

Global Security Issues and Ecosystem Markets

Presentation to Environment Business Australia Forum, "Environmental Markets and Beyond" by David Brand, Managing Director, New Forests Pty Limited, Melbourne, Australia, September 11, 2006

Good Afternoon everyone. Thank you once again to Environment Business Australia for organizing this forum and for the invitation to speak to you.

I would like to start by saying that participating in this event on such a sad anniversary should provide us food for thought. The global war on terrorism has truly dominated international politics over the past five years, and has certainly overshadowed progress on global environmental security. While some have argued that climate change and other global environmental issues should be afforded equal priority to the fight against terrorism, the reality is that there has been a loss of momentum, in spite of progress on the Kyoto Protocol and emissions trading.

I once talked to a seasoned diplomat about why the world had such a difficult time focusing its efforts on the obviously major issues around environmental degradation. We all know that we are in an unsustainable economic system. The signposts are there:

- A 35 percent increase in atmospheric carbon dioxide concentrations, likely to continue throughout the 21st century until we double or even triple the concentration of greenhouse gases in the atmosphere.
- Approximately 40% of net primary productivity of ecosystems is now diverted to human use and this is increasing.
- 60% of our ecosystem services--- things like water purification, soil conservation, and biodiversity conservation---- are either in decline or being used unsustainably
- WWF estimates that our use of natural resources now represents 1.3 times the carrying capacity of the earth.

Yet our ability as a global society to address these trends is seemingly limited.

The diplomat gave me a very compelling lecture on the problem of making the environment a central theme of the international community. He argued that the primary concerns of human beings are analogous to Maslov's hierarchy of human needs. The first primary level of concern

relates to survival---the public is first and foremost concerned about the safety of themselves or their loved ones. This effectively explains the political focus on terrorism and security issues. Second to this is economic security, and the need for people to be able to afford goods and services that make their life comfortable and stable. Below this is a search for self-actualization, such as the arts and appreciation of nature. In this hierarchy, my friend argued, the environment only surfaces when the higher order issues are addressed. For example, he explained, the Earth Summit in 1992 was successful because we were in a condition where the threat of nuclear war with the Soviet Union had receded, and most people in developed countries were able to focus on environment as a security issue. The World Summit on Sustainable Development in 2002, however, was exactly the opposite. A world in the throes of responding to the threat of terrorism was unable to establish a new and effective agenda on Environment and Development, and the US President did not even participate.

Today, it might be argued, the environment is a second order issue in the public psyche, well behind terrorism. Yet because we are allowing our form of economic growth to outstrip the capacity of the planet, we are increasingly risking a new wave of impacts on both personal security and economic security. It is not easy politically to take actions in advance of a crisis, but this is the problem that we face. If we consider the implications of a business as usual scenario on the global ecosystem in 2050 it is truly a threat to our collective security.

I therefore think that investors should look beyond the current focus on terrorism and consider the implications of a future rise in environmental security issues on their investments. Water, greenhouse gas emissions and biodiversity conservation will become increasingly costly inputs to production. The days of building new coal-fired power plants, converting primary rainforest to oil palm plantations, and irrigation of commodity agriculture crops like wheat, will end—first because they become uneconomic, and then because they become politically unacceptable.

Our business, New Forests, tries to look at the implications of these trends. We try to consider what environmental degradation and the pricing of ecosystem services will mean for our clients. For example, we seek investments that will operate in the current economy, but increasingly prosper in a world where environmental impacts are priced. We focus on ecosystems, particularly forests, and we look at things like

the capacity of our investments to enter carbon markets, to rationalize water use, or to conserve and rehabilitate biodiversity.

This is quite challenging, as we have the conundrum that while investors understand that many environmental impacts are unpriced in our current economy, they also need hard evidence that owning biodiversity, for example, is a viable commercial investment.

So we are looking for what I might call transition assets—investments that have an existing commercial return, for example from timber production, but which will become more valuable as they transition to become biodiversity banks, carbon sinks and catchment management systems.

For example, let me give you some idea of what I am talking about:

- Reforestation in NSW will not only produce timber, but now allows creation of Greenhouse Gas Abatement Certificates
- New Zealand has announced a permanent forest sinks initiative which allows us to gain access to Kyoto units from reforestation of native species
- The depletion of natural forests, and crackdown on illegal logging in the Asia Pacific region, increasingly means that maintaining land in forestry is becoming more commercially attractive than converting land to palm oil production.
- Many of the irrigation districts in the Murray Darling Basin need to intensify production, despite a finite water resource. Bringing new investment to create water banks and conservation banks can provide the capital needed to double or triple water use efficiency.

In conclusion, I suppose that our challenge is to convince investors that the environmental threats that we face can also provide opportunities. We live on a planet with finite natural resources. In the same way that we have seen oil prices go through the roof, similar supply-demand imbalances will have to affect the value of biodiversity, freshwater and carbon emissions.

Carleton Bartels, one of the innovators in the carbon market, was lost in the September 11th attacks, but I think he would have been happy to see that despite the focus of the international community on the war on terror, the carbon market has grown to meet the expectations that he and many of us had five years ago. The challenge now is to go beyond just carbon and establish a set of prices and markets for the whole range of ecosystem

services that support life on earth. This truly is our greatest collective security challenge.