



***Formative Research for  
the Climate Forum:***

*A Survey of Sustainability Experts  
and in-Depth Interviews with  
Climate Change Solution Providers*

*Prepared by GlobeScan Incorporated  
July 2006*

# Formative Research for the Climate Forum

July 2006

A SURVEY OF SUSTAINABILITY EXPERTS  
AND IN-DEPTH INTERVIEWS  
WITH CLIMATE CHANGE SOLUTION PROVIDERS

# Introduction

During May and June of 2006, GlobeScan conducted preliminary research with sustainability experts as a first step in a larger initiative that involves establishing a world-wide panel of 5,000 climate change “solution providers.” Climate solution providers include decision-makers and their influencers around the world who can be instrumental in putting in place solutions (including technology, systems, legislation, and policies) to climate mitigation or adaptation. The resulting “Climate Forum” panel would be iteratively surveyed twice yearly to inform decision makers in the public and private sectors and civil society on matters relevant to national policy, private actions, and investment decisions.

This preliminary research aims to map the channels of influence affecting the development, emergence, and adoption of climate change solutions, acquire informed input into the structure of the Climate Forum Panel, test question concepts, validate influence maps, decide on future content, and emphasize the importance of, and current need for the Climate Forum.

First, ten survey questions were asked as part of GlobeScan’s spring 2006 Survey of Sustainability Experts (SOSE), a syndicated research service for organizations that need to keep abreast of the sustainable development trends affecting their mandate. The Sustainability Experts panel represents all sectors: officials in multilateral organizations, government ministries, corporations, industry associations, sustainable development consultants, journalists, and academics, as well as leaders of major policy institutes and non-governmental organizations.

To enhance the survey sample in non-corporate sectors, GlobeScan approached a number of additional climate change experts working in governments, multilaterals, NGOs and

other institutions with a request to complete the survey. Thirty experts responded, bringing the total sample size to 270.

The second component of this research involved 15 in-depth qualitative telephone interviews with hand-picked premier climate change “solution providers,” selected in accordance with the relative importance that SOSE panelists ascribed to various types of organizations influencing the development and implementation of solutions to climate change. Respondents, all in senior positions, were selected from companies, business associations, governments, international governance bodies, NGOs, and academic or research institutions in Europe, North America, and India.

## NOTES TO READERS

All figures in the charts and tables in this report are expressed in percentages, unless otherwise noted. Total percentages may not add to 100 because of rounding. In the case of stacked bar charts, white space typically represents the portion of respondents who either answered “do not know” or did not answer at all (i.e., “DK/NA”).

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## SUMMARY OF KEY FINDINGS

For the past few years, GlobeScan's panel of sustainable development experts, surveyed regularly as part of the firm's Survey of Sustainability Experts (SOSE), have predicted that climate change will gain significantly in profile as an issue in the coming years. It is not surprising, therefore, that three-quarters of the experts surveyed for the current study believe that the current rate of progress on addressing climate change is inadequate to avert major irreversible damage, or that major damage has already occurred.

Given these opinions, and in light of the uncertainty about a post-2012 global framework, GlobeScan is seeking to build a global, multi-sector panel of applied climate change "solution providers" to be regularly surveyed with broad publication of the results. The purpose of this report is to aid in the design of that panel and subsequent surveys, as well as to help demonstrate the value of this initiative.

The Climate Forum initiative is intended to help identify areas of consensus on what are the most appropriate and effective solutions to climate change, as well to bring to light issues that are particularly contentious within the climate community. The current study finds that nearly one-half of experts surveyed believe that there is currently little or no consensus on what are the best solutions to climate change within influential circles, underlying the extent to which addressing climate change poses a political challenge. Nonetheless, further findings of this study suggest that there may be more of a basis for agreement on some issues than experts recognize, providing cause for some optimism among those seeking to build consensus.

At the basic level, however, it is clear that experts surveyed have differing views on what is the best general approach in terms of likely effectiveness in solving climate change. Experts were asked to rank a number of general approaches from most effective to least. Roughly equal percentages of experts each think that economic instruments, new science and technology and regulatory approaches will be most effective. Few think that improved international cooperation and diplomacy will have the greatest impact. In 15 in-depth follow-up interviews with selected solution providers, however, nearly all experts commented that, while an integrated approach is of course required, a regulatory framework is required before economic instruments can be put into place and before investment in scientific and technological development can be triggered.

One area of near consensus uncovered among experts surveyed pertains to the specific types of technological solutions experts expect to be effective in reducing climate change during the post-2012 period. More than eight in ten think that technologies to generate energy from renewable sources such as wind, tides, waves, natural river currents, and solar power will be very or somewhat effective. Fewer expect the same for bio-fuels, hydrogen, clean coal, and carbon capture. Even though nuclear energy emits no greenhouse gasses (during generation), only 40 percent of experts said this energy source will be effective at reducing climate change, with only 17 percent saying it will be very effective. This finding clearly indicates that nuclear energy causes a great deal of apprehension among respondents who rate it lowly for other reasons.

Also of interest is the fact that, among specific financial approaches to reducing climate change, experts surveyed believe that taxes on greenhouse gas emissions will be most effective. National and international carbon trading regimes, rebates on energy-efficient purchases, government investment in research, and accelerated depreciation or tax rebates on low-carbon assets or processes are seen as less effective, but still positively so. Carbon taxes, however, face political obstacles. In a recent public opinion survey of 19 countries conducted by GlobeScan for the BBC World Service, increasing energy taxes was found to be by far the least popular of four possible government energy conservation and efficiency initiatives.

To acquire insight into who the Climate Forum panel should consist of, GlobeScan asked experts a number of questions to identify what types of organizations will be most influential in the development and implementation of solutions to climate change. Currently, governments (especially the European Union) are seen to be most influencing what approaches to climate change are developed and deployed. This high level of influence is directly related to the fact that experts believe that governments must set clear policy and regulatory contexts to guide the actions of the private sector and NGOs. Here, the EU is particularly seen to be in a leadership position on climate change and therefore faces challenging expectations from stakeholders.

When asked what type of organizations will be most effective at developing and operationalizing solutions to climate change over the next ten years, however, two-thirds of experts point to the private sector; experts clearly anticipate an expanded

role for companies in the years ahead, but primarily as solution providers, not as agenda setters.

While governments are shown to communicate frequently with experts in other organizations, the research indicates that government professionals tend to be most influenced by peers working in the same or other government organizations, and less open to external influence. Given the need for collective action to address climate change, and the increase expected in the role of the private sector, it will be important for governments to work closely with other types of organizations. This finding underscores the critical importance of multi-sector processes such as the current Gleneagles dialogue on climate change.

Finally, to understand the network of influence among experts with respect to the development and implementation of solutions to climate change, GlobeScan conducted a mapping exercise to identify linkages among types of organizations. Overall, different types of organizations with different viewpoints are actively influencing each other in a complex web. As a result, a wide range of opinions play a role in climate change decision making within each type of organization. The one important exception may be governments where influence is highly endemic, rather than originating from external sources.

Nonetheless, the analysis reflects the intricate nature of the climate change debate. It is hoped that the Climate Forum panel of solutions providers will help to highlight where opinions differ and where opinions are aligned so that climate solutions that attract the widest potential support can be pursued.

# CURRENT CLIMATE CHANGE EFFORTS

## Current Progress on Climate Change

Experts are pessimistic that the current rate of progress on climate change will be fast enough to avert major, irreversible damage. One-third believe it is already too late.

Experts were asked to consider the present rate at which society is making progress toward addressing climate change and then to rate the likelihood of progress occurring fast enough to avert major, irreversible damage to human, social, and ecosystem health. Experts are skeptical, with three-quarters (74%) saying that it is unlikely progress will occur fast enough (43%) or that major damage has already occurred (31%).

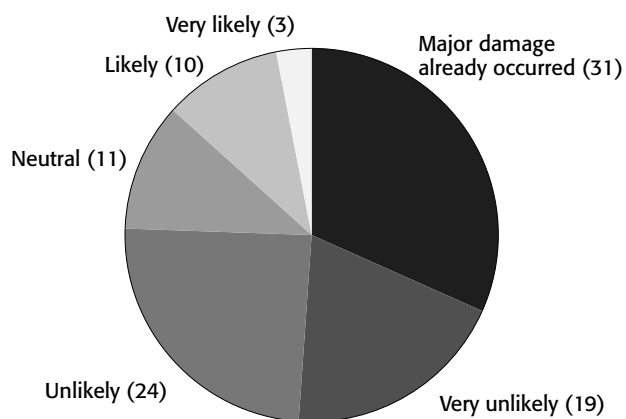
Of those experts who think it is unlikely that current progress on climate change will be sufficient, two in ten (19%) think that it is “very unlikely.”

