

Final Report: IFMA North America – April 3rd, 2008

Background

In 2007 Johnson Controls conducted research within the North American business community to look at the impact of rising energy prices on organizations. This survey of executives examined what companies were doing in response to rising energy costs, what sort of payback they expected on investments in energy efficiency, to what extent they were motivated by concerns about the environment vs. purely economics, etc. The project has been repeated in 2008 and the results compared to 2007 in order to determine whether businesses are changing their thinking and actions regarding energy efficiency.

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 energy efficient.'
- They had 'capital- or operations-related budget responsibility' for their company's facilities.

In North America, respondents included company executives, identified from an executive panel, and facilities professionals who are International Facility Management Association (IFMA) members. They represent a wide range of facility types, sizes and locations.

This report focuses on the responses of IFMA members in both years but also includes the responses of the executive panel sample for comparison.

Interviews were conducted in March 2008. A total of 338 completed surveys were returned by IFMA members in 2008 and 449 in 2007.

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

Throughout the report, 'Don't know' responses have been excluded from some questions. For questions in which a single response was required, the total of the responses for those questions may add up to less than 100%.

Where applicable, data for 2008 have been compared with that for 2007. However, new questions were added in 2008 and some other questions were modified significantly and for these questions only 2008 data are shown.

Who Were the Respondents?

Respondent Profile

- The majority of IFMA respondents are facility managers and over one-fourth are VPs or Directors of Facilities. The IFMA sample is quite different from the executive panel, which is comprised primarily of CEOs and General Managers.

<u>Position</u>	<u>IFMA</u>		<u>Executive</u>
	<u>2007</u>	<u>2008</u>	<u>Panel</u>
	(449)	(338)	(807)
	%	%	%
Facility Manager	51	57	3
CEO	*	-	40
VP or Director of Facilities	30	28	8
General Manager	3	1	15
COO or VP/Director of Operations	2	2	7
CFO	-	-	4
Other	15	12	23

- IFMA members typically have responsibility for considerably larger areas of facility, with almost one-third of them having responsibility for one million square feet or more.

<u>Area of Responsibility</u>	<u>IFMA</u>		<u>Executive</u>
	<u>2007</u>	<u>2008</u>	<u>Panel</u>
	(449)	(338)	(807)
	%	%	%
Less than 100,000 sq. ft	11	12	74
100,000 to 499,999 sq. ft	39	36	12
500,000 to 999,999 sq. ft	18	21	4
1 million to 1.99 million sq. ft	14	13	4
2 million to 4.99 million sq. ft	10	10	1
5 million or more sq. ft	8	7	2
Don't know	-	-	2

- The IFMA members who participated in the research also tend to work for companies with a lot more employees than respondents from the executive panel, three-fourths of whom are with companies with less than 100 employees.

<u>Number of Employees</u>	<u>IFMA</u>		<u>Executive Panel</u>
	<u>2007</u> (449) %	<u>2008</u> (338) %	<u>2008</u> (807) %
Less than 100	7	7	77
100 – 499	23	23	9
500 – 999	17	16	2
1,000 – 4,999	27	25	2
5,000 – 9,999	7	7	2
10,000 – 49,999	12	13	3
50,000 or more	5	7	4
Don't know	2	1	1

- More than half the IFMA members did not know (or perhaps chose not to provide) their company's revenue, which is a little more than among the executive panel; but those who did provide the information are generally from companies with larger revenues than the executive panel.

<u>Company Revenue</u>	<u>IFMA</u>		<u>Executive Panel</u>
	<u>2007</u> (415) %	<u>2008</u> (308) %	<u>2008</u> (774) %
Less than \$100K	4	4	9
\$100K – less than \$500K	*	1	15
\$500K – less than \$1 million	-	-	6
\$1 million – less than \$5 million	4	3	12
\$5 million – less than \$10 million	*	2	4
\$10 million – less than \$50 million	6	8	6
\$50 million – less than \$100 million	4	4	1
\$100 million – less than \$500 million	11	9	2
\$500 million – less than \$1 billion	4	3	1
\$1 billion or more	11	12	2
Don't know	55	54	41

- Both cells (IFMA and executive panel) represent a wide variety of industries but the IFMA sample has rather more from the financial industries and from government entities, while the executive panel has more from service industries and construction.

