



Fact Sheet 2

THE MARKETS FOR ECOSYSTEM SERVICES PROJECT

Australian markets for ecosystem services

WHAT ARE MARKETS?

A simple definition of a market is the bringing together of a buyer and a seller so that they can trade commodities. The simplest of markets involves a bartering system, while more sophisticated markets have prices and monetary exchanges. To create a market, there has to be a definition of what is to be sold, and there has to be someone willing to buy the particular commodity. Through the exchange of the buyer and seller, a price or value will emerge. This simple definition of a market can be applied to a market for ecosystem services.

WHAT CAN BE BOUGHT AND SOLD?

Many ecosystem services can potentially be marketed. Some services that form part of the examples in this fact sheet include:

- provision of clean water;
- maintenance of liveable climates and atmospheres (carbon sequestration); and,
- protection of biodiversity and habitat with consequent aesthetics and future benefit options.

EXAMPLES OF MARKET MECHANISMS

Hunter River Salinity Trading Scheme

The aim of the Hunter River Salinity Trading Scheme in NSW (HRSTS) is to manage the total quantity of salt in the Hunter River and the negative biodiversity impacts caused, particularly during periods of low flows.

The HRSTS is a 'cap and trade' mechanism. The cap is 1000 credits. Individual polluters (e.g. mines & power stations) access the cap via a 'licence' to a specified number of credits. The credit allows the holder to discharge 0.1% of the daily total allowable discharge to

the river during high flows - monitored at point of discharge. The allowable discharge is dependent on the salinity of river waters. Improved performance is rewarded when a participant needs to purchase fewer credits to operate and can sell the excess.

Bush Tender

The goal of Bush Tender is to increase provision of biodiversity in Victoria through conservation of valuable habitat on private land.

Bush Tender is an auction mechanism designed to identify the most cost-effective options for Government investment. The bidding process is designed to reveal the costs of changing land use to improve biodiversity outcomes. These costs are known to land owners but not to government. A Biodiversity Benefits Index is used to measure the relative biodiversity benefits of these changes. Individual management contracts are used to specify payments and monitoring arrangements.

Hancock New Forests Australia Pty Ltd

The aim of the Hancock New Forests Australia (HNFA) pooled investment fund is to produce a range of ecosystem services using native plantation forests on cleared farmland.

The HNFA fund will produce and market timber, carbon sequestration, dryland salinity and biodiversity outputs. Initial returns are expected from timber and carbon credits that can be readily quantified. Undefined ownership of salinity and biodiversity and few willing purchasers complicate trade in these commodities. A lack of agreed measurement standards and mechanisms reduce the immediate market potential of salinity and biodiversity outcomes.

Potential NSW Offset Schemes

An offset policy aims to substitute the negative impacts at one site with positive rehabilitation or conservation actions at another. Several offset schemes are under consideration in NSW relating to native vegetation clearing, water quality and air quality.

Offset schemes offer significant development flexibility, while delivering environmental outcomes. Offsets are based on building a system of credits and debits expressed in a unit of environmental value. For example, a developer may wish to clear land, this would create a debit, which would require a balancing credit elsewhere. In this case a credit may be obtained by establishing a site of equal or greater environmental value elsewhere. However, no scheme is yet in operation because of the difficulty in establishing a transparent and accurate system of measuring offset credits and debits.

Eco Labelling and Banrock Station Wines

BRL Hardy's vision for Banrock Station is an environmentally sustainable co-existence of vineyards, wetlands and native vegetation. Marketing of Banrock Station wines is based in part on management of Banrock Station wetlands and donations to wetland conservation projects worldwide.

'Eco labelling' and 'Green Marketing' are tools that differentiate between products by drawing attention to positive environmental performance. They have been applied to single products (Banrock Station Wines), commodities (timber) and regions (King Island products), usually in the form of product labels. Eco labelling for environmentally friendly management is designed to benefit producers through increased market share or premium prices for their products.

PROJECT PILOT MARKETS

The Markets Project will test pilot markets for ecosystem services in practice, on the ground with our case study region partners. The goal of these pilots is to find out more about their implementation in the Australian context. Potential pilots that may be considered by the project include:

- management of irrigation salinity using a cap and trade model;
- improving cost-effectiveness of salinity and water quality interventions using auctions;
- managing the environmental and aesthetic impacts of rural residential development using offsets; and,
- protecting biodiversity using eco-labelling and philanthropic marketing.

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These examples of market mechanism show some ways the Markets Project could use to facilitate rewards to landholders for the ecosystem services they provide. CSIRO Sustainable Ecosystems, The Rural Industries Research and Development Corporation, the Joint Venture Agroforestry Program, Goulburn Broken Catchment Management Authority, Blackwood Basin Group, NSW Department of Land & Water Conservation – Murrumbidgee Region and Land & Water Australia are funding the Project.

WE WANT TO HEAR FROM YOU!

If you would like more information about the Markets for Ecosystem Services Project please contact:

Stuart Whitten, Principal Investigator

Phone: (02) 6242 1683

Fax: (02) 6242 1705

Email: Stuart.Whitten@csiro.au

Or

Dave Shelton, Project Manager

Phone: (02) 6242 1538

Fax: (02) 6242 1705

Email: Dave.Shelton@csiro.au

Mailing Address

CSIRO Sustainable Ecosystems
GPO Box 284
Canberra, ACT 2601

Website: www.ecosystemsproject.org

