

Corporate Views on Climate Change

A Survey of Wisconsin Business Executives

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The perceptions and perspectives of 340 presidents, chief executive officers, and other senior executives of businesses throughout Wisconsin on climate change concerns and appropriate public policy responses.

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Executive Summary

Worldwide there is increased attention to issues associated with climate change. While policy makers at various levels grapple with the broad policy issues associated with mitigating climate change, a portion of consumers and businesses are taking action. Some businesses are making commitments to various green practices and some consumers are comparing businesses based on these practices. Focus on Energy, the statewide energy efficiency and renewable energy initiative in Wisconsin, wanted to understand the views and actions of Wisconsin businesses with respect to climate change. This is a report on a new survey of the perspectives of one key group: Wisconsin's corporate leadership. The six-page survey was mailed to 5,000 senior executives of businesses throughout Wisconsin and was completed and returned in spring 2008 by 340 of them, the vast majority presidents and chief executive officers.

Overall, the survey revealed that Wisconsin's business community is skeptical about climate change but generally receptive to many proposed ideas for addressing climate change, especially those aimed at energy conservation and alternatives. As a whole, the executives ranked climate change last among ten issues that might concern businesses in Wisconsin. However, a large majority advocated for government policies that would promote energy efficiency, forest preservation, renewable energy, wind farms, efficiency in agriculture and nuclear power.

Other key findings:

- **Perceptions about climate change** – Most business leaders do not believe that climate change is a pressing problem that poses serious economic, social or environmental risks; most believe that climate change is not the result of human activity; and most regard predictions of adverse consequences from climate change as unreliable.
- **The impact of climate change** – Despite skepticism about climate change, a large number of business leaders believe climate change is likely to have an impact on the economy, partly because of the imposition of policies some see as adverse to their businesses. Business leaders are divided on whether climate change will affect the economy, but more of them anticipate the impact to be negative rather than positive.

- **Corporate behavior in response to climate change** – Wisconsin corporate leaders are somewhat less likely than their counterparts elsewhere in the world to take climate change into consideration in strategic decisions affecting their businesses. However, most Wisconsin companies surveyed report they have reduced energy use and increased recycling to address climate change.
- **Differences by geography** – Corporate leaders in the Milwaukee area and those in the Madison region tend to differ in perceptions and responses to climate change, in some cases dramatically. For example, most corporate leaders in southeastern Wisconsin – but less than one third in the southwestern part of the state -- believe the cost of trying to stop climate change exceeds the benefits; also, nearly 80% in the Milwaukee region – but less than half in the Madison area – oppose putting more ethanol in gasoline.
- **Differences among industry types**– Manufacturing company executives tend to be more skeptical of regulatory responses to climate change than are their counterparts in the trade and service sectors, presumably because they perceive governmental action will affect their competitiveness more. For example, a large majority of service and financial industry executives said government should establish a framework for reducing greenhouse gas emissions whereas about one-third of manufacturing CEOs agreed.
- **Differences among company sizes** – Larger companies tend to take climate change into consideration in corporate decision-making more often than smaller companies do. For example, most businesses with more than \$20 million in sales report that concerns about corporate reputation led them to take climate change into consideration in business decisions; most executives of small companies reported corporate reputation was not a factor that led them to consider climate change in making business decisions.
- **Policy implications** – Overall, business executives tend to believe they are better suited to addressing climate change than government is. However, most business leaders in Wisconsin favor a range of energy policies intended to address climate change. The executives expressed support for international cooperation to invest in renewable energy, nuclear power and energy efficiency standards for vehicles and buildings. Nationally, there is widespread support for incentives to use wind, solar, bio-mass and other renewable energy sources. Within Wisconsin, most business leaders favor financial incentives to encourage energy conservation and purchase of renewable energy; energy efficiency standards for buildings; additional nuclear power generation; and elimination of barriers for siting of small wind farms.

Introduction

There is considerable dialogue -- within policy circles and elsewhere -- about climate change issues. While there is not consensus on many issues associated with climate change, there is general consensus that energy efficiency is the most cost-effective way to reduce greenhouse gas emissions associated with climate change. As a result, Focus on Energy—Wisconsin’s statewide energy efficiency and renewable energy initiative—is keenly interested in the views of various Wisconsin stakeholders regarding climate change. Therefore, Focus on Energy and the Wisconsin Energy Conservation Corporation contracted with the Public Policy Forum -- a non-partisan, nonprofit research organization based in Milwaukee -- to conduct a survey of Wisconsin business executives on their perceptions, attitudes, and behaviors regarding climate change and global warming.

