

Research on Sustainability and Competitiveness in Mexico*

Dennis Aigner, UC
Antonio Lloret, ITAM

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Main Objectives

- 1) Generate a baseline about sustainability practices in Mexican companies.
- 2) Understand how environmental performance has influenced competitiveness.
- 3) Identify changes in relation to better environmental performance in Mexican firms and its drivers.



Competitiveness*

Whereby the firm has the ability to maintain operations, survive and prosper

Business value creation

Economic growth

*** No need for a single definition at the international or national level as each firm is capable of defining its own reference markets to remain competitive.*



Sustainability

- Whereby firms integrate in their business operations stakeholder, environmental, and societal expectations.



Competitiveness Expectations

- Reputation
- Branding
- Innovation
- Productivity
- Economic benefits



Environmental Expectations

- Efficient use of natural resources
- Pollution control
- Governmental regulation and adaptation
- Energy Efficiency and security
- Carbon restrictions
- Green economy



Methodology

- Interview/Survey the most important companies in Mexico.
- Sample drawn from Expansión 500 for 2008, 2009 and 2010
- 84% of Expansión top 500 are located in and around Mexico City's or Monterrey's metropolitan area.
- Response rate of approximately 25%
- Expansion attitudinal survey, February 2011 issue: Main results are 5/10 adults in Mexico believe that business has a bigger responsibility toward the environment. 70% of Mexican consumers would pay more for a green product if it will help the environment.



Survey application

- Original list of 600 companies that have been listed in Expansion 500 for the last one year during the last 3 years.
- Reduce the list to consider conglomerates, to exclude subsidiaries and to be geographically feasible to reach.
- 400 companies contacted by phone or email, then made appointments to explain survey and clarify scope of same.
- Confidentiality letters were sent to companies that requested them.
- Main non response issues were lack of interest, limitations to share data, sustainability not prioritary for the company .



Survey sections

1. Companies main characteristics.

1. 71% more than 1000 employees.
2. Sales in million dollars and most have international operations.
3. 86% have written ethical codes and 70% have included sustainability in their mission.

2. Environmental sustainability

1. Type of environmental sustainability practices
2. Drivers of sustainability practices
3. Decision makers
4. Stakeholders and internal and external challenges.

