

## **The Use of Taxation Incentives to Create New Eco-Service Markets**

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### **I. Introduction**

Environmental taxation reform is an important impetus towards sustainability. However governments have demonstrated a limited appetite to adopt many reforms that ‘green taxation’ advocates would wish, such as shifting from taxes on employment to taxes on energy use. A politically modest tax reform model has, we would suggest, a better chance of adoption than more radical changes. This paper demonstrates the potential to combine modest taxation reform with existing farming, financial and social institutions to markedly improve the social and environmental performance of farming.

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The study upon which this paper is based<sup>3</sup> is part of a series<sup>4</sup> concerned with the underlying problem of pursuing sustainability in ways that are efficient, effective and fair. Together they make the case for wholesale reform of Australia's natural resource management strategies. We do not anticipate that the case would be markedly different for the United States of America (USA), the European Union (EU) or virtually any other jurisdiction – most of the world is institutionally poorly prepared to deal with our sustainability challenges.

The research approach was to focus first upon creating a pragmatic business model for farmland conservation by involving interest groups that would be essential to the political and operational success of the business model and to provide empirical evidence of the potential gains from

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<sup>3</sup> P Martin, S Shearing and K Werren, *Concepts for private sector funded conservation using tax-effective instrument* (Land and Water Australia) (2007). Parts of this paper are drawn from that report, which provides a more detailed discussion of the technical issues.

<sup>4</sup> P Martin and M Verbeek *Cartography for Environmental Law: Finding new paths to effective resource use regulation* (Land and Water Research and Development Corporation) (2000); P Martin and M Verbeek *Sustainability Strategy* (2006); P Martin et al. *Developing a Good Regulatory Practice Model for Environmental Regulations Impacting on Farmers* (Land and Water Australia) (in press).

modest change. We then identified minimal taxation changes that could have a high impact in bringing this business model to life. The approach demonstrates that small taxation changes have the potential to create significant on-ground impacts provided that they are embedded within a transacting-efficient business model.

The motivation for pursuing a new environment business model arises from observations of Australian (and international) sustainability initiatives, including:

1. The continued excessive reliance on government investment rather than private funds flows;<sup>5</sup>
2. The observation that change in a social/economic system is most likely if the pattern of signals and incentives across the system can be aligned and if there are multiple forms of intervention in that system;<sup>6</sup>
3. The (untested but intuitively valid) view that there is a disproportionate behavioural impact of taxation incentives compared to other incentives;
4. Observation of the fragmentation and high transaction costs of many market and market-like instruments, relative to the gains achievable;<sup>7</sup> and

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<sup>5</sup> P Martin and M Verbeek, *Sustainability Strategy* (2006).

<sup>6</sup> *ibid.*

5. The magnitude of the investment required, relative to the capacity of private citizens and government to fund the needed work.<sup>8</sup>

With the financial support of Land & Water Australia a project team of researchers, advisors and representatives of farm and conservation sectors was established.<sup>9</sup> The approach sought to engage these stakeholder interests both for their knowledge and to maximise the likelihood that the business model would achieve widespread awareness thereby maximising the potential uptake.

The likelihood of adoption was identified as being a function of the potential for substantial leverage from foregone taxation revenues, the ease with which taxation improvements could be achieved without legislative change or potential for uncontrolled government exposures, and the

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<sup>7</sup> P Martin, J Williams and C Stone, *Transaction costs and water reform: the devils hiding in the details* (CRC for Irrigation Futures Technical Report No. 08/08) (2008).

<sup>8</sup> P Martin and M Verbeek, *Sustainability Strategy* (2006).

<sup>9</sup> Tony Dormer (Dormer Chartered Accountants), David Eyre (NSW Farmers), Paul Toni (WWF Australia), Gail Broadbent (WWF Australia), Marty Sammon (AgriDNA) and representatives of the Rice Environmental Champions Program and Liverpool Plains Land Management Committee.

design of a business model and taxation arrangements with minimal transaction costs in total or for any particular interest group. This highlighted the desirability that the business model ought to be implemented using existing institutional structures.

Preliminary scoping highlighted that given the scale of environmental challenges and therefore the magnitude of funds required, the business model would need to harness multiple sustainability funds flows and investment opportunities. The initial meetings with farming and environmental stakeholders added a further criterion that the business model should enable landscape-scale (rather than enterprise-scale) sustainability transformations. Effective conservation under changing climate conditions requires landscape-scale refugia and viable ranges for plant and animal species. A patchwork of public reserves will not be sufficient in a world where the bulk of land is privately owned and managed for private profit. Legal and political barriers will continue to inhibit a regional conservation approach over private lands unless there is an economic opportunity for private conservation.

## **II. Maximum market vibrancy, minimum complexity**

Private market competition is a powerful impetus for efficiency. It follows that institutional arrangements (including taxation incentives) which maximise the vibrancy of the market for

environmental services are more likely to deliver optimal value than arrangements which lack this character. Market vibrancy derives from a large number of sellers and buyers, and a diversity of trading opportunities. Flexibility and competition are essential. Also essential is the minimisation of transaction costs.<sup>10</sup> Should taxation reform facilitate the creation of these conditions the outcomes will be greater than arrangements which do not.

Existing eco-system market arrangements in Australia do not suggest market vibrancy. Most payments are through market-like arrangements funded direct by government and purchased through arrangements that have the bureaucratic characteristics required to satisfy government. These payments separately address carbon, salinity, water, biodiversity or other desired attributes, and are fragmented across agencies and jurisdictions.<sup>11</sup> Alongside this are philanthropic and private sector schemes, also with their distinct priorities and with limited opportunities for cross-

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<sup>10</sup> Ronald H Coase, 'The Problem of Social Cost' (1960) 3 *Journal of Law and Economics* 1; and Ronald H Coase, 'The Nature of the Firm' (1937) 16 *Economica* 386.

