

HANDLING CHANGE:

DEALING WITH HUMAN NATURE

Introduction

In the past number of years, we have seen many governments in the developed world elected on promises of aggressive policies on greenhouse gas emissions. What we have seen in almost all cases is that, post elections, government action has not approached the level of the commitments made during the elections. “Talking the talk” has turned out to be cheap; “walking the walk” has turned out to be much more difficult for governments when faced with the reality of the difficulties of weaning our society off the use of cheap and conveniently accessible fossil fuels. Let’s not even venture into the realm of “walking the talk.”

Perhaps politicians are smarter than we think – they may understand human psychology very well and recognise that there are many barriers to developing and acting on policies, strategies, and plans for dealing with climate change impacts, and the broader issues of sustainability. Thus, we have this public paradox – politicians and many others proclaiming that climate change is the most important problem facing us while at the same time as adding to the transportation and energy infrastructure (e.g., twinning the Port Mann Bridge; promotion of exploration activities for natural gas, building additional natural gas pipelines, trying to maximize provincial government revenues through natural resource extraction; coal bed methane exploration; Site C).

Why Inaction?

I suspect that there might be three main reasons why meaningful, large-scale action on climate change impacts is not more evident:

- (1) The first might be that the general public simply does not know enough to act – we are not aware of any options for substantive action. We are satisfied that our cosmetic actions are effective. We are awaiting direction from governments, who have show little willingness to act.
- (2) The second might be that, quite simply, the general public does not see climate change as a particularly dangerous or urgent phenomenon. Despite all the warnings and all the information being circulated, we seem to be satisfied with nothing more than cosmetic action. There is little visible evidence that the majority of the population has begun even to contemplate the necessary lifestyle changes.
- (3) The third, the desire to protect future generations – and current generations who live far from us – is much less well entrenched in human thinking than we piously assume. What has posterity ever done for us lately? The question may be ridiculed, but it contains a worrying truth.

As humans we tend to lean towards believing that matters will eventually turn out well, that things will return to normal (the ‘glass half full’ attitude). In the planning of a new construction project, for example, costs are routinely and sometimes deliberately underestimated. Although

the results from scientific work on climate change seem increasingly worrying, I think many sectors of our society believe that the concerns are exaggerated. Most people rarely see the things that they do, buy and use as a direct part of the living systems on our planet. Few of the people who do think of their connection to nature have ever conceived that their lives could be designed to have no impact at all. Such optimism may have served our ancestors and ourselves well with past and present adversities, but it does not help us deal with a distant (temporal and spatial) and highly uncertain set of risks from rising temperatures and changing climate patterns.

We humans tend to systematically over-estimate the strength of our decision-making powers and the wisdom (benefits) of our decisions, and tend to favour the more positive of the predicted outcomes of our decisions. We tend to be very confident that the probability of our choices being right is high. We have used this characteristic to be particularly decisive in the past. This degree of certainty has allowed our leaders to persuade groups to involve themselves in focused actions (and to be re-elected). When it comes to climate change, this human attribute is, unfortunately, not helpful. Our world is facing a high degree of uncertainty about the impacts of climate change, and a very wide distribution of possible outcomes: e.g., temperature rise estimates vary from 1.5° C to 5-6° C this century; ocean levels are predicted to rise from 1.0 m to 10 m in the next 50 years, depending on which model is used.

The Weather

Since we are much more in tune with the concept of ‘weather’ than we are with ‘climate,’ what does ‘weather’ tell us? In the cool temperate, continental and cold climates (i.e., those areas with definite seasons), the variability of the weather is high. Here on the coast of British Columbia, in the summer we can see sunshine and 28° C one day and rain and 12° C the next. We can also experience “El Nino” winters with very warm temperatures (8 – 12° C for extended periods) and high precipitation (usually as rain). There seems to be an increase in the frequency of extreme weather events in the temperate and continental climate areas (more storms, more wind, more substantial temperature shifts, heavy snows, heavy rains, major flooding). This variability tends to mask the underlying and more subtle and significant changes in the climate, e.g., a steady increase in the average night time temperature.

Ask people in the eastern and southern United States, and the Canadian Maritimes who have experienced severe bouts of winter weather over the past two years if they believe in climate warming. Many of them believe that the potential effects of climate change have been exaggerated. People in countries with a lot of weather (e.g., North America and Europe) can always find information which supports whatever opinion that they happen to have on climate change. This is not unusual: survival in the good old days depended more on the weather in the crop-growing season than it did on local climate.

Greenhouse Gases

Carbon dioxide (CO₂) is invisible and a natural part of the global carbon cycle; it sustains living systems – it is required for plant life on our planet; it helps to feed us; and it helps maintain the planet at a habitable temperature. These are not the usual characteristics of what we define as an environmental enemy. Without the layer of CO₂ and the other gases keeping the warmth in, our average global temperature would be -18°C¹. Carbon dioxide is such a small part of the overall atmosphere but its atmospheric concentration is increasing substantially because of the

¹ Hopkins, R. 2008. The Transition Handbook: From Oil Dependency to Local Resilience. Green Books Ltd., Totnes, UK.

incessant and ever-growing release into the atmosphere of CO₂ from, for example, the combustion of fossil fuels, changes in land use, and deforestation. Combine this with the increase of emissions of methane from mining, livestock production, melting permafrost, and drying of wetlands, and increases of nitrous oxide from agriculture and the use of aeroplanes, and we have seen significant effects and disruption of the delicate balance of the planetary climate.

