
Citizen and Consumer Attitudes Towards Electricity Industry Restructuring: An Ontario (Canada) Case-Study

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I - Introduction

Mark Sagoff has observed that the 'citizen' in him is often in conflict with the 'consumer' in him. Apparently no more schizophrenic than the average North American, Sagoff is simply reflecting upon the apparent contradictions in his life: while he wants sustainability, environmental protection and other lofty societal goals, all too often his purchasing actions do nothing to further these ends. Indeed, he cites the example of the 'Ecology Now' bumper-sticker on his oil-leaking car as a prime example of such tensions in his life (Sagoff, 1988, 53).

Survey responses from an Ontario community suggest that respondents there are sending similarly mixed messages: while they want the forthcoming electricity industry restructuring to advance sustainability and improve the environment, they look set to search for economic advantage once the new marketplace opens. Hence, their actions could unwittingly serve to degrade the environment.

The purpose of this brief report is to explore public attitudes towards electricity industry restructuring by examining survey results from the Waterloo Region, a community in southwestern Ontario. The report proceeds in

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five parts. Following this brief introduction, the second part sets the context, describing the case-study community and the survey instrument. The third part examines 'citizen attitudes' towards electricity industry restructuring, outlining responses to questions about attitudes towards restructuring and strategies for advancing environmental goals. The fourth part examines 'consumer attitudes' towards the same, reporting personal preferences regarding potential electricity providers. Finally, the fifth part of the report offers some tentative conclusions and identifies paths for future research.

II. Context

Waterloo Region is a community of approximately 450,000 people in southwestern Ontario (Canada), located 100 kilometres west of Toronto. Traditionally, the residents of Waterloo Region have had their electricity provided to them by one of three municipal electricity utilities, each of which was the sole residential electricity provider in their own particular part of the Region. The only consumer choice in electricity was 'how much to use?'; shopping for different suppliers was not an option for residential customers.

That, however, is changing. In late 1998, the Energy Competition Act was passed by the Ontario

legislature. As a result, residential customers will be able to purchase electricity from whomever they choose. To put it in more familiar terms, the choice that was introduced to many residents in markets for long-distance telephone and natural gas during the early 1990s is being created for electricity. Though there restructuring process has been delayed, the latest signals from the Ontario Government suggest that the market will be opened during the first half of 2002.

To solicit public opinion about issues of electricity industry restructuring (as well as energy efficiency and use, energy policy and global climate change), a 158-item survey instrument was prepared. It was initially developed in accordance with the design principles outlined in Dillman (1978) and subsequently revised after a limited pre-test (n=37). Individuals participating in a home energy evaluation, through the Waterloo Region 'Residential Energy Efficiency Project' (REEP; for more information, see Parker et al, 2000), were asked to complete the survey. Of the 1,110 questionnaires distributed throughout Waterloo Region between September 2000 and April 2001, 474 were returned, for a response rate of 43%.

Table 1
Sample characteristics compared with community, provincial and national characteristics

Characteristic	Survey respondents	Waterloo Region (1996)	Ontario (1996)	Canada (1996)
average age	51.4	34.2	35.8	35.8
percentage of the population 25 years of age and over who have completed university	51.7*	17.1	18.8	17.4
average household income	\$70,000**	\$59,658	\$54,291	\$48,552
percentage male	60.6	49.1	48.9	49.1

* - this figure represents the share of the sample population that answered with 'university degree or higher' in response to a query about the 'highest level of education attained by someone in the *household*' (emphasis added); thus, though not directly comparable with the other figures in the same row, it is still suggestive of a more educated population.

** - the median value for sample population's household income was '\$60,000-\$79,999'.

sources: REEP survey; Statistics Canada (1996).

Though a large number of responses were received, the results may not be perfectly representative. As Table 1 shows, our sample was older, better educated, wealthier and had a larger male component than the population of the Waterloo Region as a whole (from which this sample was taken), of Ontario, or of Canada. Moreover, respondents had already demonstrated their willingness to pay \$25 for a home energy evaluation, which suggests a special interest in energy and environment issues. Additionally, results may have been influenced by the fact that participating residents were often engaged in a discussion about energy issues by the evaluator and his/her student intern during the home energy evaluation. Nevertheless, the results still provide an interesting snapshot of the opinions of Waterloo Region respondents.