Industry	IFMA		Executive
	2007 (449)	2008 (338)	Panel 2008 (808)
	%	%	%
Service industry	5	4	16
Finance, insurance, and banking	16	13	8
Manufacturing	9	11	8
Retail	3	2	8
Real estate	5	4	7
Education	11	7	4
K-12	NA	4	2
Higher education	NA	3	2
Healthcare	6	5	5
Government and public administration	11	14	1
Construction	*	*	7
Communications	3	4	4
Wholesale	1	1	3
Hospitality	1	2	4
Transportation and logistics	2	3	3
Consumer products	NA	1	3
Other	27	29	18

- Respondents from both samples have responsibility primarily for office space but a wide range of other facility types are also represented.

Primary Type of Building	IFMA		Executive
	2007 (449)	2008 (337)	Panel 2008 (799)
	%	%	%
Office space	76	74	63
Industrial/manufacturing/plant	15	20	14
Warehouse/storage	20	23	16
Retail	7	7	15
Education campus	11	9	5
Research center/laboratory	13	12	5
Hospital/healthcare facility/clinic	6	6	4
Hotels/hospitality	2	4	7
Other	14	16	7

- The IFMA sample includes more of a mix of government and private sector companies.

	<u>IFMA</u>		<u>Executive</u>
	<u>2007</u>	<u>2008</u>	<u>Panel</u>
	(449)	(334)	<u>2008</u>
	%	%	(804) %
Private sector	81	78	96
Public/government-owned	19	22	3
Both (education only)	NA	*	2

- And IFMA respondents are more likely to have responsibilities that cover multiple states.

<u>Number of States Responsible In</u>	<u>IFMA</u>		<u>Executive</u>
	<u>2007</u>	<u>2008</u>	<u>Panel</u>
	(449)	(320)	<u>2008</u>
	%	%	(798) %
One	69	78	87
More than one	30	23	13
All 50/Contiguous 48	5	1	2
Not answered	1	1	*

Summary

Current Use, Expectations, and Plans

Note: IFMA members included in the survey tend to represent larger companies, with bigger facilities, larger revenues, and more employees, so some of the observed differences between their responses and those of the executive panel may be a function of company size.

- IFMA members tend to work for companies that spend significantly more on energy but the proportion of total expenses energy accounts for is no larger than for other companies. On average, about 11% of total expenses are for energy.
- As with other decision makers, the vast majority (80%) of IFMA members believe energy prices will rise over the next year but they are considerably more optimistic about how much they will rise:
 - On average, IFMA members expect an increase of about 10%, compared to 15% among other respondents.
- IFMA members are considerably more likely to make energy efficiency investments from both capital and operating budgets but they do not expect to dedicate a greater proportion of these budgets to such investments:
 - IFMA members and other respondents expect to invest 9% of facilities-related capital budgets and 6% of facilities-related operating budgets to energy efficiency improvements..
- IFMA members are less optimistic about the impact of their energy efficiency improvements on energy consumption. They expect a resultant decrease of 8% in consumption, while other decision makers expect a decrease of 10%.

Emphasis on Energy Management

- The importance of energy management has grown significantly among IFMA members so that 65% of them now consider energy management to be extremely or very important to their company.
- The majority of respondents believe their company is paying more attention to energy efficiency than it was a year ago, and this is true for IFMA members too.
- IFMA members' companies will tolerate a slightly longer payback on their energy efficiency investments than other companies but few believe their company has become any more accepting of longer paybacks over the past five years.
- Only about 12% of IFMA members' companies have a green certified building but this is more than for other companies, and IFMA members are a lot more likely to work for companies that have buildings with some green elements.
- For IFMA members, as for other respondents, energy efficiency is a priority in construction projects and green certification is the goal for about one-third of new construction projects. However, for retrofit projects the goal is far more likely to incorporate green elements, than to achieve green certification.

