

BUILDING A BETTER FUTURE THROUGH COLLABORATION

The Business Case for expanding collaborative investments
in the forest and wood products sector





Board endorsement

The Board of Forest and Wood Products Australia Limited (FWPA) has reviewed the *Business Case for Future FWPA Investments 2013 to 2018*, which was developed in response to February's industry leaders' Summit.

The Board believes that the business case is highly robust and that there is a very good economic payback from increased industry investment in collaborative activities within the forest and wood products sector.

The future programs identified at the Summit, and further developed within the business case, will require a significant investment by industry that will be reflected in increased levies. The Board recognises that the current economic climate for the industry is extremely tough and the proposed levy increases may need to be phased in over a three-year period.

As confirmed by the independent consultant's review of FWPA, the Board is confident that the company has the governance and business systems in place to deliver the projected benefits of the planned collaborative activities on behalf of, and to, the industry.

On this basis, the Board fully supports and commends the Business Case to industry and the Commonwealth Government.

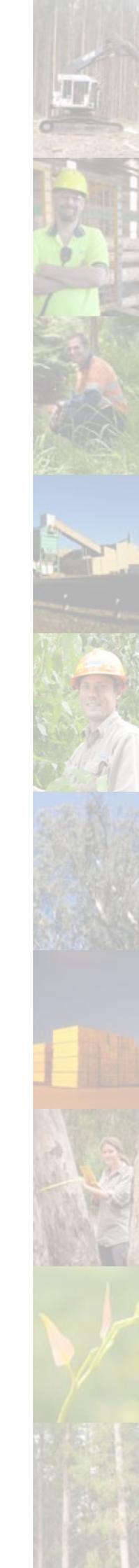
Yours sincerely,



Ron Adams,
Chairman

Contents

Deciding our industry's future	3
Identifying future activities	5
The role and performance of FWPA	5
The industry today: Challenges & Opportunities	6
The 2012 Industry Summit	7
Overview of proposed activities	9
1. Enhancing social licence	9
2. Growing the market	13
3. Improving statistics and economic analysis	16
4. Integrating forest research and extension	17
5. Boosting manufacturing productivity	20
6. Addressing skills shortages	21
Funding the programs and the levy	22
Proposed investments and funding implications	24
Return on investment (ROI)	25
Recommendation	28



Deciding our industry's future

Australia's forest and wood products industry faces unprecedented challenges and opportunities. How successfully the industry responds to the challenges and captures the opportunities will be, to a large extent, determined by its ability to act collaboratively, strategically and efficiently.

Over the past four years (2008-2012), Forest and Wood Products Australia Ltd (FWPA) has developed and successfully implemented a range of initiatives including R&D investment, generic promotion, standards coordination, and improved tech transfer.

The success of these programs has been objectively measured and the results are impressive. The ROI from R&D investments has been shown to have very high benefit to cost ratios, especially in the area of forest management. In relation to generic marketing, there is clear evidence that the advertising is having a positive impact on consumers and building specifiers across a wide range of measures. For example, the consumer awareness that wood products in the home store carbon rose by 24%, nearly a quarter. This is an exceptional result in marketing communications terms and provides knowledge that helps build the environmental credentials of wood and our industry.

FWPA is funded by industry levies and, where applicable, matching Government funds. Many of the recent initiatives were additionally funded through FWPA cash reserves, which have now been brought to a prudent level.

In February 2012, FWPA convened a Summit of the boards of the four national representative bodies of the Australian forest and wood products industry that are recognised under FWPA's constitution, as well as other FWPA company members and levy payers.

The Summit participants considered both new and existing FWPA programs and identified and prioritised those it considered to be of greatest value to the industry and its future.

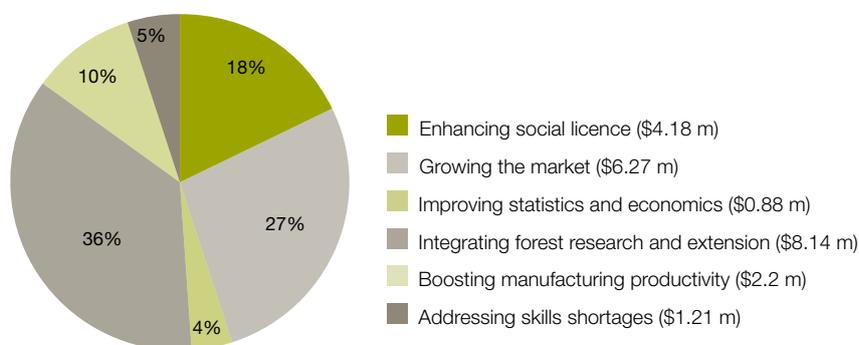
The resulting six areas of proposed activity, their investment allocation and implications on the levy are summarised in the table and chart overleaf. The full implementation of these programs requires a lift of 284% in industry funding.

This document, an overview of the comprehensive *Business Case for Future FWPA Investments 2013 to 2018*, covers the activities identified by the Summit, their benefits to various sectors and the implications for future levies.

It is recognised that the current economic climate is extremely tough and the proposed programs and associated levy increases may need to be phased in over time. One possibility is to implement the levy increases over a three-year period.

If the business case and phased implementation is supported, then there must be a formal process of consultation and an independently scrutinised poll of all levy payers who choose to vote on the proposal.

Proposed Investments by Objective



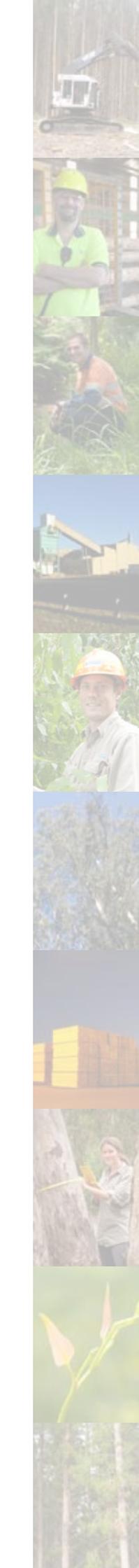
Current and Proposed Funding

	Total Investment	Gov't matching funds	Cash reserves and other income	Forest growers	Solid wood processors	Engineered wood processors	Importers	Exporters	Pulp and Paper	TOTAL LEVIES
Source of funds - 2011/12 ('000)	\$13,380	\$4,773	\$3,373	\$1,037	\$2,723	\$191	\$985	\$297	\$0	\$5,234
% of total levy income				20%	52%	4%	19%	6%	0%	100%
Current levy*				\$0.05	\$0.29	\$0.15	\$0.715	\$0.035	\$0	
Funds required for business case ('000)	\$22,880	\$8,008		\$5,845	\$5,318	\$868	\$1,981	\$860	\$0	\$14,872
% of total funds required				39%	36%	6%	13%	6%	0%	100%
Required levy per m³				\$0.25	\$0.50	\$0.50	\$1.36	\$0.08	\$0.00	