III - Citizen Attitudes

The survey asked respondents the extent to which they agreed with a number of statements about electricity industry restructuring in Ontario. More specifically, respondents were asked whether they 'strongly agreed' with, 'agreed' with, were 'unsure' about, 'disagreed' with or

'strongly disagreed' with three statements:

- 'I am pleased that I will be able to choose the company that provides my electricity.'
- 'I don't think restructuring the electricity industry in Ontario is necessary.'
- Electricity is a necessity and a single government power company should supply it.'

Agreement with the first statement and disagreement with the second and third would suggest public support for some kind of electricity industry restructuring. Table 2 presents the results.

The results from Table 2 suggest that there is some support for the process of restructuring: in response to the first two statements, more respondents 'sided with' the pro-restructuring position than with the anti-restructuring position. Nevertheless, there still appears to be a significant level of uncertainty among respondents: more than one-third of the respondents answered 'unsure' to these first two statements, and the third statement resulted in an equal division with 37% agreeing and 37% disagreeing.

Table 2
Survey responses to statements about electricity industry restructuring

Statement	strongly agree	agree	unsure	disagree	strongly disagree
'I am pleased that I will be able to choose the company that provides my electricity.'	18 (4%)	139 (30%)	180 (39%)	89 (19%)	31 (7%)
	34%		39%	26%	
'I don't think restructuring the electricity industry in Ontario is necessary.'	38 (8%)	68 (15%)	167 (37%)	144 (32%)	40 (9%)
	23%		37%	40%	
'Electricity is a necessity and a single government power company should supply it.'	53 (12%)	113 (25%)	119 (26%)	137 (30%)	31 (7%)
	37%		26%	37%	

source: REEP survey.

Notwithstanding the support for restructuring in general, the particular kind of restructuring that is occurring in Ontario does not seem to have strong support. Although the facilitation of 'energy efficiency and the use of cleaner, more environmentally benign energy sources' are stated as 'purposes' of the 1998 legislation – albeit each with apparently lower priority than the economic purposes – the Ontario Government has made little provision for encouraging either environmental sustainability or promotion of renewable energy in the new system. Instead, the Government appears to be leaving it to individuals' decisions – as played out in the market – to achieve these goals.¹ This seems to go against public sentiment, as reflected by our respondents.

For example, respondents were presented with the following question and choices:

'In your opinion, how should the start-up costs of building "Green" electricity sources be paid for? (check only one answer please):

- a) the government should subsidize power generation from "Green" sources
- b) everyone should contribute through slightly higher electricity rates
- c) only those people who want "Green" electricity should pay more to have it
- d) other [respondents were given a blank space to write in their own response]
- e) "Green" power should not be built if it costs more than conventional sources'

Fifty per cent of respondents who stated a preference chose (b), while another 37% chose (a). Only 5% stated that 'green power should

not be built' (e), while only 2% indicated that only those who want 'green electricity should have to pay more to have it' (c). Interestingly enough, this latter option is the one that the Government is effectively following. Other possibilities (like those described in (b) and (a)) have apparently been rejected or ignored by the Ontario Government. From this, it appears that 'citizen calls' for greening the electricity industry restructuring process have gone unheeded.²

IV - Consumer Attitudes

Respondents were also asked to 'rank how important each of the following factors will be to you when you are able to choose the company that provides your electricity:

- a) price of the electricity
- b) quality of the customer service
- c) electricity they sell is generated in southern Ontario
- d) environmental effects of the electricity produced by the company
- e) reputation of the company
- f) reliability of electricity'

Respondents were asked to place numbers 1 through to 6 beside the factors 'with the most important being # 1'. Three hundred and eighty-four respondents ranked all six factors. Table 3 presents the results from these respondents (with factors presented in order of respondents' priority).

¹While alternative power is becoming more practical, it is still more expensive to produce electricity in these ways than with traditional methods. Technological advances and economies of scale, however, continue to improve the cost effectiveness of alternative energy and the cost will likely decline *as more people choose these power sources.*' (emphasis added; Government of Ontario, 2000)

² Similarly, respondents were asked which three energy sources they would most prefer to be built in southern Ontario to meet the province's energy needs. Thirteen energy sources were listed. Just under half of the respondents (48%) selected either 'solar arrays (on rooftops)' or 'wind turbines' as their first choice. 'Coal plant' was selected as the first choice by 0.4% of respondents.