<sup>11</sup> For a recent empirical study of the transaction cost impacts of this complexity and fragmentation, see P Martin, J Williams and C Stone, *Transaction costs and water reform: the devils hiding in the details* (CRC for Irrigation Futures Technical Report No. 08/08) (2008).

scheme competition. From this fragmentation and administratively intense structure, one can anticipate high transaction costs.

A diversity of buyer interests in different attributes of goods provided by suppliers, diverse risk-preferences and contractual complexity seems to be inimical to vibrancy and transaction efficiency, but this is not so. The private investment market shares many of these features, with buyers and suppliers having heterogeneous preferences incorporating both economic and non-economic concerns. Comparability of offerings is often difficult, and the attributes of different suppliers and the products they offer are diverse. The main unifying feature is the use of currency as the medium to bring these interests together. Notwithstanding intrinsic complexity, finance market arrangements create vibrancy, reasonable transparency, pooling of funds and tradeable attributes and do so with transaction costs that are small percentages of the value of transactions. A taxation regime which provides a strong impetus towards a vibrant and efficient market, for environmental services, would represent a fundamental reform. If it can be achieved substantially using existing institutions and taxation arrangements, this would be an important achievement at low cost.

Our study demonstrates a viable alternative is possible to the fragmented Australian conservation model by combining taxation reform to stimulate a market combining environmental

philanthropy, 'conservation business' opportunities, investment in conservation technologies, and low transaction cost and community based coordination arrangements. The approach is designed to achieve regional scale conservation across private lands through private investment by creating real markets for a diversity of conservation outcomes. The key to a viable national conservation business model is that it must effectively combine philanthropic and self-interested motivations, it must fully engage the community whose lands will be affected and it must be delivered with minimal overheads. The elements of a suggested national conservation business model are outlined below.

The opportunity we outline is far more likely to succeed if government undertakes two sets of reforms. The first is to adjust taxation provisions to increase the appeal of private conservation investment. The second is to create real markets for eco-services.

### **1. Element 1: commercial business model**

In line with the approach taken in the study, we first outline a commercial business model for private landscape scale conservation investment. We will later address the taxation changes that can potentiate that model.

The concepts for this environmental business model are relevant to any jurisdiction, though the specific tax recommendations are unique to Australian tax law. Private investment trusts are the conceptual basis for the business model.

A range of investors with diverse risk and return requirements and sectoral preferences pool their funds through trusts operated by professional managers. These funds are used by the manager who selects a portfolio of investee enterprises which best approximate the aggregate interest of investors. The conservation business model we propose uses pooling on both sides of the investment transaction operated by professional managers who are free to negotiate within defined parameters, and can deliver the low transaction costs to provide the basis for a vibrant market.

The proposed environmental investment occurs through a series of unlisted investment trusts ('The Trust') managed by separate funds managers. A standard Trust would operate three subordinate funds. These would be a 'Philanthropic Fund', a research and development fund for environmental services ('The RD&E Fund') and an investment fund focused on profit from sale of environmental services (the 'Eco-services Managed Investment Scheme (MIS)'<sup>12</sup>). Each trust

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<sup>12</sup> In the Australian context, certain Managed Investment Schemes (MIS) have particular connotations of receiving taxation advantages for investment in rural enterprises. However the

would have standard finance sector requirements such as a valid prospectus (bring the environmental market under the governance frameworks of conventional investment market).

An investor would, through normal investment selection processes, choose their desired mix of where their funds are directed, including:

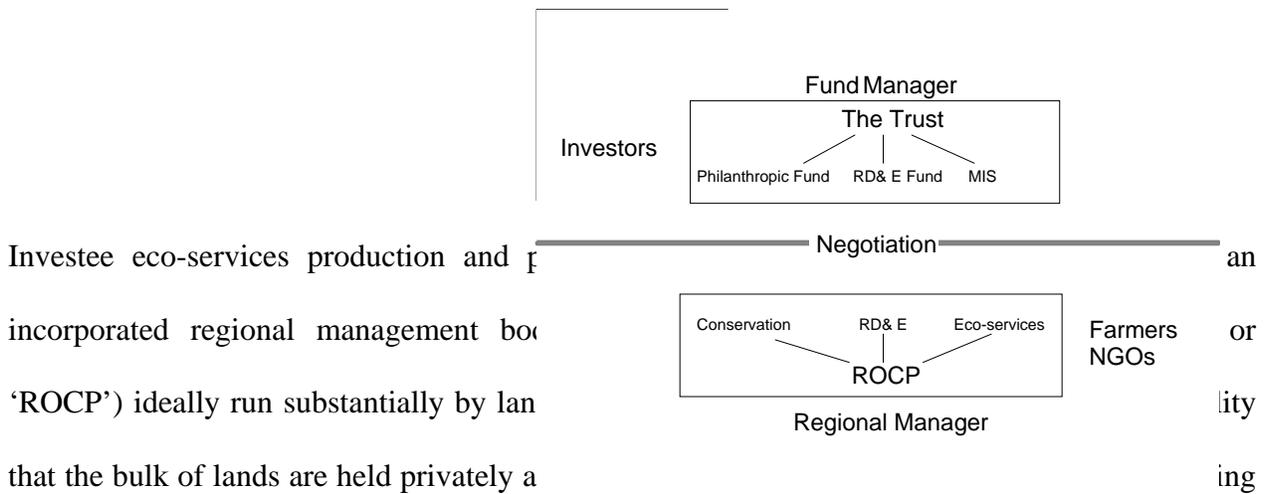
- Philanthropy, achieving the appropriate tax-deductions but no future economic return. Gifts may be structured as donations or recurrent payments such as green offsets for carbon emissions;
- Research, achieving the appropriate tax-deductions and the potential (contingent on commercial results) for future profit; or
- Eco-services through a managed investment scheme with appropriate tax-deductions and the potential for future profit shares.

