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31 March 2009

The Directors
FEA Plantations Limited
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INDEPENDENT FORESTER'S REPORT – FEA Plantations Project 2009

Dear Sirs,

The following report has been prepared for use by FEA Plantations in preparing a Product Disclosure Statement (PDS) in relation to FEA Plantations Project 2009 (the Project). This Project comprises the growing of various Eucalypt hardwood species in Tasmania, NSW and Queensland, Radiata pine softwood predominately in Tasmania, but potentially in other established softwood regions. High-value African mahogany hardwood will be established on selected sites in the Northern Territory.

This report aims to provide FEA Plantations with an independent assessment from a forestry perspective. It has been prepared in accordance with the Australian Forest Growers '*Disclosure Code for Afforestation Managed Investment Schemes*'. VDFC consent to FEA Plantations providing a copy of this report to prospective investors in the Project.

VDFC have prepared a summary of this report for inclusion in the PDS.

Apart from preparing this report and the associated Independent Market Report, Van Diemen Forestry Consultants Pty Ltd (VDFC) has had no other involvement with the preparation of this PDS.

Qualifications and experience

The Independent Forester, Mr Gerry Cross (principal consultant of VDFC) has prepared this report drawing on almost 40 years experience of plantation and forest industry management around the world. This includes some 33 years experience in all aspects of plantation development and management in Australia.

Mr Cross's qualifications are:

- Bachelor of Science (Forestry) from the Australian National University.
- Member of the Institute of Foresters of Australia (IFA).
- Registered Professional Forester and registered as a General Practising Forester.
- Deputy Chairman of the Association of Consulting Foresters of Australia Division of IFA.
- Member of Australian Forest Growers.
- Member of the National Association of Forest Industries.
- Member of a Victorian Panel for the Accreditation of Forest Practitioners to advise local government on forest practices.

As a requirement for membership of the Association of Consulting Foresters and to be an RPF, foresters are required to undertake Continuing Professional Development programs to stay abreast of changes in the profession. The opinions in this report are based on published materials and our inspections of Forest Enterprises Australia's (FEA) plantations and other plantations in Tasmania, interstate and overseas.

Overview of FEA Plantations Project 2009

Woodlots will be aggregated in Tasmania, NSW, Queensland and the Northern Territory near other large plantation estates.

The Project offers five Woodlot options:

- Woodlot Option 1 ($\frac{1}{2}$ hectare): A short Rotation(13 years) Eucalypt hardwood regime that will produce pulpwood and unpruned sawlogs
- Woodlot Option 2 ($\frac{1}{2}$ hectare): A high-value pruned Eucalypt hardwood sawlog/pulpwood regime, with a 16 year Rotation
- Woodlot Option 3 ($\frac{1}{2}$ hectare): A traditional Radiata pine softwood regime that will yield s sawlogs/pulpwood plus other products, in a 25 year Rotation
- Woodlot Option 4 ($\frac{1}{5}$ hectare): An African mahogany high-value hardwood sawlog regime, with an 18 year Rotation (Option 4); and
- Woodlot Option 5 ($3\frac{1}{5}$ hectare): A diversified forestry offer with four Option 1 Woodlots, one Option 2 Woodlot, one Option 3 Woodlot and one Option 4 Woodlot for a total of $3\frac{1}{5}$ hectares.

FEA Plantations (the Responsible Entity), has engaged FEA to manage the Project. The proposed plantations will be established on land selected by FEA based on a detailed land evaluation protocol.

FEA has developed a highly professional regime of site selection, tree establishment, annual maintenance, inventory, protection and community relations. In addition, FEA co-operates in forest research projects with other plantation owners to maintain high standards of plantation management.

As at June 2008, FEA Plantations have established 56,800 hectares of Eucalypt hardwood plantations in Tasmania, NSW and Queensland. In my opinion, these plantations have been established in a professionally competent manner and are being well managed to optimise their full site potential. The total Eucalypt estate will increase to in excess of 73,000 hectares by June 2009, plus around 500 ha of Radiata pine softwood. FEA Plantations' parent company FEA also has experience in managing Radiata pine softwood plantations through several small private holdings in Tasmania, which it has maintained for many years. In the past twelve months FEA has purchased some land with established African mahogany hardwood plantations on the property as well as an African mahogany tree nursery and hired a forester with knowledge of the Northern Territory forestry environment and several years experience in managing African mahogany plantations.

Capability of the plantation manager, FEA

FEA, the plantation manager, has demonstrated skill and expertise in Eucalypt hardwood plantation establishment, which can be readily observed in the level of development, growth and good Silvicultural practice on all the sites currently under their management in Tasmania, NSW and Queensland. In particular, the proposed intensive site preparation and follow up maintenance with fertiliser, vermin and insect control are 'state of the art' practice. From our observations we are confident that FEA will continue to use the best forest practices.