* Highest current levy in the category is shown

Possible Staged Implementation

Source of funds ('000)	2011/12 (forecast)	2012/13 (budget)	Year 1	Year 2	Year 3
Industry levies	\$5,234	\$5,371	\$8,000	\$11,000	\$14,872
Gov't matching funds	\$4,773	\$3,079	\$6,000	\$7,000	\$8,008
Total	\$10,007	\$8,450	\$14,000	\$18,000	\$22,880
Cash reserves	\$3,373				
Total investment	\$13,380	\$8,450	\$14,000	\$18,000	\$22,880



Identifying future activities

The importance of identifying and planning future activities and their funding for Australia's forest and wood products industry

Australia's forest and wood products industry is at a crossroads. Market conditions and economic and environmental factors are challenging the way the industry operates, while also creating new opportunities. The industry's ability to influence change (as much as possible) and maximise the potential of new opportunities is directly related to its capacity to act cohesively and effectively.

For the past four years (2008-2012), Forest and Wood Products Australia Ltd (FWPA) has provided product and market development services, funded by levy payers and the Federal Government. Essentially, FWPA has provided services that are not economically or strategically feasible for individual organisations or industry sectors to deliver.

This document is one of two that have been prepared to explain the situation and options to ensure informed decision making. The other document is the full version, *Business Case for Future FWPA Investments 2013 to 2018*. Readers seeking a greater depth of information about programs and funding implications are encouraged to review this document.

FWPA has provided services that are not economically or strategically feasible for individual organisations or industry sectors to deliver

The role and performance of FWPA

FWPA was established in September 2007 following widespread consultation and a poll of levy payers. The private company replaced the existing Government statutory authority so there could be an organisation to undertake generic marketing as well as R&D investments.

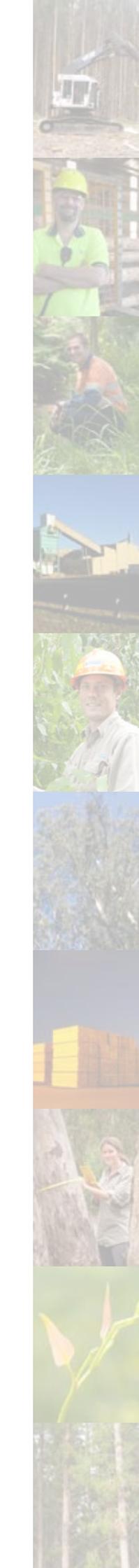
Over the past four years, in response to industry guidance, the FWPA Board has significantly increased activities funded from cash reserves. By June 2012, the company's reserves will be reduced to a prudent level, so a balance between income and expenditure will be needed in future financial years.

The company's first five-year plan of operations and statutory funding agreement (SFA) with the Commonwealth Government finishes in September 2012. Future funding arrangements are up to industry to decide. To help determine the future (if any) of the company and its operations, an independent review was undertaken as required under the SFA. The consultants concluded:

This performance review has found that FWPA is a well-run company that has met its obligations under the statutory funding agreement with government. Stakeholders including DAFF have generally described FWPA as performing its functions effectively. Where there were some areas of relative weakness early in FWPA's existence these have generally been addressed over the review period.

– SED Consulting (2012)¹

¹ http://www.fwpa.com.au/sites/default/files/FWPA_performance_review.pdf



The industry today: Challenges & Opportunities

During the past 10 years the Australian forest and wood products industry (including importers and exporters) has changed substantially and today it faces significant challenges, including:

- low profitability and return on investment
- impact of exchange rates on trade-exposed sectors
- low housing starts in Australia and key international markets
- increased competition from other nations supplying forest products
- changing ownership across all sectors
- reduced investment in R&D (and the resultant collapse in R&D capacity)
- reduced investment in industry associations (and the resultant collapse in capacity to advocate for the industry)
- continued concern about the industry's social licence to operate
- effect of adverse government policy settings

Opportunities include exploiting the environmental advantages of wood (low embodied energy and carbon sequestration) during and after the transition to a lower carbon economy

Opportunities have the potential to deliver significant benefits and contribute to ameliorating the effects of some of the challenges:

- the environmental advantages of wood (low embodied energy and carbon sequestration) during and after the transition to a lower carbon economy
- the positive feelings towards, and support for, wood as a material by consumers and material specifiers
- the growth in the Australian population and consequent need to increase housing stock
- the potential for new engineered wood products such as cross laminated timber (CLT) to develop new sectors of the construction market
- the potential to improve forest productivity for the existing estate
- lower manufacturing and logistics costs through innovation based on R&D findings
- lower operating costs through collaborative R&D and extension
- the belief that the scientific underpinnings of the sector will result in favourable government policy settings.

A positive future for the sector is not guaranteed.



Other material groups, such as concrete, steel and plastic composites, are repositioning and redesigning their products to improve environment credentials and performance.

The forest and wood products industry also has entrenched critics who continue to oppose industrial-scale forestry in native forests and the conversion of agricultural land to industrial plantations.

Unlike other higher-profile manufacturing sectors (e.g. car manufacturing, aluminium smelting), the potential closure of forest and wood products manufacturing, as well as the downstream secondary and tertiary manufacturing, has failed to gain public or political attention and action.

There is awareness that the sector cannot individually, or collectively, continue in a 'business as usual' manner. However, given its low profitability, there is the question of whether the sector can make the necessary investments to change its cost structure, products or markets.

As a whole, the forest and wood products industry faces a classic 'Catch 22' situation: it cannot afford not to change but may not have the funds to change – this applies to both individual corporate and collaborative activities.

In February 2012, FWPA took the first step towards addressing this issue.

The 2012 Industry Summit

In February 2012, FWPA convened a Summit of the boards of the four national representative bodies of the Australian forest and wood products industry that are recognised under FWPA's constitution, as well as other FWPA company members and levy payers.

The aim of the Summit was to answer the following four questions:

1. Are collaborative programs important for the industry's future?
2. If so, which programs are of the highest priority?
3. Which programs should be managed by FWPA on the industry's behalf?
4. Which programs are the industry prepared to fund?

The overall sentiment from the Summit was:

There was clear support for the continued role of FWPA. It was acknowledged that the company was performing well with high levels of governance and credibility ... There was also conditional support for increased levies if a business case showed the benefits to levy payers based upon the quantum of increase and the overall benefit to industry from key program investment.