It is timely for business leaders to express their views about this important topic. Recently the Midwestern governors endorsed the idea of a “cap-and-trade” program for carbon dioxide emissions in our region. Also, Governor Doyle convened a task force to work on a strategy for climate change that reported on its recommendations this summer.

For the survey, The Public Policy Forum selected businesses that employed more than 24 employees from a database of approximately 45,000 Wisconsin agencies, organizations, and businesses. A random sample of 5,000 businesses was selected from the qualifying firms, and survey questionnaires were mailed to the chief executive officers of those businesses during the week of April 14. After the return deadline of April 30, 340 completed surveys were analyzed for this report. All responses were treated as confidential and anonymous, although data were collected on demographic characteristics of the businesses, such as geographic location, size of the workforce, sales volume, and type of business.

In casual conversation, the terms climate change and global warming often are used interchangeably, even though climate change refers to broader issues such as changes in storm patterns and rainfall. For purposes of this survey, the term climate change was used throughout. The survey also included an introductory statement that read: “This survey will provide Wisconsin policymakers with the views of business executives regarding climate change, which refers to any significant changes in modern climate – such as the average temperature (global warming), precipitation, and wind patterns. Policymakers will be faced with arguments that significant changes have been caused by greenhouse gas emissions (such as carbon dioxide) from human activities such as electricity generation.

The response rate is typical of a survey of this type, and it is important to appreciate in reading the results that those who responded to the survey did not speak for or necessarily represent the views of those who did not. In fact, there may be a “response bias” in the sense that executives may have been more likely to respond to the survey if they have a greater interest in climate change than those who did not respond. Even so, respondents represented a cross-section of the senior business leadership in the state of Wisconsin in terms of geography, executive position, company size, and business sector. Among all respondents, 82% hold the title of chief executive officer and/or president. Another 12% are chief operating officers, chief financial officers, or other senior management. Respondent businesses represent 52 counties and were sorted for

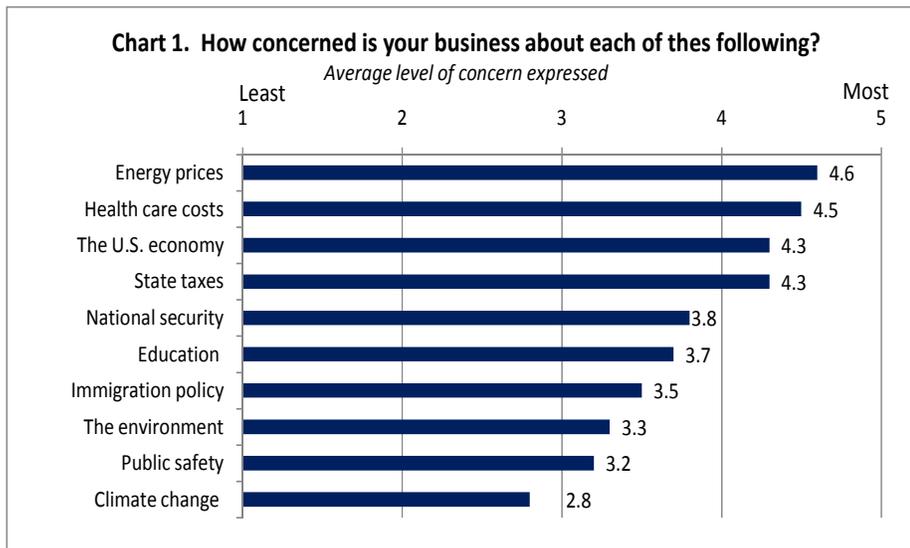
analysis into five geographic regions – southeast (the Milwaukee area), southwest (the Madison region), Northeast (the Fox Valley), central and north.

In terms of the nature of the businesses, the table below shows, executives of manufacturing companies and larger companies were somewhat more likely to respond than expected, possibly because larger manufacturing companies may be perceived as more likely to be affected in the short term by regulatory activities designed to combat climate change. Of all responding companies, 33% are manufacturing companies, 25% service, 18% retail or wholesale trade, 6% financial services, 5% transportation or utility, and 13% other, including agribusiness.