Yields from these plantations will still depend on seasonal conditions; however, the rainfall at these chosen sites is historically relatively high and dependable. Average growth and yields should be at least comparable with those achieved from the existing estate.

FEA's rationale for the plantations it manages is to develop aggregations of resource big enough to supply mills that are in turn big enough to process the logs economically for domestic and international markets, either as their sole resource or in conjunction with other developments. FEA has invested heavily in information technology in areas such as its in house Geographic Information System (GIS). This allows very accurate definition of planted areas and links to on ground GPS surveys and aerial and satellite remote imaging.

FEA has been increasing its ability to measure and monitor the progress of the plantations under management. FEA has staff members whose roles are solely to monitor the health and maintenance of the plantations and carry out frequent, regular field inspections. In addition, FEA has staff with a high level of growth modelling skills for ongoing sampling and inventory of the plantations. FEA has been upgrading its estate modelling software using a forest industry standard called Woodstock[®]. This allows complex modelling of wood flows to a range of markets to optimise wood production, product and financial outcomes.

Recognising the increasing scale of harvesting in Investor plantations, FEA has recently appointed dedicated Wood Supply Managers in both Tasmania and New South Wales to coordinate the harvest program for the company in each region. The engagement of an experienced forester in the Northern Territory will also maintain their expertise in a developing region.

Certification of management standards

FEA operates under an Environmental Management System (EMS), which has been certified to a standard recognised by JAS-ANZ as ISO 14001:2004. FEA achieved certification in December 2005 (Tasmania) and September 2007 (NSW and Queensland). An independent third party auditor verifies and carries out regular reviews of the EMS.

FEA is also committed to managing forests on a sustainable basis. In March 2007, FEA achieved certification of its Tasmanian 'defined forest area' estate against the Australian Forestry Standard AS 4708 - 2007. The Australian Forestry Standard is a nationally endorsed Australian Standard developed within the recognised international frameworks of the Montreal Process Criteria and Indicators (1995) and the ISO 14000 series of environmental standards which take account of local operating conditions. FEA achieved certification of its mainland 'defined forest area' estate in June 2008.

To complete environmental certification of its pulpwood supply chain, FEA's 50% owned subsidiary, SmartFibre Pty Ltd (SmartFibre), achieved AFS Chain of Custody certification in December 2007. This provides a guarantee to woodchip export customers that SmartFibre's products come from sustainably managed sources.

Plantation site selection

The specific site characteristics of each property to be used in the Project will be supplied to VDFC as part of the evaluation of land suitability. The Independent Forester will also inspect properties as part of the review for the Annual Report to Investors and will advise the compliance committee as to whether the land meets the selection criteria.

Productive Capacity

FEA have highly developed land selection criteria and field assessment techniques that are subject to continuous review. This ensures that the Project land base will be capable of growing a commercially viable plantation in each of the regions of operations.

Climate

Trees grow best in a mild climate with reasonably uniform rainfall so that, for most of the year, rainfall exceeds evaporation. Under the criteria produced for the Project, a minimum annual rainfall of about 800 - 1100mm is required.

On most existing FEA Plantations' sites, the long-term average rainfall is between 800 - 1500 mm per annum. Similar rainfalls can be expected for land acquired for this Project on adjoining or nearby properties.

Australia's eastern seaboard has experienced a prolonged drought over the past decade although rainfalls have generally matched those recorded during earlier droughts. A review of historical rainfall records for current plantation sites shows that past droughts have ended with a transition back to wetter climatic conditions. It is my considered opinion that potential problems can be overcome by choosing sites comprised of soils with appropriate qualities combined with suitably tailored site preparation techniques. During the current drought there have been technological improvements made to planting techniques to enhance tree survival.

Despite the drought, successful plantations have established by a number of professional plantation managers, including FEA Plantations. There is a reasonable expectation that such organisations can continue to operate successfully as the weather cycle moves through into a wetter period. Trees are very amenable to survival in extremes of climate as they have large roots systems that tap deep water reserves and can be less dependent on seasonal rain than shallow rooted annual crops. A review of the Bureau of Meteorology past 100 years rainfall records provides an understanding of the repetitive weather patterns in Australia. The continent has a recorded history of wet and dry cycles and as long as trees are planted on deeper soil profiles then they are very likely to survive and grow despite the drought. Obviously they do better in wetter periods than in drier times of the cycle.

Geology and Soils

FEA has developed soil selection criteria which ensure that selected land meets the requirements for high growth rates. This includes systematically assessing soil depth and drainage. FEA has extensive experience applying establishment techniques to match a range of suitable soils. These are being constantly improved as a result of research and assessment of results on the ground.

