Introduction

'Is that it?' I asked my wife. 'Are we finally finished remodelling the house?' Much to my displeasure, Peg replied: 'Not quite.'

After three years of exhausting work that seemed to consume every weekend and many evenings, we were making the final touches to the dilapidated house we had purchased on 24 beautiful acres. The poor condition of the dwelling had reduced the price and made the purchase possible. Unfortunately, our infatuation with the land had led to a grave misjudgement about the house. It was in much worse shape than we had thought.

Exterior walls had dry rot. Windows leaked and provided almost no protection from cold or heat. Almost every exterior door was rotten. Paint was peeling and where it did stick, it looked like it had been applied before World War I. Carpets reeked of cat urine. Electrical plugs and wires hung from the walls. The kitchen and bathrooms were filled with fake plastic butcher-block counter tops and other accessories that must have been all the rage in the 1960s. And that was just the initial list.

My wife and I wanted to fix up the house using the most environmentally and socially positive practices and materials we could find. After all, my field is climate change and sustainability and I know that global warming is the formative issue of our time. I wanted to walk the talk and practise what I preach. My wife felt the same way. She works with small animals. Our house is always filled with cats and dogs and we wanted a safe, non-toxic environment for them.

We also wanted to learn. What was involved with designing a truly climate-positive sustainable household? What did it take to think through the issues and make decisions that were environmentally sound and socially and economically beneficial? Could the work be done without massive consumption of raw materials or producing huge amounts of greenhouse gas emissions and waste? If we found that thinking and acting sustainably were relatively straightforward, we felt confident that anyone could do it.

We had basic construction skills (mostly in demolition), so to reduce costs my wife and I did as much of the work as we could on our own. It was arduous. Unfortunately, it wasn't just the physical aspects of rebuilding the house that were difficult. Keeping our vision of a climate-positive sustainable home from being lost in the minutia of constant problem-solving proved to be even more challenging. A few decisions were easy to make because they involved choices between clear right and wrong options. For example, we met and exceeded all building codes and

energy efficiency standards. Most decisions, however, were much more difficult because they required thinking through complex issues and making choices between options that all seemed to have good qualities. We wondered whether it was better for the climate and natural environment to install super-efficient windows and in other ways increase the building's energy efficiency or to invest in technologies such as solar energy panels. We pondered the effects on communities both here and abroad if we purchased products made of natural materials made in a foreign country as opposed to synthetic ones made locally.

Motivating the contractors we hired to help us rebuild the house to use climate-positive sustainable practices and products was also challenging. As a rule, they had very little knowledge about, or interest in, sustainable design and construction. Instead, their thinking was oriented towards keeping their costs as low as possible by using the cheapest, easiest to obtain materials, many of which were made with toxic substances, doing just enough to meet local building codes, and then quickly moving on to their next job while leaving behind large amounts of waste. Doing the minimum was better for them, but would increase our operating costs and produce more environmental and social impacts over the long run. Their mind frame was myopic, meaning they focused only on their immediate needs and could not see how their activities affected the ecological and human systems of which they were part. Ongoing diagnosis and intervention were required to move the contractors from a state of non-awareness and resistance to understanding and action.

Most taxing of all, however, was the constant need to examine our own thinking and behaviours. Due to the relentless stream of obstacles we faced, my wife and I both had to work hard to remain open to new options and continually consider the effects of our activities on the climate, natural environment and people today and tomorrow. Luckily, my wife had the good sense to say 'stay the course' and suggest a glass of wine (organic, of course) at the end of the many days when our heads throbbed from the stress.

Our school-of-hard-knocks education shed some light on why the road to climate protection and sustainability has been so problematic. A good deal of information is available on the web and in books describing *what* people should do to reduce greenhouse gas emissions and behave sustainably. Books describe '50 things you can do to save the Earth', for example, and no less than 39 sets of sustainability principles have been established (Edwards, 2005).

Although they offer helpful tips, reality often quickly overwhelms standards and lists with complexity, making these tools of limited use. Few resources are available to help people think through and decide *why* and *how* to make climate-positive sustainable decisions given the complicated nature of the issues. These questions are much more important than catalogues of actions that individuals can take. People need reasons, not directives, to guide their thinking and behaviour when fundamental change is required.

Most people also don't know how to adjust their habitual thinking or behavioural patterns to incorporate climate-positive approaches, especially if, like

the contractors, their mind frame is oriented to the myopic take–make–waste model. In addition, most individuals are unaware of how to motivate other people or the groups and organizations they associate with to implement climate-positive sustainable solutions. As a result, confusion, fear and discouragement seem endemic today, leading to precious little meaningful action to resolve global warming, protect the natural environment or improve social equity.

This is disturbing to me because the fields of psychology as well as organizational change have long known that people, teams and organizations evolve through a series of fairly predictable stages whenever they undergo any significant transformation in their thinking and behaviour. Very different types of change mechanisms are necessary for people who are not yet interested in new approaches than for people who are considering a change, planning or actively engaged in new behaviours.

