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Final

SINO-FOREST CORPORATION

Valuation of China Planted Forest Crops as at 31 December 2010

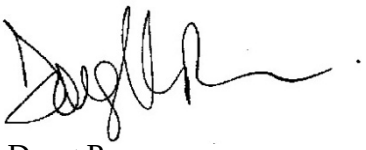
PÖYRY
Engineering balanced sustainability™

The cover photo shows a stand of Eucalyptus grandis x urophylla in Guangxi province. This stand was measured in January 2011 at age 5 years. Mean stocking was 1 250 stems/ha, mean height 18.2 m, and mean DBH 13.8 cm. Total standing volume is 165 m^3/ha.

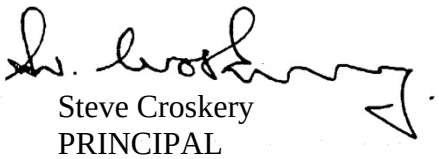
PREFACE

This report is issued by Pöyry (Beijing) Consulting Company Limited, Shanghai Branch (Pöyry) to Sino-Forest Corporation (SFC) for its own use. No responsibility is accepted for any other use.

The report contains the summary opinion of Pöyry as to the market value of SFC's Planted Forest estate in China, as at 31-December 2010. The provision of this report is subject to the terms of the Disclaimer provided on the following page.



Doug Parsonson
VICE-PRESIDENT



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ASSUMPTIONS AND LIMITING CONDITIONS

This is a summary of the full report of the same title and was prepared at the request of and for the exclusive use of the client, Sino-Forest Corporation (SFC). This report may not be used for any purpose other than the purpose for which it was prepared. It should be read in conjunction with the Background Papers accompanying the Valuation of China Planted Forest Crops as at 31 December 2010. This is an update of the retrospective value of SFC's Planted Forest crops that was the subject of Pöyry's 31 December 2009 valuation presented in Report 2BA14702: *Retrospective Valuation of China Planted Forest Crops as at 31 December 2009.* That report was issued on 18 May, 2011.

Data describing the area of forest owned, by species, age and location were provided by SFC.

Pöyry has not viewed any of the contracts relating to forest land-use rights, cutting rights or forest asset purchases. Legal matters are beyond the scope of this report and the valuation is prepared on the assumption that titles to the forest assets are according to the data provided by SFC. Maps, diagrams and pictures presented in this report are intended merely to assist the reader.

Sample inspections of SFC areas were made as part of this valuation. These were at specific locations selected by Pöyry in Guangxi province in January 2011. In addition, Pöyry visited log processors, markets and Forestry Bureaus in Guangxi, gathering basic data and information on log prices.

This appraisal assumes that the forests visited by Pöyry in the field inspection represent the full range of conditions that exist for the species seen.

Any existing liens and encumbrances have been disregarded, and the forest resource has been appraised as though free and clear under responsible ownership and competent management.

Unless otherwise stated in this report, the existence of hazardous materials or other adverse environmental conditions, which may or may not be present on the property, were neither called to the attention of Pöyry, nor did the consultants become aware of such during the inspection.

Pöyry recognises the possibility that any valuation can eventually become the subject of audit or court testimony. If such audit or testimony becomes necessary as a result of this valuation, it will be a new assignment subject to fees then in effect. Pöyry has no responsibility to update this report for events and circumstances occurring after the date of this report.

Any liability on the part of Pöyry is limited to the amount of fee actually collected for work conducted by Pöyry. Nothing in the report is, or should be relied upon, as a promise by Pöyry as to the future growth, yields, costs or returns of the forests. Actual results may be different from the opinion contained in this report, as anticipated events may not occur as expected and the variation may be significant.

EXECUTIVE SUMMARY

This is an estimate of the market value of the part of SFC's total China forest estate that was planted by the company (referred to as 'Planted Forest'). The date of this valuation is as at 31 December, 2010.

The area of Planted Forest that is the subject of this valuation measures 46 467 ha. 43 337 ha, or 93% is eucalyptus forest (*Eucalyptus grandis*urophylla*). This forest has an area weighted average age of three years and is expected to be harvested on a five to seven years' rotation. This eucalypt component has been valued using our standard approach through forecasting the wood flow and cash flow using a forest estate model.

The balance of the Planted Forest area is young Chinese fir and slash pine (*Pinus eliottii*) that has an average age of one year, and will likely be harvested on a 15 to 20 year rotation. This component has been valued using a single-hectare approach, and the lower of capitalised cost or net present value (NPV) taken as the age-class per-hectare value, which has then been multiplied by the area in the age-class.

The physical and financial forest description is taken from Pöyry's 2010 report. This refers to forest area, yield, costs and log prices, that are inputs to both the forest estate model and the single-hectare analyses.