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term MIS serves more broadly for the purposes of this paper, though the MIS taxation advantages are one mechanism for increasing the potential for such a market to be created.

The top half of the diagram below illustrates this investor structure. The investee elements are discussed below.

**Figure 1: Conceptual trust structure**



Investee eco-services production and incorporated regional management box 'ROCP') ideally run substantially by land that the bulk of lands are held privately a greater conservatism and transaction cost impediments to a vibrant market. Partnership with other non-government organisations is also possible. The ROCP Manager would negotiate on-ground investment bids collectively with landowners and other co-investees, invest once this is agreed with the investor funds manager, supervise and support the investments, and be managerially accountable within the agreed contracts. This structure has some characteristics of Landcare<sup>13</sup>

<sup>13</sup> See [www.landcareonline.com](http://www.landcareonline.com)

and some of superannuation investment funds, but adds investment accountability to a landowner-based management contract with an independent investor.

It is intended that there be a number of investee (and investor) entities, which will create the desired competition, and therefore the impetus for innovation and efficiency. As investors through their funds managers select investments from competing projects, over time this will stimulate innovation in the design of ROCPs for maximum value and efficiency at the site investment level<sup>14</sup>. Significant improvements in efficiency can be anticipated from this approach.

## **2. Element 2: Reducing the commercial risk**

Commercial investment through an Eco-services MIS will be focused on income from sales of ecosystem services such as reduction of salination, carbon emissions, water savings, or green offsets (bio banking). These services will be delivered through the investee ROCP's on the basis of the investment agreements. This is additional to an investment for philanthropic purposes, or into research and development, for which the investor incentives do not depend on eco-services cash flows.

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<sup>14</sup> J L Simon, *The Ultimate Resource* (1981).

In the early stage of any new industry there will be failures and variable returns.<sup>15</sup> The market for site-produced eco-services may have the volatility typical of, for example, the high-technology (e.g. biotechnology), and cultural (e.g. film making) industries. Given the fluctuation in values in carbon and water in existing markets, and the uncertainties of other prospective values, commercial revenue forecasts from eco-services will necessarily be speculative.

A strength of private markets is the capacity to accommodate many risks, even where these may seem to be 'objectively' non-feasible.<sup>16</sup> Private investors are able to make their own risk-reward tradeoffs provided adequate disclosure and financial market governance apply, and provided that

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<sup>15</sup> D J Teece, *Profiting from Technological Innovation: Implications for Integration, Collaboration, Licensing and Public Policy: Essays in Technology Management and Policy: Selected Papers of David J Teece* (2003).

<sup>16</sup> See G A Akerlof and M. Maun, 'The Market for 'Lemons': Quality Uncertainty and the Market Mechanism' (1970) *Quarterly Journal of Economics* 84(3) 488-500 and G E Hoffer, M D Pratt, and S J Nicks, 'Used Vehicles, Lemons Markets, and Used Car Rules: Some Empirical Evidence' (1987) *Journal of Consumer Policy* 10(4) 409-416.

the opportunities to gain from trading are perceived to be sufficiently attractive.<sup>17</sup> Around the world taxation incentives are used to foster investment in sectors where returns are uncertain due to production, market or technology risks but the potential benefits are socially important. The taxation incentives outlined later in this paper are intended to provide the additional stimulus for market participation during this development stage. Whilst it could be argued that the structure we propose could operate without additional taxation incentives, we believe that the leverage value from creating a vibrant, competitive and therefore innovative market for environmental investment will deliver greater environmental and social value than alternative methods.<sup>18</sup>

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<sup>17</sup> The everyday incidence of crime, where the risks of failure of an economic return and the absence of secure property rights are clear, is ample evidence of the ability of private entrepreneurs to invest and exercise skill even in the face of uncertainties which would prohibit government from participation.

<sup>18</sup> This proposition is reliant upon well-developed economic (Coasian) principles and models which underpin a significant part of social and economic policy. If these assumptions are incorrect, this would suggest that other more substantial adjustments to policy are necessary.

In the business model an added level of expense-sharing and risk amelioration is achieved by the involvement of co-investors who do not seek an economic return (government, landowner co-investors and philanthropists). Both commercial (private good) and social benefits (public good) could be derived from any regional conservation investment program, allowing those with a commercial interest to agree with the other investors to a higher proportion of the private goods in order to secure their co-investment in the public goods. The asymmetry of motivations of investors is one of the benefits of pooling. Thus, the multi-attribute and multi-investor structure also allows commercial investors to negotiate with the ROCs to secure the commercial benefits of eco-services from an area larger than the land into which their investment will be channelled.

A complementary commercial risk concern is that of government, where the risk is that environmental and other entrepreneurs will over-exploit the taxation incentive. Such abuse can be controlled by arrangements that make tax benefits contingent on licenses, which either require restrictive compliance with performance requirements, or limit foregone taxation revenue. The proposal we outline provides two (already present) safeguards. First, taxation incentives be governed by Private Rulings through which the Department of Taxation provides project-specific authorisation, and is able to set conditions to reduce risks of abuse. Secondly, by use of an equivalent to the approach to the Australian Pooled Development Funds scheme, under which

funds managers are given quantified limits to the investor tax-shelters that they can provide. Such an approach allows reasonably safe ‘experimentation’ by government, and staged expansion as the economic, social and environmental performance of the business model and tax incentives are proven.

