

'Op-ed by UNEP's Executive Director Achim Steiner':



As international representatives gather tomorrow for the Washington Legislators Forum to discuss climate change, they will do so understanding that 2006 was the year when "climate change" and "biofuels" became part of the common lexicon - and not a moment too soon. A new breed of "prospectors" have set off a rush to claim their stakes in the green gold of biodiesel and ethanol.

Driving their stakes in the exploding markets for alternative fuels, these prospectors - farmers and financiers - invested \$2 billion last year, a trend that is likely to continue as the world's energy demand is projected to increase as much as 50 percent over the next two decades. Biofuels have the potential to meet 50 percent or more of the world's energy demand over the next century in a sustainable and cost-effective manner. Or not.

The excitement of new markets and new technologies can often cloud the realities of hidden costs and unseen effects. As U.S. presidential candidates line up to take "the pledge" on ethanol and other alternative fuels, they need to remember the law of unintended consequences. The path to sustainable development is paved with well-intentioned but failed projects - chlorofluorocarbons are a good example.

There is no question, however, that biofuels can reduce greenhouse gas emissions and local air pollution. A vehicle running on ethanol from sugar cane produced in Brazil, for example, produces 90 percent less carbon dioxide than if it ran on gasoline - and increases energy security by reducing demand for imported oil. Just a 20 percent blend of biodiesel can reduce asthma-causing particulate matter by 30 percent and acid-rain forming sulfur dioxide by almost 100 percent. Locally produced biofuels also increase energy and economic security while promoting rural development.

For a biofuel industry to develop sustainably, however, clear international rules are needed that govern the way biofuels are produced and sold. As with environmental certifications for other products, new biofuels can be internationally certified along environmental and social criteria, which can protect producers from risking their reputations and assist governments to use natural resources sustainably.

Biofuels present a complex challenge of natural resource management and land-use planning. Crops must be suitable to the land and water resources of each region while protecting existing forests and biodiversity, and the production of food and fuel needs to be balanced.

The large-scale clearing of native forests for plantations of oil-bearing plants such as palm oil - common now to many developing countries - is simply unsustainable, and can even increase carbon emissions.

From a social perspective, a sustainable biofuel industry addresses labor and health issues and respects the rights of indigenous people who may be marginalized by large-scale projects.

And from an economic perspective, the market acceptance of biofuels will accelerate if the costs of climate change and pollution are captured in the price of energy, an omission that unfairly makes conventional fuels look more financially attractive than they really are. Reforming the \$600 billion annual subsidy to global agriculture by eliminating the most inefficient subsidies would help developing countries participate in rapidly evolving global biofuel markets while creating their own sustainable biofuel sectors.

If the world's governments can invest some of those subsidies into research and development of new processes and feedstocks, the returns could be enormous.

The promise and challenge of biofuels lie at the crossroads of sustainable development, agriculture and international trade. These are early days with plenty of growing pains, and there are mavericks that see opportunities without the costs. Unless the development of biofuels is carefully considered and managed, however, the world can wind up in a zero-sum game where one environmental problem replaces another.

We must proceed to develop biofuels quickly yet sustainably.

Op-ed by Achim Steiner, Executive Director, UNEP

In Baltimore Sun, February 13, 2007