Only one in ten experts (13%) are optimistic toward progress on climate change, thinking it is likely that the current rate of progress will be fast enough to elude irreversible damage. A further one in ten experts (11%) hold a neutral position.

Institutional and NGO sector experts are the most pessimistic about society’s progress on climate change, however, service experts are the most likely to believe that major irreversible damage has already occurred.

Regionally, Western Europeans are more likely than others to think it is unlikely that the current rate of progress will be enough to avoid major damage, whereas experts in Asia/Pacific are the most likely to think that major damage has already occurred.

**Current Progress on Climate Change Will Be Enough to Avert Irreversible Damage**



Q. 6

6. CURRENT PROGRESS ON CLIMATE CHANGE WILL BE ENOUGH TO AVERT IRREVERSIBLE DAMAGE	TOTAL	SECTOR					REGION			
		CORPORATE	GOVERNMENT	VOLUNTARY	INSTITUTIONAL	SERVICE	W EUROPE	N AMERICA	ASIA/PACIFIC	OTHER
Very unlikely	19	14	16	20	26	20	24	19	13	16
Unlikely	24	23	23	27	24	26	30	21	18	25
Neutral	11	14	6	13	13	7	15	10	11	9
Likely	10	15	19	3	9	4	7	12	8	16
Very likely	3	2	0	3	4	4	2	5	3	0
Major damage already occurred	31	32	35	33	24	39	22	32	47	34

## Allocation of Climate Change Resources within Expert's Organization

On average, experts and their organizations spend two-thirds of resources allotted for climate change on mitigation measures, and the remaining one-third on adaptation measures. These proportions are equal to what experts recommended they should be in 2005.<sup>1</sup>

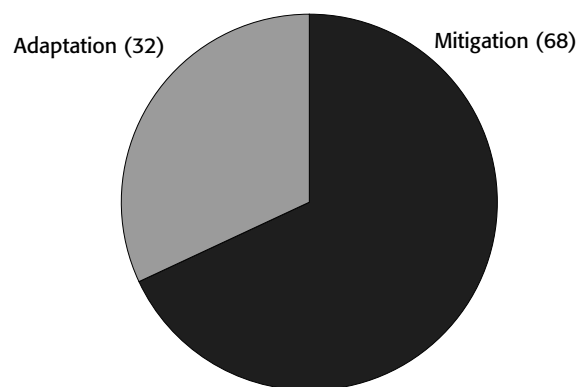
When asked what proportion of the total amount of effort and resources addressing climate change within their own organization or work is applied to mitigation measures and what proportion is applied to adaptation measures, on average experts indicate that they spend two-thirds (68%) on mitigation, and one-third (32%) on adaptation.

When asked in 2005 how climate resources *should* be allocated, experts recommended that they should be divided in the same ratio, 67:33, in favor of mitigation. Interestingly, experts' current and recommended allocation of mitigation resources exceeds what was predicted by experts in 2002<sup>2</sup>—a 58:42 split in favor of mitigation by 2012. Indeed, in in-depth interviews with expert climate solution providers, many commented that the importance of adaptation has been overlooked.

Nonetheless, government and institutional experts responding to the current survey report similar ratios for allocation of mitigation and adaptation measures to what was predicted by experts in 2002. Experts in NGOs, however, are far more likely than others to be allocating more resources to mitigation (78%, 10 points higher than average).

**Allocation of Climate Change Resources within Organization**

Mean Percentage



Q. 7

<sup>1</sup>See *GlobeScan's Survey of Sustainability Experts 2005-2*

<sup>2</sup>See *GlobeScan's Survey of Sustainability Experts 2002-2*

7. ALLOCATION OF CLIMATE CHANGE RESOURCES WITHIN ORGANIZATION MEAN PERCENTAGE	TOTAL	SECTOR					REGION				
		CORPORATE	GOVERNMENT	VOLUNTARY	INSTITUTIONAL	SERVICE	W EUROPE	N AMERICA	ASIA/PACIFIC	OTHER	
Mitigation	68	73	63	78	60	69	70	69	66	61	
Adaptation	32	27	37	22	40	31	30	31	34	39	



### Views of Solution Providers

Once results of the survey of sustainability experts had been obtained, GlobeScan conducted in-depth follow-up interviews by telephone with a select group of 15 climate change “solutions providers.” Solution providers were told of these results from the survey of sustainability experts, and asked about the allocation of climate change work within their own organization. Unlike the sustainability experts, most solution providers responded that between 80 and 100 percent of their work is focused on mitigation, rather than on adaptation.

The allocation varies by region, these experts told GlobeScan. Work in developing countries that may be more vulnerable to changes in climate and that have lower per capita greenhouse gas emissions, is more focused on adaptation than work in other areas.

Despite the concentrated focus on mitigation, some solution providers regretted that the apportionment of effort is so unbalanced. It was felt that adaptation requires more attention, and that it should have attracted it earlier than it has. It was noted that competency in adaptation is just now emerging, and that this may explain the belated attention that adaptation is beginning to receive.

Some solution providers said that the effort to address climate change is difficult to categorize in this dichotomous fashion. In addition, some initiatives or programs that can facilitate adapting to changes in climate are not considered to be climate change related measures, with watershed management being one example.

## Consensus on Climate Change Solutions

Nearly one-half of experts think that there is currently little or no consensus among influencers on what are the best solutions to climate change.

Experts were asked how much consensus on the best solutions to climate change they think exists within the most influential climate circles worldwide. A plurality of experts (44%), think that there is little consensus among influencers, while three in ten (34%) indicate that consensus is neither strong nor lacking (i.e., neutral).

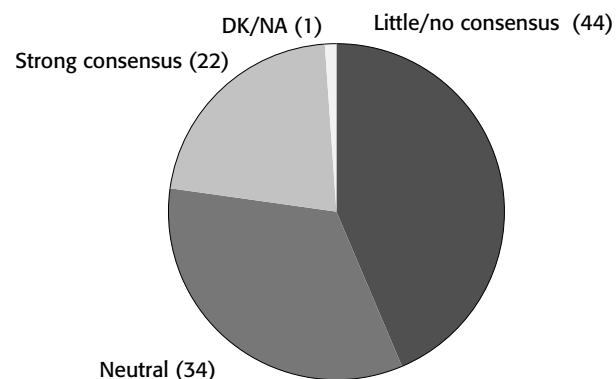
Two in ten experts (22%) consider there to be strong consensus within influential climate circles, but only 3 percent believe that there is a very strong consensus.

Government experts and those working in NGOs are more likely than others to think that there is strong consensus within influential groups, whereas corporate and industry experts are the most prone of the sectors to indicate that there is a weak consensus.

Regionally, experts in Asia/Pacific countries are less inclined than others to perceive that a strong consensus exists on what are the best solutions to climate change; instead one-half believe there is a middling amount.

While experts surveyed think that only limited consensus exists on climate change solutions, further findings from the current study suggest that there may be more grounds for agreement than recognized here, providing some cause for optimism among those seeking to build consensus. Overall, however, this finding underscores the extent to which climate changes poses a political challenge.

**Consensus within Influential Circles on Best Solutions to Climate Change**



Q. 12

12. CONSENSUS WITHIN INFLUENTIAL CIRCLES ON BEST SOLUTIONS TO CLIMATE CHANGE	TOTAL	SECTOR CORPORATE	GOVERNMENT	VOLUNTARY	INSTITUTIONAL	SERVICE	REGION W EUROPE	N AMERICA	ASIA/PACIFIC	OTHER
Very little or no consensus	14	17	10	7	17	11	12	17	11	14
Little consensus	30	33	23	30	27	33	33	24	32	34
Neutral	34	33	35	27	39	28	30	33	47	30
Strong consensus	19	14	29	23	16	24	21	23	8	14
Very strong consensus	3	2	3	10	0	4	2	1	3	9
DK/NA	1	0	0	3	1	0	1	1	0	0

## Effectiveness of Approaches to Climate Change

Nearly equal percentages of experts predict that economic instruments, new science and technology, and regulatory measures, will be the most effective approach to providing global solutions to climate change in the post-Kyoto period.