Respondents compared to Wisconsin businesses employing 25 or more		
	Survey N: 340	WI N: 8,093
Type of Business		
Manufacturing companies	33%	25%
Service businesses	25	21
Wholesale / retail	18	30
Financial services	6	7
Transportation businesses	5	6
Employees		
Fewer than 100	75	82
Between 100 and 150	7	8
150-200	5	3
200-500	7	5
More than 499	5	2
Revenue		
Less than \$5 million	36	58
\$5-10 million	16	17
\$10-20 million	11	11
\$20-40 million	7	7
\$40-100 million	6	4
More than \$100 million	4	4
Not responding	19	--

Perceptions about Climate Change and Global Warming

Climate change does not resonate among Wisconsin corporate executives as a primary concern for their businesses, especially in comparison to other challenges facing companies. The executives were asked to rate their level of concern about each of ten issues on a scale from one to five, with one representing the lowest level of concern and five the highest. On average, energy prices rated as the greatest concern for business, followed closely by health care costs, the American economy and state taxes. Five other issues ranked considerably lower on the scale: national security, education, immigration, the environment and public safety. Concern about climate change ranked last, as indicated in Chart 1 below.



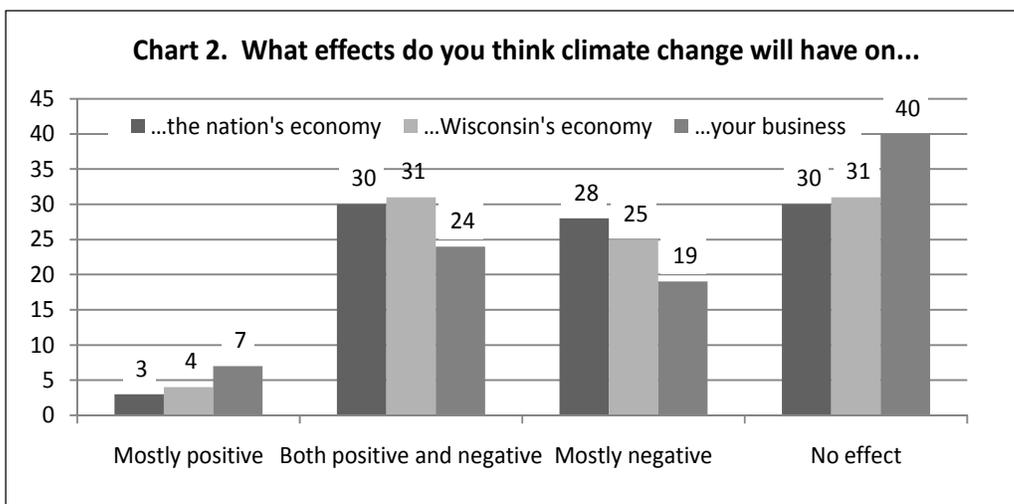
The relatively low ranking for climate change as a business concern appears to be related to perceptions about climate change, about which there is no clear consensus. Table 1 shows the level of agreement and disagreement with nine statements that were posed to respondents. The numbers do not add to 100% because in many cases the executives neither agreed nor disagreed and indicated they felt they did not have enough information to have formed an opinion.

Overall, a majority of business executives agreed with only two of the statements about climate change: that climate change is not the result of human activity (52% agreed) and that predictions of adverse consequences from climate change are not reliable (66%). About half disagreed that climate change is a pressing problem and that climate change poses serious risks to Wisconsin. Those surveyed also tend to regard business as more suited than government to dealing with climate change, and to see the cost of addressing climate change as outweighing the benefits. Even so, more respondents agreed than disagreed that government should establish a framework for reducing greenhouse gases.