The discount rate of 11.5% has been used in this valuation, and is unchanged from the rate used for the 31 December 2009 valuation. The exchange rate (RMB:USD) used is 6.5818; the rate prevailing on 31 December, 2010.

Pöyry's estimate of the market value of SFC's Planted Forest estate, as at 31 December 2010, is USD177.737 million. This comprises:

- **USD175.635 million for the market value of SFC's Planted Forest eucalypt crop assets**
- **USD2.102 million for the 3 130 ha of young planted Chinese fir and pine stands planted in 2008 and 2009.**

The valuation result is most sensitive to changes in log price, and harvesting and cartage costs combined. This is because, for a given wood flow, these two factors, and in particular log price, determine net stumpage. For a given wood flow, net stumpage is a significant determinant of forest value.

The valuation result is less sensitive to changes in forestry costs, overhead costs, and land rentals.

CONTENTS

1 INTRODUCTION

Pöyry (Beijing) Consulting Company Limited (Pöyry) has been requested by SFC to prepare a valuation of SFC's Planted Forest crop assets in China, as at 31 December 2010.

Pöyry has previously conducted forest valuations for SFC, in 2000, 2001, and 2003 to 2009 inclusive.

As at 31 December 2010, SFC owned 46 467 hectares (ha) of Planted Forest in China. The description of that forest, both in physical and financial terms, that underpins this valuation, is provided in subsequent sections of this report.

2 PURPOSE AND SCOPE

2.1 Purpose of the Valuation Update

The purpose of the valuation is to estimate the market value of the forests for asset reporting purposes. A useful definition of "market value" is:

> *"the most probable price which a property should bring in a competitive and open market under all conditions requisite to a fair sale, the buyer and seller each acting prudently and knowledgeably, and assuming that the price is not affected by undue stimulus. Implicit in this definition is the consummation of a sale as of a specified date and the passing of title from seller to buyer under conditions whereby:*
>
> - *The buyer and seller are typically motivated.*
> - *Both parties are well informed or well advised, and acting in what they consider their own best interests.*
> - *A reasonable time is allowed for exposure in the open market.*
> - *The price represents the normal consideration for the property sold unaffected by special or creative financing or sales concessions granted by anyone associated with the sale"*[1].

The market value of the tree crop assets is estimated as at **31 December 2010**.

The term "Market Value" is usually interchangeable with "Fair Value" as defined in International Accounting Standard 41 (IAS 41). IAS 41 prescribes the accounting treatment, financial statement presentation, and disclosures related to agricultural activity.

In IAS 41, "Fair Value" is defined as "*the amount for which an asset could be exchanged, or a liability settled, between knowledgeable, willing parties in an arm's length transaction*".

2.2 Scope of the Valuation Update

As a valuation update, the exercise has specifically addressed the following:

- Changes to the area of tree crops, by location, species and age, between 31 December 2009 and 31 December 2010
- Acknowledgement of recent inventory data and their impact on yield estimates
- Acknowledgement of changes in forestry and harvest related costs
- Acknowledgement of expectations for generally higher longer term log prices.

[1] Uniform Standards of Professional Appraisal Practice, The Appraisal Institute (www.appraisalinstitute.org).

3 VALUATION METHODOLOGY

A full description of valuation methodology is provided in the background papers.

For this valuation, a combination of the *income method* (i.e. assessing the present value of the anticipated future net earnings stream) and the *costs method* (i.e. acknowledging what it would cost to recreate the asset in its current condition) were used.

Pöyry applied the income approach to fast-growing eucalypts assets. These crops are typically harvested from around age five to six years. In contrast, the cost approach was applied to the small area of Chinese fir and *Pinus elliotti* that, at one and two years of age, are given a rotation of around 15 to 25 years. For these crops, the value that has been assigned is the lower of capitalised cost or NPV to calculate the value per hectare. These per-hectare values have then been multiplied by the area in the respective species and age-class to calculate the total value of the non-eucalypt forest.

4 FIELD INSPECTION

As part of Pöyry's 2009 valuation of SFC's forest crops, eucalypt operations in Guangdong province (Heyuan city) were inspected. This involved visiting a tissue culture laboratory and a eucalypt nursery and inspection of some recent and current establishment operations in the forest. Along with a photographic essay, and a chart of the, then average yield curve, this is recorded in Appendix 2 'Field Inspection Planted Forests', in the 2009 valuation report.

This year, Pöyry's inspection of planted forest was in Hezhou city of Guangxi province. Guangdong and Guangxi are the two main provinces where SFC has its planted eucalypt forest. Seventy-one percent of the total is in Guangdong, and 22% in Guangxi (with 6% in Hunan, and 1% in Fujian).

Pöyry staff inspected several eucalypt stands scattered across a number of blocks in Hezhou city.