– Australian Business Class 2012²

As a whole, the forest and wood products industry faces a classic 'Catch 22' situation: it cannot afford not to change but may not have the funds to change

² <http://www.fwpa.com.au/sites/default/files/FWPA%20Summit%20Summary%202012.pdf>

In addition, the Summit participants prioritised existing company programs and a range of potential future programs, as shown below.

Existing Program New Program

PROGRAM	Priority	Comments
Wood processing R&D	1	
Market access and development R&D	1	
Standards and Building Codes coordination	1	
Building specifier marketing strategy	1	
Consumer advertising and Planet Ark alliance	1	
Tech transfer program	1	
Primary and secondary education (ForestLearning)	1	
Herbicide trialling consortia	1	Currently partially funded by non-matched funds
Genetics deployment	1	Currently partially funded by non-matched funds
Forest health surveillance network	1	
Built environment technical support	1	
Industry statistics and economics	1	Currently partially funded by non-matched funds
Forest harvest and haulage	2	
Private forest grower extension	2	
Shared services	2	May be in conflict with Statutory Funding Agreement
Native forest access campaign	3	
Forestry education	3	
Postgraduate scholarships	3	
Mid-career development		Not supported
Promoting the sector as a career (Growing Careers)		Not supported

The programs have been organised into six areas of activity, grouped by objectives, efficiency and effect:

1. **Enhancing social licence**
2. **Growing the market**
3. **Improving statistics and economic analysis**
4. **Integrating forest research and extension**
5. **Boosting manufacturing productivity**
6. **Addressing skills shortages.**

The following pages present an overview of each area of activity and the proposed investments for the programs within them.

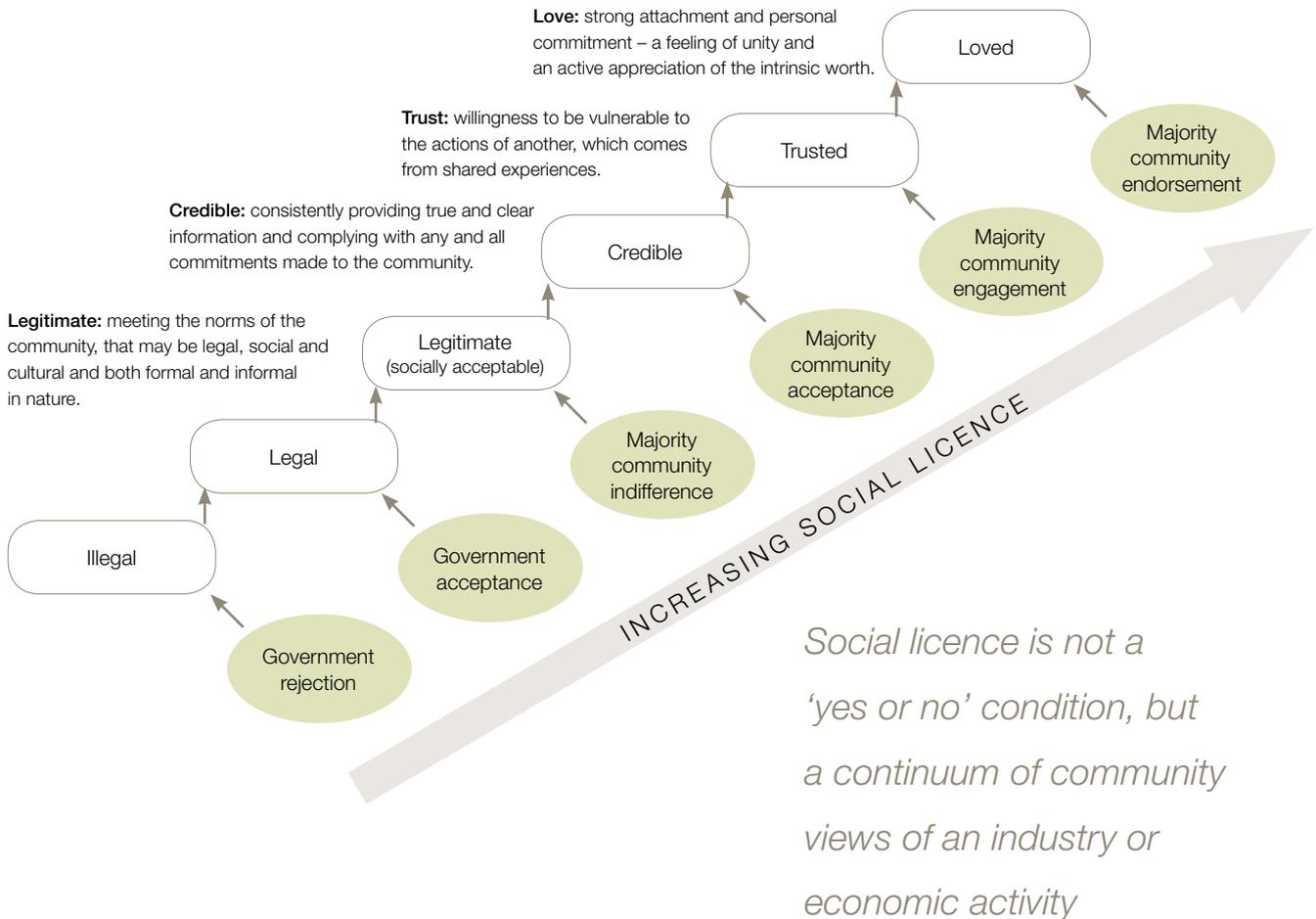
Overview of proposed activities

1 Enhancing social licence

The term 'social licence' has gained prominence over the past decade to describe the activities that, although legal, require community approval to continue, develop or expand. Social licence is not a 'yes or no' condition, but a continuum of community views of an industry or economic activity.

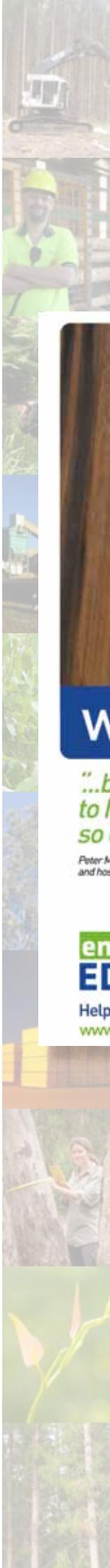
All sectors of the forest and wood products industry, whether associated with native forests, plantations or imports, are confronted with issues and interest groups that could undermine their social licence to operate.