3. Climate change and water resources challenges.

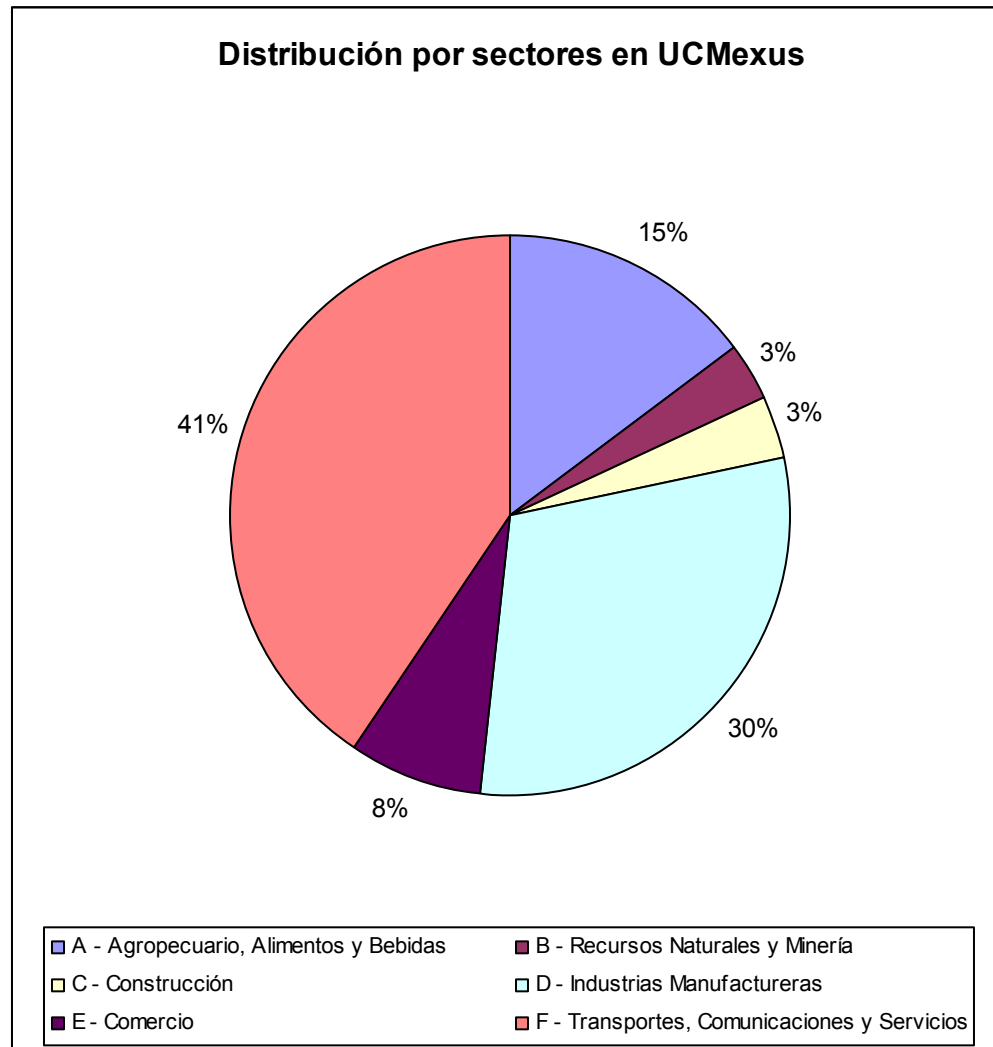
1. Awareness
2. Risk perception

4. Competitiveness

1. Sustainability impact



Distribution of Companies that answered the survey/interview

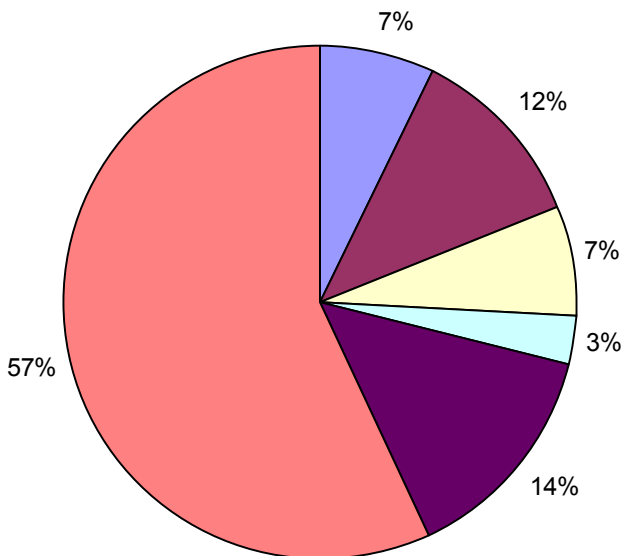


Comparative

Expansión 500

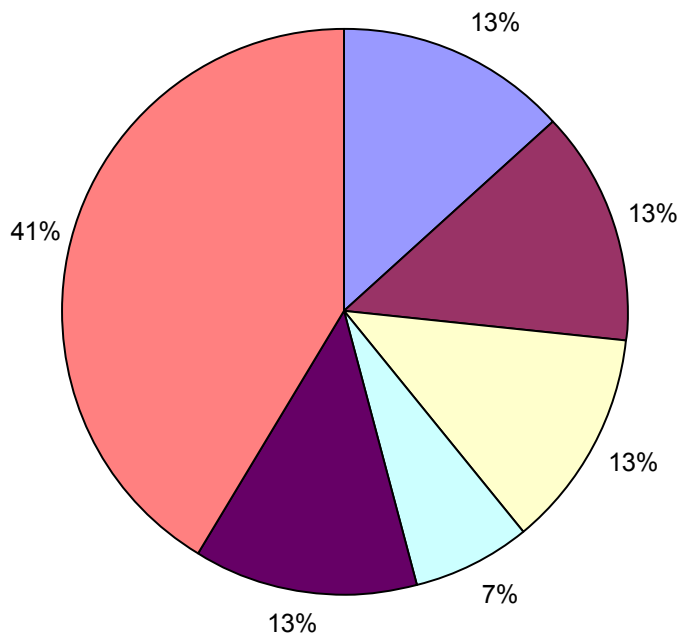
BMV

Distribución por sectores 500 Expansión



- A - Agropecuario, Alimentos y Bebidas
- B - Recursos Naturales y Minería
- C - Construcción
- D - Industrias Manufactureras
- E - Comercio
- F - Transportes, Comunicaciones y Servicios

Distribución por sectores de BMV



- A - Agropecuario, Alimentos y Bebidas
- B - Recursos Naturales y Minería
- C - Construcción
- D - Industrias Manufactureras
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Comparative surveys

- **Economist:** Online survey of 566 US based executives (39% VP or above) in Sept. 2008. 29% public companies in 17 different industries . Self selected, but population is not specified.
- **McKinsey:** December 2007. 2192 executives worldwide (27% CEO's or other "C" level executives). Data are weighted to reflect representation in the population. No mention of what the population is, however.
- **MIT:** Online survey of 2000 respondents taken from March to April 2009. Report concerns 1560 responses from for-profit companies worldwide. No indication of population. Self selected responses.
- **Delmas:** Oct-Nov 2003. Population consisted of 3255 facilities in 8 industrial sectors. 562 responses (17.2% response rate). No indication of how the list was compiled.



Section 2. Environmental Sustainability

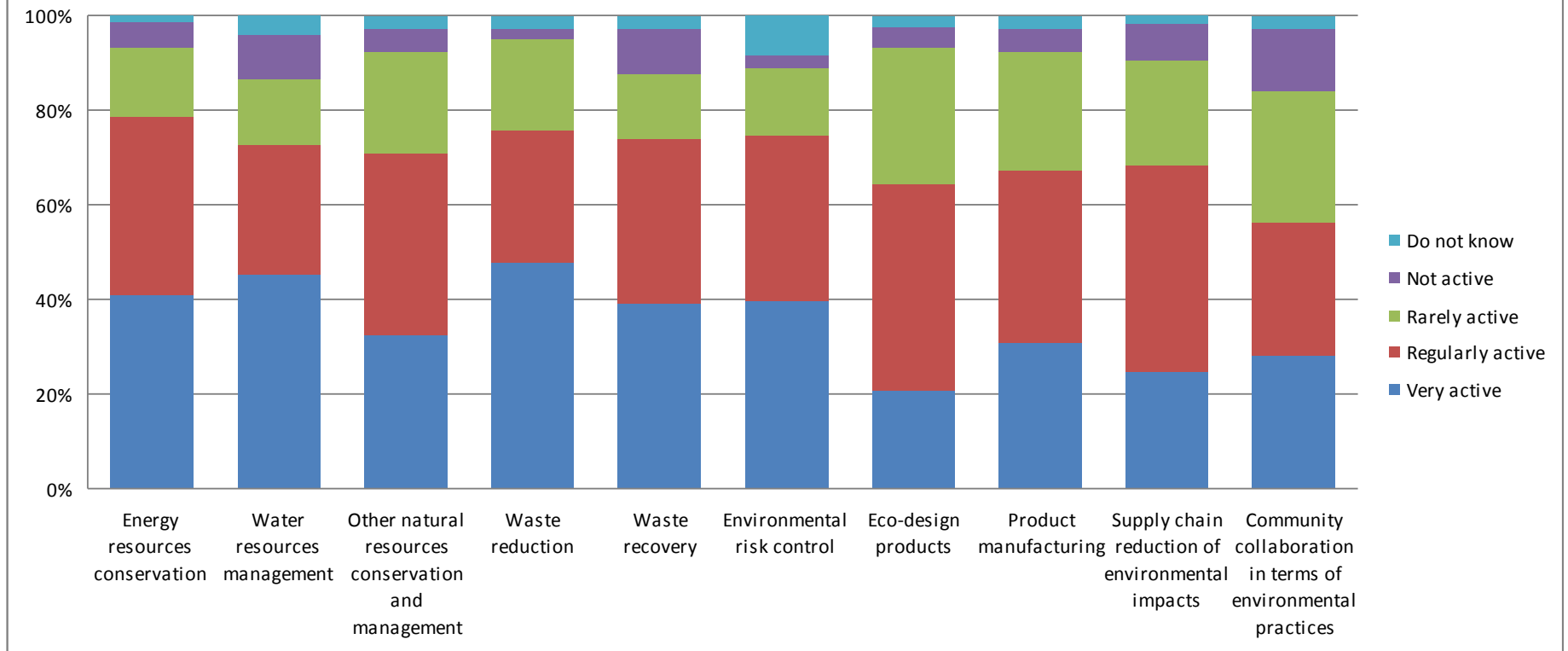


How active is your company in terms of the following areas of environmental sustainability?