Generally, the stands Pöyry inspected were rather remote, set back by several kilometres from the local main road, and accessed through 4-WD and village roads and tracks. These roads will require upgrading and maintenance, and/or the construction of additional roads in preparation for harvesting. (The forecast cash flow upon which the NPV is based has a provision of RMB10/m^3 for such roading incorporated in the logging cost).

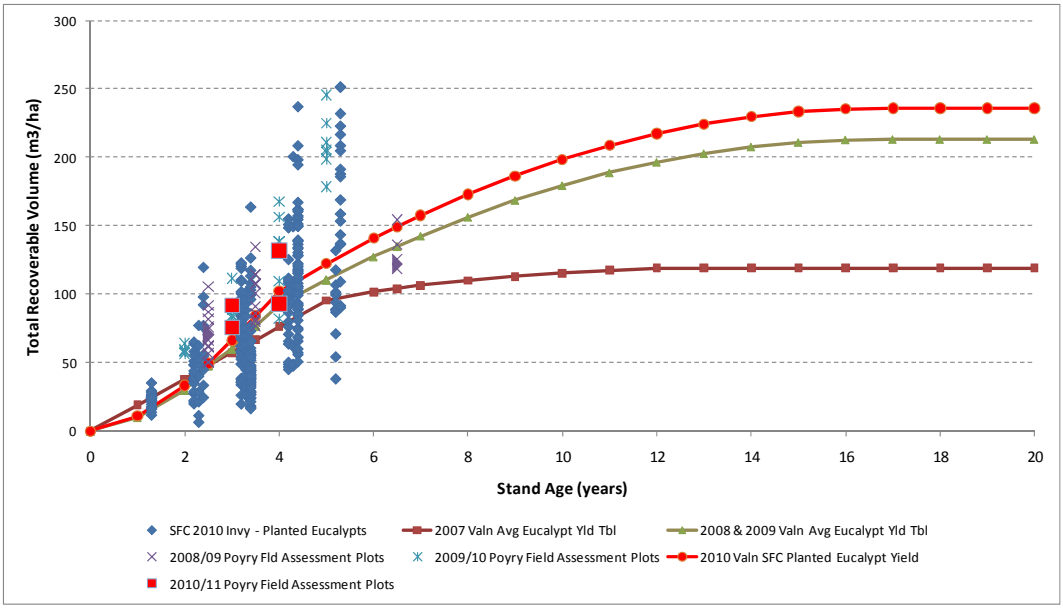
Photo 4-1:
Typical narrow track into Guangxi planted eucalypts that were inspected. This track will need widening prior to harvesting to facilitate the use of small tractors in the carriage of logs to a log yard for accumulation and loading onto trucks for cartage to mills.

Observed stand health, vigour, growth and form of SFC's eucalyptus plantations in southern China was of a typical high quality.

Photo 4-2:
Typical five-year old eucalypt stand that was inspected - exhibiting good health, vigour, growth and form.

Four plots were established and measured. These were subsequently analysed and total recoverable volume (TRV) calculated. These are shown in the chart below that shows recoverable volume on age. This chart also shows previous inventory data collected by Pöyry and importantly the TRV (m^3/ha on age) from the 316 plots that SFC established in its eucalypt forest in 2010. It also shows yield curves used by Pöyry in previous valuations, and the revised and current 2010 yield curve for SFC's planted eucalypts.

Figure 4-1:
SFC 2010 Eucalypt Inventory Information, Pöyry Inventory Information and Yield Curves applied in successive Valuations of SFC's Planted Eucalyptus Crops



4.1 Visits to Mills

In addition to inspecting the plantations, during the course of its field inspection, Pöyry visited two mills and the Hezhou city Forest Bureau.

The two mills take in large quantities of eucalyptus logs from the surrounding forest areas. The first factory was a JOSEN Group MDF/HDF production factory, opened in 2008, that produces around 150 000 t/a of board. The factory utilises all local species, but especially pine, broadleaf species, and eucalyptus. All log volume is trucked in from within a 50 km radius of the site. The factory appears highly mechanised, with a minimum of human labour employed. All wood is supplied from local forest farms (not factory-owned resource).

Photo 4-3:
MDF/HDF Mill in Hezhou City - utilises a range of local species including eucalypts. Highly mechanised with just a small number of mill labourers.

The second factory visited lay adjacent to the first, and occupied a large site with several production lines producing eucalyptus plywood from logs. This factory is state-owned and has only been operating 1-2 years. The production lines are highly labour intensive. This second factory produces <100 000 t/a of product.

Photo 4-4:
Log Yard of Eucalyptus Plywood Mill - (labour intensive)

4.2 Key Points from Interviews at Mills and Forest Bureau

Eucalypt log prices vary by mill (mill product), with the MDF mill paying less than the plywood mill.

