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The Problem with People:

Why Energy Conservation Efforts are Failing Despite an Impending Energy Crisis

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ABSTRACT

Climate change has become a critical political issue in the past twenty years. However, there is a related issue that is often overlooked by governments, industry, and the public: energy supply security, defined by the IAEA (2007) as "...the ability of a nation to muster the energy resources needed to ensure its welfare" (n.p.). Conventional energy requires the burning of fossil fuels, which releases carbon dioxide, the primary driver behind climate change (Pulles & Amstel, 2010, p. 4). Because of this, the problems of our dependence on fossil fuels and carbon fuelled global warming are interrelated. As such, solving the climate change problem may mitigate energy concerns. However, the potentially disastrous consequences of climate change will not be felt immediately while energy is critical to our daily survival; so, energy issues are arguably a more pressing concern.

As geologist and ex-Shell oil researcher, Deffeyes (2001) points out in the preface to the 2008 edition of his award-winning book *Hubbert's Peak: The Impending World Oil Shortage*, world oil prices have tripled since 2005, while oil production has gone up by a meagre factor of 1.005(x).

Deffeyes (2001) is not the only person sounding the alarm. Rubin (2009), Chief Economist and Strategist at CIBC World Markets and respected global energy market expert, points out the same trend. Oil prices have increased sevenfold since the start of the millennium, and rose for almost ten years before demand shrank enough to induce a negative price response to levels that were historically high only four years ago (p. 133). The price of energy is skyrocketing, and that rise is being driven by shrinking supply. The relationship between energy demand and conservation is complex; one that has elicited both negative and positive strategies with diverse results. So, why are some conservation efforts failing?

There are several possible reasons. People tend to cite environmentally destructive production processes, such as tailing ponds in the Alberta oil sands or the contamination of water supplies as precedents for laying the blame at industry's feet. The lack of any meaningful federal action on either issue of climate change or energy security makes government a target for blame as well. However, in democratic capitalist societies such as Canada and the U.S., companies make production decisions based on market demands, and government officials are voted into office by their constituents. Industry finds economic gain in making their products cheaply by using inexpensive energy inputs, while politicians find political gain with positive messages about the future rather than negative ones. Add to that a disparity between the stated attitudes of people and their actual willingness to take action and the problem becomes clear. We may want to fault the private sector of industry or the public sector of government, but the reality is that the individual is also responsible for the lack of action. An examination of available research about the public's feelings of helplessness, positive illusions about energy, the need for positive political messages, the dilemma of governments faced with taxing voters or saving the environment, and purchasing decisions by the consumer, will demonstrate why action needs to be taken by individuals in collaboration with governments and industry.

Perhaps the most important contributor to inaction about energy security is a sense of helplessness on the part of the citizenry. Flynn, Bellaby, and Ricci (2010) investigated the disparity between people's expressed attitudes about energy issues and their actual willingness to change.

> Across all groups we found a consensus that in many circumstances people are actually 'locked' into certain types of behaviours and activities because of the limitations available due to infrastructure (in terms of technological options, design, etc.) and institutional setting (such as

> regulations, standards, laws, etc.), which citizens feel unable to change. (p. 169)

These feelings of helplessness are exacerbated when considering the importance of energy in our lives. Simpson (2009), when discussing the Liberal Party of Canada's "Green Shift" policy, claimed that energy tax offset policies should favour low- and medium-income people because their constrained budgets afford them the least ability to respond to energy prices (p. 185). The point here is not the normative nature of Simpson's tax policy remarks, but the fact they are based on. Low-income families do not have the resources to respond to price changes in the energy market, which can contribute to the futile attitude that some people take towards energy.

There is also a phenomenon in socio-psychological circles known as *positive illusions*, in which people think more highly of themselves than they objectively are. There are many examples, such as people's beliefs about their driving abilities, or bad spellers thinking they are good spellers. In the realm of energy security, this phenomenon manifests as faulty thinking on the part of the public about future energy supplies and our ability to respond to energy crises. Positive illusions in this context can be seen in Richman's 1979 analysis of public opinion polls conducted during the oil shock, which shows a disconnect between perceptions of the future of energy security and the reality that came to pass.