The best tree growth achieved by FEA plantations has been on well drained soils derived from granitic, basaltic or sedimentary bedrock. These geological parent materials are often found in similar land systems with soil deep enough (about a metre) to store adequate water, above an impermeable layer. This is needed so that the trees will not just survive but will thrive and grow to maturity. The soils must be inherently fertile or have developed a 'bank' of fertility due to prior agricultural management which has entailed regular applications of fertiliser. Soils prone to prolonged water logging are avoided.

As well as management history, the size and location of sites are important selection criteria. Each property must be a minimum of 20 hectares or, if smaller, be near other plantations to ensure commercial viability. Similarly, preferred properties are generally less than 150 km from potential ports and/or likely processing centres in order to provide economic returns after taking account of log haulage costs.

In the Northern Territory deep profiles in the massive earths and Kandosols that have been identified as potential dryland cropping or cattle grazing properties in the monsoonal climate of the Territory have been identified and proven as suitable for African mahogany hardwood.

Determination of Net Plantable Area

The gross area selected for plantation development is generally reduced by sections being unsuitable for plantation establishment for a variety of reasons. These include the presence of rock outcrops, swamps, steep slopes, streamside or landscape management reserves, reserves to protect historical, botanical and other special values, or wildlife corridors. In addition, roads, firebreaks, and telephone and power line easements are not planted.

Plantation establishment and management

Species to be planted:

Temperate Regions - Tasmania & NSW Northern Tablelands

In both Tasmania and the southern part of the NSW area being targeted by FEA, Shining Gum (*Eucalyptus nitens*) is the preferred plantation species because of its rapid growth over the first 12 - 15 years and its resistance to frost and drought. These sites are similar in terms of rainfall, temperatures and soils and outlying remnant pockets of Shining Gum occur naturally within these regions of NSW.

Shining Gum seedlings are grown from seed-orchard seed predominantly derived from selected high quality Victorian and NSW provenances. Based on progeny trials of the families included in the seed orchards, FEA is able to increase selection pressure for characteristics such as growth and wood density to improve genetic gains from this species. FEA is now using seed from its own tree breeding program, which should provide further gains.

Softwood (*Pinus radiata*) plantings utilising high genetic quality seedlings will be predominantly in Tasmania, although other established softwood regions may be considered. The seedlings will be grown at proven forestry nurseries. Seedling specifications will ensure that only hardy, healthy seedlings are used in the Project.

Subtropical Regions - North Coast NSW and South East Queensland

On the North Coast of NSW and in South East Queensland, the main species used are Dunn's White Gum (*E. dunnii*) and Sydney Blue Gum (*E. saligna*). To a lesser extent Spotted Gum (*Corymbia citriodora* ssp. *variegata*) and the high-value but site-specific Blackbutt (*E. pilularis*) may also be established. These are all sub-tropical species with some or all of their natural distribution occurring within the targeted regions.

The main site characteristic that determines the selection of species is the likelihood of frost. Dunn's White Gum has proven to be a very adaptable species and is frequently planted in low-lying sites where cold air drainage and frost are likely to be an issue. Spotted Gum is best suited to less frost prone sites with good soil drainage. Once established it has a high level of drought tolerance. Increasingly, Sydney Blue Gum is being planted due to good early growth rates, frost tolerance and resistance to pests and diseases.

Spotted Gum is recognised as a very high quality timber and members of its botanical grouping comprise the highest volume of native hardwood harvested in Queensland representing about 60% of the sawlog harvest. The other species listed are also important native forest sawmilling species with the exception of Dunn's White Gum which has a limited natural distribution.

Tests of pulping properties of all the species have been carried out and are available in a number of reports. The properties of young trees are very suitable for pulpwood productivity given that they have high pulp yields and are planned for harvest while their wood densities are in the preferred range for commercial pulpwood.

Tropical/monsoonal Regions – Northern Territory

There have been plantations of African mahogany (*Khaya senegalensis*) in the Northern Territory since 1960. Further genetic and planting trials began in the late 1990's and with subsequent commercial plantings there are now approximately 4000 ha of mahogany established. This species is well adapted to the monsoonal climate of the Northern Territory and grows naturally in zones where there are from 2 to 8 months of dry seasons.

The species African mahogany produces a valuable hardwood timber much sought after for high value products including fine furniture and boat fit-outs. Its reputation stems from the excellence of wood from natural stands. Initial studies by CSIRO on wood from Darwin grown material demonstrated early promise of the species. The wood is of medium density and pleasant appearance with the benefit of stability and having good working properties. Other applications are interior applications, joinery timbers, veneers and general purposes where a good quality, medium weight hardwood is required. Currently international trade in African mahogany is very limited due to the difficulty in sourcing supply from the African countries of origin where it has been over-cut. It is a durable timber and works well as a flooring timber and is widely used in the Northern Territory as an outdoor furniture species and decking.