Greenhouse gases are invisible, which makes the problem difficult to see, and they are all pervasive. We have demonstrated little expertise or will power to start battling the problem. While we know a great deal about climate change, there is still a long list of things we don't know we don't know. Getting people to accept even the possible existence of unknown unknowns in climate science is difficult. We do not understand as many aspects of the climate system as we should, and we should resist ignoring this.

How Much Do We Truly Care?

How much do we really value the welfare of future generations or, indeed, the living standards of the people already affected by climate change elsewhere? What are some of the strategies and actions which we are seeing or might see to help us deal with the impacts of climate change on the people?

- (1) Many people believe that becoming rich might be a better (maybe the only) way, particularly to protect our own descendants. Throughout history, effective human societies have developed and relied on profiting through personal selfishness, even to the point of combining this characteristic with laws and regulations. There has also been limited reliance on unselfish generosity but this tends to be restricted to our families and those around us. We hear politicians of all stripes talking about protecting the world for our grandchildren's generation but there is little visible action portraying this concern.

Most of us do appear to be concerned for our own grandchildren, but how do we individually look after our own descendants? The uncomfortable reality is, as many believe, that we are better advised to accumulate as much wealth as possible – even if it means using large amounts of fossil fuel – and then bequeathing our descendants enough money to avoid some of the impacts of climate change. In countries with weak commitments to dealing with social problems, such as Canada and the United States, we will probably see the rich head for the high ground to give their children homes that will not be flooded.

Being realistic, most of us have very little interest in doing something for individuals out-of-sight, out-of-mind, i.e., our citizens who live in remote areas, or the people from far-away countries. Either that or we are entirely too reliant on the optimistic outlook. The important conclusion is, I think, that expecting people to value the lives of those remote from us in time and in place in a way similar to that we value our families and friends is very difficult barrier to overcome.

- (2) Is a person today worth the same as a person in the future? If so, some believe that we have to make financial sacrifices today to reduce the costs of climate change tomorrow. The thought is that we should not be defining what we consider to be appropriate interest rates on money we 'lend' the future just because it falls on people beyond our shores and beyond our years. But this is not reality.

Many people are generally happy to borrow from their future income (personal loans, credit cards, for example) and re-paying the debt over a set time period at much higher interest rates. This is a huge deterrent to climate change policy-making for many people. Their thought is: why should people who as individuals are willing to borrow from their future have to pay seemingly usurious interest rates when governments want to lend to the future either at no or low interest rates? When today's people – rich and poor – have such a strong preference for present-day consumption, how, for example, can we make the necessary investments in low-carbon energy that will take decades to pay back?

- (3) For climate change policies to work, they have to be pursued everywhere for generations on end. Can we rely on future generations to not revert to the wide-scale use of fossil fuel energy? If we lower our standard of living today by, for example, agreeing to the development of expensive offshore wind power, can we rely on future generations to honour that commitment? Many of us have doubts about the continuing commitment of people in the future. There will not be widespread trust in the sensible actions of people in a hundred years time to productively continue our sacrifices. This is probably because we have little faith and trust in ourselves to sustain our commitment to change.

Any Hope For The Future?

It seems to me that meaningful action on climate change seems to run counter to many of the stronger currents in the liberal societies around the world, particularly those societies run or guided by economists. No doubt the economists (and the politicians) think they are being helpful, but their relentless focus on what they consider the bottom line (financial costs and benefits) is disrupting the emergence of an ecological and social consensus as to what we might do about climate change.

I am convinced that the present-day focus on climate change (global warming) is allowing our decision-makers to 'back-burner' issues which are just as critical. Scientists have made predictions about the dire straits in which we will find ourselves in the future because of increased global temperatures, increased drought in many areas, increased flooding in many areas, melting icecaps and glaciers, etc. In other words, I see it is almost a Hollywood-like approach to a problem of epic proportions ("...the sky is falling..."). We are blatantly ignoring other problems that can be more serious locally than the specter of climate change (e.g., pollution of our air, oceans, rivers, and lakes; over-population; deforestation; soil degradation). These issues are all affecting us now and need to be addressed in a meaningful way.

Will we ever see our society agreeing to take the risks associated with substantive action on climate change if the worst effects only really began in twenty, fifty or a hundred years time? Doubtful. As long as the politicians (and their supporting cast of economists) focus on jobs, revenues, economic growth, etc., and as long as we exist under the delusion of security, I do not see significant action taking place. Even the prospect of charismatic species (e.g., polar bears, tigers, pandas) being extirpated or extinguished will probably not be powerful enough to motivate us to take the radical actions that are needed. The earlier the symptoms of global warming begin to affect the interest and well-being of powerful and rich individuals and nations, the more likely we are to see real action. The cynic in me almost hopes for some nasty disasters as soon as possible. Without them, I do not see us undertaking any meaningful political action while there is still time. The lessons from the near-breakdown of the global financial system should be blatantly obvious.

Having offered the opinions expressed above, I think that there is a primary reason for hope –

serious, highly-visible problems (e.g., drought in China, Australia, Spain and the western US; melting glaciers and ice caps; severe fires in the western United States and in Australia; mountain pine beetle problem in Canada) are being attributed to climate change. There is no irrefutable proof that any of these has been caused by global warming. But we humans tend to think that coincident events are causally related. Listen to the discussion around you – many people wish to believe that today's extreme weather events are caused by climate change. This is very useful to those who are calling for a push for concerted action soon. Politicians should be using these disasters to produce faster changes in policy and immediate action. But, can we rely on our politicians?

Compiled and synthesized by:

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