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Adapting now is the way to duck disaster

By H. Sterling Burnett

Consensus is forming that rather than trying to prevent global warming, we should adapt to higher temperatures.

Research indicates, for example, that problems like malaria, hunger and coastal flooding can be more successfully alleviated by reducing vulnerability to climate-sensitive hazards than by restricting energy use to prevent warming.

Indur Goklany of the Department of the Interior examined the relative benefits and costs of preventing, or mitigating, carbon emissions rather than adapting to climate change. He concluded that adaptation could produce the same or greater benefits at a fraction of the cost.

For instance, meeting the relatively modest carbon dioxide reductions required by the Kyoto protocol would cost an estimated \$165 billion annually.

More aggressive proposals to actually stabilize atmospheric levels of the gas at 550 parts per million -- about twice as high as pre-industrial levels -- would cost trillions of dollars. By contrast, focused adaptation efforts would cost roughly \$10 billion annually.

Comparing the results of these three alternatives is instructive. By 2085, up to 8.8 billion people worldwide are expected to be at risk from malaria.

Meeting the Kyoto protocol's emission reductions would reduce the population at risk from malaria by only 0.2 percent, and stabilizing carbon dioxide emissions at 550 parts per million would reduce the population at risk by only 0.4 percent.

By contrast, investing an additional \$1.5 billion annually would cut in half the deaths due to malaria.

The number of people threatened by hunger worldwide, even with population growth, should fall from about 521 million people today to 300 million in 2085.

Meeting the Kyoto protocol's emission reduction targets would reduce the population facing hunger by less than 2 percent, and stabilizing carbon dioxide emissions at 550 parts per million would reduce the population facing hunger by at best 10 percent.

However, investing an additional \$5 billion annually would cut the population at risk of hunger by 50 percent -- beginning today, not in 80 or 100 years in the future.

Global warming could raise sea levels by an estimated 0.5 meters by the end of this century, putting an additional 81 million people at risk of coastal flooding. Satisfying Kyoto's emission targets would reduce the population at risk from

coastal flooding by 18 percent, while stabilizing carbon dioxide emissions at 550 parts per million would reduce the population at risk by about 80 percent.

However, the United Nations' own research shows that investing an additional \$1 billion annually in adaptive measures -- such as building sea walls and relocating coastal populations -- would reduce the number of people at risk from flooding by almost 100 percent.

Goklany is not the only researcher to promote adaptation. In 2004, eight world-renowned economists, including three Nobel Laureates, were asked to rank a range of proposals identified by the United Nations, supposing that an additional \$50 billion of resources were available.

Three proposals to deal with climate change by reducing carbon dioxide emissions were ranked dead last and identified them as "bad."

The panel concluded that the cost of these proposals, including the Kyoto protocol, far exceeded expected benefits, and that it would be far better to address problems, including malaria and hunger, directly today rather than attempt to stem the rise of greenhouse gases.

Why defer confronting threats posed by global warming for years, and then only address them indirectly, rather than attacking

them head on today? That is the question confronting us.

And as economists and scientists evaluate data rather than the

politics of rising global temperatures, adaptation has emerged as the no-regrets climate policy.

H. Sterling Burnett is a senior fellow with the National Center for Policy Analysis --