

The Ecosystem Marketplace.com

Experts in financial markets, public policy, banking, forest ecology, economics, and forest industries, along with representatives from oil and energy companies and environmental groups, are behind the launch of an online marketplace for ecosystem services around the world. Buyers needing environmental credits and sellers of certain services can now find each other, negotiate deals and read the latest information on the burgeoning ecosystem services market.



The Katoomba Group is helping initiate the online matching of global ecosystem services to credit buyers, creating a market.

Since 1978, over 530 000 km² of Amazon rainforest have been destroyed to make way for cattle ranches and soybean farms.¹ A further 20 million hectares of forest and woodland is earmarked for soybean cultivation in the next 15 years. China has also recently announced plans to find the replacement of 1.8 million hectares of rainforest along Indonesia's mountainous border with Malaysia, with oil palm.²

While these activities might meet the immediate economic and social needs of the countries concerned, they are destroying forests that provide essential 'ecosystem services'. What's more, with these services now being priced internationally, the loss

of these valuable environmental assets is further magnified.

According to David Brand, Managing Director of New Forests, a Sydney-based environmental asset management, advisory and consultancy business, the controversial first attempt at valuing the Earth's ecosystem services in 1997 estimated their average worth at US\$33 trillion.³ Last year the global economy exceeded US\$55 trillion and is expected to reach US\$200 trillion by 2050, far outstripping the valuable natural infrastructure on which it relies.

'Unless we price these ecosystem services and invest in protecting the natural infrastructure that's supporting the global economy, we'll see a steady erosion of nature and a huge future cost to society,' Dr Brand says.

In response to this need a range of projects have been initiated around the world to design and test markets for ecosystem services. In Australia these projects include Markets for Ecosystems Services⁴ initiated

by CSIRO Sustainable Ecosystems and the Joint Venture Agroforestry Program Greening Australia's Land Innovation Fund⁵ and the National Market-based Instruments Pilot Program⁶.

An international working group known as the 'Katoomba Group' was also established in April 2000 (Dr Brand is a founding member), to gather the collective knowledge and lessons learned from such projects, and to spur the development of 'market-based instruments' (MBIs) for ecosystem services from forests. The group includes experts in financial markets, public policy, commercial bankers, forest ecologists, economists, and has representatives from both developed and developing country governments, forest industries, oil and energy companies and environmental groups.

'We have a range of strategies to conserve environmental services, such as legislative designation of protected areas or regulation of land use and management,

1. www.mongabay.com/brazil.html#cattle

2. www.panda.org/news_facts/newsroom/other_news/news_cfm?uNewsID=22371&uLangID=1

3. Valuing ecosystems services:

http://earthtrends.wri.org/features/view_feature.cfm?theme=5&fid=15

4. Ecosystems Services Project: www.ecosystemsservicesproject.org

5. Land Innovation Fund: www.greeningaustralia.org.au/GA/NAT/OnGroundAction/LIF.htm

6. National Market-based Instruments Pilot Program: www.napswg.gov.au/mbi/



which have their place, but can be inefficient or difficult to enforce or fund,' says Katoomba Group member and CSIRO environmental economics researcher David Shelton.

'If we're going to successfully conserve nature, then maybe it can pay its own way. Market-based approaches to conservation provide a flexible and familiar structure and financial incentives to improve environmental performance.'

The Ecosystem Marketplace

With MBIs for ecosystem services proliferating around the world, the Katoomba Group saw a need to provide a central portal of information on the latest market developments and trading activity. The result was the Ecosystem Marketplace website⁷, launched in October 2004. The Marketplace signals the arrival, to the mainstream, of a burgeoning demand and supply structure for ecosystem services – a historic watershed in the global understanding and appreciation of the environment.

7. Ecosystem Marketplace: www.ecosystemmarketplace.com
8. www.ecosecurities.com
9. www.pointcarbon.com
10. www.forestre.com
11. www.newforests.com.au

'The group recognised that we wanted something that would stimulate market development, provide some transparency, connect buyers and sellers, and help foster an exchange of ideas,' Mr Shelton says.

The website features daily news from around the world, feature stories, and a library of case studies, presentations, published articles, white papers and tools. Like the Australian Stock Exchange, a 'Marketwatch' feature also provides real time transaction information on 14 carbon, water and biodiversity markets. At the time of writing, Hunter River salinity credits were trading at \$6.31 and NSW Greenhouse Gas carbon credits were valued at \$12.20 per ton of CO₂ on the spot market.

Managing editor of the Ecosystem Marketplace, Ricardo Bayon, says transparency is an important function of the website.

'Transparency, as we have seen from all sorts of markets – stocks, bonds, currencies, electricity – helps keep things clean,' he says.

'Allowing people to see what's going on, what's being sold and for how much, helps them plan how to get involved in these markets themselves, and ensures things work more efficiently.'

As new MBIs for ecosystem services evolve, the Katoomba Group is continuing to research ways of providing rules and regulations to underpin them, and strategies for pricing, marketing and monitoring the performance of services. A large part of this involves quantifying what an ecosystem service is, defining people's rights to them through legislation, and developing methods of encouraging compliance and good performance.

New Industries

A range of new businesses have evolved in the wake of ecosystem service markets including brokers (EcoSecurities⁸), analysts (PointCarbon⁹) insurers (ForestRe¹⁰), information providers (Ecosystem Marketplace), consultants and ecosystem service managers and investors (New Forests¹¹).

'Like their counterparts in the equity or currency markets, these businesses provide services to those interested in managing their environmental risk (buyers) or making money from their services (sellers), as well as providing services to investors looking for new ways of making money from these markets,' Mr Bayon says.

New Forests, for example, has a client

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seeking a significant investment in New Zealand compatible with the Kyoto Protocol rules. The forests will be managed to generate carbon credits and renewable energy development.

'The New Zealand government also wants to start a nutrient trading scheme as large amounts of nitrogen are flowing from agricultural areas into rivers and lakes,' Dr Brand says.

'If investors establish forests in these areas to mop up the excess nutrients, the expectation is that they will be paid for that service.'

Proponents of ecosystem service markets stress that markets are just one policy approach to dealing with environmental problems. However, as markets encourage resource users to internalise the cost of environmental goods and services into their day-to-day business practices, they may stimulate more creative and effective conservation solutions.

'People will avoid paying for something for as long as they can, even if it's not in their long-term self interest,' Mr Bayon explains.

'If ecosystem services are external to the market there's no incentive to reduce pollution or conserve remnant vegetation. But by recognising their value and creating a situation where individuals and companies are rewarded for providing them, there are now incentives for sustainable behaviour.'

● Wendy Pyper

More information:

Ecosystem Marketplace:
www.ecosystemmarketplace.com
The Katoomba Group:
www.katoombagroup.org
Forest Trends: www.forest-trends.org
Taking it to the bank. *The Green Business Letter*, March 2005. www.greenbizletter.com
Are you being served? *The Economist*, 21 April, 2005.

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