Improved Genetic Stock

The use of selected seed provenances and seed-orchard sources will further increase the expected growth rates and productivity of plantations established for the Project. Such increases are reported both orally and in published literature to be from 5% to more than 20% (in the case of superior seed-orchard sources) for improvement in the key characteristic of wood volume yield.

Seed orchard seed is used for the sub-tropical species where available and suitable. To date, seed orchard seed has been mainly available for Dunn's White Gum and Sydney Blue Gum. Selected provenances or regional seed sources are generally used for the other species. FEA is establishing its own seed orchards and tree breeding programs, either collaboratively or on its own for the main species referred to above. A number of progeny trials linked to the breeding program have been established. In addition, the company has an extensive range of species trials established since 2001 in subtropical regions.

There are co-operative programs in NT and Queensland for the long term selection of quality clonal material and also collections of quality seed from additional provenances in African countries by FEA and various plantation companies. In the short term FEA, in conjunction with the relevant government agencies, is working towards the use of better seed and clonal material for use in current *Khaya senegalensis* (KS) plantations. FEA has also made its own collections of superior seed from the Republic of Mali in Western Africa.

Stocking

It is proposed to plant the hardwoods (Eucalypt species and African mahogany) at about 1200 stems per hectare, with softwood (Radiata pine) at about 1330 stems per hectare. This will provide optimal wood volume, Thinning selection and value production under the proposed Silvicultural regimes.

Site Preparation

FEA has developed a range of site preparation and weed control prescriptions to match the variety of species and site requirements that are associated with their targeted plantation development regions. These have been proven to promote good early tree survival and growth and should ensure that plantations established for the Project get away to a good start.

Planting

Seedlings are produced by 'state of the art' tree nurseries under contract to FEA. Trees will generally be planted in either spring or autumn in Tasmania, and from spring to autumn in NSW and Queensland. This aligns with the silvicultural cycles of both Eucalypt hardwood species and Radiata pine softwood. Actual planting dates will be determined by soil moisture levels in order to ensure good early survival and uniform establishment. African mahogany seedlings will be planted at the commencement of the wet season in October through January so that trees will have established root structures prior to the beginning of the dry season.

Fertilisation

Trees are fertilised as required to optimise early growth and to outcompete weeds. Normally this involves an initial application of 200g per plant of standard analysis NPK fertiliser mix or its equivalent. However, care must be exercised on former pasture sites that have a history of heavy fertiliser application as additional fertiliser may be detrimental to tree form and early stability.

Fertiliser regimes are constantly under review in the light of new research, and are tailored to match nutritional requirements especially micro nutrients and site specific needs to meet management objectives. Follow-up fertiliser may be applied at canopy closure or after Thinning to further boost productivity.

Refill planting

FEA Plantations provides a Stocking Guarantee for three years from the date the Investor is registered as a Woodlot owner or the commencement of the first general insurance period in the plantations second growing year, whichever is the earlier. During this period, plantations with less than 90% survival will be refilled in the first suitable period for replanting. In instances of very poor survival, areas may be totally replanted. The aim of refill planting is to ensure sufficient stocking to optimise site occupancy (i.e. dominance of the trees).

Roading

There are usually well formed farm, logging or local government roads which provide basic access to and within most properties. Other tracks will be initially established for planting and maintenance access only. This internal road network may need to be subsequently upgraded to allow for log cartage.

Planned Silvicultural regimes

Woodlot Option 1 (Eucalypt hardwood)

The proposed Rotation length will average 13 years. Where appropriate a Thinning will be conducted at around age 9 years. This will remove approximately every fifth row and thin in-between bays to leave a final stocking of around 450 stems/ha. Thinning will yield predominately pulpwood plus a small proportion of sawlog. Final Clearfall harvest will yield pulpwood plus a larger proportion of unpruned sawlog.

Woodlot Option 2 (Eucalypt hardwood pruned)

The proposed Rotation length will average 16 years. Stem pruning will be conducted in two or three lifts at about age 3, 5 and 7 years. This will produce about 400 to 450 stems/ha of better formed and vigorous trees to grow clearwood (knot free timber). Thinned down to about 450 stems/ha at about age 9 years, the stand will then be grown on to generate both pruned and unpruned sawlogs for solid wood products, as well as pulpwood.

The aim of this regime is to optimise the proportion of knot free timber for high value solid wood products. Pruned trees will be monitored in accordance with standards in the Australian Forest Growers' (AFG) Pruned Trees Certification Scheme. Pruned stands will be audited and certified by forestry workers trained and accredited by AFG during pruning operations. This will enable the calculation of clearwood proportions prior to harvest scheduling to optimise the value of clearwood sawlogs.