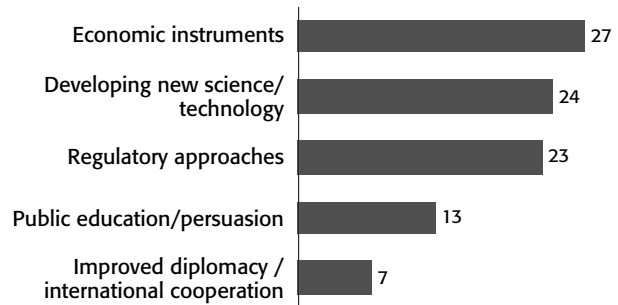
Experts were asked to rank the following five approaches in terms of their likely effectiveness in providing global solutions to climate change in the post-Kyoto period:

- Developing new science and technology (i.e., increase energy efficiency, reduce GHG emissions, capture CO<sub>2</sub>)
- Public education and persuasion (i.e., social marketing to encourage conservation, technology adoption)
- Regulatory approaches (i.e., requiring improved energy and emission performance, the development of climate friendly energy sources, more nuclear power)
- Economic instruments (i.e., emission trading permits or tax measures that encourage improved energy and emission performance, adoption of cleaner fuels)
- Improved diplomacy and international cooperation that encourages developing countries and a greater number of industrialized countries to make more significant reductions of GHG emissions

Almost three in ten experts rank economic instruments (27%) as the most effective approach to global solutions to climate change after 2012, followed closely by developing new science and technology (24%) and regulatory approaches (23%). Public education and persuasion is seen as the most effective approach by 13 percent of experts and 7 percent choose improved diplomacy and international cooperation as the most effective approach.

### Effectiveness of Specific Approaches to Climate Change

"Most Effective Approach"



Q. 8

## Effectiveness of Approaches to Climate Change

Some experts also volunteer that corporate initiatives and responsibility, environmental catastrophes, and shifts in theory and mindset will most affect global solutions to climate change after 2012.

Across most sectors and regions, experts assign top ranking to economic instruments. Corporate experts think that developing new science and technology will be the most effective approach to solving climate change. Indeed, the overall percentage of experts who believe that scientific and technological approaches to climate change will be most effective would have been lower were it not for the high level of interest in them among the private sector.

NGO experts are, by far, the most likely to say that a regulatory approach is the most effective.

8. EFFECTIVENESS OF SPECIFIC APPROACHES TO CLIMATE CHANGE "MOST EFFECTIVE APPROACH"	TOTAL	SECTOR CORPORATE	GOVERNMENT	VOLUNTARY	INSTITUTIONAL SERVICE	REGION W EUROPE	N AMERICA	ASIA/PACIFIC	OTHER	
Economic instruments	27	30	32	23	20	35	25	21	42	32
Developing new science/technology	24	36	16	7	29	11	21	30	24	16
Regulatory approaches	23	14	16	47	21	33	28	23	8	25
Public education/persuasion	13	10	19	10	17	11	16	14	8	11
Improved diplomacy/int'l cooperation	7	5	13	7	7	4	6	3	11	14
Environmental catastrophe (volunteered)	1	0	0	0	1	2	0	0	5	0
Corporate initiatives/responsibility (volunteered)	*	0	0	0	0	2	1	0	0	0
Other / DK/NA	5	6	3	6	5	2	3	8	3	2

### Views of Solution Providers

In in-depth interviews with selected climate solution providers, experts were told of the foregoing results and asked what type of climate solution they think will be most effective. Nearly all solution providers interviewed, not surprisingly, stated that integrated approaches are required, and that no single approach will be sufficient. When prompted, however, many experts said that a regulatory approach is the most effective, and that it sets a framework for economic instruments and the development and marketing of new technology.

Solution providers believe that the marketplace, including the carbon market, needs strong signals and more certainty regarding the policy context. Regulation and legislation were seen as the source of these signals. Emissions and efficiency standards were offered as good examples of signals to the market. Regulatory approaches were also described as being the most practical.

Experts further explained that the reason regulatory approaches to solving climate change are seen as important is that the benefits of individual action to address climate change are difficult for individuals to rationalize. Climate change is a matter of collective risk and wellbeing, and therefore requires collective action, which must be triggered by regulatory measures. Incentives for voluntary or individual action are often lacking.

Government regulation and/or funding was said to effectively promote research into new climate friendly technology. To achieve uptake and implementation, new technologies often require more support from government than they are given, and without such support often fail to achieve commercialization or sufficient use to yield their potential benefit.

Later during the interviews GlobeScan asked solution providers what specific regulatory measures they think should be explored by the Climate Forum panel. In this context, many experts suggested that regulations to set economic frameworks were important. Among these, emissions caps with carbon trading systems were of prominent interest, as were regulations establishing energy efficiency standards. Legislation mandating zero-footprint requirements was also identified as a topic of interest.

Sector-specific regulatory measures that solution providers would like to see explored by the Climate Forum panel include those pertaining to forestry, insurance, electricity generation, and construction standards for coastal areas.

A final comment relevant to regulation was that there is a need to understand how to harmonize or streamline regulatory processes across various branches or departments within governments to reduce duplication and inconsistency.

## Effectiveness of Technological Approaches

Experts predict that renewable energy sources, such as wind, tides, and solar power, will be the most effective approach to reducing climate change in the post-Kyoto period. Energy conservation and efficiency were volunteered by many experts as effective and rated very highly.

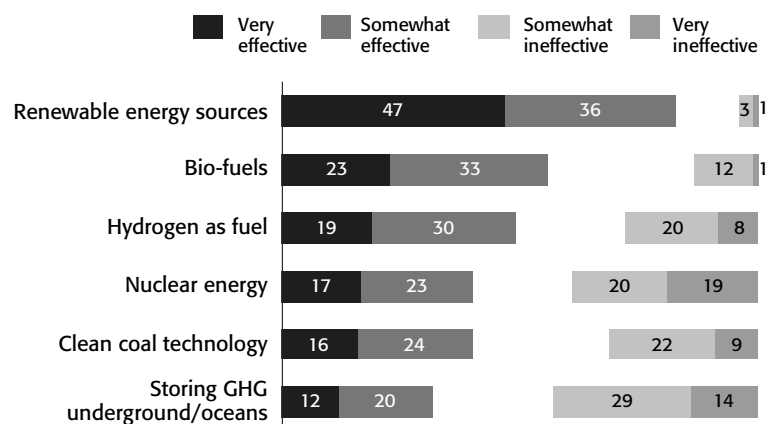
Given a list of six specific technological approaches to solving climate change, experts were asked to rate how effective each would be in reducing climate change after 2012. Eight in ten experts (83%) foresee technologies to generate energy from renewable sources such as wind, tides, waves, natural river currents, and solar power as a very or somewhat effective approach; only 4 percent see them as ineffective.

Bio-fuels, including bio-diesel, ethanol, and methanol, are considered the next most effective approach to reducing climate change after 2012 (56%), followed by using hydrogen as fuel (49%). Four in ten experts, each, predict nuclear energy (40%)

and clean coal technology (40%) will be effective approaches to climate change in the post-Kyoto period. Storing greenhouse gas emissions underground or in oceans receives support from only three in ten experts (32%) and is the only approach where more experts predict it to be ineffective than effective (43% vs 32%, respectively), despite considerable research and investment into the technology.

Experts working in government are twice as likely as those in research and academic institutions to believe that carbon capture will be effective.

### Likely Effectiveness of Technological Approaches in Reducing Climate Change after 2012



The white space in this chart represents "Neutral" and "DK/NA."

Q. 9

## Effectiveness of Technological Approaches

Not included on the list, but spontaneously mentioned by 13 percent of experts is energy conservation and efficiency. Of those who volunteered this approach, all think it will be effective in reducing climate change after 2012; three-quarters of which predict it will be “very effective.”

A number of respondents rightly pointed out that the question focused on supply and ignored the importance of addressing demand. They also noted that although nuclear is effective in reducing GHG emissions it does have other significant disadvantages. There appears to be significant apprehension about this energy source.

Across the sectors, experts generally tend to rate the approaches similarly, with the exception of corporate experts,

who are the least likely of the sectors to predict renewable energy sources will be an effective approach to climate change post-2012. NGO experts also tend to hold stronger views than others toward some of the scientific and technological approaches that were posed. They are more likely than others to rate hydrogen fuel, clean coal technology, and nuclear energy as ineffective; however pluralities still rate them as effective. No experts in the NGO sector think that renewable energy sources will be ineffective in reducing climate change after 2012.

Regionally, Asia/Pacific experts are the most likely of the regions to see potential in bio-fuels and renewable energy sources.

### 9. LIKELY EFFECTIVENESS OF SCIENTIFIC AND TECHNOLOGICAL APPROACHES IN REDUCING CLIMATE CHANGE AFTER 2012 “EFFECTIVE” (“4” AND “5”)

	TOTAL	SECTOR CORPORATE	GOVERNMENT	VOLUNTARY	INSTITUTIONAL	SERVICE	REGION W EUROPE	N AMERICA	ASIA/PACIFIC	OTHER
Renewable energy sources	83	77	97	90	84	80	85	80	92	80
Bio-fuels	56	62	61	47	55	50	53	52	74	57
Hydrogen as fuel	49	49	45	37	55	50	57	34	61	57
Nuclear energy	41	52	52	13	34	43	36	41	45	45
Clean coal technology	40	40	45	23	41	46	47	31	45	41
Storing GHG underground/oceans	32	31	48	30	26	35	33	33	26	32
Energy conservation/efficiency (volunteered, n=36)	100	100	100	100	100	100	100	100	100	100

### Views of Solution Providers

Climate solution providers were asked to identify specific scientific and technological solutions to climate change that should be explored by GlobeScan's proposed Climate Forum Panel.