Motivations for Energy Efficiency

- As is the case for other respondents, saving money is a greater motivation for IFMA members to improve energy efficiency than is concern for the environment. The environment is usually a consideration but cost savings are generally more important.
- IFMA members are less likely than other respondents to believe that climate change is a significant influence on their energy efficiency decisions, or that it is important for their company to minimize its dependence on traditional energy.
- IFMA members are as likely as other respondents to believe that incentives are influential on energy efficiency decisions and that there will be significant legislation mandating energy efficiency or carbon-reduction in the next two years.

Measures Already in Place

- IFMA members are considerably more likely to have adopted energy efficiency measures in a number of key areas:

Staff-related: Their companies are a lot more likely to have sent staff to energy management seminars and to have hired an energy consultant.

Equipment and Systems: They are more likely to have adjusted temperature controls, installed or upgraded a building management system, and installed VS/VF drives.

Lighting: They are more likely to have installed lighting sensors or timers.

Energy Supply: They are a lot more likely to have negotiated energy contracts with suppliers and are somewhat more likely to have put energy price hedging strategies in place.

- However, few IFMA members' companies have a publicly-stated carbon-reduction goal and they are considerably less likely than other respondents to have considered or implemented renewable energy sources.

Detailed Findings

Current Energy Use, Expectations and Plans

- Although significant number of respondents in both cells did not know the total amount their company spends on energy, IFMA members represent companies that spend more. One-fourth of IFMA members work for companies that spend in excess of \$1 Million on energy per year.

	IFMA		Executive Panel
	<u>2007</u> (432)	<u>2008</u> (317)	<u>2008</u> (773)
<u>Amount on Energy Last Yr</u>	%	%	%
Less than \$100K	5	3	38
\$100K but less than \$500	19	16	5
\$500K but less than \$1,000,000	11	10	1
\$1,000,000 but less than \$5,000,000	16	17	2
More than \$5,000,000	9	10	3
Don't know	41	44	51

- On average, just over 10% of IFMA members' expenses are for energy, which is consistent with the executive sample.

	IFMA		Executive Panel
	<u>2007</u> (449)	<u>2008</u> (338)	<u>2008</u> (805)
<u>% of Total Expenses Energy Accounts for</u>	%	%	%
Less than 1%	13	7	7
1% - 4%	19	18	17
5% - 9%	13	16	27
10% - 14%	9	13	19
15% - 19%	7	8	8
20% - 24%	5	5	6
25% or more	10	7	6
Don't know	24	27	10
<i>Average</i>	<i>10%</i>	<i>11%</i>	<i>10%</i>

- 80% of both cells believe energy prices will increase over the next year.

	IFMA		Executive Panel
	<u>2007</u> (449)	<u>2008</u> (338)	<u>2008</u> (808)
<u>Believe Price of Energy Will...</u>	%	%	%
Increase over the next year	79	79	80
Decrease over the next year	2	4	4
Not change significantly	20	17	16

- IFMA members are far more optimistic than executives about how much they expect energy prices to rise. On average, they expect an increase of around 10%, compared to the 15% expected by executives.

	IFMA		Executive
	2007	2008	Panel 2008
	(346)	(265)	(644)
<u>Anticipated Increase</u>	%	%	%
1% - 5%	26	29	11
6% - 10%	30	23	24
11% - 20%	16	18	26
21% - 40%	5	3	10
More than 40%	1	*	3
Don't know	22	26	27
<i>Mean anticipated increase</i>	<i>10.56%</i>	<i>9.85%</i>	<i>15.43%</i>

- IFMA members expect to spend a considerably larger proportion of their capital budget on energy efficiency improvements than do executives, and the proportion they expect to spend grew significantly over the past year.

	IFMA		Executive
	2007	2008	Panel 2008
	(449)	(338)	(808)
<u>Expectations – Capital Budget</u>	%	%	%
Expect to make energy efficiency improvements with capital expenditures in the next year	66	75	48
Do not expect to make improvements with capital expenditures in the next year	24	15	27
Don't know	10	11	26

- And, for those IFMA members expecting to make capital budget investments in energy efficiency, the proportion of the facilities-related capital budget they expect to spend grew from 7% to 9% in the past year.