Answer Options	Very active %	Regularly active %	Sum %	Rarely active %	Not active %	Do not know %
Energy resources conservation	41.0	37.6	78.6	14.6	5.6	1.2
Water resources management	45.5	27.2	72.7	14.1	9.1	4.1
Other natural resources conservation and management	32.3	38.5	70.8	21.3	5.2	2.6
Waste reduction	47.5	28.1	75.6	19.3	2.5	2.5
Waste recovery	39.0	35.1	74.1	13.5	9.7	2.8
Environmental risk control	39.7	35.1	74.8	14.2	2.8	8.2
Eco-design products	20.8	43.5	64.3	29.1	4.1	2.4
Product manufacturing	30.8	36.6	67.4	24.9	5.2	2.6
Supply chain reduction of environmental impacts	24.8	43.7	68.5	22.3	7.7	1.5
Community collaboration in terms of environmental practices	28.0	28.4	56.4	27.6	13.1	2.8



How active is your company in terms of the following areas of environmental sustainability?



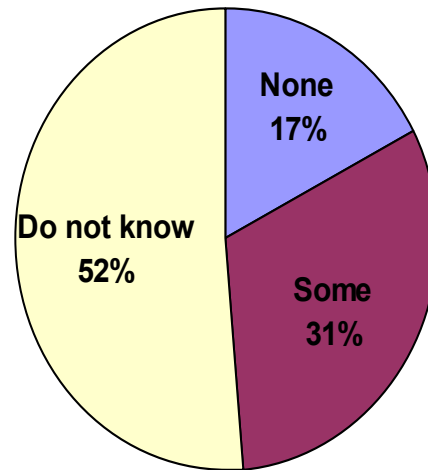
Does your company use metrics to measure environmental performance?

Comparative results from Economist		
Answer options	Ours %	Economist %
Yes	59	31
No	31	38
Do not know	10	31

Among the metrics used: Triple Bottom Line (21%), ISO 14001 or 14031 (24%), Global Reporting Initiative (31%), other (17%).



Approximately what percentage of your company's annual operating budget is invested in the implementation of environmental sustainability practices?



Does your company have a written business plan or project to address environmental sustainability issues?

Answer Options	Response Percent
Currently has an environmental sustainability project	52.9%
Does not have an environmental sustainability project	18.0%
Is currently developing an environmental sustainability project	22.8%
Think will soon develop an environmental sustainability project	11.2%
No future plans for developing an environmental sustainability project	1.8%
Do not know	1.2%

What are the main reasons for your company to adopt environmental sustainability practices?

("most important" rankings only)

Answer Options	Ours %	MIT %
Revenue growth	21.3	8
Increased profits	14.3	N/A
Cost savings	25.2	10
Public relations	12.0	N/A
Internal pressure (i. e. employees)	4.2	9
Environment protection	63.6	N/A
Brand/image improvement	16.0	35
Recruitment and retention of employees	13.7	9
Opening new markets	34.6	10

How does your company perceive environmental organizations (NGO or local organizations), as an opportunity or a challenge for its business?

Answer Options	Great extent + Some extent %	Response count
Business opportunity	81.5	88
Challenge for the company	86.2	85
Problem for the company	23.0	79



To what extent are your company's employees involved in environmental sustainability strategies?

Answer Options	Great extent	Some extent	No extent
Voluntarily	42.3	50.7	7.0
Motivated or forced by the company	24.1	44.9	31.0
Average	33.7	47.9	18.4
Economist	16.0	63.0	21.0



How do the following groups and/or organizations influence the environmental sustainability strategy of your company?

Answer Options	Greatly affects %	Affects to some extent %	Sum %	Does not affect %	Response Count
Government	35.2	47.7	82.9	17.1	92
Employees	21.7	58.7	80.4	19.6	93
Shareholders	40.2	45.1	85.3	14.6	90
Consumers	32.1	46.4	78.5	21.5	92
Suppliers	12.7	60.4	73.1	26.9	93
Environmental support groups	14.8	48.0	62.8	37.1	91
NGO	10.4	50.1	60.5	39.6	91
Educational institutions	10.6	42.9	53.5	46.4	91
National regulations	50.6	33.1	83.7	16.3	93
International regulations	39.4	34.7	74.1	25.9	91
Media	12.8	57.6	70.4	29.6	92
Competitors	15.8	43.9	59.7	40.3	92
Socially responsible investment funds	11.6	31.7	43.3	56.7	87
Local community	31.4	47.4	78.8	21.1	92
Industry, trade or business associations	6.5	60.2	66.7	33.3	91
Others	12.6	15.4	28.0	72.0	8

Comparative stakeholders influence

	Economist	MIT
	%	%
Government	22	30
Employees	20	30
Shareholders	17	20
Consumers	16	N/A
Suppliers	N/A	5
Environmental support groups	5	N/A
NGO's	5	7.5
Educational institutions	13	N/A
Media	2.4	2.5
Local community	N/A	5

In your opinion, does the adoption of environmental sustainability practices improve your company's financial results?

Answer Options	Response Percent	Combined	Economist
Greatly improves	56.7%	92.5%	89%
Slightly improves	35.8%		
Does not affect	7.5%	7.5%	11%



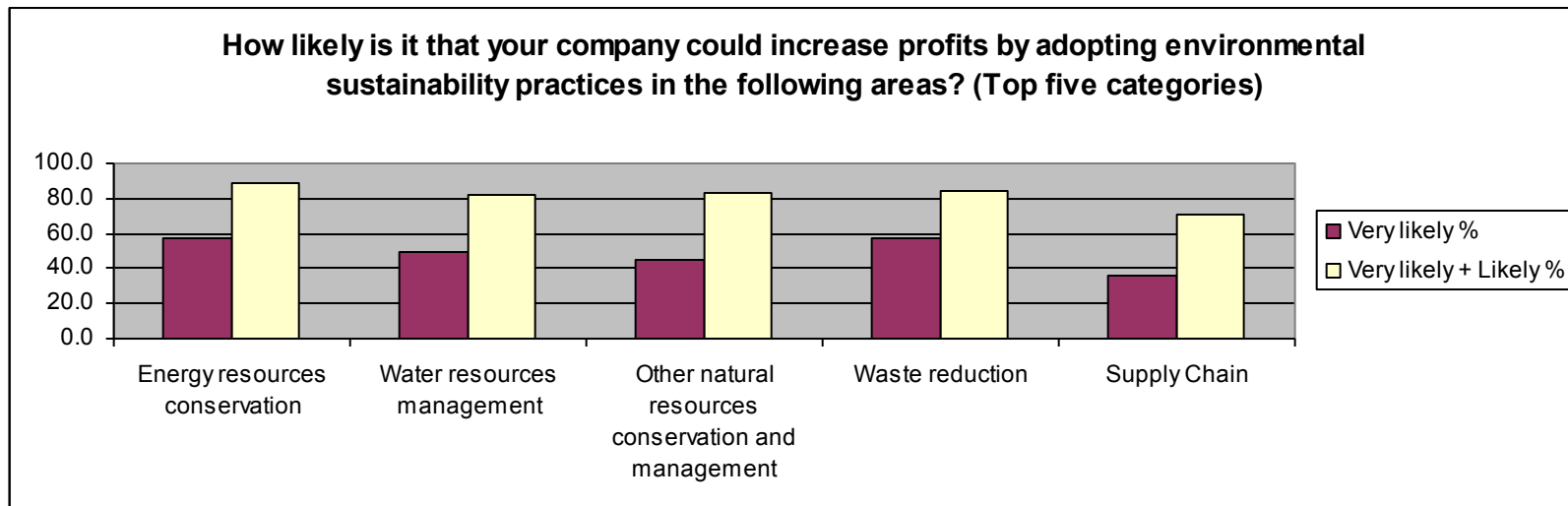
Five years from now, do you think that environmental sustainability practices will be more or less important to your company's business strategy?