Consistent with their earlier concerns, one common comment offered by solution providers was that more research is needed about how to adapt to climate change. Others mentioned an ongoing need to better understand climate systems, including ice modeling and impacts on sea levels. One solution provider added that we need more research establishing that climate change is real in order to help those who doubt the existing science.

With regard to hydrogen, a number of solution providers expressed concern that this source of energy may not develop as hoped, with ongoing concerns about building a hydrogen infrastructure. A related comment was that a wide range of existing technology exists that could help address climate change, but that we do not know how to effectively promote and increase uptake of these technologies. Uptake and technology transfer need to be better supported.

In contrast to the survey findings, a number of interviewees expressed interest in carbon capture and sequestration as an area in need of exploration by the Climate Forum. Other scientific and technological approaches that solution providers would like to see examined include additional opportunities for improving energy efficiency, bio-fuels and photovoltaics.



## Effectiveness of Economic Instruments

*Taxes on greenhouse gas emissions is anticipated to be the most effective economic instrument in terms of reducing the impact of climate change in the next ten years.*

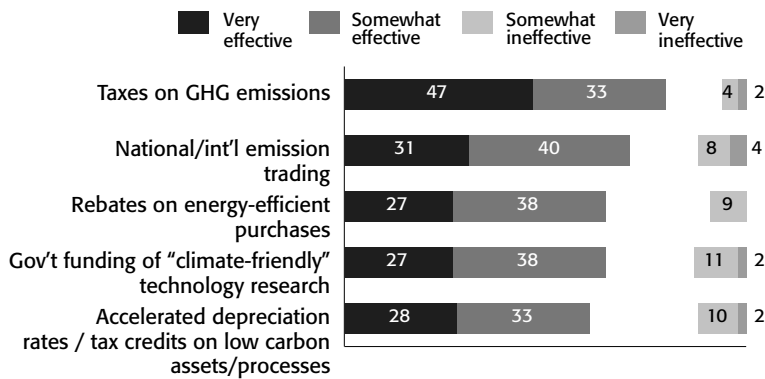
Along with scientific and technological approaches, experts were asked to rate five specific economic instruments in terms of their likely effectiveness in reducing climate change after 2012. Eight in ten experts (80%) say that taxes on greenhouse gas emissions including fuel taxes based on carbon emissions will be an effective approach to lessening climate change.

Carbon taxes, however, face political obstacles. In a recent public opinion survey of 19 countries conducted by GlobeScan for the BBC World Service, increasing energy taxes was found to be by far the least popular of four possible government energy conservation and efficiency initiatives. Not surprisingly, experts in government are slightly less likely than others to rate carbon taxes as an effective approach to climate change.

Seven in ten (71%) experts rate national and international emission trading systems as effective, while two-thirds each think rebates on purchases of energy efficient equipment, cars, and appliances (65%) and financial support from governments for research into climate-friendly technologies (65%) will be effective post-Kyoto in decreasing the extremity of climate change. Six in ten experts (61%) also see merit in accelerated depreciation rates and tax credits on low-carbon assets and processes.

There is a high degree of similarity across the sectors and regions, but government experts are more likely than others to think that government funding of research will be effective.

### Likely Effectiveness of Economic Instruments in Reducing Climate Change after 2012



The white space in this chart represents "Neutral" and "DK/NA."

Q. 10

10. LIKELY EFFECTIVENESS OF ECONOMIC INSTRUMENTS IN REDUCING CLIMATE CHANGE AFTER 2012 "EFFECTIVE" ("4" AND "5")	TOTAL	SECTOR					REGION			
		CORPORATE	GOVERNMENT	VOLUNTARY	INSTITUTIONAL	SERVICE	W EUROPE	N AMERICA	ASIA/PACIFIC	OTHER
Taxes on GHG emissions	80	73	71	87	84	87	83	79	76	80
National/int'l emission trading	71	70	81	70	65	78	65	75	76	70
Gov't funding of "climate-friendly" technology research	65	57	84	63	72	54	65	65	66	64
Rebates on energy-efficient purchases	65	57	68	67	73	63	62	66	74	64
Accelerated depreciation rates/tax credits on low carbon assets/processes	61	63	58	67	60	59	58	66	68	50

### Views of Solution Providers

GlobeScan also asked select solution providers about what types of economic instruments the Climate Forum should examine. Most comments were general in nature. The need to make mitigation financially viable and to send the right signals in the right markets and regions were emphasized by interviewees. A need for effective investment decision-making to support climate friendly companies and business activity was also highlighted. One respondent added that developing countries need to find synergies between investments that meet local needs but also contribute to climate change mitigation.

More specific suggestions included further exploration of current topics, such as emissions trading and carbon taxes, and tax shifting generally.

# THE ROLE OF ORGANIZATIONS IN SOLVING CLIMATE CHANGE

## Type of Organization Predicted to be Most Effective

Experts predict that over the next ten years, private companies and their associations will be the most effective organizations in terms of developing and implementing appropriate solutions to climate change.

When asked to choose two types of organizations that they predict will be the most effective at developing and implementing solutions to climate change over the next ten years, two-thirds of experts (65%) point to private sector companies and their associations. Experts clearly expect the private sector to play an increasingly important role in addressing climate change. Other findings, however, suggest that companies require a clear policy context from governments before investing heavily in developing solutions to climate changes.

National governments, including the EU, are seen as the second most effective type of organization (57%), followed distantly by NGOs (31%), and science and policy research organizations (27%). One in ten experts (10%) foresee the UN and its agencies playing the most effective role in developing and implementing solutions to climate change over the next ten years.

Service and corporate experts are the most likely to think that the private sector will be the most effective in developing and implementing climate solutions over the next ten years. However, less than one-half of institutional members hold this opinion. Instead, they are more likely than others to think that science and technology research organizations will be the most effective.

Although majorities across all regions predict that the private sector will be the most effective in implementing and developing solutions to climate change, North American experts are significantly more likely than those in other regions to think so.

### Organizations Predicted to Be Most Effective in Developing or Implementing Climate Change Solutions over Next Ten Years

Up to Two Choices



Q. 11

#### 11. ORGANIZATIONS PREDICTED TO BE MOST EFFECTIVE IN DEVELOPING OR IMPLEMENTING CLIMATE CHANGE SOLUTIONS OVER NEXT TEN YEARS UP TO TWO CHOICES

	TOTAL	SECTOR CORPORATE	GOVERNMENT	VOLUNTARY	INSTITUTIONAL	SERVICE	REGION W EUROPE	N AMERICA	ASIA/PACIFIC	OTHER
Private sector companies/associations	65	78	71	67	44	76	60	79	53	57
National governments	57	56	68	57	52	61	61	51	58	64
NGOs	31	25	16	47	35	33	30	33	32	27
Science and policy research organizations	27	25	23	20	44	9	29	26	32	23
UN and its agencies	10	8	13	7	12	9	11	2	21	14

### Views of Solution Providers

In telephone interviews, climate change solution providers were asked who they think will most influence the world's response to climate change over the next ten years. Respondents often agreed with the SOSE panelists that business will become more influential in terms of which specific solutions to climate change are implemented, but they generally felt that business will continue to react to the policy framework set by national governments. Financial markets are also expected to play an influential role.

Some respondents expressed hope that international institutions and processes will become more influential, but conceded that for now, national governments are driving the agenda.

NGOs were said to play an important role in shaping the policy context and choices available within those contexts. NGOs could, for example, encourage governments to support particular climate friendly technologies, something that many respondents thought was a significant shortcoming of current government performance.

## Organizations Currently Most Influencing Climate Change Solutions

Experts tend to believe that governments or countries, especially the European Union, are currently the most influential in defining and implementing solutions to climate change.

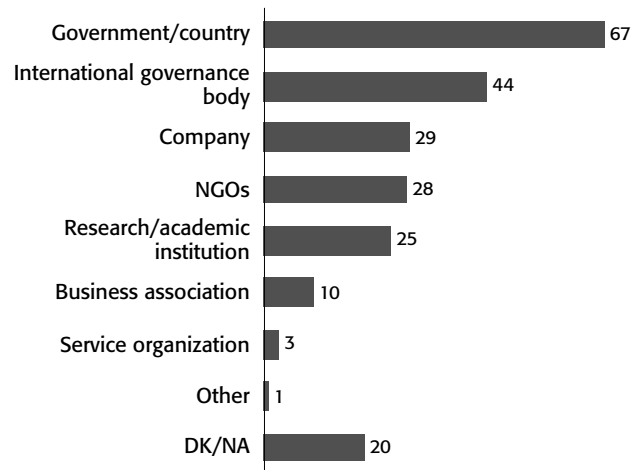
Experts were asked to name up to three organizations in the world that they think are currently the most influential in defining or implementing appropriate solutions to climate change. Two-thirds of experts (67%) specify governments or countries, while almost one-half name an international governance body (44%).