Social Licence Continuum



Enhancing social licence

	Total Investment	Gov't matching funds	Industry funds required	Forest growers	Solid wood processors	Engineered wood processors	Importers	Exporters	Pulp and Paper
Investment required ('000)	\$4,180	\$165	\$4,015	\$1,221	\$1,584	\$120	\$683	\$407	\$0
Required levy per m³				\$0.05	\$0.15	\$0.07	\$0.47	\$0.04	\$0.00



Consumer advertising and Planet Ark alliance

FWPA's consumer promotion campaign, Wood. Naturally Better.™ and the partnership with Planet Ark are intended to encourage the use of sustainably sourced wood products rather than other building materials. Increased understanding of the environmental benefits of wood products, especially in a carbon constrained economy, can help support the industry's social licence to operate. Planet Ark is one of Australia's most trusted sources of information about environmental issues.

The performance of the campaign is measured regularly using consumer tracking research. This research clearly demonstrates that the campaign has been successful in improving consumer understanding of the role of wood and carbon and has improved consumer perceptions across a wide range of measures.

The research clearly demonstrates that the campaign has been successful in improving consumer understanding of the role of wood and carbon



why wood?

"...because it's far better for our environment to have carbon stored for life in here... so choose sustainably sourced wood."

Peter Maddison, award-winning architect and host of Grand Designs Australia

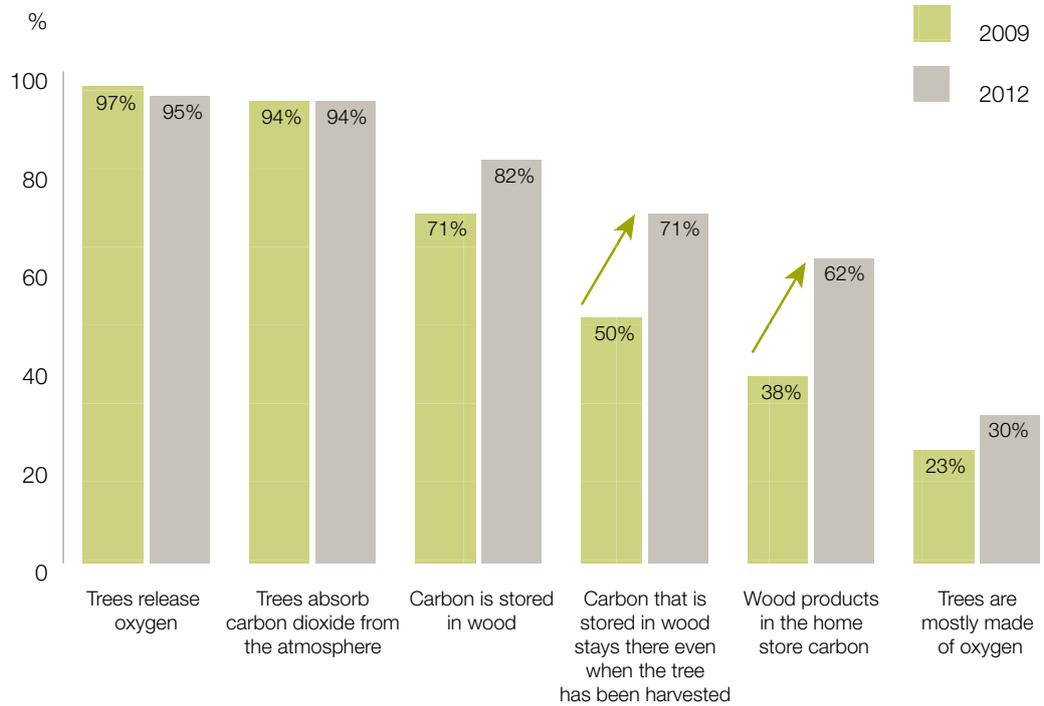
environmental EDGE PLANET ARK

Helping you make better environmental choices
www.environmentaledge.com.au

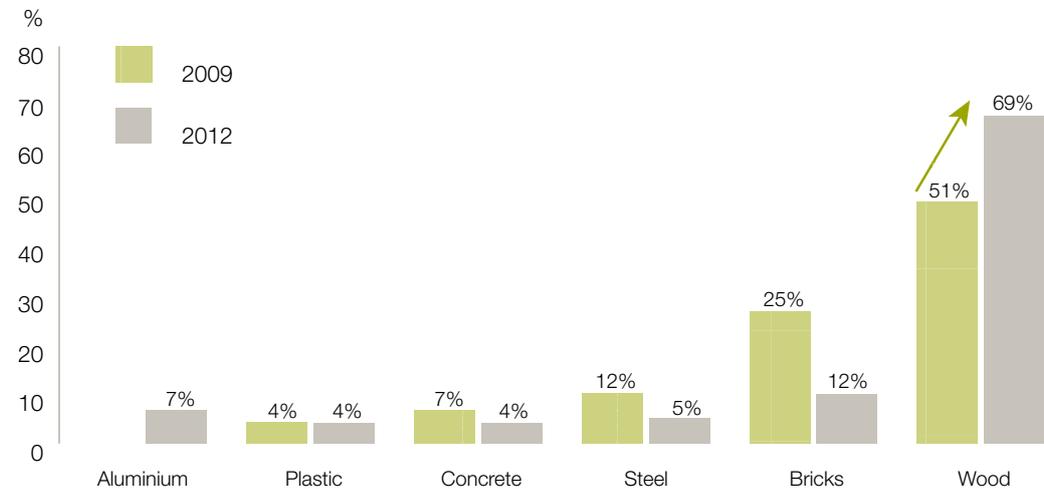
WOOD
NATURALLY BETTER
www.naturallybetter.com.au

- ▲ TV host and architect Peter Maddison presents the Wood. Naturally Better.™ Environmental Edge commercial for Planet Ark.

Consumers' understanding of wood and carbon



Consumers' association of various materials with 'environmentally friendly'



Plans for future consumer promotional activity include:

- expanding the frequency and reach of the Planet Ark co-branded TV advertising and gradually evolving the message
- developing and distributing support materials to trade partners to promote the message throughout and through the supply chain
- expanding the support of events that can be used to promote the 'wood is good' message (e.g. National Carpenters Day, Sustainable House Day, home shows)
- assisting in developing consistent themes in messaging across FWPA and industry campaigns

Proposed investment: \$2.75 million per year



Primary and secondary education (ForestLearning)

The teacher education program, ForestLearning, has the potential to positively affect the industry's social licence through developing informed attitudes toward the industry. The ForestLearning program was launched in June 2011 with a new website (www.forestlearning.edu.au) that is being promoted directly to teaching associations and via the Primary Industries Education Foundation (PIEF). The website provides a convenient access point for pre-existing teaching resources for years 3 to 12 across a range of subjects.