Table 1. Business executives' perceptions about climate change.		
	Agree	Disagree
The consequences of climate change are positive for humanity and wildlife.	19%	42%
Government should establish a framework for reducing greenhouse gas emissions.	47	40
Addressing climate change will encourage innovative technology that will create jobs in Wisconsin.	34	37
The cost of trying to stop global warming exceeds the potential benefits to society.	48	33
Climate change is the result of natural processes, not human activity.	52	35
The consequences of climate change pose serious economic, social and environmental risks in Wisconsin.	32	48
Climate change is a pressing problem.	31	52
Businesses are better suited to addressing climate change than government is.	45	23
Predictions of adverse consequences from climate change are unreliable.	66	20

There are notable geographic differences, however, in business perceptions about climate change. Business leaders in the southwestern part of Wisconsin, which for purposes of this survey included the Madison region, tended to express greater concern about climate change than did business leaders elsewhere in the state. For example, 56% of respondents in southeastern Wisconsin (the Milwaukee region) agreed that the cost of trying to stop climate change exceeds the potential benefits to society. For the southwestern part of the state, 32% agreed. Also, 60% of Milwaukee region business leaders regard climate change as the result of natural processes, not human activity; for the Madison region, 35% agreed. These differences may be partly explained by the fact that business in the Milwaukee area tends to be more focused on manufacturing, a sector perhaps more directly affected by regulatory responses to climate change.

Table 2. Climate change perceptions by region of Wisconsin.					
	Percent agreeing				
	South-east	South-west	Central	North-east	North
The consequences of climate change are positive for humanity and wildlife.	19%	14%	12%	23%	22%
Government should establish a framework for reducing greenhouse gas emissions.	40	63	59	48	42
Addressing climate change will encourage innovative technology that will create jobs in Wisconsin.	28	40	50	34	34
The cost of trying to stop global warming exceeds the potential benefits to society.	56	32	47	59	46
Climate change is the result of natural processes, not human activity.	60	35	56	54	42
The consequences of climate change pose serious economic, social and environmental risks in Wisconsin.	27	28	41	30	49
Climate change is a pressing problem.	34	38	38	33	41
Businesses are better suited to addressing climate change than government is.	50	42	42	43	39
Predictions of adverse consequences from climate change are unreliable.	73	57	61	72	56



Business leaders are divided on the impact climate change is likely to have on the economy as well as on their own profits. As Chart 2 shows, most executives see climate change as having a negative effect or no effect at all on the economy, both at the national and state levels. Again, there are significant differences by region, with 40% of executives in the Milwaukee and central Wisconsin regions seeing no effect on the nation's economy, compared to 19% of executives in the Madison region.

When it comes to corporate profits, the effects of climate change tend to be seen as minimal. Asked what effect climate change will have on their companies' profits over the next five years, 57% of respondents said no effect whatsoever. Another 31% anticipate negative effects, and 12% positive. Again, Madison area companies are more likely than businesses elsewhere in the state to anticipate that climate change will cut into their profits.

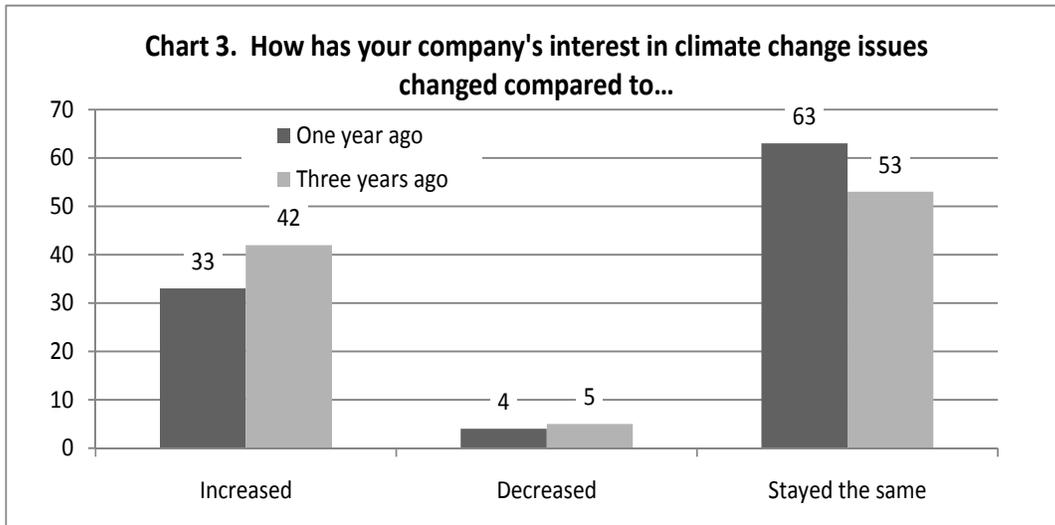
Wisconsin Business Behaviors and Practices in Relation to Climate Change

