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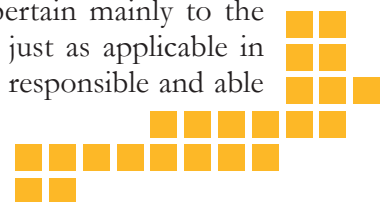
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## Confidence in the Capacity to Address Climate Change

Low adoption rates of many energy-saving measures may be due, at least in part, to a lack of awareness of the benefits associated with these measures. As a result, many studies have recommended increased communication aimed at consumers concerning these benefits - be they environmental, financial or health related - as a means of changing attitudes and accelerating adoption rates. Changes in attitudes towards the adoption of particular technologies may also require changes in attitudes pertaining to the roles of individual actions in addressing larger questions concerning energy use and the environment. Without this, the advertised environmental benefits may be viewed by households as being negligible or unimportant, and only other types of benefits (such as, for example, time savings or convenience) will be weighed against considerations such as purchase price or search and learning costs.

In this newsletter, an article by CBEEDAC's Executive Director explores individual attitudes in terms of awareness of and concern for environmental issues and the extent to which households indicate that they are willing to take personal actions or provide support for related government initiatives. Important elements in the relationship between concerns and actions include the capacity and responsibility that households assign to themselves and to government in addressing climate change. Survey data from Alberta indicate that the proportions of households supporting a new climate change-related tax or adopting energy saving practices themselves are relatively low compared to the proportion of households who are concerned with climate change, but there appears to be a somewhat better match between the level of this support/adoption and the confidence that households have in themselves and in government to address climate change.

While the data and analysis in this article pertain mainly to the residential sector, the conclusions are likely to be just as applicable in other sectors where the same dilemma over who is responsible and able to make a change is likely to arise.





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## Does Environmental Concern Result in Strong Support for Solutions to Address it?

by Lucie Maruejols

The All Alberta Survey (AAS) is a series of annual surveys, conducted by the Population Research Laboratory at the University of Alberta, that explores the opinions of Alberta residents on a number of socio-political and economic themes. Responses to questions asked in the 2006 and 2008 editions of these surveys provide interesting information about household concerns regarding climate change and the extent of household support for a number of options that might be used to address these concerns.

### *Awareness and concern*

Albertans are clearly aware of environmental issues, with a vast majority of respondents in the 2006 AAS believing that there has been recent evidence of climate change, and 67 % agreeing that a major cause of such change pertains to human activities. Climate change clearly raises some concerns among Albertans, with 76 % of survey respondents believing that it will have important effects on the province, while about 50% of them are concerned that climate change will have a significant impact on their or their family's economic situation, health and well being.

Besides being concerned with climate change, households appear to want the problem to be addressed. Only 4% of households think that there is nothing that can be done, leaving most households in agreement with the view that it is someone's responsibility to take action. In this regard, about 60% of respondents judge that responsibility for minimizing the negative impacts of climate change falls on all of society (government, firms, and individuals), while 10% believe it to be foremost the provincial or federal government's responsibility. Overall, therefore, close to 70% of survey respondents rely fully or partially on the government to take action, while a smaller but nevertheless large (62 %) proportion acknowledges, at least in part, their personal responsibility.

### *Support for government initiatives*

While survey respondents largely hand the *responsibility* for addressing the negative effects of climate change to the government, their views as to the government's *capacity* to face this challenge are somewhat different.

When asked about their confidence that the government has the capacity to address climate change, 54% of the respondents in the 2008 AAS did not believe that any level of government is capable in this regard. Among the remainder, 30% believed that both they and the government can address climate change, while 16% believed that only the government has that capacity. Some 18% of respondents believed that only they can address the issue, so that in total 64% of households stated that either they and/or the government have the capacity to address climate change.

Although only about half of the respondents appear to be convinced that the government can address climate change, the level of support for particular government actions toward climate change does not appear to be dependent on this finding.

Specifically, about half of the respondents were willing to pay a new tax that was to be used specifically to address the negative effects of climate change. Surprisingly, among the 54% of households that did not believe that the government had the capacity to address climate change, 45% were nonetheless willing to pay a tax to address the negative effects of climate change. The proportion of households willing to pay that tax among households that are confident the government would do a good job of addressing climate change is only slightly higher, at 53%. Strongest support for the tax (58%) is found among the group of households that believe that both they and the government have the capacity to address climate change. This rate is still relatively low, and indicates that even though these households believe the government



would do a good job, 42% of them are not ready to support a government initiative involving a new tax. Of course these households may view the government as already having the capacity to address climate change without an additional tax.

From a historical perspective, recent results suggest increased willingness to deal with perceived environmental concerns via a tax mechanism. Some 10 years earlier, the 1997 All Alberta Survey also asked participants similar questions on their willingness to address environmental issues and their support for a new tax. The results, presented in the two figures below, show a wide gap between agreeing on one's own responsibility, as a consumer, to address environmental concerns, and being willing to address such concerns financially. In that survey, close to 80% of respondents agreed that Canadian consumers should do *whatever it takes* to protect the environment from global warming, but more than 60% disagreed with a new tax addressing one of its major causes, including some 40% who strongly disagreed. Among those house-