Answer Options	Response Percent	Economist
Much more important	49.2%	44%
More important	42.7%	
Equally important	5.9%	39%
Less important	0.6%	5%
Do not know	1.6%	12%



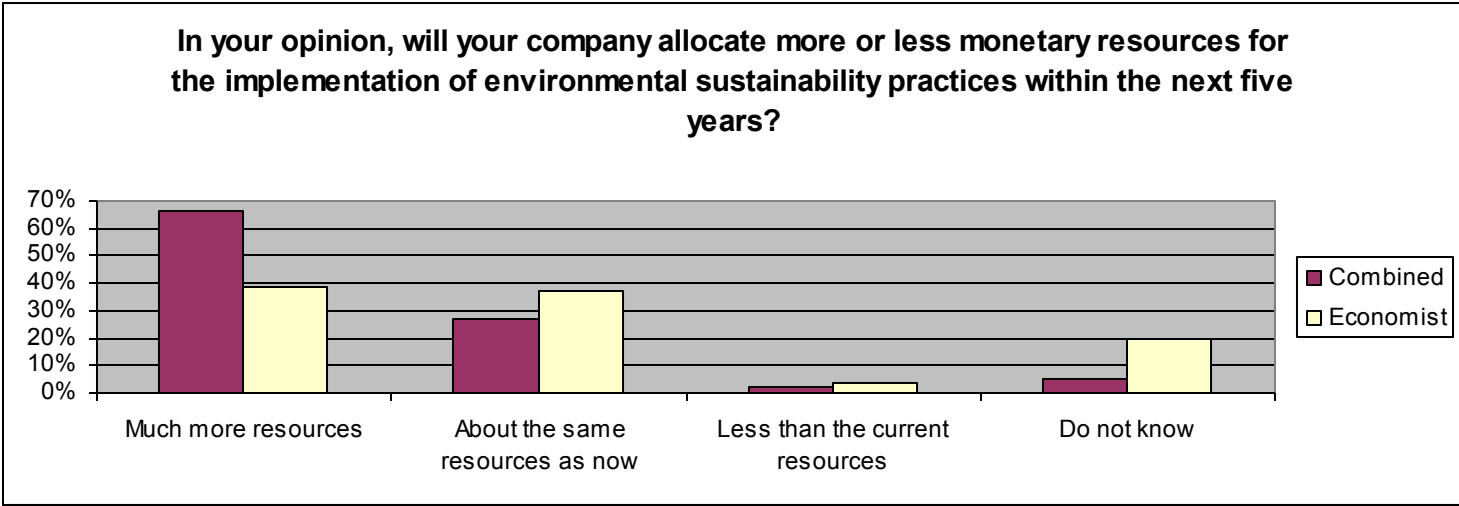
How likely is it that your company could increase profits by adopting environmental sustainability practices in the following areas? (Top five categories)

Answer Options	Very likely %	Very likely + Likely %
Energy resources conservation	57.3	88.9
Water resources management	49.7	81.6
Other natural resources conservation	44.5	83.0
Waste reduction	56.8	83.9
Supply Chain	35.6	70.6



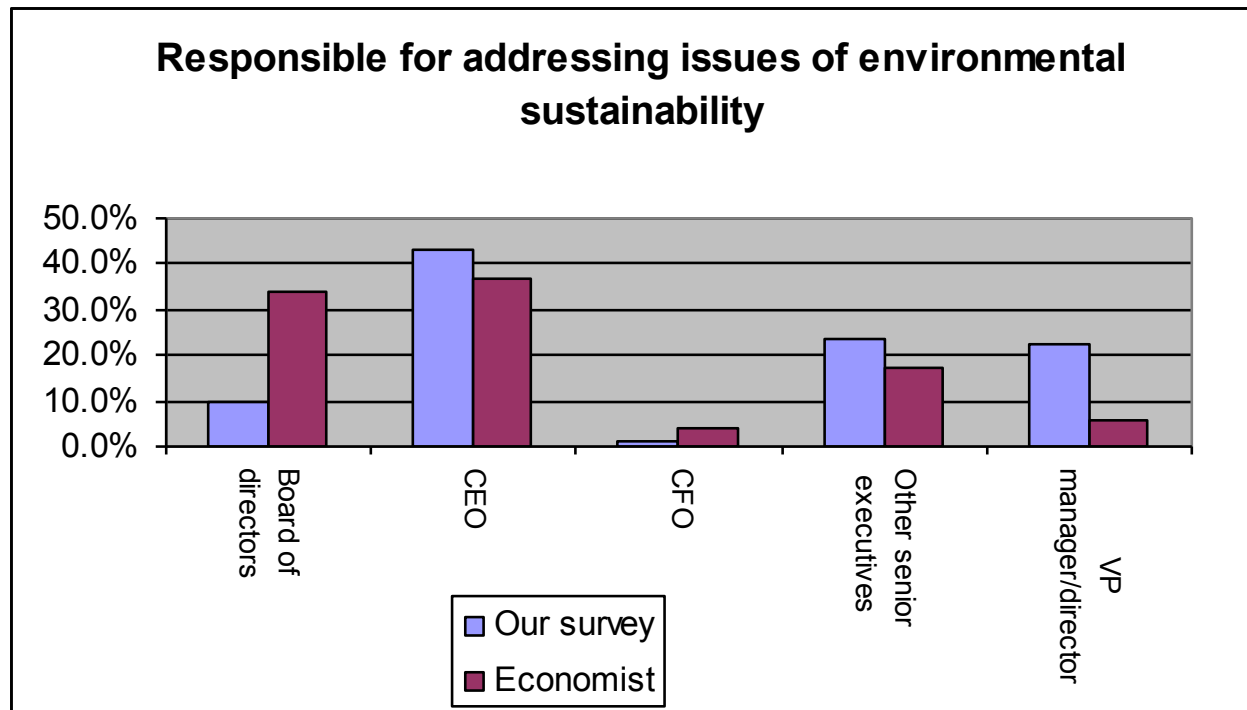
In your opinion, will your company allocate more or less monetary resources for the implementation of environmental sustainability practices within the next five years?