Most corporations in Wisconsin rarely take climate change into consideration when making corporate decisions. This finding is evident from responses to two series of questions, including those summarized in Table 3. Business strategy and decision-making regarding energy usage and environmental issues appear to be done often in the absence of consideration of long-term global climate consequences. Larger companies and those based in the Madison region of the state are somewhat more likely to consider climate change in business decisions than are smaller companies and those elsewhere in the state (See Appendix 1).

Table 3. Frequency of taking climate change into consideration when it comes to business decision-making.		
	Always/ Frequently	Seldom/ Never
Managing corporate reputation and brands.	15%	70%
Managing environmental issues.	29	54
Reducing the organization's carbon footprint.	20	59
Overall corporate growth strategy.	15	69
Developing and/or marketing new products or services.	20	62
Planning investments.	14	69
Managing supply chain purchases.	13	70
Lobbying and developing regulatory strategy.	6	78
Trading, such as trading in carbon emission rights.	5	90
Investing in new technology or equipment.	21	54
Exploring potential expansion or relocation.	12	74
Managing energy use.	38	41

The reluctance of business leaders to incorporate climate change concerns in their overall strategy is similar to the findings of a survey by McKinsey & Co. of companies worldwide, which found American companies tend to be less focused on climate change than companies elsewhere in the world.¹ In that survey, 30% of companies across the globe reported they took climate change into consideration in overall corporate strategy always or frequently, but for North American companies it was 21% compared to 15% in our Wisconsin survey. The McKinsey survey found that corporations elsewhere in the world were somewhat more likely to factor climate change into their corporate decisions. In India, 40% of companies reported doing so, compared to 37% in Europe, 34% in the rest of Asia, and 25% in Latin America. In a separate question, Wisconsin business executives were asked how the impact of climate change is viewed within their companies. Nearly half (46%) responded climate change is viewed as having no impact. Another 23% said climate change is viewed as posing an equal balance of risks and opportunities, 18% of companies view climate change as posing mostly risks with limited opportunities, 3% only risks, and 9% mostly or only opportunity.

Although climate change issues are not near the top of the list of corporate concerns in Wisconsin, many business leaders say their interest in climate change is increasing. As Chart 3 shows, a large minority of respondents reported their businesses have become more interested in climate change over the past three years, and about one third reported heightened interest in the past year. However, the majority of business executives say their companies have not become more interested in the topic, and some say their interest has declined.



Even so, most businesses in Wisconsin report taking some actions in an effort to address climate change. Table 3 lists those actions in order, from actions most often taken by business to those least popular to date. The vast majority of company leaders say their businesses have taken measures to reduce their energy usage and have increased recycling efforts, and about half the companies report reducing the use of paper. Specific actions to address climate change drop off dramatically from there, with just 15% reporting efforts to reduce commuting and 12% reporting investments in green technologies. Other ideas for addressing climate change have not caught on in corporate Wisconsin, although some early adopters report using alternative fuels and renewable energy, and some companies appear to be measuring and taking measures designed to reduce their carbon footprint. A few companies, particularly larger ones, have produced a report on their impact on the environment.

Table 4. Actions business leaders report their companies have taken to address climate change.	
Reduced energy use by switching to energy efficient lighting, using occupancy controls, and/or installing energy efficient equipment.	76%
Increased recycling.	72
Reduced paper.	49
Taken steps to reduce employee commuting, such as carpooling, mass transit, and telecommuting.	15
Invested in research and development of green technologies.	12
None of these things.	11
Purchased alternative fuels and/or hybrid automobiles for company cars.	11
Received power from renewable sources.	9
Established specific initiatives to reduce carbon footprint.	8
Sought LEED certification for new or existing facilities.	8
Calculated the company's carbon footprint.	6
Produced a report with information on the impact of the business on the environment.	5

Recycling and energy reduction strategies are consistently reported to be in effect throughout the state and regardless of the nature and size of the business. For example, service-oriented businesses and retail stores are just as likely to say they have undertaken energy reduction measures as are manufacturers (Table 5), although they are somewhat more likely to have increased recycling. When it comes to paper reduction, about one third of manufacturers responding said they had taken that action, whereas well over half of trade and service companies reported doing so. For actions taken by a small minority of businesses, the nature of the business appears to influence the likelihood of a company exploring them. Manufacturers are more likely than service and trade companies to measure their carbon footprints, invest in green technology research, and produce an environmental report. Retail and wholesale trade businesses, meanwhile, are more likely to report purchasing alternative fuels and/or hybrid vehicles; and service businesses are more likely to report using green technology in buildings.