It appears that, even though experts expect the private sector to be most effective in developing climate change solutions in the coming years, for now, the actions of governments are seen to most determine how society responds to climate change.

Three in ten experts each cite a company (29%) or an NGO (28%), and one-quarter cite a research or academic institution (25%). Ten percent of experts mention a business association as the most influential organization on climate change, and only 3 percent think a service organization is most influential. Two in ten experts (20%) do not name an organization that they think is most influential on climate change solutions.

### Most Influential Type of Organizations in Defining or Implementing Climate Change Solutions

Unprompted, up to Three Mentions



Q. 13

### 13. TYPE OF MOST INFLUENTIAL ORGANIZATIONS IN DEFINING OR IMPLEMENTING CLIMATE CHANGE SOLUTIONS UNPROMPTED, UP TO THREE MENTIONS

	TOTAL	SECTOR CORPORATE	GOVERNMENT	VOLUNTARY	INSTITUTIONAL	SERVICE	REGION W EUROPE	N AMERICA	ASIA/PACIFIC	OTHER
Government/country	67	64	77	80	71	50	64	67	74	68
International governance body	44	26	55	50	55	44	47	23	74	57
Company	29	36	26	40	18	33	28	30	24	34
NGOs	28	20	19	40	33	30	27	33	16	27
Academic/research institution	25	21	26	30	26	28	15	29	34	29
Business association	10	19	3	7	5	13	11	9	16	7
Service organization	3	3	0	7	5	2	2	2	3	5
Other / DK/NA	21	26	29	3	18	26	24	25	16	13

## Organizations Currently Most Influencing Climate Change Solutions

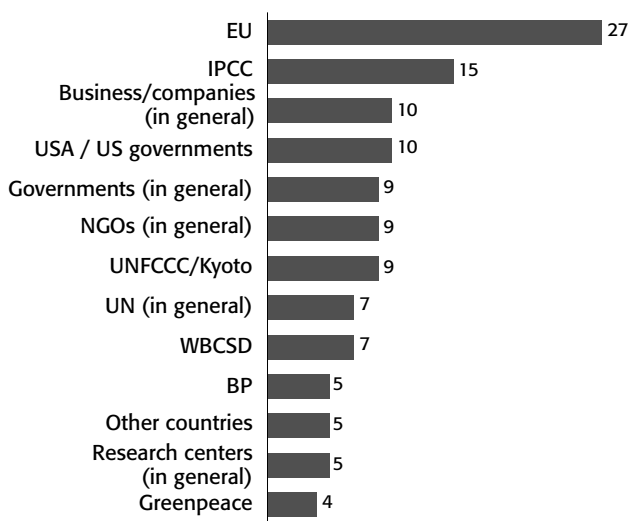
Specifically, the EU is named by three in ten experts (27%) as most influencing the development and implementation of solutions to climate change. This finding suggests that the EU is currently seen to be in a leadership role on climate change and faces challenging expectations from stakeholders. The Intergovernmental Panel on Climate Change (IPCC) is named by 15 percent of respondents. One in ten experts each suggest business/companies in general (10%), US governments (10%), governments and NGOs in general (9% each), and United Nations Framework Convention on Climate Change (UNFCCC/Kyoto) (9%). BP is the only company (5%) among the ten most cited organizations. These findings reveal that, while governments, such as the EU, are seen as the most influential today, respondents predict that the private sector will assume an effective role in the coming years (see page 18). The governments of China and India specifically are each mentioned by 4 percent or fewer respondents.

Institutional experts are the least likely of the sectors to name a company. Experts in companies are the most apt to name a business association, but among the least likely to name an NGO. Government and NGO experts are more likely than others to name a government or country as the most influential organization on climate change solutions.

Regionally, experts in Asia/Pacific are more inclined than others to mention an international governance body or an academic/research institution. North American experts are the most likely of the regions to name an NGO.

### Specific Organizations Most Influential in Defining or Implementing Climate Change Solutions

Unprompted, up to Three Mentions



Q. 13

13. MOST INFLUENTIAL ORGANIZATIONS IN DEFINING OR IMPLEMENTING CLIMATE CHANGE SOLUTIONS UNPROMPTED, UP TO THREE MENTIONS	TOTAL	SECTOR					REGION				
		CORPORATE	GOVERNMENT	VOLUNTARY	INSTITUTIONAL	SERVICE	W EUROPE	N AMERICA	ASIA/PACIFIC	OTHER	
EU	27	26	13	33	35	22	33	23	34	21	
IPCC	15	6	16	17	22	15	16	6	29	21	
Business/companies (in general)	10	14	3	13	2	17	9	10	5	14	
USA / US governments	10	12	23	13	6	4	6	13	11	14	
Governments (in general)	9	10	26	10	5	4	6	10	3	21	
NGOs/ENGOS (general)	9	9	7	20	4	11	6	10	3	16	
UNFCCC/Kyoto	9	9	16	3	10	4	7	3	16	18	
UN (in general)	7	1	10	10	11	9	8	6	8	9	
WBCSD	7	14	3	0	5	4	8	4	13	5	
BP	5	4	7	7	4	7	2	7	8	2	
Other countries	5	1	7	13	6	2	6	4	5	5	
Research centers (in general)	5	4	3	10	6	4	3	4	5	11	
Greenpeace	4	3	3	0	9	4	8	3	5	0	

### Views of Solution Providers

In in-depth interviews, selected solution providers were asked what types of actors they think most influence the world's response to climate change today. There is near consensus among those interviewed that governments are currently the key actor. More specifically, the EU was seen as most active in addressing climate change, but much would hinge on what the governments of the USA, China and India do. These three nations are seen by solution providers, therefore, as highly influential despite current uncertainties.

The US government was said to have lost international credibility and to be polarized internally, limiting its effectiveness. American state governments, on the other hand, were said to be making more of an impact.

While governments were understood by respondents to be clearly the most influential in how society addresses climate change, NGOs and business communities were described as having an important influence on government decision making. The EU, for example was characterized as a confluence of interests where influential NGOs, companies, officials and politicians are working in the same direction toward emissions reductions. Other experts highlighted the fact that business and the EU continue to dispute emissions trading.

One respondent emphasized that initiatives implemented by international coalitions or organizations will be most influential. Ultimately, however, those organizations were said to be influenced by governments that form them.

## Organizations that Experts Approach for Information on Climate Change Solutions

Academic and research institutions are the most consulted source on climate change solutions. The WBCSD is the most mentioned organization to approach for climate change advice.

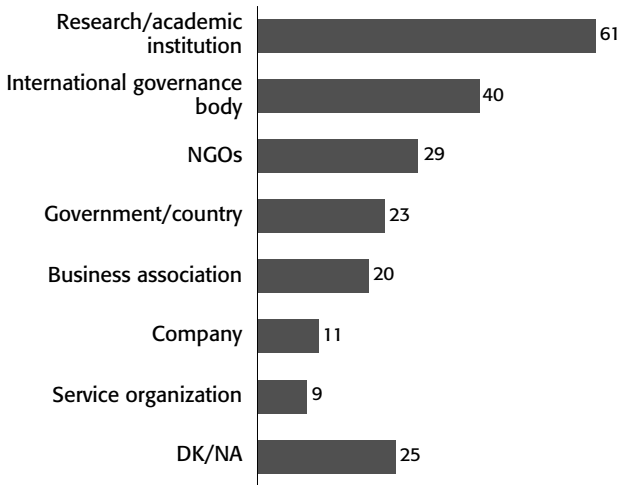
To better understand who influences experts' thinking on climate solutions, experts were asked to name up to three organizations (other than their own) that they would approach in their professional role if they required information or advice on climate change solutions.

More than six in ten experts (61%) say they would approach an academic/research institution if they required an influential source of information. A further four in ten experts would turn to an international governance body (40%), and three in ten, an NGO (29%).

Despite experts naming governments or countries as the most influential organization, only two in ten (23%) would consult them for information or advice on climate change. Business associations are also mentioned by two in ten experts (20%), and only one in ten experts would seek advice from a company (11%) or service organization (9%). One-quarter of experts (25%) do not name an organization that they would turn to for advice on climate change solutions.