	IFMA		Executive
	<u>2007</u>	<u>2008</u>	<u>Panel</u>
	(297)	(253)	(383)
<u>% of Capital Budget Expect to Invest</u>	%	%	%
Less than 1%	14	8	7
1% - 4%	29	26	23
5% - 9%	22	23	28
10% - 14%	12	15	21
15% - 19%	4	5	9
20% - 24%	4	5	5
25% or more	3	7	4
Don't know	10	11	3
<i>Mean expectation</i>	<i>7%</i>	<i>9%</i>	<i>9%</i>

- IFMA members are also more likely to make energy efficiency improvements with operating expenditures, and the number expecting to do so increased somewhat over the past year.

	IFMA		Executive
	<u>2007</u>	<u>2008</u>	<u>Panel</u>
	(449)	(338)	(808)
<u>Expectations – Operating Budget</u>	%	%	%
Expect to make energy efficiency improvements with operating expenditures in the next year	70	76	55
Do not expect to make improvements with operating expenditures in the next year	18	13	20
Don't know	12	10	25

- IFMA members expect to commit less of their operating budget to energy efficiency improvements than they do of their capital budget, and a somewhat lower proportion than the executives.

	<u>IFMA</u>		<u>Executive</u>
	<u>2007</u> (310)	<u>2008</u> (255)	<u>Panel</u> <u>2008</u> (443)
<u>% of Operating Budget Expect to Invest</u>	%	%	%
Less than 1%	21	8	8
1% - 4%	37	36	31
5% - 9%	20	24	29
10% - 14%	8	11	15
15% - 19%	1	4	7
20% - 24%	1	2	3
25% or more	-	1	3
Don't know	12	14	5
<i>Mean expectation</i>	4%	6%	8%

- Companies most commonly expect to use between 1% and 9% less energy as a result of their anticipated investments in energy efficiency. IFMA members expect an average reduction of 8%, which is slightly less than the expectations of the executives.

	<u>IFMA</u>		<u>Executive</u>
	<u>2007</u> (407)	<u>2008</u> (321)	<u>Panel</u> <u>2008</u> (713)
<u>Anticipated Resultant Consumption Reduction</u>	%	%	%
Less than 1%	6	7	6
1% - 4%	33	28	20
5% - 9%	27	27	27
10% - 19%	11	15	19
20% - 29%	4	2	8
30% or more	*	2	2
Don't know	18	18	18
<i>Mean expectation</i>	7%	8%	10%

- Of those making energy efficiency improvements, only about one-third expect to see a decrease in the amount they pay per square foot of facilities as a result. This is consistent for IFMA members and executives.

	<u>IFMA</u>		<u>Executive</u>
	<u>2007</u>	<u>2008</u>	<u>Panel</u>
	(334)	(263)	(587)
	%	%	%
Dollars paid per square foot will increase	31	34	38
Dollars paid per square foot will decrease	28	32	33
Dollars paid per square foot will not change significantly	41	33	29

Company's Emphasis on Energy Management

- For IFMA members, energy management has grown in importance over the past year and it is now more important to these respondents than to the executives interviewed.

	IFMA		Executive
	2007 (449)	2008 (338)	Panel 2008 (807)
<u>Importance of Energy Management to Company</u>	%	%	%
<u>Extremely/very important</u>	59	65	53
Extremely important (5)	19	22	18
Very important (4)	40	43	35
Somewhat important (3)	33	30	37
Not very important (2)	7	5	8
Not at all important (1)	1	*	2
<i>Mean</i>	3.70	3.82	3.59

- IFMA members review their energy consumption data considerably more frequently than the executives

	IFMA		Executive
	2007 (449)	2008 (338)	Panel 2008 (807)
<u>Frequency of Reviewing Consumption Data</u>	%	%	%
Daily (265)	5	4	1
Weekly (52)	4	5	5
Monthly (12)	48	54	44
Quarterly (4)	15	11	19
Twice a year (2)	4	5	11
Annually (1)	14	12	10
Less than once a year (0.5)	8	6	7
Don't know	3	3	3
<i>Avg. times per year</i>	21.6	20.0	12.9

- But they do not review their energy forecasts as frequently and neither do they review them any more frequently than the executives.