	Manufacturing	Trade	Service
Reduced energy use.	75%	79%	76%
Increased recycling.	60	77	83
Reduced paper.	36	54	59
Invested in green technologies.	18	5	11
Purchased alternative fuels and/or hybrids.	8	12	9
Received power from renewable sources.	6	7	9
Sought LEED certification.	8	5	13
Calculated carbon footprint.	8	2	7
Produced a report on the environment.	9	4	3

Survey analysis found a correlation between perceptions about climate changes and actions taken to address them. The correlation is especially strong when it comes to businesses calculating their carbon footprints and taking initiatives to reduce carbon emissions. Among all survey respondents, just 5% and 8%, respectively, reported taking those actions; but among those who said they were concerned about climate change, 12% said their businesses had measured the footprint, and 21% said they had taken initiatives to reduce carbon. A similar correlation was found between concern about the environment and actions to measure and reduce carbon emissions.

More specific perceptions about climate change also correlated with business actions aimed at addressing climate change, as Table 6 shows. For example, among respondents who believe climate change is a pressing problem, 19% have invested in green technology research; among those who do not believe climate change is a pressing problem, 7% have done so. Also, among those who believe government should establish a framework for reducing greenhouse gas emissions, 19% have taken steps to reduce employee commuting; among those who do not believe in establishing a government framework, 10% have tried to reduce commuting.

Table 6. Percentage of respondents who <u>AGREE</u> climate change is a pressing problem who have taken the following actions, compared to those who <u>DISAGREE</u> climate change is a pressing problem.		
	Those who believe climate change is a pressing problem	Those who do NOT believe climate change is a pressing problem
Reduced energy use by switching to energy efficient lighting, using occupancy controls, and/or installing energy efficient equipment.	87%	59%
Increased recycling.	87	55
Reduced paper.	61	35
Taken steps to reduce employee commuting, such as carpooling, mass transit, and telecommuting.	22	9
Invested in research and development of green technologies.	19	7
None of these things.	2	17
Purchased alternative fuels and/or hybrid automobiles for company cars.	14	10
Received power from renewable sources.	13	5
Established specific initiatives to reduce carbon footprint.	19	4
Sought LEED certification for new or existing facilities.	15	4
Calculated the company's carbon footprint.	10	2
Produced a report with information on the impact of the business on the environment.	8	2

Respondents also were asked whether there were actions their businesses would like to take but have not yet taken. Nearly 22% said there were. Among the actions cited are:

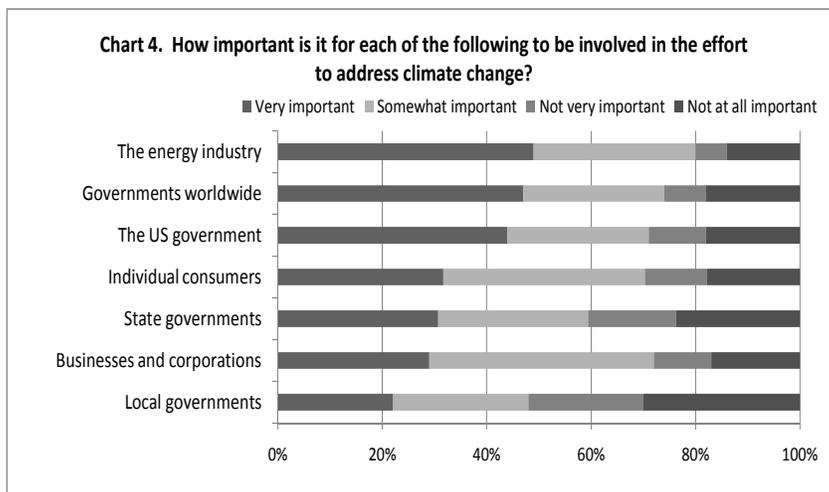
- Encouraging customers to use reusable shopping bags
- Installing wind turbines for power
- Installing solar panels for hot water
- Purchasing more fuel efficient vehicles
- Installing more efficient lighting
- Energy audits
- Mass transit
- Geothermal heating and cooling