Table 3
Importance of factors in choosing an electricity provider

Factor	1 st (most important)	2 nd	3 rd	4 th	5 th	6 th (least important)	Median	Average
price of the electricity	150 (39%)	100 (26%)	72 (19%)	34 (9%)	15 (4%)	13 (3%)	2	2.2
reliability of the electricity	140 (37%)	118 (31%)	56 (15%)	35 (9%)	19 (5%)	16 (4%)	2	2.3
environmental effects of the electricity produced by the company	66 (17%)	46 (12%)	90 (23%)	79 (21%)	69 (18%)	34 (9%)	3	3.4
quality of the customer service	25 (7%)	59 (15%)	77 (20%)	96 (25%)	88 (23%)	39 (10%)	4	3.7
reputation of the company	22 (6%)	46 (12%)	53 (14%)	76 (20%)	115 (30%)	72 (19%)	4	4.1
electricity they sell is generated in southern Ontario	9 (2%)	20 (5%)	35 (9%)	52 (14%)	64 (17%)	204 (53%)	6	5.0

source: REEP survey.

Price and reliability clearly rank high in respondents' list of priorities. Sixty-five per cent of respondents stated that price would be either the first- or second-most important factor in selecting an electricity provider. A similar share (67%) said the same thing about the reliability of the electricity. These two factors were clearly ahead of environmental considerations. 'Environmental effects of the electricity produced by the company' would be either the first- or second-most important factor in selecting an electricity provider for 29% of respondents, while a slightly smaller share (just under 27%) stated that it would be the least- or second-least important factor and the largest group (44%) placed it in the middle at third or fourth rank. Customer service and company reputation were less important and local production was the least important factor of all. Overall, 'consumer voices' appear ready to demand lower prices.

V - Discussion and Conclusions

The citizen/consumer paradox noted in the introduction to this report appears to be afflicting respondents to our survey in Waterloo Region. While the 'citizen' in many of our respondents appears to desire a more sustainable electricity system, the 'consumer' in most of them is set to look for the cheapest electricity product once the market is opened. Given the direction in which Ontario's electricity restructuring is currently heading – and given that more polluting power generation alternatives are usually cheaper – 'consumer' priorities look set to scupper 'citizen' aspirations.

This kind of citizen/consumer paradox has, of course, often been explained by reference to the 'tragedy of the commons' or the 'dilemma of collective action'. While everyone would like the 'public' benefits associated with a more

sustainable energy system (for example, cleaner air and a stable global climate), they are hesitant to pay the higher 'private' costs of doing so (for example, by purchasing premium-priced green electricity). They remain fearful that others will 'free-ride' – that is, not pay the private cost but reap the public benefit anyway. In this way, the prospects of being exploited may mean that no one pays the private cost and the public benefit may thus remain elusive.

How can this 'tragedy' or this 'dilemma' be avoided? John Dryzek highlights one possibility. Commenting upon Sagoff's car dilemma described in the opening paragraph, he observes: 'The citizen in him would like the government to crack down on the consumer in him.' (Dryzek, 1997, 95) Respondents to our survey have expressed a similar sentiment. The responses to the question about how to pay for the start-up costs of building green electricity sources (see Section III above) suggest that respondents are clearly interested in collective – often government-led – action on these electricity challenges.

At a minimum, it would appear that a more vigorous debate about greening the electricity system in Ontario needs to take place. Not only do survey respondents appear to be demanding it, but a look around the world would encourage the same: Ontario is one of the few jurisdictions that is not investigating different regulatory and market mechanisms aimed at reconciling citizen and consumer preferences. Indeed, the fact that a jurisdiction like Texas has introduced protected markets for renewable energy (a 'renewable portfolio standard') makes the silence from the Ontario Government on the issue all the more incredible.

So therein lies a significant research challenge. There is a need to explore policy options for electricity sustainability and to invigorate public debate about the same. Our survey suggests public interest in creative policy options; it is now incumbent upon researchers to provide the analysis of various alternatives and, in this way, to help to stimulate the debate. A more informed and more engaged populace will surely increase the chances of securing a more sustainable electricity future for us all.

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