> As for the long term, Americans are optimistic that technology will lead us to the development of new energy sources and less dependence on foreign oil. By the year 1990, oil and gas are expected to be superseded by coal, nuclear, and solar power as leading U.S. sources of energy. By the year 2000, solar power is expected to emerge as our major source. (p. 576)

Of course, no one can see the future. Nevertheless, even today, ten years later than expected, solar power falls short of becoming our major energy source, and the U.S. is still dependent on foreign oil. This is a clear demonstration of positive illusions in the public mindset with little having changed.

> In the realm of climate change, . . . positive illusion is represented in the common expectation that scientists will invent technologies to solve the problem. Unfortunately, there is little concrete evidence that new technologies will solve the problem in time. But the overestimation that new technologies will emerge serves as an ongoing excuse for the failure to act. (Bazerman, 2009, p. 26)

Furthermore, Bolsen and Cook (2008) performed a similar analysis, but using considerably more recent information, in which they discovered that, as of 2005, only 37 percent of U.S. citizens correctly identified "growing international demand" as the primary reason for current "high energy costs," and that only 22 percent of people blamed the American consumer, compared to 62 percent of people blaming oil companies (pp. 368-371). Essentially, people feel science is going to solve their problems for them, despite a lack of evidence that technology is up to the task, and they do not feel responsible for the problem anyways.

The problem with people does not end with positive illusions. Flynn, et al.'s (2010) research shows more than just how feelings of helplessness explain the discrepancy between stated attitudes and actual willingness to change. "They [the respondents] also believed that international and national changes in policy (in reduction of carbon emissions) had to be seen to occur in order for citizens and consumers seriously to consider radical changes in their behaviour" (p. 176). The research team found a number of possible reasons for this, pointing out that "Focus groups in all areas believed that until there were substantial economic incentives or financial penalties (such as higher energy prices, road charging, higher costs of flying, etc.) most people would maintain their current lifestyles and energy uses" (p. 176). People are claiming to be environmental, but instead of acting, they are waiting for the government.

Because respondents in Flynn, et al.'s (2010) study point to a lack of initiatives, there is a temptation to counter-argue that government should be responsible for motivating the populace to deal with energy security, but this facilitates another way for people to avoid taking responsibility for their energy use. People not only have positive illusions about themselves and the capacity for science to deal with our energy problems, but they need to hear positive messages about the future from their leaders. Van de Velde (2009) and a team of researchers found that the framing of an environmental message is an important contributor to how effectively it convinces people to assist in solving environmental issues. Positive messages focusing on opportunities were more effective than negative messages reinforcing the seriousness of the problem (p. 5547). No one wants to hear how bad things are or are going to get. This may be why energy policy is disguised as climate change on the political stage, and, as Deffeyes (2001) posits, "Public attention to the predicted energy shortfall is essentially zero" (p. 7). Between the positive illusions of the public and the need for politicians to reinforce those illusions by avoiding talking about the coming energy crisis, it is not surprising that little has been accomplished when it comes to addressing energy concerns.

The problem with people crystallizes clearly in the political context. Flynn, et al. (2010) have shown that people will not change their energy use patterns until significant economic penalties appear (p. 176), but elected officials are hesitant to impose those penalties. It is challenging to sell voters on the idea of imposing a new tax on energy which is an essential part of people's budgets in which they do not have a lot of flexibility. As Bazerman (2009) puts it:

> Public officials are faced with the dilemma of imposing costs (such as gas taxes) on the current generation for a problem that is out of focus for many constituents. Without knowledge of the potentially disastrous long-term effects and costs of climate change, the public is unlikely to enthusiastically endorse these short-term costs. (p. 28)

So, people will most likely not change their consumption patterns until the government imposes a significant cost on them, but they are not willing to vote for governments that will impose those charges. It is no wonder little is getting done. People have essentially relied on their positive illusions.