- Renewable energy systems
- Calculating carbon footprints
- Installing energy efficient equipment

The survey questionnaire asked company executives whether their companies have energy management plans. Among all respondents, 85% reported that they had such plans, and 70% reported their businesses have specific goals for reducing energy usage, indicating a strong interest in saving on energy costs.

Business executives and policy

Despite skepticism about climate change, and the reluctance to factor climate change into corporate planning and decision-making, the survey found widespread support among business leaders for coordinated and systematic efforts to address climate change issues. This is especially true on a global scale. As Chart 4 shows, most Wisconsin business executives believe it is important for the energy industry and governments worldwide to address climate change. However, the smaller the unit of government, the less likely it is for a business executive to see the role of that government as important in addressing climate change. For example, most business executives report it is not very important, or not at all important, for local governments to be involved whereas about 75% see the role of governments worldwide as at least somewhat important.



In terms of specific policies, survey respondents are supportive of a wide variety of measures and are opposed to others. In the **international** arena, the majority of business executives who responded favor more use of nuclear power (75%), investments in renewable energy (62%), and international standards requiring vehicles, buildings and equipment to use energy efficiently (58%). Nearly half (46%) would favor a ban on sale and import of products from rain forests.

When it comes to **national** policy, the majority favors energy conservation (82%), greater reliance on nuclear power (77%), and financial incentives for businesses to use wind, solar, biomass, and other renewable energy sources (67%). About half favor tax incentives and disincentives designed to produce and promote climate-friendly actions, and nearly half (44%) favor a new national transportation network emphasizing mass transit. However, 57% are opposed to a carbon tax to reduce greenhouse gas emissions, and 53% oppose a cap and trade system that would set a limit on greenhouse gas emissions and allow businesses to sell unused allotments.

Views on possible policies for the state of Wisconsin are highlighted in Table 7, which makes it evident that some potential state policies would be far more popular among business executives than others. In general, respondents are strongly supportive of energy conservation, forest preservation, renewable energy, and nuclear power measures. The majority is opposed to carbon taxation, a cap-and-trade policy and greater use of ethanol.

Table 7. Percentage of Wisconsin business executives in favor of these state policies aimed at addressing climate change.	
Financial incentives to encourage businesses to conserve energy.	74%
Additional nuclear generation plants in Wisconsin.	74
Market-based pricing to reward energy usage at off-peak times. Unlikely this would reduce emissions much.	73
Financial incentives for preservation and planting of Wisconsin forests.	63
Energy efficiency standards for buildings.	62
Elimination of barriers to the siting of small wind farms.	62
Creating increased incentives or options for businesses to purchase renewable energy.	61
Incentives for farms to be more energy efficient, such as capturing methane from manure, better soil management, and less fertilizer usage.	60
Local transportation and land use policies aimed at more use of mass transit and shorter commuting distances.	49
Requirements that utility companies use renewable energy sources – such as wind and solar power – for at least 25% of their electricity generation by 2025.	44
Tax deductions for businesses that donate to fund green energy projects.	42
Increased state funding for research and development of renewable alternative fuels such as ethanol and bio-diesel.	38
A regional cap-and-trade policy—setting a limit on greenhouse gas emissions and allowing businesses to sell unused allotments or greenhouse gas reductions to other businesses.	19
A carbon tax to reduce greenhouse gas emissions.	18
A requirement that gas sold in Wisconsin contain more ethanol.	16

In the survey, respondents also were asked to rate the value of Wisconsin’s Focus on Energy Program that serves businesses to promote energy efficiency. Overall, the executives rated the program as most helpful among five entities (including the federal and state governments, trade

associations and the Wisconsin Manufacturers and Commerce) in providing assistance or advice related to energy usage (Chart 5). However, businesses in the southeastern part of the state were somewhat less likely to report that Focus on Energy was helpful than were businesses elsewhere in the state (Table 8).