Woodlot Option 3 (Radiata pine softwood)

The proposed Rotation will include a first Thinning at about 13 years of age to reduce stocking to about 450 to 500 stems/ha. A second Thinning at about 18 years would further reduce the stocking to about 300 to 350 stems/ha, followed by a final Clearfall harvest at about age 25 years. The first Thinning will produce mainly pulpwood and some small sawlogs. The second Thinning will produce mainly small and medium sized unpruned sawlogs and some pulpwood. Clearfall will produce mainly medium and large sized unpruned sawlogs and a small amount of pulpwood.

Woodlot Option 4 (high-value African mahogany hardwood)

The proposed Rotation length will average 18 years. Stem pruning, conducted at the manager's expense, will be in two or three lifts at about age 2, 4 and 6 years. This will produce about 350 to 400 stems per hectare of better-formed and vigorous trees. A commercial thinning is planned to be carried out at age 11 to leave about 350 to 400 stems.

Woodlot Option 5 (diversified forestry offer)

This comprises four woodlots of Eucalypt hardwood Option 1, one Woodlot each of Eucalypt hardwood clearwood Option 2, Radiata pine softwood Option 3 and high-value African mahogany hardwood Option 4 for a total of 3¹/₅ ha of plantations. There would be a series of four returns from Thinnings in the various regimes at age 9, 11, 13, and 18 years. Subsequently then there are four cash returns at the time of Clearfall at age 13, 16, 18 and 25 years. This option provides opportunity for a long term investment with periodic returns after age 9.

Anticipated growth and yield

Mean annual increment (MAI) is a measure of wood volume production over a given Rotation length expressed as cubic metres per hectare per year. The figures used here are based on an average MAI of 27 m³/ha/yr for Eucalypt hardwood, and 22 m³/ha/yr for Radiata pine softwood over the range of sites to be used. For high-value African mahogany hardwood there is not the accumulated level of growth data that is available for Eucalypt and Radiata pine but total recovered volume for an 18 year Rotation without pulp is estimated to be 11 m³/ha/year.

The Eucalypt hardwood yield estimates recounted below are based on planting about 1200 stems per hectare and on conservative use of predictions from the Tasmanian Farm Forestry Toolbox which is a publicly available modelling system for stand productivity developed with contributions from several research organisations. VDFC have also used

actual yield data reported from current Thinning and final harvesting operations in *E. nitens* stands in northeast Tasmania.

Tasmania

The Tasmanian Eucalypt hardwood plantation sites proposed for Project 2009 are located near established *E. nitens* plantations which are achieving good growth in similar soils with minimum average annual rainfalls of between 800 - 1100mm for Woodlot Options 1 and 2. The quality of these sites combined with the planned regime of intensive site preparation, fertilisation, and good follow up maintenance should enable these stands to achieve yields within a range of 22 to 32m³/ha/yr at Clearfall with a Thinning at about 9 years. In fact, growth of up to 38m³/ha/yr has been recorded for some stands of Eucalypts across northern Tasmania. Radiata pine softwood has been grown in Tasmania for more than fifty years and there is a body of available information on the quality of soils and the climatic factors under which *P. radiata* growth rates of 22 m³/ha/yr or better can be achieved. As long as the sites chosen for Project 2009 match the known performance criteria of earlier successful sites, then growth of 22 m³/ha/yr achievable.

NSW and Queensland

FEA has eight years experience of establishment and management of Eucalypt plantations in the NSW and Queensland regions. Many of the sites chosen for Project 2009 are in locales where highly productive native forest grows on similar soils. The quality of agricultural soils and climatic factors including at least 800 mm of annual rainfall and high solar radiation, plus results from early growth plots for recent plantings, make it reasonably certain that under the management regimes proposed they too will achieve growth within the range of 22 to 32m³/ha/yr.

Published data from some NSW Eucalypt plantations based on early inventory conducted in 1 – 4 year old plantations indicate that those on better sites with good soils and rainfall are capable of achieving MAI's in the range of 44m³/ha/yr at age 8 – 10, tailing off to 27m³/ha/yr by age 25. This should give an MAI over the 13 year Rotation of close to or in excess of 27 m³/ha/yr. These results depend on the use of high site quality land such as those FEA Plantations has acquired to date in this region.

Nevertheless, estimates of Eucalypt plantation yield in NSW and Queensland is speculative, because plantations have not been grown for long enough to confirm them. However, the reasonable expectation for achievement of this potential is certainly there.