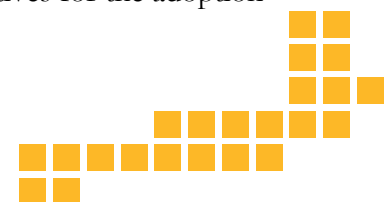
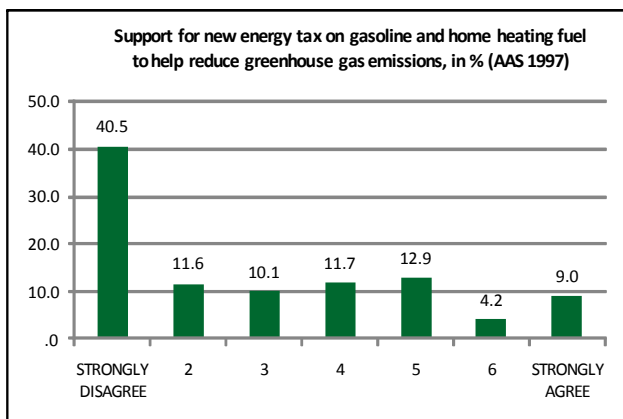
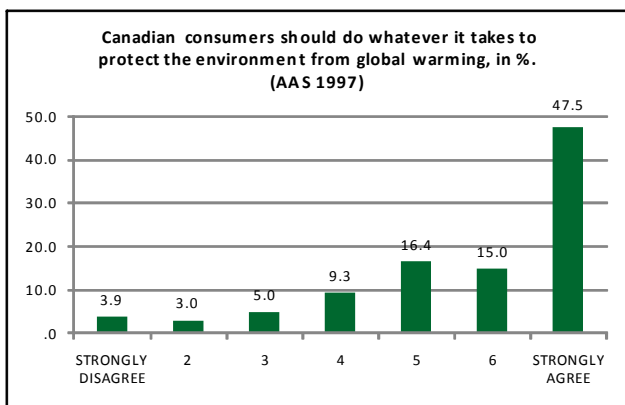
holds that were in agreement with doing whatever it takes, only 30% agreed that the government should introduce a new tax to address greenhouse gas emissions from the residential sector. In comparison, with the 2006 and 2008 AAS the difference between the percentage of respondents who declared that the government and individuals should address climate change and the percentage who stated their willingness to pay for a new tax serving this purpose does not appear to be nearly so large.

### *Acting individually*

In the 2008 AAS, 48% of respondents believed that individuals have the capacity to address the negative effects of climate change. In addition, in the 2006 AAS, 62% agreed that most of this responsibility should be borne by individuals. However, stated preferences of households regarding who has the responsibility and capacity to address climate change were not always consistent with their stated preferences regarding making a personal financial contribution.

The 2007 Survey of Household Energy Use (SHEU07), conducted by Statistics Canada for Natural Resources Canada, collected information on residential energy use, equipment and the adoption of practices that reduce the use of energy and water by Canadian households. Information included in this survey can help determine the extent to which households are inclined to address climate change by adopting energy saving behaviour, which may in part explain their reluctance to agree to pay a new tax.

The table on the next page describes the proportion of households that engaged in a series of practices that can be considered to be environmentally friendly regarding the use of energy and water, for Canada and for Alberta. Participation in these various practices can be viewed to some extent as reflecting the mindset of households regarding the protection of the environment and their individual responsibility in addressing climate change. Of course, financial benefits associated with reduced energy consumption can also be motives for the adoption of such practices.





Type of Eco-Friendly Behaviour by Households (SHEU07)	Percentage of Households	
	Canada	Alberta
Reduce heating or cooling in certain areas of their dwelling	51%	51%
Occupants wear more clothing rather than adjusting the dwelling temperature	77%	84%
Electronics are unplugged when occupants are absent for an extended period	54%	65%
Computer printer is manually turned on when needed and off when not needed	48%	47%
A low-flow showerhead is used	61%	62%
Key factor in appliance purchase decisions is energy and water consumption	69%	67%
Cold water is used for most clothes washing	47%	33%
Cold water is used for most clothes rinsing	78%	75%
Clothes washer is always full before it is switched on	62%	81%
Dishwasher is always full before it is switched on	74%	80%
Dishes in dishwasher are dried naturally (heat off or door open)	40%	39%
Any improvements were made to the dwelling to reduce energy consumption	70%	59%

The table shows that the adoption of these practices is somewhat mixed both in Canada as a whole and in Alberta. Some practices seem have been adopted widely (by more than 75% of the households), such as putting on more clothing instead of adjusting room temperature during the winter months, using cold water instead of hot or warm water for rinsing clothes when using a clothes washer, and making sure the dishwasher and clothes washer are full before running them. Some of these high scores might be the result of successful public campaigns or the continuation of traditional habits. On the other hand, some of the practices exhibit low adoption rates (below 50%), such as turning on a printer only for the time it is required, using cold water for washing clothes, or allowing dishes washed by a dishwasher to dry with the heat off or the door of the dishwasher open.

Adoption rates for these practices vary mainly between 40% and 80%, which is relatively high compared to the percentage of the population who believe that they, as individuals, have the capacity and responsibility to address climate change. However, for Alberta, adoption rates are generally relatively low compared to the percentage of households who are aware of climate change and believe that it will have a large provincial impact.

Overall the results appear to reflect a continuing trade-off between an awareness of and a concern for environmental issues, but a reluctance to incur the cost and/or inconvenience of adopting individual practices to address these issues. Alternatively, perhaps the confidence that households have in the government's capacity to effectively address climate change issues leads to the view that individual actions are unnecessary.

## Building Services

CBEEDAC has the expertise to provide services to the building sector in the area of data storage and analysis. For more information regarding these services, on becoming a sponsor of CBEEDAC, or about the services provided by other Data and Analysis Centres, contact CBEEDAC or see our website at our new web address: [www.cbeedac.com](http://www.cbeedac.com).

CBEEDAC reports are available online from our website in PDF format.

If you house and/or collect data that could become a valuable addition to Canada's Building Energy End Use information system please consider contacting the Centre with your data information.

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