### Type of Organization Experts Would Approach for Information or Advice on Climate Solutions

Unprompted, up to Three Mentions



Q. 14

14. TYPE OF ORGANIZATION EXPERTS WOULD APPROACH FOR INFORMATION OR ADVICE ON CLIMATE SOLUTIONS UNPROMPTED, UP TO THREE MENTIONS	TOTAL	SECTOR					REGION			
		CORPORATE	GOVERNMENT	VOLUNTARY	INSTITUTIONAL	SERVICE	W EUROPE	N AMERICA	ASIA/PACIFIC	OTHER
Academic/research institution	61	58	58	43	71	63	45	76	66	57
International governance body	40	17	74	47	50	33	42	20	50	71
NGOs	29	26	13	67	20	39	23	34	32	30
Government/country	23	19	29	17	34	9	21	19	37	21
Business association	20	26	26	17	12	20	20	22	16	16
Company	11	14	7	17	4	20	3	11	13	13
Service organization	9	7	7	10	9	11	9	9	5	9
Other / DK/NA	25	33	19	17	21	28	33	25	16	16



## Organizations that Experts Approach for Information on Climate Change Solutions

With respect to specific organizations, 12 percent of experts each name the World Business Council on Sustainable Development (WBCSD) and IPCC as their preferred source of information. The popularity of WBCSD as a source of information on climate change reflects the extent to which experts expect the business community to be effective in developing and implementing solutions to climate change and, to a lesser extent, the composition of GlobeScan’s SOSE panel (see Methodology). Approximately one in ten each name educational institutions (10%), the EU (9%), and the World Resources Institute (WRI) (8%).

Government and institutional experts are less likely than others to indicate that they would approach a company for advice, but both are more inclined than others to seek advice from a government agency. Governments are the most inclined to go to international governance bodies for advice on climate change solutions, while NGO experts are significantly more likely to seek advice from other NGOs.

Regionally, Western Europeans are, by far, the least likely of the experts to seek information or advice on climate change from academic institutions; however they still are the most inclined to approach academic institutions over any other type of organization. Along with experts in Asia/Pacific, they are the most likely of the regions to approach international governance bodies like the UN. North Americans are the most likely to turn to academic institutions, whereas Asia/Pacific experts search for information and advice from governments more often than other experts.

14. SPECIFIC ORGANIZATIONS EXPERTS WOULD APPROACH FOR INFORMATION OR ADVICE ON CLIMATE SOLUTIONS UNPROMPTED, UP TO THREE MENTIONS	TOTAL	SECTOR						REGION			
		CORPORATE	GOVERNMENT	VOLUNTARY	INSTITUTIONAL	SERVICE	W EUROPE	N AMERICA	ASIA/PACIFIC	OTHER	
IPCC	12	4	19	17	18	4	12	6	16	18	
WBCSD	12	20	10	10	6	9	7	16	16	7	
Educational institutions (in general)	10	7	3	13	12	13	8	9	13	14	
EU	9	3	7	10	17	4	14	2	11	11	
World Resources Institute	8	14	10	3	4	7	3	12	3	11	
Research centers (in general)	7	4	7	10	9	11	7	6	11	9	
Energy sector (in general)	6	10	0	13	2	4	3	7	5	9	
UNEP	6	1	10	13	6	7	7	4	5	9	
UNFCCC/Kyoto	6	1	23	0	7	7	5	1	8	21	
UN (in general)	5	1	10	10	5	7	4	4	3	14	
Consultants (general)	4	5	0	3	4	4	2	4	5	5	
NGOs (general)	4	0	3	7	6	9	2	3	11	7	
Pew Center	4	6	7	0	4	0	1	5	3	7	
Rocky Mountain Institute	4	3	3	0	6	7	3	5	5	2	
USA/US governments	4	1	19	3	4	0	1	8	3	2	

## Role of International Organizations in Climate Change Solutions

Experts expect the EU to play a major role in climate change solutions over the next five years.

When asked to rate nine international organizations in terms of how significant a role they will play in defining or implementing climate change solutions over the next five years, eight in ten experts (79%) expect the EU to play a major role, underscoring again the extent to which the EU is expected to be a key actor on climate change. It should be noted, however, that experts were not asked to rate the importance of the role of major developing countries as part of this question; their perceived importance would likely have been high.

Approximately one-half of experts (46%) anticipate that the WBSCD will play a major role, while nearly four in ten foresee the G8 group of countries (42%) and the United Nations Environment Programme (40%) to also have a significant role over the next five years. Pluralities of experts also expect the Pew Center on Global Climate Change (37%) and the WWF (32%) to play a significant role.

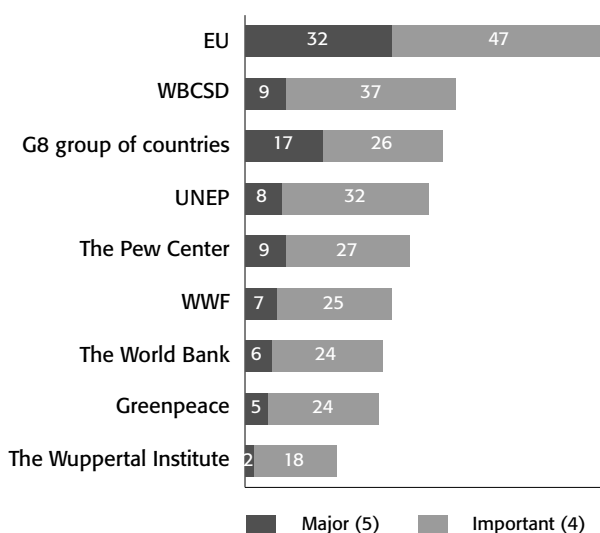
Fewer experts think that the World Bank (30%), Greenpeace (29%), and the Wuppertal Institute (20%) will have a major role in climate change solutions over the next five years.

Large majorities of experts across all sectors think that the EU will play a major role over the next five years, but government experts are significantly more likely to be of this opinion. NGO experts are the least inclined of the experts to think the WBSCD will play a major role, but, along with institutional experts, they are the most inclined to expect that the Wuppertal Institute will play a major role.

More Asia/Pacific experts than experts in Western Europe anticipate that the EU will play a major role in developing solutions to climate change over the next five years.

### Role of International Organizations in Defining or Implementing Climate Change Solutions

“Major (5)” or “Important (4),” over Next Five Years



Q. 17

17. ROLE OF INTERNATIONAL ORGANIZATIONS IN DEFINING OR IMPLEMENTING CLIMATE CHANGE SOLUTIONS "MAJOR ROLE" ("4" AND "5")	TOTAL	SECTOR					REGION			
		CORPORATE	GOVERNMENT	VOLUNTARY	INSTITUTIONAL	SERVICE	W EUROPE	N AMERICA	ASIA/PACIFIC	OTHER
EU	79	72	94	77	80	80	80	75	84	82
WBSCD	46	51	48	37	43	46	44	44	55	43
G8 group of countries	42	40	68	47	34	41	35	39	45	61
UNEP	40	35	52	40	44	33	49	23	50	48
The Pew Center	37	28	48	40	39	37	24	53	39	25
WWF	32	22	32	33	37	37	31	33	39	20
The World Bank	30	28	52	20	28	28	21	31	37	39
Greenpeace	29	26	19	30	37	28	28	30	39	20
The Wuppertal Institute	20	14	13	30	30	11	26	14	26	16

### Views of Solution Providers:

#### The World Bank's Role in Addressing Climate Change

Climate change solution providers interviewed believe that the World Bank has a very important role to play in addressing climate change (both mitigation and adaptation) and has the assets and knowledge to have a large impact. Many respondents, however, indicated that they think that the World Bank needs to implement an overarching framework or screen for financing projects that integrates low-carbon priorities into all of its decision making, particularly with regard to what projects the Bank chooses to finance. It was suggested that loans be tied to a clear policy with contingent eligibility.

Specific examples included increasing funding for energy efficiency, shifting investments out of fossil fuel energy sources and into renewables, and supporting low-carbon companies. The World Bank was also seen as having the potential to raise awareness of climate change issues and to build capacity in developing countries. Another solution provider noted that the World Bank could improve its support of technology transfer.

It was also suggested that the World Bank could work with regional banks (EBRD was provided as an example) to establish a consortium to influence national policies, and to streamline its work with that of the regional banks. Other suggested collaborative measures included playing an advisory role to policy makers at the highest levels. It was also suggested that the World Bank's internal operations could set an example by becoming carbon-neutral.

Finally, one respondent commented that the World Bank needs to clarify its mission with regard to climate change, and to address a perceived "implementation deficit" between headquarter objectives and actions at the level of the country desks.

## The Influence Map

To understand the dynamics of influence affecting the development and implementation of solutions to climate change, GlobeScan has applied its Influence Mapping technique to the data derived from the Survey of Sustainable Development Experts.

As reported above, experts were asked the following questions, unaided:

- What types of organizations are most influential overall when it come to the development and implementation of solutions to climate change
- Who or what types of organization most influence their opinion on the matter (i.e., who do they consult as a trusted source of information)

- How frequently do they communicate with their most trusted source of information
- Who or what type of organization do they seek to influence with regard to solutions to climate change

With this information, along with information indicating what type of organization each respondent is associated with, GlobeScan is able to understand the net level of influence, channels and directions of influence among groups.