### **3. Element 3: promoting private sector environmental research**

One of the fundamental causes of volatility in new industries is the lack of technical knowledge refined through experience.<sup>19</sup> There are substantial knowledge or technology gaps yet to be bridged for market-based conservation to thrive. These include:

1. definition of commercial eco-services and the markets for them;
2. instruments and institutions to ensure the efficient operation of eco-service markets;
3. metrics (and associated audit and governance mechanisms) to ensure the integrity of the market and reliable delivery of conservation outcomes;
4. conservation and restoration technologies to produce the eco-service outcomes; and

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<sup>19</sup> D J Teece, *Profiting from Technological Innovation: Implications for Integration, Collaboration, Licensing and Public Policy: Essays in Technology Management and Policy: Selected Papers of David J Teece* (2003).

5. landuse technologies that allow optimal production and eco-services delivery in an integrated manner.

Accelerating research is one mechanism for supporting the development and eventual stabilisation of a market for environmental services. The RD&E Fund would combine private funding from investors who select the RD&E Fund within the Trust (thereby attracting the available taxation benefits, discussed below) with funding from: commissioned research or investment from the philanthropic fund, consistent with the trustees' obligations; government or private grants or commissions for research and development, environmental improvement or otherwise; and (as the knowledge base is developed) fees-for-service from extension or provision of technology to projects funded by the Trust, or otherwise; royalties or other fees earned from the technologies or intellectual property; and fees-for-service for the management of on-farm research relevant taxation or research funding activities.

In Australia the availability of a government supported structure for research and development partnerships with industry provides an additional leverage opportunity. By creating a set of investors with an interest in environmental markets research through this business model and by

using the Cooperative Research Centres program<sup>20</sup> it may be possible to significantly increase the impetus for commercial partnering with public good environmental research, and to create mechanisms for the commercial application of such research findings.

#### **4. Element 4: Efficient Regional Management**

The ROCP structure proposed for the creation and management of regional conservation programs, and for the attraction of private investment to them is intended to provide a low transaction cost basis for regional management. The structure varies in important respects from existing government-led regional arrangements (with which it ought be complementary) in that the operators have unfettered flexibility to design a program that meets their private interests, and to offer that to investors who are equally free to accept, negotiate or reject it. The ROCP is not constrained in its innovation by government policy or preference, nor does it carry the transaction cost burdens of government. Again drawing on the well-demonstrated characteristics of private entrepreneurialism relative to public administration, one could anticipate that this will stimulate innovations that are not likely to emerge from less dynamic structures, and that over time the cost

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<sup>20</sup> For details of the program, see [www.crc.gov.au/Information/default.aspx](http://www.crc.gov.au/Information/default.aspx)

per transaction are likely to be forced down more rapidly than is likely with a more regulated model. Successful ROCPs would:

1. conduct detailed research and consultation to develop a regional strategy;
2. invest, or seek investment from government or the community to craft an attractive investment program;
3. Negotiate with landowners and others and achieve sufficient contractual certainty to satisfy potential investors;
4. Develop a binding contractual structure and governance arrangements to meet the need of independent investors with clear outcome goals;
5. Identify research and development needs, and commission research, and supervise its implementation under contract;
6. Manage the ROCP and account for investor funds and the outcomes of these investments;
7. Report to the Investment Company through them to the investors.

Under the structure we have proposed the Fund Manager has the same legal status and obligations of any other finance market trustee, and it is anticipated that this will result in high standards of governance of investments being required by investors, and in the importation of the

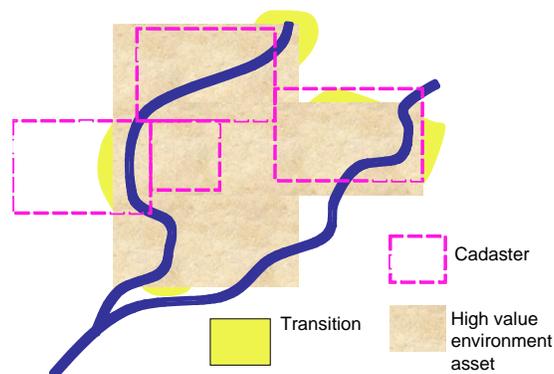
legal obligations of corporate management into the delivery of environmental investments. As both buyer and seller have an interest in least-cost management, and the freedom to negotiate contracts which suit only their purposes, it is likely that a wide variety of contracting and evaluative structures will emerge.

#### **5. Element 5: Least cost, competitive investment structures**

Groups of landowners, perhaps in conjunction with interest groups such as local government or environmental stakeholders, would be encouraged to come forward with proposals for investment through the Trusts conducted by different investment managers. These conservation management programs would be expected to cover a number of properties, providing an integrated regional conservation approach. It is expected that the manager of these ROCPs will ensure that the bid addresses the investment program, management arrangements and the eco-services that are likely to arise from the investment. ROCPs are likely to be centred around particular high value environmental assets, but will address management of adjacent lands, providing a landscape-scale approach. Based on consultation with farmer conservation groups, including two on-ground case studies reported below, we expect three levels of conservation to be incorporated in a typical ROCP.

