

## Investment IN THE Planet's FUTURE

By David Brand

> Forests are no longer seen as simply a source of timber – they hold big pay-offs for both investors and the environment <



> Much of the forest industry around the world was originally developed through the exploitation of natural forests. The major investments needed by early forestry companies were in building sawmills and pulp mills, establishing roads to the forests, and hiring crews and equipment to harvest and transport the wood from the forest to the mill. In fact, much of the forestry investment was based on the work of astute 'timber cruisers' who would survey forests for their value and seek to buy them or have them dedicated in timber licenses to their clients.

In Australia, up until the mid-20th century, there was limited commercial value placed on the forest, although species such as the red cedar (*Toona australis*) supported early commercial logging operations. Much of the forest was considered scrub or bush and cleared for more valuable agricultural uses. A few foresighted foresters and administrators did seek to protect areas for future timber production purposes, and these areas were largely maintained as state government-owned forests. After World War II, Australian governments realised that the natural hardwood forests would be insufficient to provide the timber needed to meet a growing population and growing economy. While Australia had been able to import timber, particularly Douglas fir from western North America, there was a view by governments that moves towards self-sufficiency in major natural resources such as timber would benefit the country.

This drove the first real wave of forestry investment in Australia. In the 1960s and 1970s, the federal government provided low-interest loans to state governments to support the establishment of softwood plantations that would provide the future building materials for expanding housing needs in the burgeoning cities. Traditional Australian foresters managing the native eucalyptus forests often complained that they were forced to accelerate the harvest of the native forests to provide the funds to support the ever-expanding softwood estate – primarily radiata pine and slash pine species originating from North America.

#### FOREST INVESTMENT TODAY

Softwood plantations in Australia were funded by governments because the private sector would not consider such long-term investment propositions. Although companies would undertake reforestation of logging areas, the rationale for tree-planting was based on considering the reforestation as a required cost of harvesting the existing timber. Actually buying land and planting trees for a harvest in 30 to 40 years' time was unthinkable from an economic perspective.

#### Biography

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One early exception was based on the agrarian basis of Australian tax law. Farmers who invested in developing their land and putting in crops could deduct the costs from their income as an expense. Schemes began to emerge in the 1970s to allow wealthy individuals to invest in reforestation projects and deduct the costs from their other income. In many cases the promoters would provide loans to the investor, thus providing tax deductions without upfront investment. Many of these schemes, however, were poorly managed and once the tax deductions were gained, the investors had little ongoing interest. In many cases, the forests were not properly tended and had limited long-term value.

However, in the 1990s a new wave of these managed investment schemes (MIS) began to emerge, primarily based on growing Tasmanian blue gum (*Eucalyptus globulus*). These forests were established to provide pulpwood, usually

Table 1: Plantation forests in Australia by state (hectares) March 2004

STATE	HARDWOOD	SOFTWOOD	TOTAL
ACT	194	15,700	15,894
NSW	51,300	270,467	321,767
NT	3,198	3,817	7,015
QLD	25,969	181,598	207,567
SA	32,351	116,768	149,119
TAS	135,284	78,162	213,446
VIC	142,553	217,285	359,838
WA	247,500	104,054	351,554
<b>Total</b>	<b>638,349</b>	<b>987,851</b>	<b>1,626,200</b>

Table 2: Ownership (hectares) of plantation forests in Australia March 2004

PUBLIC HARDWOOD	PUBLIC SOFTWOOD	PRIVATE HARDWOOD	PRIVATE SOFTWOOD	TOTAL
87,000	713,000	549,000	273,000	1,622,000



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for export to Japan. One of the key drivers for these plantations was a commitment by the Japanese pulp and paper industry in the mid-1990s to migrate from sourcing woodchips from native eucalypt forests to a supply based on forestry plantations. These blue gum plantations in Tasmania, south-west Western Australia and the 'green triangle' of southern South Australia and western Victoria have expanded to rival the size of the government-owned pine plantation estate.