Answer Options	Response Percent	Combined	Economist
Much more resources	7.2%	64.4%	39%
More than the current resources	57.2%		
About the same resources	27.1%	27.1%	37%
Less than the current resources	2.1%	2.1%	4%
Much less than current resources	0.0%		
Do not know	6.3%	6.3%	20%



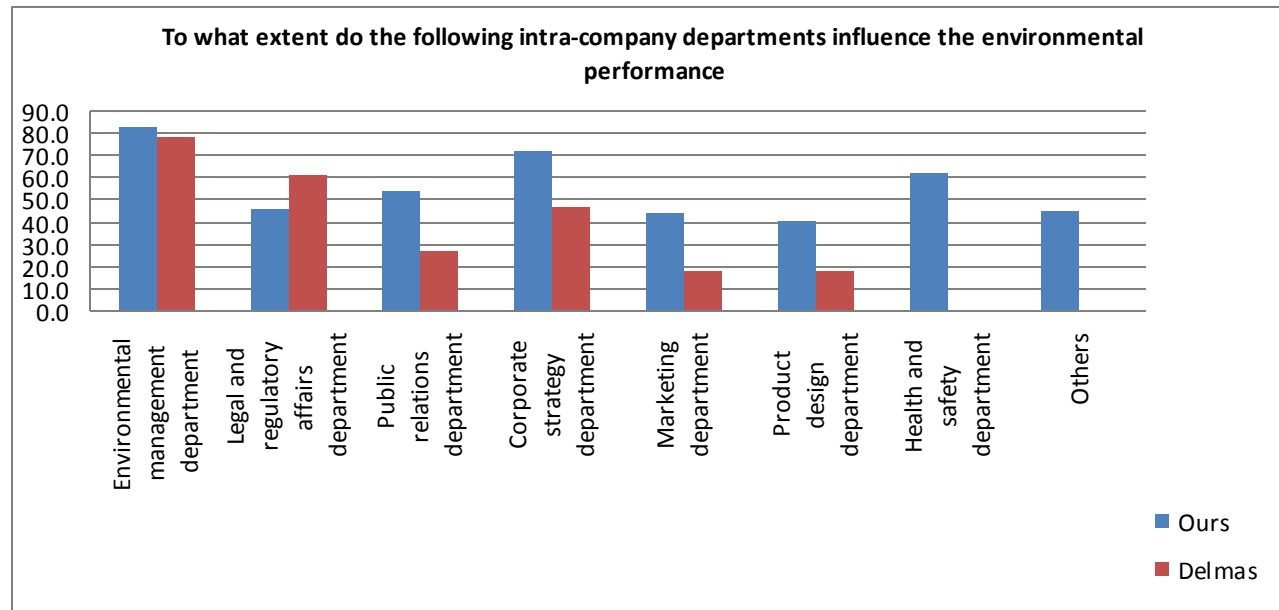
In your company, who is primarily responsible for addressing issues of environmental sustainability?

Answer Options	Response Percent	Economist
Board of directors	9.6%	34%
CEO	43.1%	37%
CFO	1.3%	4%
Other senior executives	23.7%	17%
VP manager/director	22.3%	6%



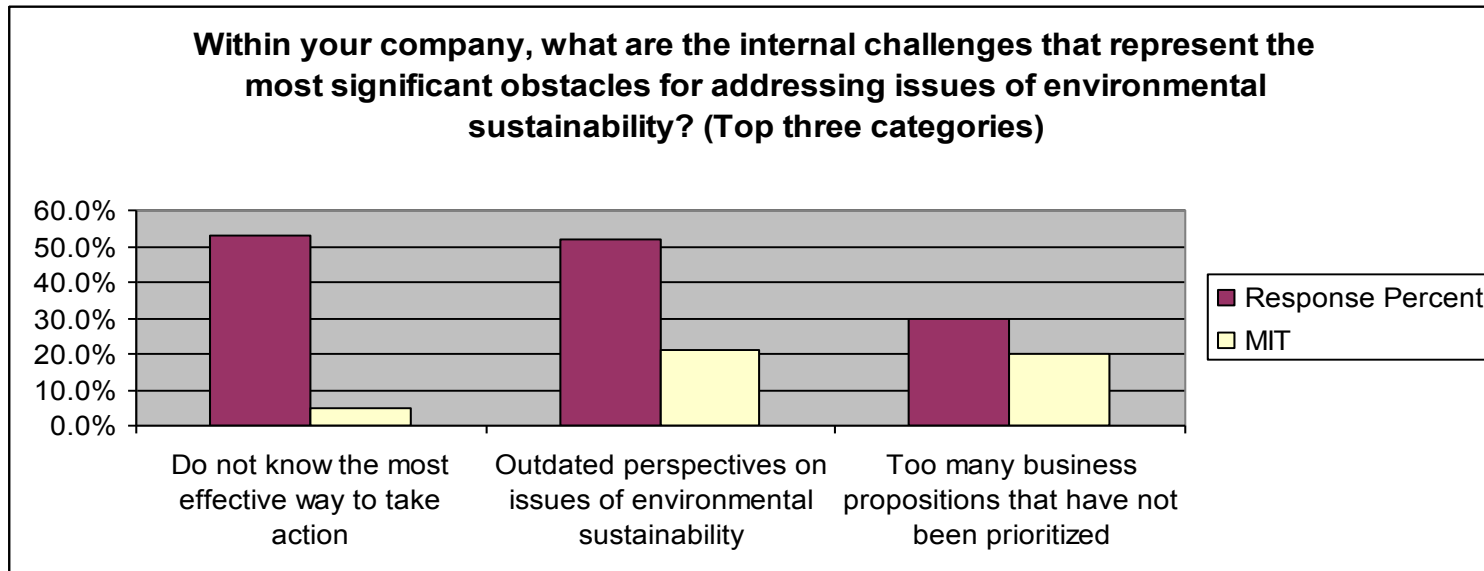
To what extent do the following intra-company departments influence the environmental performance improvement of your company?
(strong & very strong influence)

Answer options	Ours	Delmas
Environmental management	83.0	78
Legal and regulatory affairs	46.0	61
Public relations department	53.9	27
Corporate strategy department	71.9	47
Marketing department	43.8	18
Product design department	40.5	18
Health and safety department	62.1	N/A
Others	44.7	N/A