## The Influence Map

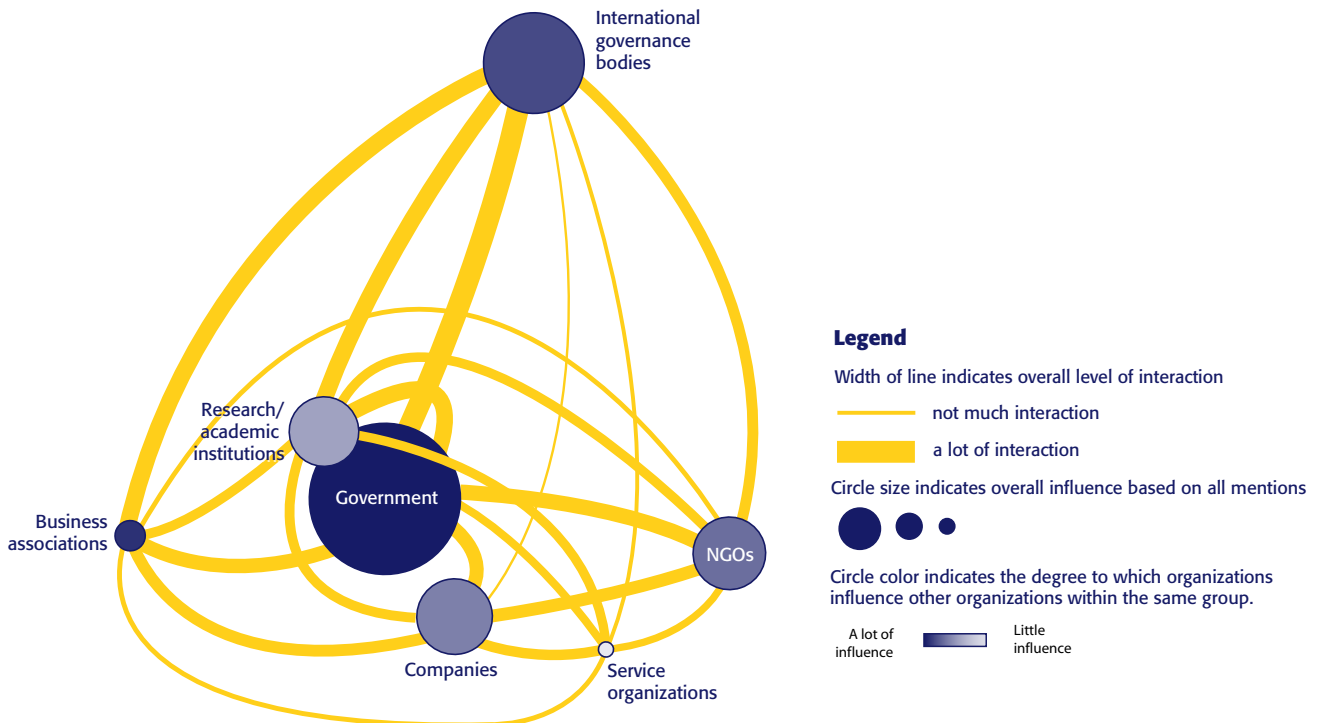
To map the network of influence with regard to the development of solutions to climate change, a factor analysis was conducted to locate each type of organization in a perceptual space that represents the totality of views on sustainability topics and climate change as captured by the survey. It should be noted, however, that respondents were selected on a non-random basis and their views cannot be regarded as quantifiably projectable to any specific population, cohort, or universe.

Groups that are close together on the map have similar views. Groups that are far apart differ most in overall opinion.

Relationships between these groups are based on indices obtained from four 'influence' related questions asked of all respondents.

The width of lines depicts the extent to which the linked type of organizations interact.

The size of the bubbles indicates the level of influence the group has overall, and the shade of the bubble indicates to what extent organizations within that group influence other organizations within the same group.



## The Network of Influence

As the Influence Map indicates, sustainability experts working in different types of organizations have differing opinions about solutions to climate change and other sustainability issues.

With government located closest to the center of the network, the map shows that people working in government have views that are closest to the average of all of those surveyed. The influence analysis illustrates that governmental organizations are seen by experts as most influencing how solutions to climate change are evolved and implemented. Clearly, those seeking to influence what types of climate solutions are developed and deployed should attempt to influence government decision-making.

However, government appears to be least influenced by other actors, with respondents in this category being the most likely to indicate that they are most influenced by peers also working in governments. As such, governments may be the most difficult for others to influence.

Nonetheless, governments are shown to be actively communicating with experts in other types of organizations. The analysis underscores the importance of dialogues involving representatives from multiple sectors, such as the Gleneagles Dialogue on climate change.

Experts in research and academic institutions have opinions about sustainable development and climate change that most closely match those of government experts. These two groups interact frequently.

Private sector experts have opinions that are also similar to experts working in government, but they tend somewhat more than government professionals to believe that companies can make a significant contribution to advancing sustainable development in social and economic areas. Companies appear to be most influenced by the actions of governments and business associations, although most experts concur that the private sector will become more influential with respect to climate solutions in the future.

Experts in service organizations such as consultants also believe that the private sector can help advance sustainable development in social and economic areas. Service organiza-

tions appear to interact with other types of organizations less frequently than others do.

Experts in NGOs differ from those in other categories in that they are more inclined to think that companies have an important role to play in the environmental aspects of sustainable development. Not surprisingly, experts in NGOs are more likely than others to expect that energy efficiency and alternative sources of energy, as well as biodiversity, will take on greater profiles as issues in the coming years. NGOs are most influenced by the actions of governments, followed by companies, as they react to government policies and corporate actions.

More focused on technical issues such as carbon capture, clean coal combustion, biotechnology and nanotechnology, professionals in business associations surveyed have opinions about sustainable development that differ considerably from the views of NGO experts. Business associations interact most with experts in multilateral organizations and government.

Experts surveyed in multilateral organizations stand out from other types of experts in that they are more inclined to believe that health issues (including human disease and environmental pollution) will achieve greater profile in the coming years. They also tend more than others to think that economic instruments will offer effective solutions to climate change. Multilateral experts interact most with business associations, academics, and experts in governments.

Overall, different types of organizations with different viewpoints are actively influencing each other in a complex network. As a result, a wide range of opinions are playing a role in climate change decision making within each type of organization. The one important exception may be governments where influence is highly endemic, rather than originating from external sources.

Nonetheless, the analysis reflects the intricate nature of the climate change debate. It is hoped that GlobeScan's Climate Forum panel of solutions providers will help to highlight where opinions differ and where opinions are aligned so that climate solutions that attract the widest potential support can be pursued.

# SOLUTION PROVIDERS' ADVICE FOR THE CLIMATE FORUM

*GlobeScan is building a panel of experts to be surveyed about climate solutions twice yearly under an initiative known as the Climate Forum. Results would be broadly publicized and easily accessible. During recent interviews with climate change solution providers, GlobeScan asked participants a number of questions about the utility of the proposed Climate Forum and who the panel should include.*

## Value of the Climate Forum

*The solution providers who GlobeScan interviewed were virtually unanimous in thinking that the Climate Forum would be highly valuable.*

Respondents indicated that they would value the Climate Forum because it could help meet a commonly felt need in the climate community. The Forum was thought to be a mechanism that would help order the large volume of often contradictory information and opinion, and help to crystallize viewpoints. The Forum would also facilitate international discussion and the exchange of ideas and advice across regions. Experts working on certain topics would be able to access feedback from peers. The Forum would help solution providers influence governments, particularly regarding choices about what types of solutions they adopt. Results of the iterative surveys could be used to help establish and communicate the business case supporting a particular path forward, and to dispel misinformation.

Many solution providers offered insightful advice about how to help ensure that the panel is trusted and effective. While acknowledging the potential value of the Climate Forum, some experts emphasized the importance of having a balanced panel makeup so that the results are credible and well trusted. Similar advice was offered regarding how the results are interpreted and communicated. One solution provider hoped that the Climate Forum output would not undermine or contradict current work underway to achieve agreement on preferred approaches to climate change and develop concise positioning statements.

Overall, however, the Climate Forum initiative was strongly supported by those interviewed. In fact, all experts interviewed expressed interest in becoming Climate Forum panel members themselves.

### Climate Forum Panel Design

GlobeScan asked solution providers what types of solution providers should be members of the Climate Forum panel. Suggestions were diverse.