Also, most executives said their companies had not received services from Focus on Energy, but most of those who had reported both cost and energy savings as a result. Just over half of the respondents said they believe Focus on Energy helps businesses save money on energy bills.

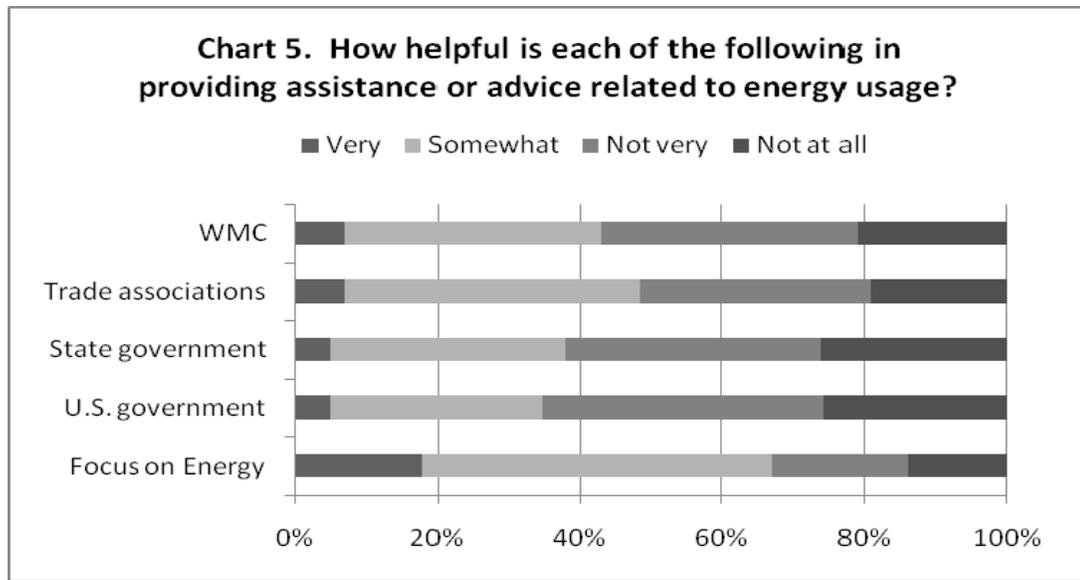


Table 8. Percent finding ... helpful by region.

	South-east	South-west	Cent-ral	North-east	North
...Wisconsin Manufacturers and Commerce	41	43	53	45	38
...A trade association	46	57	45	46	50
...Wisconsin state government	31	54	42	32	37
...The federal government	26	51	36	44	24
...Focus on Energy	62%	72%	73%	68%	71%

Conclusion

Surveys cannot capture the complete sentiments of the population being studied, and this survey is no exception. Wisconsin has thousands of presidents and owners of businesses, and this report is based on the responses of 340 of them. Even so, the respondents appear to be representative of Wisconsin senior business executives in terms of geography, size of business, and the nature of businesses conducted throughout Wisconsin.

Taken as a whole, their message is one of skepticism about the causes and impact of climate change, and the capacity of government regulatory policy to effectively respond to climate change. However, the survey reveals that Wisconsin's business leaders, regardless of their views about climate change, are receptive to measures that would promote energy efficiency, lower energy costs, and facilitate the competitiveness of Wisconsin companies in the global marketplace.

This message resonated throughout the survey and also in the comments many of the respondents wrote on the questionnaire. Appendix B contains many of those comments.

The survey also raises additional questions about business responses to climate change issues. Some of those questions are: Is skepticism about climate change likely to change when, and if, climate change has a more direct impact on the bottom line? To what extent are business attitudes about climate change driven by concerns about regulation and to what extent by concerns about the impact of climate change itself? Are perceptions about climate change consistent with reality? Are manufacturers more likely than other businesses to question concerns about climate change because they anticipate burdensome regulations? And what impact will rising energy costs, and business efforts to cut costs by reducing energy usage, have on the response to climate change?

¹ **How companies think about climate change:** A McKinsey Global Survey, *McKinsey Quarterly*, February 2008. The report can be found at:
http://www.mckinseyquarterly.com/How_companies_think_about_climate_change_A_McKinsey_Global_Survey_2099