Northern Territory

There have been nearly 4000ha of African mahogany, a hardwood established in the Territory to date and most of this is quite young. However there has been a large amount of African mahogany planted over the last twenty to thirty years and this accumulated experience has also been put to good use and considerable management work has been done but silvicultural regimes are still plastic and being tested with the passage of the seasons so that the knowledge base increases.

Recent publications indicate that the diameter growth can achieve a base of 2.4 cm in diameter per growing season. This can translate into an MAI of 11 m³/ha/yr of volume suitable for processing for sawn timber.

Anticipated harvest yield - Woodlot Option 1 (Eucalypt hardwood)

I believe that if the proposed establishment and maintenance practices are followed, Woodlot Option 1 plantations will routinely yield an average of 95m³/ha from a Thinning at about age 9, followed by 260m³/ha at final harvest at age 13 years. This equates to an MAI of approximately 27m³/ha/yr (see Table 1 below).

The Thinning may yield pulpwood, piles and posts for preservative treatment, and unpruned sawlog. The final harvest should yield both unpruned sawlog and pulpwood in this regime. Although much past emphasis in plantations has been placed on growing for a single product, namely pulpwood, FEA is now processing small diameter logs for solid wood products such as structural grade sawn timber from both Thinning and final harvest of young stands. Sawlog yields are expected to be in the order of 10% for Thinning and 48% for Clearfall harvest.

Table 1

Woodlot Option	Harvest	Age	Product	Product Yield (m ³ /ha)	Total Yield (m ³ /ha)
Option 1	Thinning	9	Unpruned sawlog	10	95
			Pulpwood	85	
	Clearfall	13	Unpruned sawlog	125	260
			Pulpwood	135	
Total					355

Anticipated harvest yield - Woodlot Option 2 (Eucalypt hardwood - pruned)

Woodlot Option 2 includes a pruning and Thinning regime over a longer Rotation period of 16 years. It is expected to yield a similar mix of products from Thinning as Woodlot Option 1, but at the final harvest is expected to produce pruned logs (for rotary peeling or higher quality sawn timber production) and unpruned sawlogs as well as pulpwood (see Table 2 below). Sawlog yields are expected to be in the order of 10% for Thinning and 60% for Clearfall harvest.

The estimated average yield at age 16 is likely to be 335m³ per hectare, with Thinning at about age 9 resulting in an additional yield of 95 m³/ha. This equates to an MAI of almost 27 m³/ha/yr.

Table 2

Woodlot Option	Harvest	Age	Product	Product Yield (m ³ /ha)	Total Yield (m ³ /ha)
Option 2	Thinning	9	Unpruned sawlog	10	95
			Pulpwood	85	
	Clearfall	16	Pruned sawlog	121	335
			Unpruned sawlog	80	
Pulpwood			134		
Total					430

Anticipated harvest yield - Woodlot Option 3 (Radiata pine softwood)

Provided the proposed establishment and maintenance practices are followed, plantations in Woodlot Option 3 are expected to routinely yield an average of 206 m³ from two Thinnings at ages 13 and 18, followed by 345m³ at final harvest at 25 years of age. This equates to an MAI of approximately 22 m³/ha/yr (see Table 3 below).

The first Thinning will produce mainly pulpwood and some small unpruned sawlogs. The second Thinning will produce mainly small and medium sized unpruned sawlogs and some pulpwood. Clearfall will produce mainly medium and large sized unpruned sawlogs and a small amount of pulpwood.

Table 3

Woodlot Option	Harvest	Age	Product	Product Yield (m ³ /ha)	Total Yield (m ³ /ha)
Option 3	First Thinning	13	Unpruned sawlog	32	98
			Pulpwood	66	
	Second Thinning	18	Unpruned sawlog	68	108
			Pulpwood	40	
	Clearfall	25	Unpruned sawlog	310	345
			Pulpwood	35	
Total					551

Anticipate Harvest Yield – Woodlot Option 4 (high-value African mahogany hardwood)

Based on reported productivity from stands in both the Northern Territory and Northern Queensland, the two regions which are in the homocline for growth of African mahogany hardwood, it is possible to achieve between 10 and 15 m³/ha/yr of log volume suitable for sawing. To produce logs of high quality for quality sawn hardwood production, then appropriate silvicultural and stand management techniques must be applied. In the long term trees must be selected and used in breeding programs for seed and clonal programs. In the meantime pruning and form pruning with appropriate thinning regimes will generate quality sawlogs and veneer logs.

Table 4

Woodlot Option	Harvest	Age	Product	Product Yield (m ³ /ha)	Total Yield (m ³ /ha)
Option 4	Thinning	11	Unpruned sawlog	22.5	22.5
	Clearfall	18	Unpruned sawlog & pruned sawlog	175.5	175.5
Total					198

It should be noted that with all options, it may not be possible to thin 100% of the stands, dependent upon topography, markets, stand production and a range of other factors. This should not impact on total yield at the end of the Rotation.

