

The third biennial **Muskoka Summit on the Environment** took place at the Rene Caisse Theatre in Bracebridge, Ontario over May 8th and 9th, 2014. The topic this year was '**Environment vs Economy: Resolving the Dichotomy**', and six invited speakers from across North America discussed this topic from their particular perspectives. The Summit also featured on the June 4th episode of Paul Kennedy's award-winning CBC Radio program, *Ideas*.

A Communiqué has been developed at each Summit that attempts to capture the highlights of the discussion. Speakers, participants and organizers all contribute to the text. The Organizing Committee intends that this Communiqué be a brief summation of the issues explored at the two day event and it is available for all participants to use in further discussions.

Needed: A New Economy for a Finite Planet

Our planet is finite. We use and alter the earth's environment to sustain our economy, which, therefore must also be finite and incapable of perpetual growth. Humans are now so numerous and so powerful that our activities are causing measurable changes to the state of our planet; changes that can also be detrimental to our continued well-being. Our global population and our economy (the sum total of our activities) both continue to grow. Therein lies the problem. Our economy can be sustainable only if married to a sustainable environment in which the human enterprise is managed so that ecosystems continue to function and provide the resources and services on which all life depends. This means that we must establish a level of economic activity that is commensurate with the planet's capacity to sustain it. A healthy economy can be compatible with a sustainable environment, but only if that 'health' does not require continuing growth.

In recent years, thinking on environmental sustainability has been formalized in terms of nine planetary boundaries that define the safe operating space for humanity with respect to the Earth system. These boundaries are associated with the planet's biophysical subsystems or processes, and include rate of biodiversity loss, changes to the rate and pattern of global freshwater use, the nitrogen and phosphorus cycles, change in land use, and climate change. By managing human activities to avoid transgressing these boundaries, we avoid causing widespread environmental changes that would have unacceptably large or abrupt impacts on human lives as well as on lives of other organisms.

Conventional economic theory defines a healthy economy as one that grows steadily, creating increasing wealth, and therefore increasing quality of life for people. An economy growing at less than about 3% per annum GDP is seen as one that cannot sustain the demand for increasing wealth. A growing economy typically consumes more resources and energy and generates more waste.

Since 1960, the human population has grown 2.34 fold, the mean per capita rate of consumption (per capita GDP) has grown 2.5 fold, and, as a result, the global GDP has grown 5.9 fold. Not surprisingly, this growth in GDP has been strongly correlated with growth in use of resources, and growth in use of energy. Since the growth in energy use has been primarily through expanded use of fossil fuels, there has been concomitant growth in emissions of CO₂, a major greenhouse gas contributing to climate change. Current trends are all increasing.

There also have been impressive increases in the efficiency of the economy – growth in use of resources and energy has been somewhat less pronounced than growth in global GDP. In addition, there have been instances of more abundant resources being substituted for ones that have become scarce, and of agricultural innovations that have increased the capacity of

environmental systems to generate needed resources. Such technological improvements to the 'economic engine' have lessened the environmental impact of the great increase in global GDP that has occurred. However, to gamble on a continuing stream of such improvements into the future is clearly foolish, and humanity is now pressing up against several of the planetary boundaries. We already appear to have exceeded the boundaries for biodiversity loss, climate change, and the nitrogen cycle; and boundaries for global freshwater use, land use, ocean acidification and the global phosphorous cycle are approaching rapidly. In these circumstances, it is very risky to assume that somehow we will find still more undiscovered ways to permit continuing growth on our finite planet. There are alternatives to the conventional economics of steady growth and use of GDP as the sole measure of economic health. These alternatives have got to be explored.

We urgently need to acknowledge that the growth of our economy, a human construct, must and will be constrained. We also need a profound philosophical shift so that, when weighing the quality of a life, we value features other than the accumulation of material riches. Distinctly possible futures exist in which there are fewer people on the planet, but they lead culturally rich, intellectually stimulating, healthy and productive lives within a stable economic system in a sustainable environment. None of them will be reached unless we alter our measure of what constitutes a 'successful' life, and our understanding of the 'purpose' of the natural world.

People intuitively recognize the non-monetary value in family and societal links and in ties to a homeland. Beyond the satisfaction of basic needs for food, water, and shelter, the accumulation of wealth is not critical to well-being or a sense of contentment. The arts, literature, and stories told round a campfire have value that far exceeds that of the material resources that make them possible. We would do well to refocus our economy to provide satisfying occupations and personal well-being, instead of wealth and conspicuous consumption. We should also measure progress using alternatives to GDP, such as the General Progress Indicator or Gross National Happiness Index. We can relearn Robert Kennedy's 1968 lesson: GDP "measures everything in short, except that which makes life worthwhile", and apply that lesson to our lives.

Over the last 200 years, we have progressively broadened the concept of intrinsic rights to apply to an ever-widening portion of humanity. This process is continuing, and there now is growing recognition of the rights of other species, and of nature itself. This changing perspective has occurred in parallel with a growing awareness that the natural world does not exist in order to support our needs. While these philosophical shifts are still emerging, they do help us make the profound adjustments in thinking about the economy and the environment that our current predicament requires. This shift in perspective will be hastened by a more complete weighing of the costs and benefits of economic decisions; one that adequately incorporates all environmental, economic, cultural, and social tradeoffs. We all must start acting in ways that ensure economic decisions keep humanity within the nine planetary boundaries. This is the essence of sustainability. Above all, what is needed now is a much fuller discussion, locally, nationally and globally, of what we value in our lives and our environment, and a concerted effort to revise economic models and practice to comply with the requirements of a finite world. There is room for optimism, but not a lot of time in which to act.

ENVIRONMENT vs ECONOMY
resolving the dichotomy