The highest value environmental assets, such as a riverine corridor or a wildlife corridor, a specific habitat, or perhaps an iconic species distributed across a landscape will be managed for conservation under various tenures (ownership, lease, license, easement), depending on the investment approach that is bid by the landowners. A transition zone of adjacent lands will be managed to complement the core conservation asset. This may mean investing in capital (fences, watering points) or changing management practice (minimum till, not clearing forest remnants, reduced stocking). Finally, to maximise the investment appeal of the ROCP, it is likely that investee covenants will also address the environmental management of the larger area under ownership of the participating landowners, and arrangements for the delivery of various eco-service values and the sharing of this value with the MIS. The diagram below notionally represents the three zones, and integrated conservation management across private titles.

**Figure 2: Notional model: Conservation zones across titles**



### **III. Taxation – the impetus for reform**

Our approach in this study is to seek the least radical taxation changes which will have the greatest impact in creating a vibrant market for environmental services. The key to this is a combination of an efficient business model with the potential to reflect highly diverse investor/investee interests at low transaction costs, and the use of taxation reform to accelerate change.

Whilst empirical research is missing anecdotal indications are that the responses to a tax incentive or a disincentive are often disproportionate.<sup>21</sup> Indications from the USA in particular are that a tax break for private investment can trigger significant privately funded farmland

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<sup>21</sup> Taxation is a powerful, if somewhat blunt, tool that can be utilised to modify the behaviour of individuals. In broad terms there are two ways the government can utilise taxation to bring about the change of an individuals' behaviour. First the government can tax 'bad behaviour' and second, the government can provide tax incentives to encourage 'good behaviour'. See also R Douglas, *Potential Effects of Selected Taxation Provisions on the Environment* (Consultancy Report to the Productivity Commission) (2002) 11.

conservation.<sup>22</sup> Experience in Australia supports similar observations about the impact of tax incentives on investor behaviour.<sup>23</sup>

Given public policy concerns for halting environmental degradation in all countries, reform to at least remove taxation impediments to privately funded conservation would be a sensible, if conservative, move. Reform to provide strong inducements to invest in conservation would give an impetus to privately funded conservation investment. As discussed above, where taxation reform provides the impetus for the creation of a vibrant market that serves public good interests one can justifiably anticipate that the efficiency gains from the use of a market, and the innovations that should be expected from this, provide the basis for a strong case for taxation innovation.

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<sup>22</sup> See generally, J N Levitt, *From Walden to Wall Street: Frontiers of Conservation Finance* (2005) and W J Ginn, *Investing in Nature: Case Studies of Land conservation in Collaboration with Business* (2005).

<sup>23</sup> CPA Australia, 'Agribusiness Managed Investment Schemes Explained' (2007) August IntheBlack 18; Miranda Stewart, 'Venture Capital Tax Reform in New Zealand and Australia' (2006) June Journal of International Taxation 40

Finally, given that the benefits of the provision of eco-services are spread across a large section of the community, and the costs of protecting or providing these are often borne by a small part of the community, there are arguments for further spreading the conservation investment load.<sup>24</sup> Taxation has the advantage of being an already established institutional structure for achieving this social objective.

The reform concepts discussed in this section are largely consistent with existing Australian taxation arrangements, and many would require only administrative action or minor regulatory reform. They are based on our analyses of current taxation impediments to conservation investment and are similar to those identified in prior studies.<sup>25</sup> Where there are differences in

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<sup>24</sup> House of Representatives Standing Committee on Environment and Heritage, *Public Good Conservation: Our Challenge for the 21st Century* (Commonwealth of Australia, 2001) <http://wopared.parl.net/house/committee/enviro/pubgood/report/report.pdf>.

<sup>25</sup> P Martin and M Verbeek *Cartography for Environmental Law: Finding new paths to effective resource use regulation* (Land and Water Research and Development Corporation) (2000) ; P Martin and M Verbeek *Sustainability Strategy* (2006); P. Martin et al. *Developing a Good Regulatory Practice Model for Environmental Regulations Impacting on Farmers* (Land and Water Australia) (in press).

our recommendations to those of other researchers, they arise from: recognition of the increasing imperative for government to act given the fiscal and climate change issues; the emergence of fledgling commercial markets for eco-services; and the need to integrate proposals for improved taxation treatment with proposals for investment and market structures to address conservation policy and implementation problems.

The specific reforms discussed are, of course, specific to the Australian taxation regime. However, like the business model proposed, the structure is transportable to most jurisdictions.

### **1. Recommendation 1: Conservation investment deduction**

At present in Australia no deduction is available for expenditure incurred in improving or protecting ecological assets unless there is a profit making or farm or mining production link. Neither is it clear that investment in conservation with a view to participating in future eco-services markets will trigger tax-deductibility as normal expense deductions, capital, and research deductions or under the special deductions for farming and forestry.

For example, should a supermarket chain purchase a site for a shopping centre and wish to replace contaminated soil with fresh soil and (for environmental and social purposes) that a wildlife corridor of native trees be planted:

1. under the environmental protection deduction provision,<sup>26</sup> the decontamination costs are deductible;
2. if the public good purpose is honestly disclosed, deduction for the planting of the trees is likely to be denied ; and
3. Even if the intent were to establish a resource for future bio-banking it would be far from clear that deductibility would be allowed.

Deductibility for environmental investment can be readily ensured with minor reforms. These would include management of land in a business-like way for eco-services income under the definition of primary production, (though still subject to the other tests of primary production business to limit the potential for abuse); and to include the establishment and management of professionally managed conservation zones for marketable eco-services as ‘forestry’ for the

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<sup>26</sup> Income Tax Assessment Act 1997(Cth), ss 40–755 to 40-765: An environmental protection activity is an activity carried out in preventing, remedying, treating, cleaning up or storing pollution or waste.

purpose of Eco-services MIS schemes. It would also be desirable to allow for normal deductions for expenses incurred in the business of conservation, where there is business intent but the activities are not otherwise similar to primary production.