Future activities planned under this program include:

- progressive upgrading of teaching resources to align with the national curricula across a range of subject areas and age groups
- promoting the availability of the resources to teachers
- undertaking a limited 'teach the teacher' program to create champions
- developing a program of school visits by industry supporters

Proposed investment: \$0.33 million per year*

Native forest access campaign

A structured, national program to maintain access to native forests must be built on a platform of cogent social, economic and moral arguments that are relevant to a largely urban population. The proposed investment is insufficient to support mass media advertising, so a targeted program aimed at opinion leaders would be undertaken.

Activities would include:

- market research into issues related to management of native forests
- developing social, economic and moral arguments related to native forest management
- communicating with key opinion leaders and journalists
- developing a website and marketing collateral
- targeted advertising

Proposed investment: \$1.1 million per year

A structured, national program to maintain access to native forests must be built on a platform of cogent social, economic and moral arguments

*All proposed investments in this document are inclusive of a nominal 10% corporate overhead cost

2 Growing the market

Wood is highly regarded by consumers, however, owing to a range of factors, this level of goodwill does not necessarily translate into increased sales volumes or improved social licence.

There is an opportunity to significantly grow the market for wood-based construction systems in both traditional and non-traditional markets in Australia. This can benefit the sector by increasing market share compared to other materials or increasing market price, or both.

The traditional market for wood in the Australian marketplace is for structural or decorative applications for use in new and renovated detached dwellings. There is an opportunity to increase the use of wood in detached houses. Also, recent developments such as Lend Lease's new cross-laminated timber (CLT) building in Melbourne suggest that timber-based construction systems have the potential to gain market acceptance in multi-residential and non-residential buildings.



Initiatives in this program include:

Market access R&D and extension

Since 2002, about \$21 million has been invested in market access research and extension. An independent assessment concluded that this investment has generated around \$68 million in value to the industry, a benefit-cost ratio of 3:2.

Planned future activities include:

- quantifying the environmental credentials of wood products for application within the emerging environmental ranking schemes in the built environment
- analysing and reporting housing market needs and expectations for timber building materials in terms of performance and alignment to emerging construction practices and regulations and development of new knowledge where appropriate
- identifying and analysing product opportunities for timber materials within multi-residential and non-residential construction sectors and developing new knowledge where appropriate

Proposed investment: \$2.2 million per year

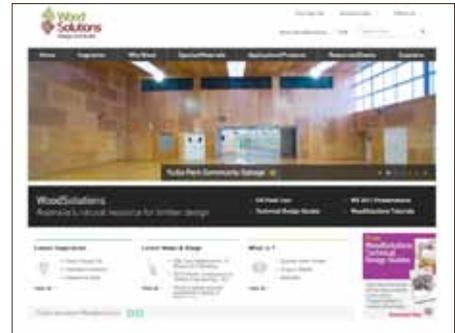
Growing the market

	Total Investment	Gov't matching funds	Industry funds required	Forest growers	Solid wood processors	Engineered wood processors	Importers	Exporters	Pulp and Paper
Investment required ('000)	\$6,270	\$1,628	\$4,642	\$757	\$2,149	\$519	\$1,216	\$0	\$0
Required levy rates (\$/m ³)				\$0.03	\$0.20	\$0.30	\$0.83	\$0.00	\$0.00

Building specifier marketing strategy (WoodSolutions)

WoodSolutions is currently focused on establishing a credible platform for delivering independent, generic information to building specifiers. Activities to date have included:

- an authoritative website and knowledge database
- a national seminar program
- onsite technical presentations
- technical design guides
- alliances with key professional associations
- developing a strong brand



Measure of success for WoodSolutions

Measure	Results
Number of daily visits to website	1,400
Number of registered users to website	4,500
Percentage of seminar participants who said they would be using more wood in their future projects	80%
Percentage of seminar participants who wanted to receive up-to-date and relevant information on designing with wood	94%

Planned additional activities include:

- expanding alliances to other professional associations (e.g. developers)
- developing timber engineering and costing tools to address market gaps for multi-residential and non-residential construction
- developing and distributing education resources to university and TAFE students
- developing accredited continuous professional development programs (CPD) for building professionals



Proposed investment: \$1.32 million per year



Standards and Building Code coordination

This program, begun in 2009, aims to increase the use of wood-based products through the efficient and effective development and/or maintenance of key standards, codes and handbooks that support the manufacture and use of timber and wood products (except forest management standards).

Standards and codes are important to market access. The industry has approximately 150 timber and wood product standards and is exposed to nearly 80 building standards that influence the use of timber and wood products. In addition, there are many building regulations that reference standards that affect the use of timber and wood products.

The main planned additional activities include:

- developing a mechanism to control linkage between standards to ensure changes flow in a planned manner
- reducing the number of relevant Australian standards to a sustainable number of approximately 30 to 40
- migrating non-key standards to other formats such as industry handbooks or guides
- developing a training program to increase adoption of key standards
- providing training opportunities for early career technical people
- reducing regulatory barriers for timber and wood products

Proposed investment: \$0.55 million per year

It is proposed to develop a support team of 8-10 technical wood specialists who have backgrounds as design and building professionals

Built environment technical support

Lack of knowledge is the main reason why specifiers – architects, building designers, engineers, etc – don't use wood and wood products more often. A technical support service can disseminate timber and wood product knowledge as well as inspiring the design and construction of timber projects, and providing technical advice to all design professionals.

It is proposed to develop a support team of 8-10 technical wood specialists who have backgrounds as design and building professionals (e.g. structural engineers, architects, building designers, project managers). This team would operate in key Australian markets and urban centres, providing generic support under the WoodSolutions brand.

The support team would also be a resource for the other FWPA programs and initiatives. For example they can:

- provide representation on building standards and regulatory committees
- liaise with key building professional associations
- be the 'eyes and ears' on developing issues or opportunities
- provide the speakers for the WoodSolutions onsite tutorial and industry-organised seminars and workshops
- develop or review publication and guides
- supply content for the WoodSolutions website
- provide educational links and lectures

Proposed investment: \$2.2 million per year

3 Improving statistics and economic analysis

FWPA and its predecessor have provided funding to gather, analyse and publish key industry statistics that are of benefit to industry and other parties. However, much data is incomplete or of limited use in decision-making. A survey showed that improved data would be used by all industry participants.

Industry statistics and economics are eligible for Commonwealth matching payments, so the cost to industry could be reduced by establishing a centralised statistics and economics service.

Under this program, it is proposed that FWPA take a much more active role in the collection and analysis of statistics for the sector.

