Climate change: Cultural shift needed similar to smoking, slavery

October 27 2010

(PhysOrg.com) -- Despite scientific evidence of climate change, it will take a significant cultural shift in attitudes to address the situation, says a University of Michigan researcher.

The shift would be much like what has happened with recent cigarette smoking bans and even similar to the abolition of slavery in the 19th century.

"The present reality is that we tend to overlook the social dimensions of environmental issues and focus strictly on their technological and economic aspects," said Andy Hoffman, the Holcim (U.S.) Professor of Sustainable Enterprise at the Ross School of Business and School of Natural Resources and Environment. "To properly address climate change, we must change the way we structure our organizations and the way we think as individuals.

"It requires a shift in our values to reflect what scientists have been telling us for years. The certainty of climate change must shift from that of being a 'scientific fact' to that of being a 'social fact.'"

In an article published in the current issue of the journal *Organizational Dynamics*, Hoffman compares the current cultural attitudes toward climate change to historical societal views on smoking and slavery.

For years, scientists pointed to data that would suggest that smoking causes lung cancer, but the general public consciousness ignored that

fact, he says.

"And yet, the general public now accepts belief that smoking and second-hand smoke cause lung cancer," said Hoffman, who is also associate director of the Erb Institute for Global Sustainable Enterprise. "They have become 'social facts' and with that shift, action becomes possible."

Hoffman says that climate change today still resides in the "pre-social" fact phase, awaiting public acceptance. He points to the abolition of slavery as an example of the magnitude of the cultural and moral shift it will take in order for climate change to become a social fact.

During the 1700s, slavery was a primary source of energy and wealth around the world, especially in the British Empire. Abolitionism was seen as a challenge to the way of life in Great Britain, leading to the collapse of its economy. It would eventually take about 100 years to abolish slavery.

"Just as few people saw a moral problem with slavery in the 18th century, few people in the 21st century see a moral problem with the burning of fossil fuels," Hoffman said. "Will people in 100 years look at us with the same incomprehension we feel toward 18th-century defenders of slavery? If we are to address the problem adequately, the answer to that question must be yes—our common atmosphere will no longer be seen as a free dumping ground for greenhouse gases and other pollutants."

But Hoffman says this value shift will require people to come to terms with a new cultural reality: first, that we have grown to such numbers and our technologies have grown to such a capacity that we can, and do, alter the Earth's ecological systems on a planetary scale; and second, that we share a collective responsibility and require global cooperation to solve it.

According to Hoffman, research and experience support the conclusion that there is a range of individual- and organizational-level biases that operate to maintain current behaviors that do not support sustainability.

Organizations must augment the development of new protocols for carbon accounting or economic incentives to reduce emissions in order to overcome these obstacles and to change the culture and values of the organization, he says.

"These alterations must integrate sustainability concerns into the existing routines by which business strategies are constructed, recasting them in ways that are mutually beneficial to the objectives of individuals, organizations and the sustainability of the ecosystem on which they depend," he said. "The solutions to climate change within the organization must emerge from an alteration of the organizational system, reaching deep into the levels of the core beliefs and values that members hold toward the relationship among the organization, the market and the natural environment. It involves the unlearning of what has been ingrained."

Hoffman says that organizations must develop a climate strategy by conducting an emissions profile assessment, gauging risks and opportunities, evaluating options, and setting goals and targets. Once a strategy is established, organizations must create financial mechanisms to support climate programs and get employee buy-in by educating and rewarding its work force. Finally, organizations must be aware of regulatory policy options that would most benefit their own business strategies and ideally "gain a seat at the table" when future regulations are designed.

"For business, the rules of the game are changing, and companies are finding that the implications of these changes have deep cultural significance for their organizational purpose and objectives," Hoffman

said. "No solution to [climate change](#) will ever be found if we do not spend time changing the culture and values by which we make and implement our decisions."

Provided by University of Michigan