As financial entrepreneurs will exercise their talents to increase the scope of any opportunity, any tax instrument has the potential for abuse. For these deductibility reforms this can be done in two ways. It may be reasonable to require that the investment be linked to credentialed conservation programs or regional natural resource management plans. In effect this would make deduction subject to certification of the credibility of the conservation program as part of a larger scheme. We anticipate that this would also significantly increase involvement in government-sponsored catchment management programs, and uptake of credible non-government landscape conservation.

Either as an alternative or a complement to this control, deductibility could be limited through a Pooled Development Fund (PDF)-like structure, under which a licensed body is approved to enrol eco-service businesses, which in turn achieve full tax deductibility and a tax shelter for future gains. Australian PDFs are a specialist mechanism for encouraging venture investment.

## **2. Recommendation 2: Conservation MIS prepayment deduction**

As noted above, MIS schemes provide taxation advantage to certain forms of primary production in Australia.<sup>27</sup> They have been highly contentious because they have been very successful as a

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<sup>27</sup> Changes to Agribusiness Managed Investment Schemes: On the 6th February 2007 the Minister for Revenue announced that investors in non-forestry agribusiness managed investment schemes will be unable after the 2006-2007 financial year to claim upfront tax deductions for their contributions to the schemes as the investors are not considered to be 'carrying on a business'. However, from the 1 July 2007 investors in forestry managed investment schemes will be allowed an upfront tax deduction as long as at least 70 percent of the amount is directly targeted at forestry development. It was indicated that amendments to legislation will mean that investors in forestry managed investment schemes will not be required to prove that they are 'carrying on a business' in order to claim a tax deduction. (P. Dutton (2007) *Non-forestry Managed Investment Schemes* (Website, Treasury) Last accessed 21st March, 2007 <<http://treasurer.gov.au/pcd/content/pressreleases/2007/007.asp>>). The Governments' stance on agribusiness managed investment schemes suggests that an upfront tax deduction in conservation funds will only be allowed if a specific section in the Income Tax Assessment Act 1997(Cth) is applicable.

tax instrument (to the detriment of other land uses), and have now been restricted to forestry.<sup>28</sup> Whilst many farmer or other bodies reading this report may shudder at the thought of expanding the use of MISs to achieve other social and environmental policy goals the simple fact is that as an instrument to alter landscape use the MIS program has been highly effective. It is the application, not the instrument, which has been the problem to date with MIS.

Generally, Australia's taxation system requires that prepaid expenditure<sup>29</sup> be apportioned over the period that the goods or services are consumed. As the establishment of viable eco-service businesses may require substantial investment ahead of income production, this treatment of expenses will be a substantial impediment to eco-service businesses.

Special prepayment rules apply to timber plantation MISs<sup>30</sup> for operations such as caring for seedlings, planting, applying fertiliser, pest control and tending trees for felling. This special

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<sup>28</sup> Barbara Drury, 'Aggro in Agribusiness' (2007) May *Charter* 30; Australia Treasury, *Non-Forestry Managed Investment Schemes*, Issues Paper (2008).

<sup>29</sup> Income Tax Assessment Act 1936 (Cth), ss 82KZL to 82KZO

<sup>30</sup> Income Tax Assessment Act 1936 (Cth), s 82KZMG

treatment is justified substantially on conservation and regional employment grounds. The same reasoning could readily be extended to non-harvested vegetation for eco-services production.

Extension of the definition of timber plantation to include lands managed for the production of ecological services such as carbon sequestration, salt sequestration or the production of biological diversity with a commercial intent would reduce the funding impediments to this investment and therefore increase the likelihood of private investment in conservation MIS.

Private Rulings are used by the Department of Taxation and investors to negotiate controls over schemes which qualify for concessional treatment, Use of a Private Rulings approach for conservation MIS would limit the potential for abuse of the MIS arrangements.

### **3. Reform 3: Tax-support Conservation Gifts**

Philanthropy is critical to providing financial leverage for the proposed landscape-scale conservation business model. It provides the means to address non-commercial values, and to provide investment leverage. In the Australian context (which seems to be common internationally) cultural gifts<sup>31</sup> are currently tax-advantaged over ecological gifts.<sup>32</sup> A capital

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<sup>31</sup> Income Tax Assessment Act 1997 (Cth), ss 30-15, items 4 and 5, 30-100

gain or loss<sup>33</sup> arising from a gift of property under the Cultural Bequests Program is disregarded for tax purposes. Furthermore, a capital gain or loss arising from a testamentary gift<sup>34</sup> (donation made under a will) or a gift of property under the Cultural Gifts Program is disregarded. Given the conservation funding challenges facing Australia, this relative disadvantage for environmental conservation seems ill justified.

Extension of the gifting concession to environmental gifts by increasing the flexibility of gifting, allowing living bequests, and removing capital gains tax impediments to gifting are proposals which have been previously made which we endorse. Extending the land gifting provisions to newly emerging property rights (such as water, carbon, salt or biodiversity) would increase the range of philanthropic options to encompass interests and allow more targeted conservation programs in the future, consistent with the direction of natural resource management policy.