	<u>IFMA</u>		<u>Executive</u>
	<u>2007</u> (449)	<u>2008</u> (338)	<u>Panel</u> <u>2008</u> (803)
<u>Frequency of Reviewing Forecasts</u>	%	%	%
Daily (265)	*	-	1
Weekly (52)	2	1	3
Monthly (12)	24	28	19
Quarterly (4)	22	19	27
Twice a year (2)	9	12	14
Annually (1)	28	27	19
Less than once a year (0.5)	6	5	12
Don't know	9	7	5
<i>Avg. times per year</i>	<i>6.9</i>	<i>5.6</i>	<i>7.9</i>

- Around 70% of companies say they are paying a little or a lot more attention to energy efficiency than they were one year ago, and this is the case for IFMA members too.

	<u>IFMA</u>		<u>Executive</u>
	<u>2007</u> (449)	<u>2008</u> (338)	<u>Panel</u> <u>2008</u> (808)
<u>Attention Paid to Energy Efficiency Vs. Year Ago</u>	%	%	%
Paying a lot more attention now (5)	27	33	29
Paying a little more attention now (4)	35	36	44
Paying about the same attention (3)	34	28	22
Paying a little less attention now (2)	2	1	1
Paying a lot less attention now (1)	-	*	*
Don't know	2	1	3
<i>Average</i>	<i>3.89</i>	<i>4.03</i>	<i>4.02</i>

- IFMA members will tolerate an average payback of just over four years on their energy efficiency investments, which is slightly longer than observed among the executive panel sample.

		<u>IFMA</u> <u>2008</u> (338)	Executive <u>Panel</u> <u>2008</u> (806)
<u>Tolerance for ROI on Energy Efficiency Investment</u>	%		%
Less than a year (0.75)		1	6
1 but less than 2 years (1.5)		14	16
2 but less than 3 years (2.5)		20	23
3 but less than 4 years (3.5)		19	15
4 but less than 6 years (5.0)		23	16
6 but less than 10 years (8.0)		10	5
10 years or more (10.0)		4	2
Would not require ROI		2	5
<i>Average Maximum ROI period</i>		<i>4.1 years</i>	<i>3.3 years</i>

- About one-fifth of companies will allow a longer payback on their investment than they would have done five years ago. This is true for IFMA members too, and has not changed significantly since last year.

	<u>IFMA</u> <u>2007</u> (449)	<u>IFMA</u> <u>2008</u> (336)	Executive <u>Panel</u> <u>2008</u> (800)
<u>ROI Tolerance Compared to 5-Years Ago</u>	%	%	%
Company will allow longer payback period today	19	19	22
Allowable payback period has not changed	42	43	36
Company allowed longer payback 5-years ago	10	11	10
Don't know	29	27	33

- Few companies have any green certified buildings but IFMA members are somewhat more likely to do so, and are considerably more likely to have buildings with green elements.

	<u>IFMA</u> <u>2008</u> (336)	Executive <u>Panel</u> <u>2008</u> (808)
<u>Current Status Vis-à-vis Green Facilities</u>	%	%
Have at least one green certified building	12	6
Have buildings with elements but no certification	59	32
Have no buildings that incorporate green elements	25	50
Don't know	4	12

- For the vast majority of companies, energy efficiency is a priority in construction and retrofit projects.

	<u>IFMA</u>		<u>Executive</u>
	<u>2007</u>	<u>2008</u>	<u>2008</u>
	(320)	(238)	(244)
<u>Consideration of Efficiency in Construction Projects</u>	%	%	%
Energy efficiency was/will be a design priority	83	88	88
Energy efficiency was not/won't be a priority	13	11	9
Don't know	4	2	3

- Companies are more likely to have a goal of green certification for new construction projects but their goal for retrofit projects is more likely to be to incorporate green elements, rather than achieve certification.

	<u>New Construction Projects</u>		<u>Retrofit Projects</u>	
	<u>IFMA</u>	<u>Executive</u>	<u>IFMA</u>	<u>Executive</u>
	<u>Members</u>	<u>Panel</u>	<u>Members</u>	<u>Panel</u>
	(144)	(101)	(143)	(158)
<u>Goal for 'Greenness' of New Construction/Retrofits</u>	%	%	%	%
To be certified to a recognized green standard	32	38	17	22
To have green elements but not green certification	50	46	59	59
No goal for them to be green buildings	15	9	20	16
Don't know	3	8	3	4

Motivations for Energy Efficiency

- For IFMA members, as for other respondents, cost savings are a greater motivation for achieving energy efficiency than is environmental responsibility. However the environment is usually at least part of the motivation.