Absent from the discussion so far has been the private sector, primarily the oil and energy industry. It may be comforting for people to blame oil companies for high prices, but this is not the case, and a little unfair. It is common knowledge that the goal of industry is to amass profit which is accomplished by selling a product to as many people as possible by keeping production costs as low as possible. A firm using a more expensive energy input will find itself selling less because of the higher price of its final product. Miller, et al. (2005) state that "Since firms can enhance profits by producing what consumers are willing to buy, we can see that demand plays an important role in deciding what goods and services are produced (p. 45)." There is a niche market for environmentally friendly products, but these products come with a higher price tag. If more people bought less-energy intensive products, more producers would make less-energy intensive products. We do not buy what they sell. They sell what we buy. This is basic economic principle. Simply put, in a capitalist society, blaming chemical companies for despoiling the environment when consumers are the ones refusing to spend an extra two dollars for a green product only shifts the focus from one group to another. Government, industry, and individuals are all responsible for the current environmental state of the Earth.

Energy security has been a complex problem since American domestic oil production first began to decline in 1970 (Deffeyes, 2001, p. 1). The relatively recent problem of climate change further complicates the issue. As Jaccard (2009), a professor

in the School of Resource and Environmental Management at Simon Fraser University explains, North America has plenty of coal and natural gas to burn, not to mention the Alberta Oil Sands (p. 110). Unfortunately, the environmental costs of these resources could be staggering. In order to avoid economic and environmental catastrophe, hard decisions need to be made. Realistically, people cannot continue to live with such ease and convenience, to the detriment of Earth's environment. The problem with people is that they may not want to hear the truth, choosing instead to ignore this critical issue while waiting for politicians and scientists to save the day, often just to avoid the inconvenience of taking a bus to work instead of driving. The blame clearly rests on the people, who ultimately include the public, politicians, and industry leaders.

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References

Bazerman, M. (2009). U. S. Energy Policy. *Environment*, *51*(5), 22-34. Retrieved December 2, 2010, from Academic Search Complete database.

Bolsen, T., & Cook, F. (2008). The Polls – Trends. *Public Opinion Quarterly*, *72*(2), 364-388. Retrieved December 2, 2010 from Business Source Complete database.

Deffeyes, K. S. (2001) *Hubbert's Peak: The Impending World Oil Shortage*. 2009 re-issue with preface. New Jersey, Princeton University Press.

Flynn, R., Bellaby, P., & Ricci, M. (2009). The 'value-action gap' in public attitudes towards sustainable energy: the case of hydrogen energy. *Sociological Review*, *57* 159-180. Retrieved November 28, 2010, from Academic Search Complete database.

International Atomic Energy Agency (2007, February). *Analyses of Energy Supply Options and Security of Energy Supply in the Baltic States*. Retrieved September 12, 2011, from http://www.oecd-nea.org/nea-news/2010/28-2/NEA-News-28-2-2-opinions.pdf

Jaccard, M. (2009). Peak Oil and Market Feedbacks: Chicken Little vs. Dr. Pangloss. In Thomas Homer-Dixon (Ed.), *Carbon Shift: How peak oil and the climate crisis will change Canada (and our lives).* (p. 97-131) Toronto: Random House.

Miller, R. L., Abbott, B., Fefferman, S., Kessler, R.K., & Sulyma, T (2005). Chapter 2: Production Possibilities and Economic Systems. *Economics Today: The Micro View* (3rd ed.) (p. 29 – 53) Toronto: Pearson Addison Wesley.

Pulles, T., & Amstel, A.V. (2010). An Overview of Non-$C0_2$ Greenhouse Gases. *Journal of Integrative Environmental Sciences, 7*(S1), 3-19. Retrieved September 12, 2011, from Academic Search Complete database.

Richman, A. (1979). The Polls: Public Attitudes Toward the Energy Crisis. *Public Opinion Quarterly*, *43*(4), 576. Retrieved November 28, 2010, from *E-Journals* database.

Rubin, J. (2009). Demand Shift. In Thomas Homer-Dixon (Ed.), *Carbon Shift: How peak oil and the climate crisis will change Canada (and our lives).* (p. 133-151) Toronto: Random House.

Simpson, J. (2009). Broken Hearts, Broken Policies: The Politics of Climate Change. In Thomas Homer-Dixon (Ed.), *Carbon Shift: How peak oil and the climate crisis will change Canada (and our lives).* (p. 177-201) Toronto: Random House.

Van de Velde, L., Verbeke, W., Popp, M., & Van Huylenbroeck, G. (2010). The importance of message framing for providing information about sustainability and environmental aspects of energy. *Energy Policy*, *38*(10), 5541-5549. Retrieved December 1, 2010, from Academic Search Complete database.