Research also shows that a systematic relationship exists between the weight people give to the costs and benefits of a change and their readiness to make a shift. The more the downsides of new thinking and behaviour dominate, the more people resist new approaches, and the more the upsides rule, the greater the likelihood that change will occur. The different interventions used to help people progress from the initial stage of not being ready to consider new thinking and behaviour to the later stage of change where new patterns are firmly embedded must increase their perception of the benefits and decrease their concerns about the downsides of change. Change interventions must also increase the confidence people have in their ability to make a shift. In some cases, this may involve skill building and other times may require addressing countervailing cultural and social norms or other perceived or real obstacles.

Information about the process of change does not seem to have made its way to those promoting climate protection and sustainability. Often, no systematic change strategy exists at all, or if one does exist it is based on a one-size-fits-all approach that reaches only a small number of people.

Generally, 80 per cent or more of any group of people are not prepared to quickly alter their thinking and behaviour on an issue. This is especially true when the changes involve deeply held beliefs and assumptions about other people or the natural environment. It should therefore be no surprise that many climate protection and sustainability initiatives struggle. Most tend to emphasize either generic information campaigns or, conversely, action-oriented policy initiatives. The implicit assumption seems to be that people are either totally unaware of the issues or, on the other hand, are ready to act. The vast majority of people and organizations, however, usually lie somewhere between those two poles. People whom climate and sustainability-change initiatives fail to address naturally ignore or resist the need for new thinking and behaviours.

Said differently, change experts have long known that information alone is not sufficient to foster fundamental change. Action without some degree of increased awareness, however, also usually fails. Communications embedded in strategically targeted cognitive, experiential and behavioural change interventions

are necessary to address the needs of people no matter what their stage of change may be.

One very successful model that meets these needs is what I call the 5-D 'staged-based' approach to change. The 5-D staged approach applies to individuals, teams and organizations, and, I believe, to society as a whole. It employs a suite of specifically tailored change interventions to help people move from their current stage of change, no matter what it may be, to the next, all the way to action.

My concern over the scarcity of resources available to help individuals and groups institute effective global warming and sustainability communications, behavioural change and policy initiatives led to this book. It is not filled with lists of things you can do to reduce greenhouse gas emissions and become more sustainable. This book is about the process of new thinking and change, not the outcome.

In one sense, this volume is a follow-up to my previous book, *Leading Change Toward Sustainability: A Change Management Guide for Business, Government and Civil Society* (Doppelt, 2003), which describes how organizations can alter their systems of governance, culture and leadership to embrace sustainability. People I spoke with during my research for *Leading Change* often told me they wanted to learn how to shift their personal thinking and behaviours from unsustainable to sustainable, and help people whom they know and work with do the same. This book is my attempt to honour those requests.

In another sense, this book is an altogether new venture. Through my work directing the Climate Leadership Initiative at the University of Oregon, it has become abundantly clear to me that we will not protect the climate or adopt a path towards sustainability unless a vast number of people reorient their thinking and behaviours.

For instance, many people – in particular, environmentalists – hold the perception that climate protection and sustainability are about the natural environment. This is wrong. Sustainability is about *us*. It's about altering the way in which we humans imagine, design, build and operate our economic and social systems. The climate and natural environment are just some of the many beneficiaries of more mindful and effective human behaviours.

Despite the fears of many in the business community, climate protection and sustainability are also not about constraining the economy. To the contrary, only by increasing prosperity, well-being and security around the globe will we protect the climate and achieve sustainability.

Although many politicians would have you believe that new technologies and policies lie at the heart of climate protection and sustainability, this is also erroneous. New ways of providing goods and services and the policies needed to foster them are merely the outcome of something much more fundamental, which is a deep-seated change in how we perceive and respond to the world around us. At their core, climate protection and sustainability are about *new ways of thinking and behaving*. Until this is understood by a majority of the population, little progress will be made.

The struggle to resolve global warming and today's other pressing environmental and social challenges thus reflects, more than anything, a crisis of thought. In fact, I believe that climate change represents the greatest failure of thought in human history. The most urgent need is for all of us to look inside and decide if our core beliefs and perceptions, and the behaviours that they spawn, match the nature of today's reality and if we are living up to our most deeply felt values and aspirations. If people and organizations can become motivated to engage in this type of deep-rooted appraisal and then be helped to progress through the normal stages of change all the way to action, solutions that increase economic prosperity and social well-being and that protect the environment will inevitably follow. It is my hope that this book will, in some small way, contribute to this goal.

REFERENCES

Doppelt, B. (2003) *Leading Change Toward Sustainability: A Change Management Guide for Business, Government and Civil Society*, Greenleaf Publishing, UK

Edwards, A. (2005) *The Sustainability Revolution*, New Society Publishing, Gabriola Island, BC