	IFMA		Executive
	<u>2007</u> (430)	<u>2008</u> (332)	<u>2008</u> (798)
<u>Relative Influence of Cost Savings/Environment</u>	%	%	%
100% cost savings (7)	5	2	8
Mostly for cost savings (6)	22	20	21
Somewhat more for cost savings (5)	24	19	22
50% cost savings/50% environmental (4)	36	42	33
Somewhat more for environment (3)	8	13	9
Mostly for environmental responsibility (2)	5	4	6
100% environmental responsibility (1)	*	1	1
<i>Mean</i>	<i>4.62</i>	<i>4.44</i>	<i>4.62</i>

- IFMA members are slightly less likely to feel that climate change is a significant influence on their company's energy efficiency decisions.

	IFMA	Executive
	<u>2008</u> (336)	<u>2008</u> (807)
<u>Influence of Climate Change on Energy Efficiency Decisions</u>	%	%
<u>Extremely/very significant</u>	<u>21</u>	<u>30</u>
Extremely significant (5)	7	10
Very significant (4)	15	20
Somewhat significant (3)	33	30
Not very significant (2)	31	22
Not at all significant (1)	10	15
<i>Mean</i>	<i>2.75</i>	<i>2.88</i>

- 40% of IFMA members believe incentives are *extremely* or *very* influential on their energy efficiency decisions, which is consistent with other respondents' views.

		<u>IFMA</u>	Executive
		<u>2008</u>	<u>Panel</u>
		(337)	(806)
<u>Influence of Utilities/Gov. Incentives on Energy Efficiency Decisions</u>		%	%
<u>Extremely/very influential</u>		<u>40</u>	<u>37</u>
Extremely influential (5)		11	14
Very influential (4)		29	24
Somewhat influential (3)		34	38
Not very influential (2)		16	13
Not at all influential (1)		6	9
<i>Mean</i>		<i>3.23</i>	<i>3.22</i>

- But IFMA members are considerably less likely to believe that it is important for their company to minimize its dependence on traditional energy such as gas, oil, and electricity.

		<u>IFMA</u>	Executive
		<u>2008</u>	<u>Panel</u>
		(336)	(803)
<u>Importance of Minimizing Dependence on Traditional Energy</u>		%	%
<u>Extremely/very important</u>		<u>23</u>	<u>44</u>
Extremely important (5)		5	15
Very important (4)		18	29
Somewhat important (3)		45	37
Not very important (2)		23	12
Not at all important (1)		4	5
<i>Mean</i>		<i>2.96</i>	<i>3.39</i>

- About one-third of IFMA members and other respondents believe that green buildings will be *extremely* or *very* important in attracting and retaining future employees.

		Executive	
		<u>IFMA</u> <u>2008</u> (336)	<u>Panel</u> <u>2008</u> (800)
<u>Perceived Importance of Green Buildings in Attracting and Retaining Employees</u>			
		%	%
<u>Extremely/very important</u>		34	30
Extremely important	(5)	10	11
Very important	(4)	24	18
Somewhat important	(3)	44	32
Not very important	(2)	16	21
Not at all important	(1)	4	11
<i>Mean</i>		3.20	2.99

- And about 40% believe it is *extremely* or *very* likely that in the next two years there will be significant legislation mandating energy efficiency and/or carbon reduction.

		Executive	
		<u>IFMA</u> <u>2008</u> (334)	<u>Panel</u> <u>2008</u> (806)
<u>Expectation of Significant Legislation Mandating Energy Efficiency or Carbon Reduction in Next 2 Years</u>			
		%	%
<u>Extremely/very likely</u>		41	38
Extremely likely	(5)	10	12
Very likely	(4)	32	26
Somewhat likely	(3)	39	36
Not very likely	(2)	14	17
Not at all likely	(1)	2	4
<i>Mean</i>		3.35	3.27

Energy Management Measures Already in Place

- IFMA members are considerably more likely to have attended or sent staff to energy management seminars, or to work for companies that have hired an energy consultant.