Production of solid eucalypt hardwood plantation timber

In addition to the production of traditional softwood plantation sawn timber, FEA has developed sawmilling and further processing techniques which are generating strong, stable and ecologically sustainable hardwood products for framing and joinery that have found strong market acceptance.

It has established a new standard for plantation grown hardwood, PGH 20, based on an engineering rating of the timber. Following the recommended span tables under this standard, FEA's kiln dried plantation Eucalypt hardwood, EcoAsh[®] branded timber can be used in rafters, floor joists, floor bearers and structural trusses. These new uses are providing an alternative market for small hardwood plantation logs and providing Investors with improved returns from thinned stands.

Woodlot Option 2 offers additional value adding from proposed pruning. Pruned trees provide an opportunity to sell a higher grade of sawlogs for producing peeled or sliced veneer and/or for appearance grade sawn timber. These logs could be processed domestically or exported for the same purposes. Processing them domestically, would mesh with FEA's existing and future integrated milling and woodchip export operations.

FEA should be able to pay a competitive market price for these sawlogs or alternatively negotiate the same with other potential purchasers to enable higher financial returns to be passed on to Investors.

Risks, forest protection and insurance

Fire

Although fire is the major risk to plantations, the history of areas burnt on FEA plantations thus far suggests that the risk is quite low. Good access via the proposed network of roads and firebreaks will help to minimise fire risk. This is further by programs of weed control, grazing, adequate firebreak maintenance and participation in the volunteer fire brigade system. To ensure fire preparedness, FEA has tankers plus mobile slip-on tanker units for rapid response to limit the spread of any fire that does occur. In the Northern Territory there will need to be careful management of fuel loads as the stands mature as there is potential for serious fires in tall grasses that cure after the wet season. FEA has experienced personnel in the Territory to manage the plantations and management systems to control the hazard with fire breaks, mechanical grass mulching, strategic prescribed burning and fire detection and response systems.

FEA has a comprehensive company fire plan and contractor standby system for the fire danger periods in each of the three states in which its plantations are located. These fire plans are updated annually and are circulated to other forest managers and landowners to allow close and effective co-operation in the event of a fire.

Co-operation between adjoining owners in fire patrols and aerial surveillance during periods of high hazard also minimises the potential for losses.

Fire insurance will be the Investor's responsibility. VDFC advises Investors to carefully weigh up the cost of insurance against the risks, and to carry insurance for establishment and clean up of the site in the event of a fire until the age at which trees can be commercially salvaged after fire, which is around age 7.

Tasmania

There have been very few large losses of Eucalypt plantations to fire in the past 13 years in Tasmania and no significant losses by FEA. The fact that the plantations managed by FEA are, for the most part, in relatively small parcels also lessens the risk of large losses. Also, other forest owners with managed plantations are reasonably close by, which means that there are other interested parties who will join in the surveillance and assist in the rapid initial response in the event of a fire.

NSW

In NSW, hardwood plantation losses due to fire have not been great, even though the fire season has been severe at times due to recent El Nino events. There is also a risk of damage from fires lit to generate 'green pick' in spring on nearby grazing properties. In 2002, when there were 200 fires in the north-coast NSW region, only one small plantation owned by Forests NSW (FNSW) was lost. In 2006, part of one FEA Plantations' plantation in NSW (about 180 hectares) of 30 month old trees was affected by wildfire. In this instance, all insured Investors whose Woodlots were destroyed received full insurance payouts.

FNSW ensures that its fire management guidelines are implemented on each plantation. These specify, among other things, the width of internal and external roads and breaks and the number of water points. FEA also implements similar standards for protective measures.

Farms or FNSW properties surround the plantation sites, and the proximity of FNSW reduces the risk. In the event of fires, the vigilance of FNSW and of the Rural Fire Service personnel ensures rapid early deployment of fire control units and swift control of fires that might threaten plantations.

FEA has its own equipment and experienced staff. In addition, all company vehicles are equipped with direct communication with other major land managers and the fire service in this region. An FEA and neighbouring landowner policy of prompt attendance and control of any fires reduces any potential for losses.

Queensland

In Queensland, Forestry Plantations Queensland (FPQ) has provided details of fire history over the past 10 years. The native hoop pine and hardwood plantation area burnt is reported as only 132.9 hectares from 14 fires, with most of that burned in two years of three and five fires in which 67.5 hectares and 39.3 hectares were burned respectively. This is mainly in hoop pine plantations as the Queensland Hardwood Plantations have only developed any significant area of hardwood plantation during the past seven years.

