| Wind | 19 | 6 |
| Geo-thermal | 13 | 9 |
| Hydro-power | 11 | 2 |
| Bio-mass | 7 | 3 |
| None of these | 32 | 62 |
| Don't know | 9 | 9 |

- Few companies have a publicly stated carbon-reduction goal but those in the healthcare industry are particularly unlikely to have one.

| | <u>All Industries</u> | <u>Healthcare</u> |
|----------------------------------------------|-----------------------|-------------------|
| | (1139) | (333) |
| | % | % |
| Have a publicly stated carbon-reduction goal | 12 | 5 |
| Don't have stated carbon-reduction goal | 77 | 84 |
| Don't know | 11 | 10 |