FWPA's strong connections across industry sectors, linkage to government and its pre-competitive position puts it in an ideal position to help forge a new approach to statistics and economics.

A key platform is to establish an online statistics hub where data can be centrally entered, accessed and analysed. This model already exists for two key data sets, so it is a matter of implementing the appropriate systems that can provide confidence to maintain commercially sensitive data.

Equally important is to rebuild the skills to critically analyse the data and make meaningful projections into the future.

FWPA's strong connections across industry sectors, linkage to government and its pre-competitive position puts it in an ideal position to help forge a new approach

Specific activities under this program would include:

- developing a national statistics portal for entry and analysis of statistics
- developing regular economic forecasts of the sector's key metrics
- recruiting a national economist
- establishing an industry advisory group
- holding regular workshops and/or master classes on forest and wood sector economics

Proposed investment: \$0.88 million per year

Statistics and economic analysis

	Total Investment	Gov't matching funds	Industry funds required	Forest growers	Solid wood processors	Engineered wood processors	Importers	Exporters	Pulp and Paper
Investment required ('000)	\$880	\$440	\$440	\$176	\$176	\$13	\$44	\$31	\$0
Required levy rates (\$/m³)				\$0.01	\$0.02	\$0.01	\$0.03	\$0.003	\$0.00

4 Integrating forest research and extension

The changing structure of the Australian forest and wood products sector (particularly the significant decline in research capacity and imminent closure of the CRC for Forestry) requires a new approach to the funding of R&D and encouraging the uptake of R&D findings.

FWPA is an active participant in the national research, development and extension process and is hopeful that an overarching solution can be developed for the sector. However, in the interim, there is a need for ongoing investment in FWPA's current five priority R&D areas as well as five additional priorities identified at the Summit.

Sustainable resource R&D

FWPA has completed and published five investment plans to inform its future investment portfolio in forest research:

1. Genetic improvement and delivery
2. Mitigation and adaptation to climate change
3. Water use efficiency, and balanced policy outcomes
4. Forest management tools

Each investment plan has been developed following extensive consultation, analysis of the current situation and desired outcomes from the investments and, in some plans, a recommended resource allocation.

Proposed investment: \$2.2 million per year

Each investment plan has been developed following extensive consultation, analysis of the current situation and desired outcomes



Forest research and extension

	Total Investment	Gov't matching funds	Industry funds required	Forest growers	Solid wood processors	Engineered wood processors	Importers	Exporters	Pulp and Paper
Investment required ('000)	\$8,140	\$4,070	\$4,070	\$3,143	\$482	\$74	\$0	\$371	\$0
Required levy rates (\$/m³)				\$0.13	\$0.04	\$0.04	\$0.00	\$0.03	\$0.00



Genetics deployment

It is proposed that tree breeding be done on a national basis to improve cost efficiency and deliver more genetic gain per unit time with lower overheads. This approach is recommended because breeding programs are largely precompetitive in nature and require secure and predictable funding over a long period of time.

Specific activities under the genetics deployment program would include:

- reviewing all historic genetics research across species and regions to determine its suitability for incorporation into a national program
- transferring all existing trials and data into a common database for evaluation and information conservation
- developing and adopting common information and analysis tools
- establishing agreed breeding strategies for key species and regions
- liaising with international tree breeding programs to leverage collective knowledge.

Proposed investment: \$1.1 million per year

Forest health surveillance

Managing forest health in response to a wide range of pests can be critical to the productivity and viability of commercial forestry. Given the mobility of pests, there are strong arguments for collaboration within and between regions.

A national approach to forest health surveillance must be focused on building systems and tools that can be applied at a regional level.

Specific activities under this program will include:

- establishing a network of forest health specialists to provide remote diagnostics and extension support for plant pest

and disease outbreaks for plantation managers

- providing and resourcing field sampling, reporting and response activities by a program of forest health experts and field foresters
- providing susceptibility assessments of commercial plantations and native forests to emerging pathogens
- developing appropriate response strategies in the event of detected outbreaks.

Proposed investment: \$0.66 million per year

Pesticide trialling

To maintain and improve the productive capacity of the Australian forestry plantation industry growers must be able to minimise the effects of weed competition and insect attack.

The most economical way to achieve this goal is through the use of pesticides, specifically herbicides and insecticides. However, there is an underlying community concern about the use of pesticides that requires communication with local communities as well as addressing regulatory and compliance requirements.

Specific activities would include:

- continuing the current herbicide testing program with provisions for expansion into new tree species and site conditions
- expanding into evaluation and licensing of insecticides and fungicides against common plantation threats
- liaising with chemical producers to set priorities for research to meet industry needs
- developing and promulgating best practice guides for chemical use to enhance efficiency and social acceptability

Proposed investment: \$0.66 million per year



Forest harvest and haulage

The supply chain linking forest owners, logging and haulage contractors and processors is critical to the success of the domestic industry. Optimising this supply chain has historically been difficult due to competing interests, poor communication and differing technical skills.

The proposed program will cover the timber supply chain from pre-harvest planning and preparation through to delivery and pre-processing of timber products. Specific activities would include:

- developing existing tools and research outputs so they are practical and useful to Australian timber supply chain participants
- developing new practical, integrated tools to optimise efficiency and value across the supply chain in accordance with international best practice
- benchmarking supply chain costs between regions and international areas
- encouraging the adoption of R&D findings and tools throughout the supply chain

Proposed investment: \$1.32 million per year

The proposed program will cover the timber supply chain from pre-harvest planning and preparation through to delivery and pre-processing

Private forest grower extension

One of the best opportunities to expand the forest estate in key 'wood basket' regions is to stimulate the small to medium-sized farm sector.

While current and past state and regional based programs have met with varied success, the encouragement of a vibrant small to medium-scale privately owned forest resource base can help overcome a number of economic and social constraints on future wood supply in key regions.

Proposed activities include:

- developing a program of technology transfer and extension to capitalise on significant historic research and technical investment
- developing field extension services in the major commercial forestry regions
- coordinating with key state agencies and local industry, where present
- tasking extension officers to expand the private tree farm estate in key regions
- facilitating development or maintenance of cooperative structures
- providing independent technical and commercial advice
- developing a program for collection and analysis of private forestry statistics, including sales data

Proposed investment: \$2.2 million per year

5 Boosting manufacturing productivity

Funding of pre-competitive research in wood processing for solid wood products and engineered wood products has been undertaken by FWPA and its predecessor. However, research capacity in Australia for wood processing, properties and performance is now extremely limited with much of the expertise limited to one facility.

Australian plantation species and native forests have unique properties that require optimisation of processing technology for local conditions.