A second trend that has begun to affect plantation ownership has been the emergence of institutional investment in forestry. Specialised Timberland Investment Management Organisations (TIMOs) first emerged in the United States in the mid-1980s. These investors were seeking diversification of large investment portfolios. Forestry has proved to be an attractive asset class, delivering sound long-term returns relative to its risk profile, and a negative correlation with the returns of other assets including public equity markets, corporate debt and real estate. As the benefits of forestry investment became evident, the amount of funding available has grown by about 20 per cent a year, and today represents about \$US20 billion (\$27 billion). Much of the North American investment by TIMOs has come from buying forestland from the forest industry, which has been seeking to reduce the exposure of its balance sheet to these capital-intensive assets.

In Australia, the TIMOs first entered the market to buy into the privatisation of government forestry assets in Victoria and Tasmania. Although other state governments remain major owners of softwood plantations, the expectation is that these assets will evolve to private institutional ownership in the coming decade. Ultimately, we are likely to see an Australian forestry sector that is dominated by private investment. Tables 1 and 2 summarise the plantation forests of Australia and demonstrate the current split of forestry ownership between governments and the private sector.

Plantation forests today dominate Australian timber production. The native forests, while still a source of valuable specialty timbers for poles, timber and appearance-grade uses such as flooring, have declined in traditional uses for construction timber and pulp and paper. The construction timber markets are now primarily served by timber from pine plantations and woodchip for papermaking is increasingly being sourced from the pine and blue gum plantations.

Australia's plantation forests today, while not formally valued, are likely to be worth about \$5 billion to \$6 billion, about equally split between government-owned and privately owned forests. New plantation forestry investments by MIS operators are likely to be \$500 million in the 2005-06 year, and increasing further in 2006-07. Institutional investment also looks set to increase, with a growing demand from Australian and international superannuation funds, pension funds, insurance companies, foundations and endowments for opportunities to own high-quality forestry assets.



### TOWARDS THE FUTURE

Forests are increasingly seen as being much more than solely a source of timber. Native forests have been increasingly reserved for conservation purposes, and the clearing of native woodlands and forests for agriculture has largely been halted by government regulation. The next step in this evolution appears to be a growing trend towards the pricing of environmental commodities provided by forests.

Recent international studies such as the UN Millennium Ecosystem Assessment have pointed to the ongoing degradation of the natural environment and the risks that this poses to human access to fresh water, food production, climate regulation and protection from natural disasters. As the global economy is forecast to quadruple by the middle of this century, what implications does this have on ecosystems and the services that they provide us?

In response to these challenges a new trend is emerging – the pricing of environmental services from forests. In the 1990s, governments began to explore the use of market-based mechanisms to control and price environmental impacts, particularly from industrial emissions. The US pioneered sulphur dioxide emissions trading so that emitters who exceeded their allowable limits could buy excess emissions reductions from those companies who had been able to reduce their emissions beyond their requirements. This approach allows the market to find the cheapest solution to reducing environmental impacts.

More recently, the global concern over rising greenhouse gas emissions and climate change has led to the establishment of new markets for greenhouse gas emissions. The greenhouse gas market is also able to introduce the concept of 'offsets', or direct crediting of activities that reduce or absorb greenhouse gas emissions. Planting new forests can be one source of offsets in a greenhouse gas emissions trading regime, because forests grow by absorbing carbon dioxide and storing it in woody biomass. Australia has been a world leader in establishing the regulatory and technical systems necessary to underpin these forestry offsets. The first Australian carbon trades from forests occurred in 1998, followed

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by carbon rights legislation to separate the legal title to carbon in trees, a National Carbon Accounting System to facilitate measurement and crediting of carbon offsets in forests, and a new class of forestry carbon investments by greenhouse gas emitters.

As the concept of environmental markets expands, forests stand to become a kind of natural infrastructure investment, providing carbon offsets, water purification and even biodiversity services on a commercial basis. New institutional funds, building on the expertise in traditional forestry investment, are now seeking to exploit these new environmental revenue streams to provide premium returns to investors. With its substantial land area, significant natural resource economy and increasing demand for clean water, Australia is a natural test bed for these emerging regulatory approaches.

With growing sophistication in forestry investment, new environmental services markets and a supportive tax and regulatory environment, forestry is likely to see substantial increases in investment over the coming years. With foresight and innovation, these new investments can provide not only solid long-term returns but a dividend to the global environment. With the early timber cruisers now long gone, Australian forestry investment is relying on a growing collaboration among finance professionals, environmental scientists and timberland managers to evolve to meet the needs and opportunities of the 21st century.