	IFMA		Executive Panel
	2007 (449) %	2008 (338) %	2008 (806) %
<u>Staff-Related Measures Adopted</u>			
Educated staff or other facility users on what they can do to reduce energy use	72	77	69
Attended or sent staff to energy management seminars	48	53	15
Hired an energy consultant to find ways to improve energy efficiency	29	29	8
Hired an energy manager	10	10	5
None	11	7	25

- And IFMA members are more likely to work for companies that have adopted a number of equipment and systems-related measures, including adjusting temperature controls, increased consumption monitoring, upgrading or installing a building management system, and installing VS/VF drives.

	IFMA		Executive Panel
	2007 (449) %	2008 (336) %	2008 (808) %
<u>Equipment and Systems-Related Measures Adopted</u>			
Adjusted HVAC temperature controls to reduce time that heating/AC runs	75	75	55
Replaced inefficient equipment before the end of its useful life	32	45	39
Increased preventive maintenance schedules	33	38	32
Increased frequency of monitoring consumption	37	40	28
Upgraded or improved an existing building management system	43	53	18
Installed variable speed/frequency drives (VSD/VFD)	52	53	7
Installed a building management system where there was not one	30	27	9
Captured waste energy (such as heat & steam)	NA	12	6
Re-commissioned building systems and equipment	NA	19	3
Other	12	12	4
None	5	4	18

- IFMA members are also more likely to work for companies that have installed lighting sensors or lighting time clocks.

	<u>IFMA</u>		<u>Executive Panel</u>
	<u>2007</u> (449)	<u>2008</u> (338)	<u>2008</u> (808)
<u>Lighting-Related Measures Adopted</u>	%	%	%
Switched to energy efficient lighting	79	83	76
Installed lighting sensors so lights come on and off as needed	63	67	26
Installed or adjusted time clocks to turn lights on/off at specified times	52	52	20
Other	7	5	1
None	6	6	14

- But when it comes to building design-related measures adopted, the IFMA member is not very different from other energy efficiency decision makers.

	<u>IFMA</u>		<u>Executive Panel</u>
	<u>2007</u> (449)	<u>2008</u> (322)	<u>2008</u> (797)
<u>Building Design-Related Measures Adopted</u>	%	%	%
Installed energy-saving glass in windows	26	28	26
Increased building insulation	NA	17	26
Re-roofed with white roof covering to reduce heat gain	17	25	11
Installed a green roof	NA	3	6
Other	12	7	2
None	56	47	51

- IFMA members are considerably more likely to have negotiated energy contracts with energy suppliers and somewhat more likely to utilize price hedging strategies.

	<u>IFMA</u>		<u>Executive Panel</u>
	<u>2007</u> (449)	<u>2008</u> (324)	<u>2008</u> (794)
<u>Energy Supply-Related Measures Adopted</u>	%	%	%
Negotiated energy contracts with suppliers	48	41	19
Put energy price hedging strategies in place	20	17	10
Installed renewable energy systems (such as solar, wind, geo-thermal, or methane gas)	NA	10	9
Self-generate power during demand peaks	11	10	8
Converted to using alternative fuels	6	6	9
Other	4	4	2
None	39	40	61

- IFMA members have not yet adopted any renewable energies to the extent that other decision makers have. Almost half say they are not considering or implementing any of renewable energies in construction or retrofit projects.

	<u>IFMA</u> <u>2008</u> (237)	Executive <u>Panel</u> <u>2008</u> (246)
<u>Renewables in/Considered in Projects</u>	%	%
Solar electric	24	52
Solar thermal	15	32
Wind	11	26
Geo-thermal	12	14
Hydro-power	4	18
Bio-mass	4	11
None of these	48	17
Don't know	11	7

- And, like other energy efficiency decision makers, few IFMA members' companies have a publicly stated carbon-reduction goal.

	<u>IFMA</u>		Executive <u>Panel</u>
	<u>2007</u> (449)	<u>2008</u> (336)	<u>2008</u> (803)
	%	%	%
Have a publicly stated carbon-reduction goal	10	15	11
Don't have stated carbon-reduction goal	71	67	81
Don't know	19	18	9