Research capacity for wood processing, properties and performance is extremely limited with much of the expertise now limited to one facility

Wood processing R&D

A future program of activity has been identified in two FWPA R&D investment plans. Key activities include:

- optimising production grading systems, translating log quality measures into improved product value and volume recovery
- improving product durability through wood modification and preservative treatment
- improving mill productivity through reduction in process energy and water consumption
- improving in-mill processing logistics and material handling systems

Proposed investment: \$2.2 million per year



Manufacturing productivity

	Total Investment	Gov't matching funds	Industry funds required	Forest growers	Solid wood processors	Engineered wood processors	Importers	Exporters	Pulp and Paper
Investment required ('000)	\$2,200	\$1,100	\$1,100	\$220	\$770	\$110	\$0	\$0	\$0
Required levy rates (\$/m ³)				\$0.01	\$0.07	\$0.06	\$0.00	\$0.00	\$0.00

6 Addressing skills shortages

Over the past decade, investigations and initiatives have addressed the workforce skills needed for the sector. FWPA developed an education investment plan to address some of the identified gaps, which included the development of the ForestLearning and GrowingCareers programs.

One of the specific skills shortages identified by Forestworks and the FWPA review relates to tertiary-trained professional foresters. Under the education investment plan, FWPA has undertaken some limited activity to help promote professional forestry as a career opportunity to 18-35 year olds.

Training professional foresters and future researchers within Australia will ensure that their skills are closely aligned to the needs of the sector.

Forestry education

Proposed investment: \$0.88 million per year

Postgraduate scholarships

Proposed investment: \$0.33 million per year

Skills shortage

	Total Investment	Gov't matching funds	Industry funds required	Forest growers	Solid wood processors	Engineered wood processors	Importers	Exporters	Pulp and Paper
Investment required ('000)	\$1,210	\$605	\$605	\$328	\$157	\$30	\$39	\$52	\$0
Required levy rates (\$/m ³)				\$0.01	\$0.01	\$0.02	\$0.03	\$0.005	\$0.00



Training professional foresters and future researchers within Australia will ensure that their skills are closely aligned to the needs of the sector

Funding the programs and the levy

The levies to FWPA are established by Commonwealth Government legislation and regulation, and have remained largely unchanged since they were enacted in 1994.

The major changes have been the incorporation of the National Timber Market Development levy, the increase in the hardwood levy from 22 cents to 29 cents, and the introduction of a new forest grower levy class at 5 cents/m³. The current levy rates for the 12 levy classes are shown below.

Statutory levies by class

Levy class	Levy category	Unit	Current levy rate	Proposed levy rate
Private grower levy	Grower	m ³ round log	\$0.05	\$0.25
Gov't grower levy	Grower	m ³ round log	\$0.05	\$0.25
Hardwood sawlog	Solid wood processor	m ³ round log	\$0.29	\$0.50
Softwood sawlog	Solid wood processor	m ³ round log	\$0.29	\$0.50
Softwood low grade/roundwood	Solid wood processor	m ³ round log	\$0.08	\$0.50
Cypress	Solid wood processor	m ³ round log	\$0.22	\$0.50
Hardwood woodchip	Exporter	m ³ round log	\$0.035	\$0.08
Softwood woodchip	Exporter	m ³ round log	\$0.00	\$0.08
Wood panel	Engineered wood processor	m ³ round log	\$0.10	\$0.50
Plywood & veneer	Solid wood processor	m ³ round log	\$0.15	\$0.50
Importer charge	Importer	m ³ finished product	\$0.725	\$1.36
Pulp and paper	Pulp and paper	m ³ round log	\$0.00	\$0.00

Note: importer charge is currently calculated at 2.5 times the highest domestic levy

Simplifying the levy classes to 6

Compared to other RDCs, the forest and wood products sector has a more complex administrative arrangement with 12 levy classes varying with product type. This increases administration costs for companies and government. To assist in the analysis of the proposed programs in this business case, the 12 levy classes have been consolidated to six. It is a recommendation that the industry support the consolidation of levy classes into these six categories to reduce the administrative costs of the levy system.

Comparing wood levies to other commodities

A comparison of levies compared to other commodities shows that the levies within the wood sector are significantly lower than any other sector, as a proportion of the estimated selling price.

The table below shows that, even at the new levels required to fund the activities outlined in this report, the levies are still significantly lower than those paid by members of other industries.

Comparison of levies to other commodities

Organisation	Commodity type	Current Levy rate (\$)	Estimated commodity price (\$)	Current levy as a proportion of selling price	Proposed levy as a proportion of selling price
Forest and Wood Products Australia Ltd	Round log	0.050	55	0.09%	0.45%
	Softwood sawn timber ^a	0.290	400	0.07%	0.31%
	Imported softwood timber	0.715	400	0.18%	0.34%
	Engineered wood product	0.150	800	0.02%	0.07%
Cotton RDC ^b	Cotton	2.250	425	0.53%	
Australian Egg Corporation Ltd	Chick x 2d old	0.460	4.5	10.22%	
Dairy Australia	Milk	0.004	0.396	0.89%	
Australian Pork Ltd	Pig	2.525	200	1.26%	
Grape and Wine RDC ^b	Grapes	2.000	400	0.50%	
	Wine	4.980	1010	0.49%	
Rural Industries RDC ^b	Honey	0.023	3	0.77%	
	Bees	0.100	20	0.50%	
	Rice	3.000	275	1.09%	

(a) assumes 40% recovery (b) R&D expenditure only

...the levies within the wood sector are significantly lower than any other sector

Proposed investments and funding implications

This is a summary, by area of activity, of current and proposed investments levels and the implications for levy amounts.

All funding requirements include the estimated proportion of matchable payments from the Commonwealth Government.

	Total Program Cost (\$'000)	Total Gov't matching funds (\$'000)	Total industry funds required (\$'000)	Proposed funding by levy category (\$'000)					
				Forest growers	Solid wood processors	Engineered wood processors	Importers	Exporters	Pulp and Paper
Enhancing social licence	\$4,180	\$165	\$4,015	\$1,221	\$1,584	\$120	\$683	\$407	\$0
Growing the market	\$6,270	\$1,628	\$4,642	\$757	\$2,149	\$519	\$1,216	\$0	\$0
Improving statistics and economics	\$880	\$440	\$440	\$176	\$176	\$13	\$44	\$31	\$0
Integrating forest research and extension	\$8,140	\$4,070	\$4,070	\$3,143	\$482	\$74	\$0	\$371	\$0
Boosting manufacturing productivity	\$2,200	\$1,100	\$1,100	\$220	\$770	\$110	\$0	\$0	\$0
Addressing skills shortages	\$1,210	\$605	\$605	\$328	\$157	\$30	\$39	\$52	\$0

TOTAL	\$22,880	\$8,008	\$14,872	\$5,845	\$5,318	\$868	\$1,981	\$860	\$0
--------------	-----------------	----------------	-----------------	----------------	----------------	--------------	----------------	--------------	------------

Required levy per m ³	\$0.25	\$0.50	\$0.50	\$1.36	\$0.08	\$0.00
----------------------------------	--------	--------	--------	--------	--------	--------

Return on investment (ROI)

Enhancing social licence

In terms of financial benefits, a maintenance or improvement of social licence has the potential to reduce operating costs, increase market access (i.e. volume or price) and improve the recruitment of talented people to the sector.

