

## **The Larger Challenge**

**We are starting to understand that a healthy environment, a healthy community, and a healthy economy are inextricably linked**

There is a dream where people live in communities that generate most of their own required energy, where people walk to work because it is close to where they live, where they go to the local grocery store in small electric vehicles, where the daycare is adjacent to where they work, and they have lunch with their neighbours. At work they have a telepresence connection in an executive office so they are electronically integrated with the rest of their company, wherever it may be. Their house is cleverly designed to make use of solar heat and energy, is heavily insulated and has triple-glazed windows. Walking and bicycle paths take design precedence over roads. Children spend more time playing outdoors and parents spend less time driving them around. The school is close by and has a generous playground. People know their neighbours and are proud of their community. Anyone who has a good level of education and skills can find a job. People travel, when they need to do so for business meetings and vacation, on transit and airlines. The community is surrounded by, and places much less stress on, a vibrant and biodiverse environment that delivers significant ecological goods and services. This community affords a high quality of life and yet uses much less energy than we do today.

An appropriate question is “can the free-market bring about such a vision with the appropriate incentives?”

Richard Dawkins speaks of how our fascinating world with all its built-in biodiversity and balance is created by the selfish gene. This physical world has rules, or limits, within which the selfish gene operates. If we were to set up a world of minimal rules within which the selfish entrepreneur works, what should the rules be?

Thomas Homer-Dixon in his book *The Upside of Down*, talks about how societies grow more complex over time and that the energy requirement to support that complexity grows along a similar curve. The conundrum is that our increasingly complex and wealthy civilization is supported by a capitalistic consumer economy which in turn is supported by a high level of energy input. Yet the main source of this energy, the burning of fossil fuels, is also bringing about environmental changes which may well threaten our economy if not our very society.

Is there a set of rules to this game that would bring about our dream and avoid this economic energy trap? Can the selfish entrepreneur get us there with a simple combination of cap-and-trade systems, education, royalty regimes, energy taxes, and appropriate fiscal and monetary policy? Or is a more fundamental restructuring of our cultural and financial system required?

The research required to move our society forward is significant. As we work to identify research gaps and possible pilot projects there will be many difficulties. Many people around the world are addressing this challenge and finding it slow going.

My experience from many years and many challenges is that there is always a solution. Let's not fall into the trap described by Gonzales de Cellorigo who, in describing the centuries ago decline of Spain with its concurrent lack of effective leadership, wrote "those who can will not, and those who will cannot".