Experts recommended for the panel included:

- Business representatives, including those responsible for sustainability and environmental issues in heavy industries, especially energy and automotive, as well as metals and cement
- Utilities and energy, including nuclear energy and hydroelectricity
- Renewable energy industry experts
- Financial and economic experts
- Academics
- Technical experts, particularly with regard to energy
- Governments, including municipal and other sub-national jurisdictions
- Multilateral organizations, including UNFCCC representatives

- Development banks, especially the World Bank
- NGOs, e.g., Greenpeace and WWF
- Trade unions
- Consumer organizations

Solution providers also offered general advice about the panel formation. Some said that the panel should be made up of people with balanced or moderate viewpoints. Others recommended that panelists be well known and established, so that the survey results would be more resistant to criticism. The panel should be multidisciplinary and diverse. The panel should not only be made up of solution providers, but also solution implementers, such as heavy industry. The panel should be balanced between climate change practitioners and people working in theoretical disciplines.

Solution providers believe that it is very important that the panel be as international and inclusive as possible, with representatives from low emitting but highly vulnerable countries, as well as wealthy regions.



# METHODOLOGY

## Online Survey of Sustainability Experts

A total of 2,989 GlobeScan Survey invitations were sent out beginning April 20, 2006 to a list of sustainable development experts across mainly OECD countries. Of these, a total of 240 qualified respondents completed the on-line questionnaire by the closing date of May 30, 2006.

To enhance the survey sample in non-corporate sectors, GlobeScan approached approximately 460 additional climate change experts working in governments, multilaterals, NGOs, and other institutions with a request to complete the survey between July 12 and 20, 2006. Of these, an additional 30 experts responded, bringing the total sample size to 270.

Respondents are drawn from five sectors: corporate, government, voluntary (NGO), institutional (e.g., academics), and service (e.g., consultants). Regionally, Asia, Western Europe, North America, as well as Africa, the Middle East, South America, and Eastern Europe are represented. The following table gives a detailed breakdown of the percentage of respondents drawn from each sector and region.

Of the 270 respondents, 66 percent have more than ten years of experience working on SD issues, 26 percent have five to ten years, and 8 percent have three to four years of SD experience. Less than 1 percent of respondents have under three years of SD experience.

### Survey of Sustainability Experts 2006-1 Respondents (by Sector and Region)

	CORPORATE <sup>i</sup>	GOVERNMENT <sup>ii</sup>	VOLUNTARY <sup>iii</sup>	INSTITUTIONAL	SERVICE	TOTAL
Western Europe	7	2	3	13	9	33
North America	13	5	5	9	5	36
Asia/Pacific	4	1	1	5	3	14
Other	6	3	3	3	1	16
Total	30	12	11	30	17	100

<sup>i</sup>Includes Companies and Industries

<sup>ii</sup>Includes National governments / international governance bodies

<sup>iii</sup>Includes NGOs

## In-Depth Qualitative Interviews

Approximately 45 GlobeScan Survey invitations were sent out to a select group of premier climate change “solution providers” beginning June 19, 2006. Of these, 15 in-depth telephone interviews, conducted by senior researchers, took place before June 27, 2006.

Respondents were selected from companies, business associations, governments, international governance bodies, NGOs, and academic or research institutions. All respondents play senior roles in their organizations. Six are located in the EU, four in the USA, two each in Switzerland and Canada, and one in India. The following table gives a breakdown of the number of interviews conducted within each of the sectors.

SECTOR	NUMBER OF INTERVIEWS
Government / int’l governance body	5
NGOs	5
Company/industry	3
Business association	1
Academic/research institution	1

# QUESTIONNAIRE

## Energy and Climate Change

6. Thinking of the present rate at which society is making progress toward addressing climate change, please rate the likelihood that progress will occur fast enough to avert major, irreversible damage to human, social and ecosystem health.

*Please use the 5-point scale (where 1 is “very unlikely” and 5 is “very likely.” If you believe that major irreversible damage has already occurred, please choose “Already occurred”).*

- 1 (Very unlikely)
  - 2
  - 3 (Neutral)
  - 4
  - 5 (Very likely)
  - I believe major damage has already occurred
7. What percentage, if any, of the total effort/resources addressing climate change **within your own organization or within the work that you do** is applied to mitigation measures (e.g., reducing greenhouse gas emissions), and what percentage is applied to adaptation measures (e.g., preparing to adapt to climate changes)? (Total percentage allocated to mitigation and adaptation measures should equal 100%.)

Mitigation measures (%): \_\_\_\_\_

Adaptation measures (%): \_\_\_\_\_

## QUESTIONNAIRE

8. Thinking of the post-Kyoto period (i.e., after 2012), how would you rank the following approaches in terms of their likely effectiveness in providing global solutions to climate change?

*Please assign a number to each approach with 1 being the most effective, 2 being the second most effective, and so on. If you think that an approach that is not listed should be included, please briefly describe it and assign it a rank.*

		Rank 1 – 6
a)	Developing new science and technology (e.g., that increases energy efficiency, reduces GHG emissions, or captures CO <sub>2</sub> , etc.)	
b)	Public education and persuasion (e.g., social marketing to encourage conservation, technology adoption, etc.)	
c)	Regulatory approaches (e.g., <b>requiring</b> improved energy and emission performance, the development of climate friendly energy sources, more nuclear power, etc.)	
d)	Economic instruments (e.g., emission trading permits or tax measures that <b>encourage</b> improved energy and emission performance, the adoption of cleaner fuels, etc.)	
e)	Improved diplomacy and international cooperation that encourages developing countries and a greater number of industrialized countries to make more significant reductions of GHG emissions	
f)	Other (please describe briefly and rank) <div style="border: 1px solid black; height: 60px; width: 100%; margin-top: 5px;"></div>	

## QUESTIONNAIRE

11. Which of the following types of organizations do you predict will be the most effective in developing and causing the implementation of appropriate solutions to climate change over the next 10 years?

*Please choose two.*

- Science and policy research organizations
- National governments (including the EU)
- UN and its agencies
- NGOs (e.g., environmental advocacy groups, social development organizations, etc.)
- Private sector companies and their associations
- Other (please specify)

12. How much consensus do you think there is within the most influential circles globally on what are the best solutions to climate change?

*Please use the 5-point scale (where 1 is “very little or no consensus” and 5 is “very strong consensus.”)*

- 1 (Very little or no consensus)
- 2
- 3
- 4
- 5 (Very strong consensus)

13. Please name up to three organizations or types of organizations **in the world** (including, for example, countries, government departments, companies, research institutes, non-governmental organizations, international organizations, etc.) that you think are the most influential today in defining or implementing appropriate solutions to climate change. Beside it, please also provide a categorization of the **type** of organization using the categories provided below.

- Company
- Business association
- Government or country (including EU)
- International governance body (including UN agencies, multilaterals)
- Non-governmental organization (i.e., environmental, social justice NGOs, etc.)
- Institution (i.e., academic, research institutes)
- Service organization (i.e., consultants, journalists)
- Other (please specify)

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_

## QUESTIONNAIRE

14. Please name three organizations or types of organizations in the world, apart from your own that you would approach in your professional role if you needed an influential source of information or advice relating to the development or implementation of appropriate solutions to climate change. Beside it, please also provide a categorization of the **type** of organization using the categories provided below.

- Company
- Business association
- Government or country (including EU)
- International governance body (including UN agencies, multilaterals)
- Non-governmental organization (i.e., environmental, social justice NGOs, etc.)
- Institution (i.e., academic, research institutes)
- Service organization (i.e., consultants, journalists)
- Other (please specify)

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_

15. How many times a year do you exchange communications regarding climate change, either face-to-face or electronically, with the first organization that you entered in the previous question?

Number of times per year: \_\_\_\_\_

## QUESTIONNAIRE

16. Please name three organizations or types of organizations in the world that **your organization actively attempts to influence** in terms of their approach to defining or implementing appropriate solutions to climate change. Please let us remind you that your answers will be kept strictly anonymous and not linked to you or your organization. Beside it, please also provide a categorization of the **type** of organization using the categories provided below.

- Company
- Business association
- Government or country (including EU)
- International governance body (including UN agencies, multilaterals)
- Non-governmental organization (i.e., environmental, social justice NGOs, etc.)
- Institution (i.e., academic, research institutes)
- Service organization (i.e., consultants, journalists)
- Other (please specify)

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_

17. How significant a role do you expect each of the following international actors will play in defining or implementing appropriate solutions to climate change over the next 5 years?

*Please use the 5-point scale provided (where 1 is “minor” and 5 is “major”).*

	1 Minor	2	3	4	5 Major
a) The G8 group of countries (in their annual meetings)					
b) UN Environment Programme					
c) Greenpeace					
d) The World Bank					
e) The Pew Center on Global Climate Change					
f) World Wildlife Fund / Worldwide Fund for Nature (WWF)					
g) The European Union					
h) The Wuppertal Institute					
i) World Business Council for Sustainable Development					
j) Other (please specify and rate)					
<input style="width: 350px; height: 20px;" type="text"/>					