

Profiting from Environmental Markets

Remarks to Environment Business Australia dinner by David Brand, Managing Director, New Forests Pty Limited, April 10, 2006, Melbourne

I want you to consider this evening the implications of the trajectory of our economy and population growth over the next 50 to 100 years. I would like you think about what the world will be like with a Gross World Product of four times our current global economy in 2050, and 16 times our current GWP in 2100. Yes that's right--- 16 times the current Gross World Product. If we have an average 2.8% per annum growth in the global economy, that's the numbers. That's a global economy of about \$USD464 TRILLION per annum. Even if you think that the global economy will only grow by 2.0% per annum, that is a global economy of about \$USD125 trillion per annum.

Does anyone in this room think that that is sustainable under our current economic system of natural resource consumption?

It has been estimated by the WWF "Living Planet Report" that we already use about 1.3 times the carrying capacity of the earth, Scientist estimate that we divert about 40% of the gross primary productivity of photosynthesis on earth to human use. We have already increased global atmospheric carbon dioxide concentrations by about 35% since pre-industrial time. The Millenium Ecosystem Assessment concluded that approximately 60% of ecosystem services are being used unsustainably or are in decline.

If we try to play this movie forward, what kind of world would we have in 2050 and 2100?

The price of a Megalitre of freshwater will be quoted on the evening news every night much like West Texas Intermediate Crude is quoted today. There will be little or no tropical rainforest left, as it will all be converted to genetically engineered oil palm, soybeans and other commodities. Naturalness as we know it will be largely gone, aside from limited reserve areas, and the global ecosystem will be totally dominated by human systems. The wild species left will be generalists like sparrows, foxes, rabbits, surviving in ecosystems dominated by weed vegetation. I could go

on about the spread of diseases, natural catastrophes, etc, but I won't

My objective tonight isn't to ruin your dinner. Instead it is to point out that the status quo is not just unsustainable, it is fundamentally infeasible. Therefore the economy will be repositioned, and those who understand the process of repositioning will succeed against those who try to operate in the status quo.

The central problem, which will break down is environmental externalities. Our current system is based on the ability to use the atmosphere as a dumping ground, to consume biodiversity and convert it to human production systems, and to use freshwater wastefully, consistently converting it into increasingly unusable forms.

I work in a business, New Forests, that aims to profit from the transition to pricing environmental externalities related to greenhouse gas emissions, biodiversity and freshwater. We are starting from a position of helping investors become positioned in assets that will operate in our existing economy, but which will appreciate in value as price signals for carbon, water and biodiversity expand and increase in value.

I've been at this for about 10 years now. However, the last 12 months have been a sea change. If we look around the world, we now have a carbon market worth \$USD11 billion in turnover per annum, growing exponentially. There is now about \$USD3.7 billion invested in carbon funds that weren't there a year ago. Water rights in Australia are probably already worth in the order of \$100 billion and rising. We are seeing endangered species and wetlands banking firms in the USA now generating revenues of \$1 billion per annum.

How is this transition occurring?

In some cases it is just a process of issues finally reaching a kind of tipping point, where the political cost of supporting the status quo exceeds the political cost of regulation. In other cases the underlying environmental or ecosystem assets are finite, and when they are finally fully allocated, the price snaps like a rope pulled tight. Once an asset like water becomes valuable, then the price signal pushes into land management forcing a rationalization of

cropping, land use, vegetation management, fertilizer use, and soil conservation.

Once carbon becomes valuable, we will see energy conservation, re-engineering of industrial processes, a focus on fugitive gases, changes in building management, forest conservation and reforestation, etc.

Once biodiversity becomes valuable we will see national parks becoming augmented by private biodiversity banks, a substitution of technology for land in the agribusiness sector, increasing urban population density vs suburban sprawl, and an emphasis on organic produce in grocery stores.

I'm not some kind of futurist. But it is patently obvious to me that there will be spectacular growth in industries that specialize in environmental commodities like water banks, biodiversity banks, carbon pools, and land funds. There will also be big growth and profits in waste management, recycling, water efficiency infrastructure, renewable energy, land rehabilitation, building re-fit businesses, organic agriculture, environmental certification processes, and private registries and accounting services for ecosystem services.

All of you here in this room are already in the game. We are entering into a new and exciting era, but we need to focus on an orderly transition to the full pricing of environmental services, environmental externalities and environmental commodities.

The key to the transition is investors. There are huge pools of capital being deployed today—for example there is almost \$1 trillion in Australian super funds, and about \$USD20 trillion in US institutional investment---and investors must understand that there is greater growth and opportunity in areas of the economy that conserve or replenish the environment, than in those that consume it.

To me the investment community is like a food chain of risk return profile. At the front end, where this stuff is happening are the private equity firms, hedge funds and speculators. They are willing to take early positions in water, carbon and biodiversity markets. And we are already seeing this. I was in NYC recently and met

with companies who are buying any kind of environmental asset position. The same is happening in London.

These companies create liquidity in the market and then sell down to the Institutional investors, often at a handsome profit, as these environmental assets and the businesses controlling them are revalued. Institutional capital then bulks up the market and replicates business models as price signals emerge. Companies with substantial environmental externalities and impacts become less profitable as their margins are eroded to pay for their impacts. Investment allocations shift, and new businesses exposed to environmental markets gain value and market share, and outperform the status quo.

If you look back 100 years, there are very few companies who have maintained a position in the Dow Jones—I think that GE is about the only one. It is interesting to see that GE is now re-positioning itself into the arena of environmental technologies like water and renewable energy. I wonder what the ASX 100 will look like in the next 100 years. Will companies controlling and developing water, carbon and biodiversity assets replace mining companies, automotive manufacturers and energy companies?

The Economist published a review of Sustainable Development a couple of years ago. The Author, Vijay Vithaswaran titled the survey, 'The Great Race'. His central premise was that the drawdown on natural capital to promote economic development was in a kind of race against the demand by affluent societies for environmental security. A world in poverty is unable to focus on environment, as the short term needs for subsistence overwhelms any altruistic concern about environment. We now see major economies such as China and India transitioning through the process of economic growth to the point where they will evolve from centers of ecological impact to major markets for ecosystem and environmental services.

The opportunity for Australia is to be part of the leadership in this area. Michael Porter of Harvard University, the global commentator on the competitiveness of nations has suggested that countries who learn how to fix their problems first end up exporting the solutions, and becoming world leaders in the business opportunities that follow. I believe that our environmental problems – among the highest per capita greenhouse gas

emissions, highest per capita water usage, and probably among the highest per capita biodiversity impacts---- are in fact an opportunity.

Of course it has been frustrating over the recent past as key industry sectors have lobbied for continued ability to avoid paying for environmental externalities. But the winds of change are upon us and, as Australia steps up to the plate and begins to regulate emissions, water, landclearing and biodiversity, we will see a pent up entrepreneurship emerge.

As an example our company is already working with governments, business and industry internationally, and playing off our strength of having an Australian background. We are seeing a rapid expansion in understanding the opportunities that arise from environmental and ecosystem markets. Surprisingly Australia is seen as an innovator in this area. We had the first greenhouse gas market in the world in NSW, we are allowing the tradability of water rights, and there are a series of innovative programs around biodiversity.

I suppose that my message tonight is one of commercial opportunity. Let's think about the environment as a natural infrastructure. Macquarie Bank has been a world leader in infrastructure investment, and profited from that innovation. Why shouldn't Australian firms be leading the world in carbon pooling, water banking and biodiversity banking? It all comes down to convincing key business leaders and politicians that this is an opportunity rather than a threat.

Thanks for your time this evening.