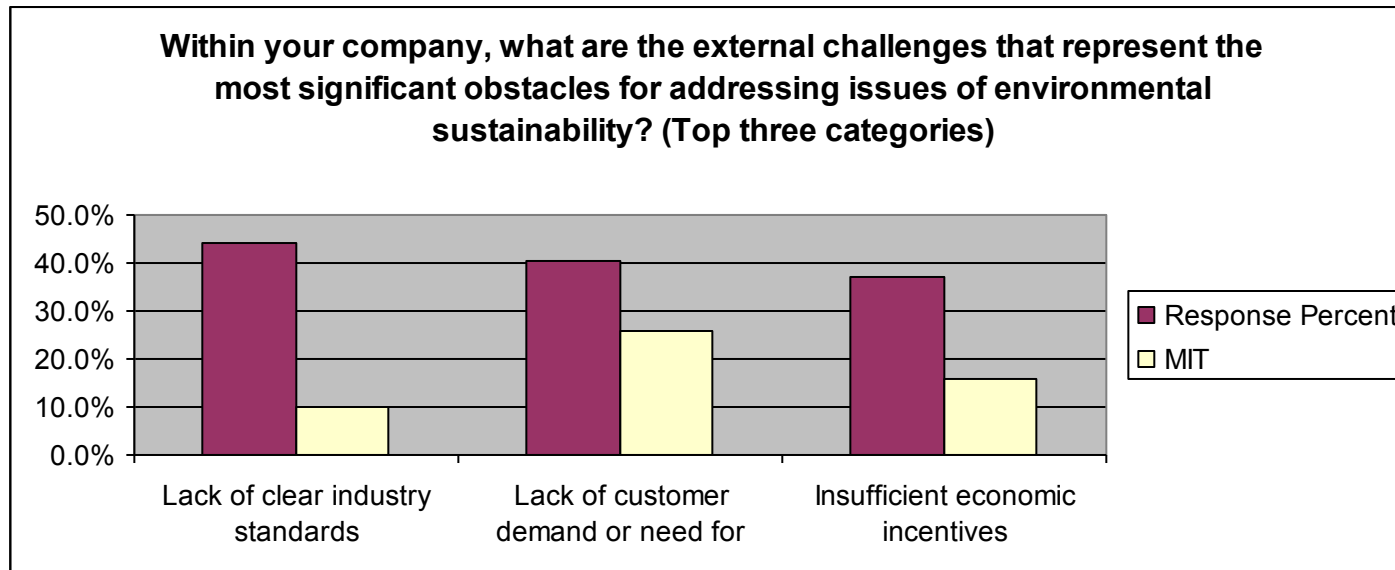
Within your company, what are the internal challenges that represent the most significant obstacles for addressing issues of environmental sustainability? (Top three categories)

Answer Options	Response Percent	MIT
Do not know the most effective way to take action	53.0%	5.0%
Outdated perspectives on issues of environmental sustainability	51.7%	21.0%
Too many business propositions that have not been prioritized	29.8%	20.0%



Within your company, what are the external challenges that represent the most significant obstacles for addressing issues of environmental sustainability? (Top three categories)

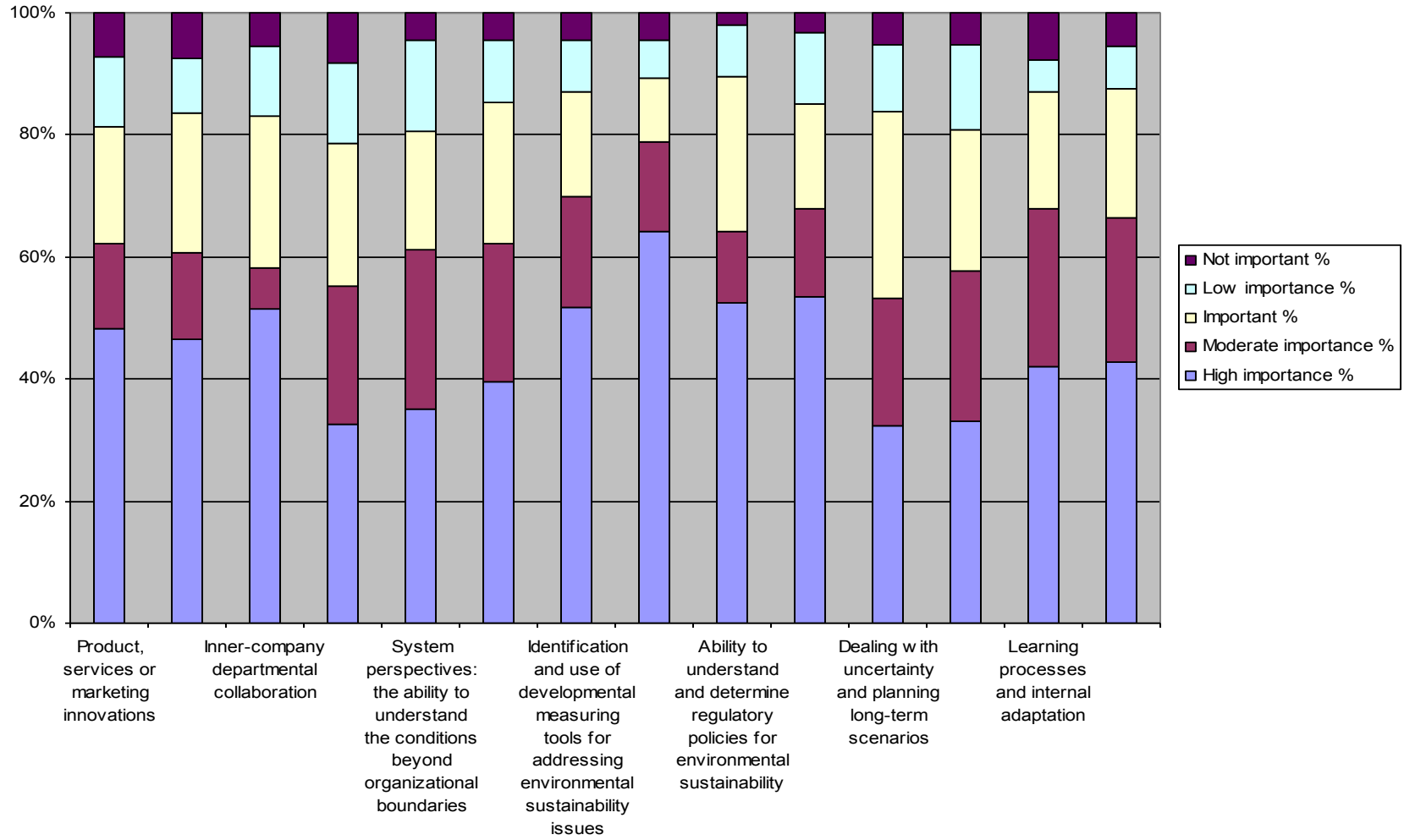
Answer Options	Response Percent	MIT
Lack of clear industry standards	44.1%	10%
Lack of customer demand or need for	40.4%	26%
Insufficient economic incentives	37.2%	16%



How important are the following elements when addressing environmental sustainability in your company?