In contrast, plantations of exotic pine have suffered 374 fires and a total area of 8301 hectares burned in the past 10 years, with the peak numbers of fires being 87 and 63 in 2001 and 2002 respectively. In 1994, a further 5047 hectares of exotic softwood plantation was burnt.

In all areas, most fires result from human activity, (e.g. in rural fire escapes and arson), but their spread is minimised by a rapid early response policy. FNSW and FPQ have very large estates with many neighbours. The areas managed by FEA are smaller and largely surrounded by farms. Both the risk profile and the specific likelihood of arson are diminished with fire surveillance and an active good neighbour policy.

Browsing Animals

There are risks to the plantations from browsing by various animals during the first several seasons. FEA has monitoring systems to detect and then implement control of browsing in order to minimise loss of growth.

Insect Attack

Insect defoliation is another risk. FEA monitors stands for signs of high insect population which may cause defoliation and inhibit wood growth whilst tree crowns recover. When beetle, autumn gum moth, psyllid or sirex attack warrants action, the stand is sprayed with a suitable registered control substance from the ground or air under strict environmental guidelines.

Control of insects other than termites is not currently a large problem for managers of mahogany plantations. There are means of controlling termites being applied in NT which are dependent upon the detection and poisoning of termites with bait traps. Incidences of attacks have been low in developed pasture sites and the issue is well monitored.

A known hazard for the Meliaceae family of trees to which African mahogany belongs is tip borer, *Hypsila robusta*. This insect pest is reported from most areas of the Pacific and SES Asia. The insect attacks the terminal tip and causes death of growing tips and results in multiple leader development. It is currently not a major problem but could be a future threat dependent upon the plantation location and its proximity to native vegetation.

Fungal Pathogens & Nutrient Deficiencies

Fungal pathogens and nutrient deficiencies are monitored on a regular basis and appropriate treatments with fungal sprays and/or fertiliser treatments will be applied when problems are identified. These periodic checks and remedial works are part of FEA's routine practice.

Windstorm

Windstorms can cause windthrow and are a risk, particularly after Thinning. Investors are currently able to insure against wind damage but the list of insurable risks and the regions where certain risks are accepted can vary in the insurance policy from year to year. In most cases it is possible to salvage storm damaged trees. FEA plans to minimise storm damage by Thinning plantations before the trees exceed a height to diameter ratio of 100:1, or by avoiding Thinning in high risk plantations entirely.

In the Northern Territory the threat from wind and cyclonic winds is a possible risk that occurs each year. However the mahogany is shown to be relatively windfirm and the major developments of plantations are several hundred kilometres inland where the level of cyclonic wind forces commonly has abated due to distance from the coast.

FEA Plantations has experienced one severe windstorm in Tasmania in August 2007 which was, preceded by heavy rains, and damaged approximately 30 hectares of recently thinned 9 –year old plantation. All timber affected by this event was able to be salvage harvested.

Climate change

Trees are very adaptable and when planted on deep soils with high moisture holding capability they have great capacity to survive and grow in periods of quite dry weather with unseasonable dry spells. Such events have been experienced in the recent past and there has been good growth recorded despite a lower than average rainfall. If such events are repeated then there are impacts on growth but if appropriate soils and climatic zones are chosen then trees as a crop are very flexible. Eucalypts, Radiata pine and African mahogany all have good flexibility and capacity to survive so as to be able to grow following severe dry periods.

Disclaimer

VDFC has acted as independent consultant forester to the Project and has no financial interest in it. VDFC is independent of FEA Plantations and has provided opinions on this Project as the independent forestry consultant and in no other capacity. VDFC has used some information provided by FEA in this report. Although this information has been checked for reasonableness and accuracy, a range of factors can affect the results achieved. Neither VDFC nor its employees are responsible for the production of this PDS, or take responsibility for omission or error in any matter in the PDS not referred to in this report, or guarantee the performance of the Project because of the risks attendant on investments of this nature. VDFC does not accept responsibility for updating the information contained in this report after the date of production.

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- (i) VDFC has been retained by FEA Plantations to prepare the Independent Forester's Report and Independent Market Report for inclusion in the Product Disclosure Statement. The total remuneration for this engagement was at standard professional fee rates.
- (ii) VDFC also provides consultant services to FEA Plantations on behalf of Investors to ensure that the plantation maintenance and protection is done to an expected professional standard.
- (iii) VDFC does not make any direct investment in FEA Plantations or its business interests and has no commercial interest in the financial products being offered other than as a service provider to FEA Plantations.
- (iv) VDFC does not hold an Australian Financial Services Licence and is not operating under such a licence in providing this report.

Yours faithfully

Van Diemen Forestry Consultants Pty Ltd



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