The financial implications from an increase in market prices or volume are shown below as a sensitivity analysis which shows even relatively minor increases in price or volume will provide a more-than-adequate payback on the proposed investment.



Growing the market

All the market development activities are about improving the market conditions for forest and wood products. In a competitive market, increased demand will generally result in an increased market share (i.e. greater volume) and/or market price.

One approach to estimating returns is to review a range of scenarios, such as those below:

- 0.5% increase in market price achieved in full by Year 5
- 5% volume increase achieved in full by Year 5
- 1.5% increase in market price achieved in full by Year 10
- 15% volume increase achieved in full by Year 10.

	Benefit-cost ratio after 5 years	Benefit-cost ratio after 10 years	NPV after 5 years @ 8% discount rate (\$ m)	NPV after 10 years @ 8% discount rate (\$ m)
Scenario 1 0.5% price increase in full by Year 5	4.20	5.44	\$44.3	\$131.7
Scenario 2 5% volume increase in full by Year 5	6.04	8.02	\$70.1	\$208.7
Scenario 3 1.5% price increase in full by Year 10	4.64	10.58	\$45.1	\$262.5
Scenario 4 15% volume increase in full by Year 10	6.96	15.87	\$76.9	\$410.4

Improving statistics and economic analysis

It is estimated that the industry is currently spending \$600,000 to \$800,000 per year (excluding internal staff costs) on statistics collection and analysis. By centralising this activity, the sector should be able re-direct internal staff costs.

If the capital expenditure in the sector is assumed to be \$200 million per year, the potential returns from improved decision making can be estimated. This excludes the benefits that may derive from improved pricing and/or inventory decisions.

	Benefit-cost ratio after 5 years	Benefit-cost ratio after 10 years	NPV after 5 years @ 8% discount rate (\$ m)	NPV after 10 years @ 8% discount rate (\$ m)
Scenario 1 0.5% saving in Capex after 5 Years	1.36	1.82	\$0.52	\$2.04
Scenario 2 1% saving in Capex after 5 Years	2.73	3.64	\$2.79	\$7.03
Scenario 3 1.5% saving in Capex after 5 Years	4.09	5.45	\$5.06	\$12.02

Integrating forest research and extension

An *ex post* investment of FWPA's prior investments in forest R&D by URS Forestry shows the estimated benefit-cost ratio is more than 13:1. It is anticipated that the proposed program would generate benefits of the same order of magnitude of previous investments.

	No of Projects	Total Value Invested (\$'000)	Value of Sample projects (\$'000)	Sample projects as % of total investment	Weighted Average BCR	Estimated benefits from total investment (\$'000)
Growing	35	17,596	3,394	19	13.4	235,339

Source: URS Forestry – Benefit-cost analysis of selected projects within the FWPA R&D Program (2012)

Boosting manufacturing productivity

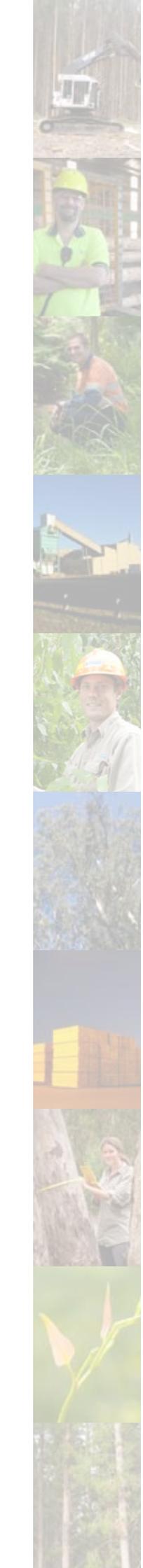
Previous analysis of FWPA's investment in manufacturing productivity, using the combined RDC methodology for benefit-cost analysis, has shown that the weight average return is 5.0 over a 20-year period. It is anticipated that similar returns could be achieved for future investments.

	No of Projects	Total Value Invested (\$'000)	Value of Sample projects (\$'000)	Sample projects as % of total investment	Weighted Average BCR	Estimated benefits from total investment (\$'000)
Processing	60	35,636	3,490	10	5.0	177,428

Source: URS Forestry – Benefit-cost analysis of selected projects within the FWPA R&D Program (2012)

Addressing skills shortages.

The return on investment in local training is achieved by avoiding the need to 'localise' overseas-trained professionals or researchers. It is estimated that the cost of localising would be in the order of 6-12 months at full salary costs (say, \$75,000-\$100,000 per year per person). If the sector requires 10-15 new recruits per year, then the proposed program would be cost neutral. Any requirements in excess of that would create a positive return.



Recommendation

The Australian forest and wood products industries are on the cusp of enormous change in response to the challenges and opportunities that are on the foreseeable horizon.

Critically, the sector needs to consider whether these challenges and opportunities will be addressed on a collaborative basis or on an individual corporate or sector basis.

FWPA was established as a vehicle for industry collaboration.

Over the last four years, FWPA has demonstrated that it can deliver clear and quantifiable outcomes in terms of R&D investments, generic marketing and standards coordination. It has established strong corporate governance, responsive stakeholder engagement and management systems that can be leveraged by industry to achieve its desired outcomes.

FWPA's business model has several key features in its favour

1. ability to eliminate 'free riders' through compulsory levies
2. access to Commonwealth Government matching funds for eligible activities
3. an industry-owned company with an industry-elected Board of Directors

The FWPA Board of Directors commends this Business Case to industry and to the Commonwealth Government. The proposed programs have a very favourable return on investment and the potential to deliver measurable benefits to all sectors along the full supply chain. By utilising a staged implementation, the short-term cost impact of the proposed investments will be spread over an agreed period.

At the Summit in February, there was clear endorsement for industry to work collaboratively to achieve a positive future for the sector. This Business Case was developed to help achieve this objective.