Answer Options	High importance %	Moderate importance %	Important %	Sum %	Low importance %	Not important %	Response Count
Product, services or marketing innovations	48.2	13.9	19.2	81.3	11.5	7.2	96
Business model or processes innovation	46.5	14.1	22.8	83.4	9.0	7.5	95
Inner-company departmental collaboration	51.6	6.5	25.0	83.1	11.5	5.4	96
External supply chain chain movilization due to environmental	32.5	22.7	23.3	78.5	13.2	8.2	96
System perspectives: the ability to understand the conditions beyond	35.1	26.0	19.4	80.5	15.0	4.5	95
Identification and use of specific frameworks for environmental	39.5	22.7	23.2	85.4	10.1	4.5	96
Identification and use of developmental measuring tools for addressing	51.8	18.1	17.3	87.2	8.4	4.5	95
Vision and commitment towards environmental sustainability	64.2	14.7	10.3	89.2	6.2	4.6	96
Ability to understand and determine regulatory policies for environmental	52.5	11.7	25.5	89.7	8.3	2.1	96
Communication between the interested parties	52.9	14.4	17.0	84.3	11.4	3.3	96
Dealing with uncertainty and planning long-term scenarios	32.3	21.0	30.5	83.8	11.0	5.2	96
Ability to fully experience and accept failure when analyzing external	32.9	24.7	23.1	80.7	13.9	5.2	96
Learning processes and internal adaptation	41.9	26.0	19.0	86.9	5.3	7.7	96
Dynamic adaptation to the changing businnes environment	42.8	23.8	21.2	87.8	7.1	5.4	94

How important are the following elements when addressing environmental sustainability in your company?



Section 3. Climate Change and Water Resources Challenges



Climate Change

- **86.9% believe "climate change" an issue worth considering**
- **Only 48% are familiar with the Mexican Government's climate change strategy.**
- **76.9% have a specific plan for addressing climate change**
- **Only 38.6% measure the company's carbon contribution and, out of those not measuring, 42.1% have plans goals to measure their carbon footprint**



If climate change is an issue worth considering, which of the following factors influenced your company to take climate change into account? Check all that apply.

Answer Options	Response Percent
Corporate reputation	69.2%
Consumer demands or preferences	22.3%
Media attention	36.7%
Management conviction	70.4%
Regulations	48.7%
Investment opportunity	26.1%
Competitor pressure	8.8%
Business plan proposed by employees	16.6%
Physical threats to company assets	16.1%



If your company is familiar with the Mexican Government's climate change strategy, what is its perspective on it?

Answer Options	Response Percent
Adequate	22.1%
Sufficient	9.2%
Insufficient	45.4%
Misguided	23.3%

If “misguided,” why?

- There is no vision of joint participation: government-industry-community
- Certain issues are prioritized but real and substantive changes to policies and regulations relating to the use of energy are neglected.
- Lack of controls, penalties and/or incentives. It has not focused in the most inefficient sectors.
- There is lack of leadership that does not allow it to be applied properly.
- It does not include either a clear set of rules or incentives.



What specific actions has your company taken?

Answer Options	Response Percent
Cleaner technology investment	85.9%
Greenhouse gas reports	46.1%
Reducing greenhouse gas emissions	53.2%
Employee climate change training programs	51.2%
Acquisition of fuel efficient vehicles (such as electric, hybrid or diesel) or other means of sustainable transportation	12.1%
Others	20.7%

What effect, if any, do you think climate change will have on your company's profits in the next five years?

Answer Options	No impact	Low impact	High impact	McKinsey		
				No impact	Low impact	High impact
... if the company takes action against climate change	7.9%	43.5%	48.6%	29.0%	9.0%	63.0%
... if the company does not take further action against climate change	4.0%	33.4%	62.7%	41.0%	22.0%	38.0%



Water Resources

42.1% of companies have been subjected to cuts in water supply or have been at risk from water scarcity.

63.2% companies think that given the current infrastructure conditions that provide water to their company, supply is at risk.

28.5% of the companies perceived the water infrastructure is inadequate or insufficient.

56.1% of companies have water recycling plants, 68.4% have water consumption goals, and 79.8% aim to conserve water use.

What use does your company make of water (check all that apply)?

Answer Options	Response Percent
In the production of goods and services (water as a component of the product)	35.5%
In the production process of goods and services (water as a component for cooling, diluting or processing)	41.5%
In the production chain of goods and services (water as a component of goods and services that the company uses to produce its products or services)	47.0%
Water disposal (waste and drainage)	81.8%



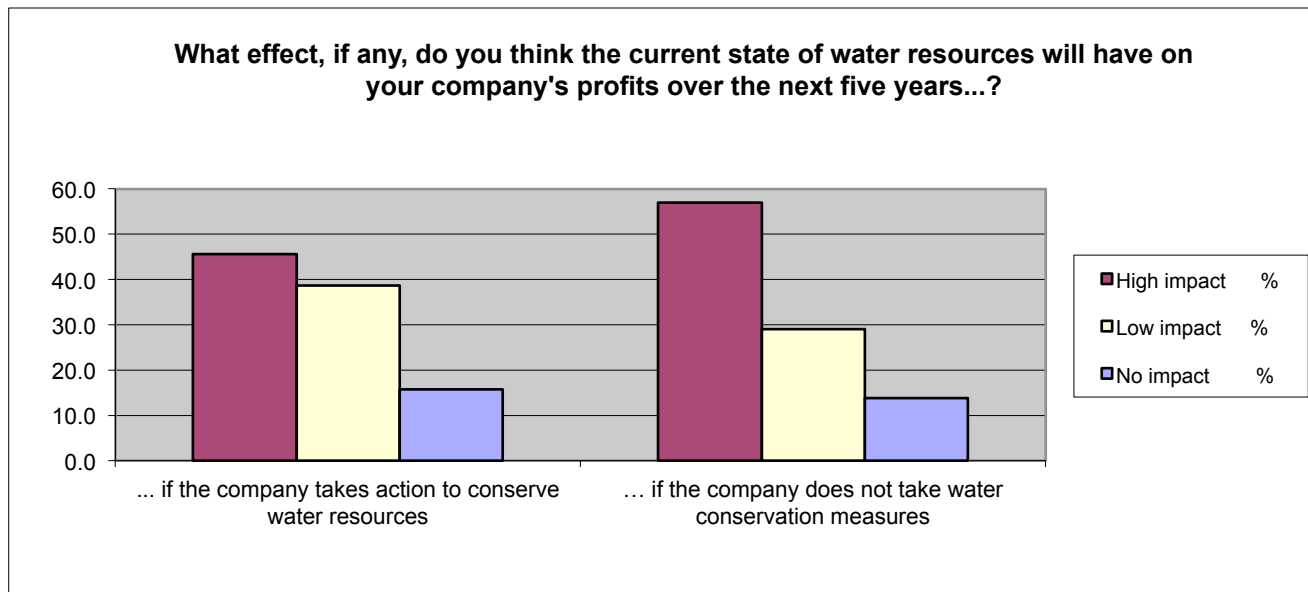
The risks the company undertakes for water usage are:

Answer Options	Response Percent
Physical hazards	53.0%
Regulatory risks (conservation policies and prices)	61.4%
Reputation risks (company misuse of water resources i.e. pollution)	45.8%



What effect, if any, do you think the current state of water resources will have on your company's profits over the next five years...?

Answer Options	High impact %	Low impact %	No impact %
... if the company takes action to conserve water resources	45.7	38.6	15.7
... if the company does not take water conservation measures	57.0	29.1	13.9



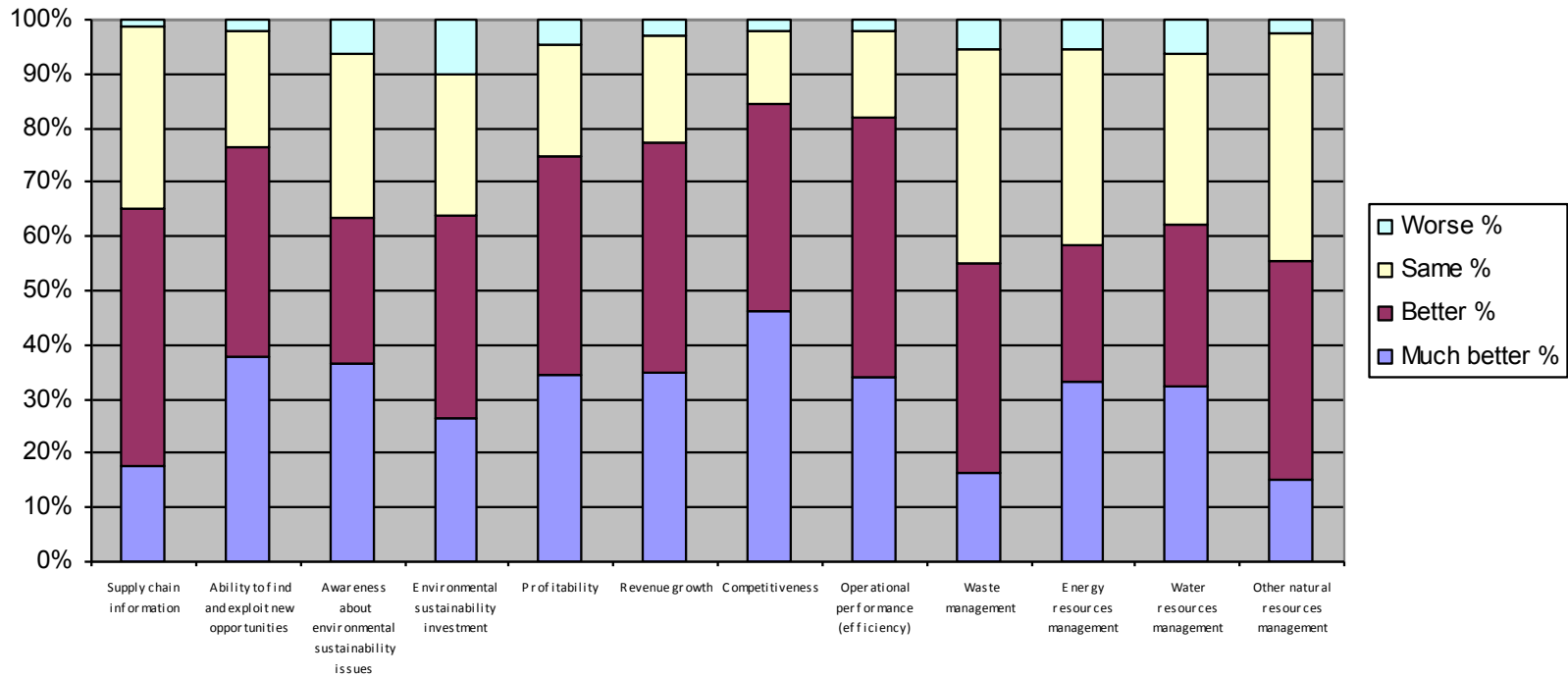
Section 4. Competitiveness



How would you consider your company's position compared to its closest competitors in the following areas?

Answer Options	Much better %	Better %	Sum %	Same %	Worse %	Response Count
Supply chain information	17.7	47.6	65.3	33.4	1.4	87
Ability to find and exploit new opportunities	38.0	38.4	76.4	21.7	1.9	91
Awareness about environmental sustainability issues	36.5	26.9	63.4	30.1	6.5	89
Environmental sustainability investment	26.4	37.5	63.9	26.3	9.9	90
Profitability	34.5	40.3	74.8	20.7	4.5	86
Revenue growth	35.0	42.5	77.5	19.5	3.0	86
Competitiveness	46.4	38.0	84.4	13.6	2.0	85
Operational performance (efficiency)	34.1	48.0	82.1	15.9	2.0	87
Waste management	16.3	38.8	55.1	39.6	5.4	87
Energy resources management	33.1	25.3	58.4	36.2	5.5	87
Water resources management	32.4	29.7	62.1	31.6	6.2	89
Other natural resources management	15.2	40.3	55.5	41.9	2.6	86

How would you consider your company's position compared to its closest competitors in the following areas?



The impact environmental sustainability practices have had on your company's profits are:

Answer Options	Response Percent	Combined
Very high	15.1%	59.9%
High	16.4%	
Regular	28.3%	
Low	8.8%	15.5%
Very low	6.7%	
No impact	7.3%	
Do not know	11.2%	
Not applicable. Company does not have sustainability practices in place	6.1%	



Has the implementation of environmental sustainability practices enabled your company to have a greater capacity to respond to new market conditions, i.e., opportunities or threats?

Answer Options	Response Percent	Combined
Very high	12.8%	63.5%
High	25.4%	
Regular	25.4%	
Low	9.4%	14.5%
Very low	5.1%	
No impact	6.5%	
Do not know	9.1%	
Not applicable. Company does not have sustainability practices in place	6.4%	