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<sup>32</sup> Income Tax Assessment Act 1997 (Cth), ss 30-15, 30-55, 30-250 to 30-285

<sup>33</sup> Income Tax Assessment Act 1997 (Cth), s 118-60(2)

<sup>34</sup> Income Tax Assessment Act 1997 (Cth), s 118-60(1)

#### **4. Reform 4: Conservation Pooled Development Funds**

We have noted above the desirability of government being able to limit potential abuses of taxation support of a conservation business model. To limit possible ‘blowouts’ in tax impacts of conservation investment schemes it is possible to allow concessions with a ceiling on the total of foregone tax revenue, much like the Pooled Development Funds program,<sup>35</sup> or the rulings-controlled MISs. PDFs provide equity capital for eligible activities to Australian resident companies with assets not exceeding \$50m (small–medium enterprises or SMEs). Dividends<sup>36</sup> and income from the sale<sup>37</sup> of PDF shares are exempt from income tax, as are capital gains<sup>38</sup> on the disposal of PDF shares. A capital gain realised by a PDF on a qualifying SME investment is also effectively exempt to the extent that it is distributed to a complying superannuation fund (or similar entity) other than a self managed superannuation fund. This result is achieved through a

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<sup>35</sup> Pooled Development Funds Act 1992 (Cth)

<sup>36</sup> Income Tax Assessment Act 1936 (Cth), s 124ZM: A PDF resident shareholder can elect to include franked PDF dividends in their assessable income in which case they can utilise the relevant franking credits.

<sup>37</sup> Income Tax Assessment Act 1936 (Cth), s 124ZN

<sup>38</sup> Income Tax Assessment Act 1997 (Cth), s 118-13

‘venture capital franking rebate’ to the superannuation entity.<sup>39</sup> The taxable income of a PDF is divided into two components.<sup>40</sup> First, the SME income component is taxed at 15% and second, the unregulated investment component is taxed at 25%. This is to provide a strong incentive to use the funds for investment and to limit the potential to use the fund as a tax-advantaged ‘cash-box’.

A Conservation Pooled Development fund approach, under which the operator of the investment (either the Investment trusts and/or ROCPs) could be licensed with a cap on the tax deductions would provide an efficient, proven tax leveraged arrangement for both investors and the eco-services ‘enterprises’ that they will foster because PDFs require specific approval for the amount of funds they can raise and therefore the tax shelter they are able to provide, the PDF structure would provide an easily capped mechanism for government to provide taxation support for new eco-services enterprises.

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<sup>39</sup> Income Tax Assessment Act 1997 (Cth), Division 210

<sup>40</sup> Income Tax Rates Act, 1986 (Cth), s 23

## **5. Reform 5: Conservation Technology investment flow-through**

Overcoming knowledge and technology impediments to effective environmental markets is a key to their maturation as a reliable investment (and as a more efficient mechanism for government). More commercially targeted RD&E would accelerate the emergence of new solutions to conservation challenges. Under existing Australian research and development taxation arrangements, the benefits of R&D concessions may be trapped in the corporation<sup>41</sup> that commissions the research— it may be years (if ever) before investors benefit from their investment.

An option available in some other jurisdictions which could promote conservation research and development amongst small investors, is the ‘flow through tax company structure’<sup>42</sup> The mechanism allows deductions to be claimed sooner than if the company has to carry them

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<sup>41</sup> Income Tax Assessment Act 1936 (Cth), s 73B

<sup>42</sup> For example, in Canada, flow through shares (FTS) is a mechanism that allows a mining corporation to obtain financing for expenditures on mineral exploration and development in Canada. By issuing flow through shares, a company can renounce, or flow through, certain expenses to the purchaser of the share. These expenses are deemed to be incurred by the investor and not the corporation and reduce income tax payable by the investor.

forward against future income, and allows tax deductions to be claimed by individuals subject to higher tax rates than the corporate rate. This would expand the pool of possible investors in the important area of research.

#### **6. Tax-holiday: an alternative stimulus?**

These five reforms would form a sufficient basis to stimulate adoption of the conservation business model we propose. In turn it is anticipated that this would result in increased funding and (perhaps most important) a higher degree of commercial innovation than under current arrangements. An alternative (or perhaps complement) would be a tax-holiday. This approach is a more radical change to the tax legislation than those we have outlined.

Tax holidays are time-limited or activity-limited exemptions from income tax, capital gains tax, or council rates. Tax concessions for superannuation are the most significant version of the tax holiday approach to stimulating private investment. In Australia a concessional rate of 15% applies to superannuation income, and some income can be diverted to this end.

A tax-holiday for the income and capital gains for investment in eco-services provision would stimulate the search for viable commercial models. It would attract private innovators into an area that has been, to date, dominated by public sector investments through catchment management

and other natural resource management programs. Under such a scheme investors in an ROCP (or similar regional arrangement) could be entitled to upfront deductions of the establishment and operating expenses for the conservation estate. They would be entitled to a sheltered rate of income tax for the eventual income from eco-services and to a shelter from capital gain in the event of disposal (either into the open market or into a permanent conservation program).

An alternative would be to provide a tax shelter for the capital itself, as has been done in the USA to support non-profit organisations.<sup>43</sup> Under this arrangement, a provider of capital for a conservation program would obtain a deduction for some percentage of the capital they provide, lowering the effective cost of conservation investment capital. In Australia, Infrastructure Bonds

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<sup>43</sup> See <http://www.cdfifund.gov/>: The New Markets Tax Credit (NMTC) Program permits individuals to receive a credit against Federal income taxes for making qualified equity investments in designated Community Development Entities (CDEs). The credit provided to the investor totals 39 percent of the cost of the investment and is claimed over a seven-year credit allowance period. In each of the first three years, the investor receives a credit equal to five percent of the total amount paid for the stock or capital interest at the time of purchase. For the final four years, the value of the credit is six percent annually. Investors may not redeem their investments in CDEs prior to the conclusion of the seven-year period.

have been given tax-preferred status to encourage private investment in new infrastructure. An equivalent scheme to support private investment in eco-services provision seems no less justifiable on policy grounds.

#### **IV. Justification for reform**

The purpose of the taxation reforms we propose is to stimulate the creation of a vibrant private market for conservation. The use of taxation for this positive purpose can be differentiated from traditional use of Pigouvian taxes<sup>44</sup> to increase the cost, and thereby control consumption of, environmental goods.<sup>45</sup> In a recent report, David F Williams argues that environmental taxes aimed to curb ‘bad behaviour’ are an unreliable source of revenue and that they tend to be regressive in nature.<sup>46</sup> However, the proposals we make are not about Pigouvian taxes, they are

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<sup>44</sup> Named after economist Arthur Pigou (1877 – 1959), these types of taxes are levied to correct negative externalities of market activities, for example, a tax on producers to encourage the reduction of pollution.

<sup>45</sup> R H Woellner, S Barkoczy, S Murphy and C Evans, *Australian Taxation Law* (18<sup>th</sup> ed, 2008) [1.170].

<sup>46</sup> David F. Williams, *Taxation and the Environment* (KPMG’s Tax Business School) (2008).

for the use of tax as a stimulus for a new industry with both commercial and public good attributes.

A lack of tax incentives hampers private conservation.<sup>47</sup> However, some tax concessions including higher relative tax deduction, accelerated depreciation, tax offset, tax exemption or a reduced tax rate<sup>48</sup> are used to promote adjustments to land use. These tax incentives are not focused on industry wide change, but on the support for individuals making investments offering a land use benefit.<sup>49</sup> Examples include:

1. Three year write off for expenditure on water facilities (including the land care deduction),<sup>50</sup> valued at \$30 million for the 2006 year;
2. Tax write-off for horticultural plants,<sup>51</sup> valued at \$4 million for the 2006 year;

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<sup>47</sup> R. Douglas, *Potential Effects of Selected Taxation Provisions on the Environment, Consultancy Report to the Productivity Commission* (2002) 11.

<sup>48</sup> R H Woellner, S Barkoczy, S Murphy and C Evans, *Australian Taxation Law* (18<sup>th</sup> ed, 2008) [1.170].

<sup>49</sup> Termed 'tax expenditures', representing their character as a reduction from net taxation available for government expenditure: Australian Treasury, *2006 Tax Expenditure Statement*.

<sup>50</sup> Income Tax Assessment Act 1997 (Cth), Subdiv. 40-F

3. Deduction for environmental protection,<sup>52</sup> valued at \$4 million for the 2006 year.

The Allen Consulting Group study suggested a tax-favoured private investment scheme could generate \$12.7 billion of private funds, a leverage of 3.47 on government expenditure.<sup>53</sup> They proposed a Land Repair Fund with some characteristics of the Natural Heritage Trust and Research & Development concessions, and incentives for conservation on private lands or investment in environmental technology and management. The vehicle proposed was Sustainable Landuse Investment Corporations. The study did allude to the possibility of combining taxation incentives with market instruments such as carbon or other credits. This idea was not developed beyond the concept of trading in environmental outcomes.

In order to provide an indication of the potential from the ROCP aspect of the business model we conducted two evaluations with farmer conservation bodies of the outcomes available from ROCP programs. These were conducted with the Ricegrowers' Association of Australia (RGA)

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<sup>51</sup> Income Tax Assessment Act 1997 (Cth), subdivision 40-F

<sup>52</sup> Income Tax Assessment Act 1997 (Cth), s 40-755

<sup>53</sup> The Allen Consulting Group, *Repairing the Country: Leveraging Private Investment* (2001)

and the Liverpool Plains Land Management Committee (LPLMC). RGA is an industry body with more than 1,700 members and has a strong environmental focus including programs for environmental management and stewardship. Two such programs are the Biodiversity and Greenhouse Strategies. LPLMC is a landholder body established in 1992 in the Namoi Valley. It is run by and has a suite of programs for on-farm conservation farming. Both evaluations showed significant social, environmental and economic ‘payoffs’ from the adoption of a landscape scale privately funded and managed business model for the environment<sup>54</sup>. The market model outlined in this paper has the feature that it is focused upon the creation of competitively vibrant and efficient private market. From first principles of economics it should be anticipated that this will result in significant leverage beyond that attributable to direct government subsidy, or even a mere tax deduction. However it is not within the scope of this paper to evaluate this value.

Since the completion of this work there has been substantial interest evoked from farming, environment and government bodies. An advocacy group of organisations has been formed to stimulate discussion of new privately funded market models for conservation of rural lands, and

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<sup>54</sup> For details see P Martin, S Shearing and K Werren, *Concepts for private sector funded conservation using tax-effective instrument* (Land and Water Australia) (2007).

discussions have been initiated with government. The outcomes of this research have, if nothing else, demonstrated that:

1. approaching tax policy from within the lens of efficient business models (rather than as a stand-alone consideration) does provide new and potentially powerful insights into tax reform options;
2. there is a significant potential to leverage limited government funds into substantial public good outcomes, through the marriage of limited tax reform to new institutional models; and
3. by conducting technical taxation research collaboratively with the farm and environmental sectors, and with those involved in the practical aspects of finance and taxation issues, it is possible to achieve significant gains over doing so in isolation.