Stated eucalypt prices:

- RMB290/m^3 for sed >5 cm
- RMB550-560/m^3 for sed >7 cm
- RMB580/m^3 for sed >10 cm
- RMB450/m^3 for sed <8 cm
- RMB530-540/m^3 for sed 8 – 12 cm.

Main markets for products are Guangdong and Shanghai

- Log transport costs RMB60/m^3 for < 100 km
- Harvesting tax at 10% (as per State Regulations and RMB20/m^3 for quarantine, harvesting license etc.)
- Labour cost 10% more than previous year
- Logging cost (eucalypts) RMB50-60/m^3
- Land rentals (eucalypt forest land type) RMB30/mu (RMB450/ha).

5 FOREST DESCRIPTION - PHYSICAL

Key characteristics of the physical forest description that impact on forest value are the stocked area of forest crops by age, and the growth and yield of those forest crops. These characteristics are discussed in the following sections.

5.1 Stocked Area of Forest

Data describing the stocked area of Planted Forest owned, by species, age and location, were provided by SFC. **It is important that the users of this report understand this**. This valuation is not a due diligence review. Pöyry has neither verified the authenticity of the total area of forest said to be owned, nor its ownership. Rather, Pöyry has relied on the description of the stocked area of forest that is said to be owned, by species, age and location, as provided by SFC.

Pöyry did conduct an analysis of the stocked area as identified on a set of maps representing the areas selected for the field inspection. Each of the stands mapped were identified in satellite imagery and a comparison was made between the stand boundary shape and the internal stocked area. For the planted eucalypts, assessed in Guangxi province in this valuation, this analysis showed that Pöyry's estimate of stocked area overall was 1.4% greater than that of SFC's. At a compartment level, the range of Pöyry's area estimate to SFC's mapped area was from -9% (i.e. Pöyry's area estimate is 9% less than SFC's), to +11% (i.e. Pöyry's area estimate is 11% more than SFC's). Pöyry does not hold this out to be a substantial area verification that might be conducted as part of a due diligence assignment. It is at best an indication that, overall, SFC's area records are reasonably accurate. **However Pöyry again highlights that we have relied on the description of the stocked area of forest that is said to be owned, by species, age and location, as provided by SFC.**

The total area of Planted Forest, as at 31 December 2010 was 46 467 ha.

This is described in the following chart and table.

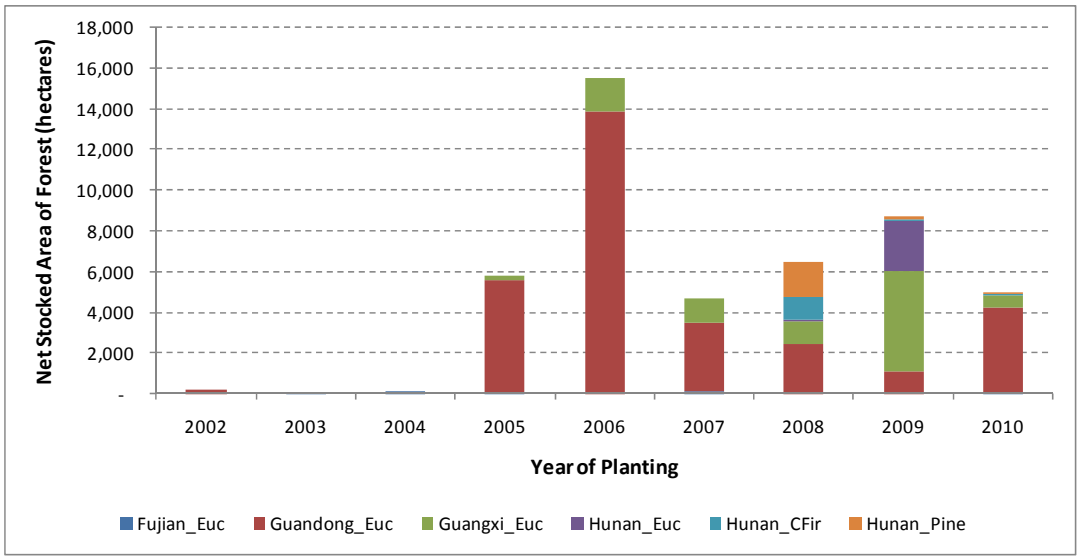
Table 5-1:
Area (ha) of Planted Forest in China Owned by SFC as at 31 December 2010

Province & Species	Year of Planting									
	2002	2003	2004	2005	2006	2007	2008	2009	2010	TOTAL
Fujian_Euc		73	119	34		125			43	**394**
Guandong_Euc	223			5 558	13 835	3 356	2 473	1 130	4 176	**30 751**
Guangxi_Euc				216	1 659	1 193	1 110	4 920	557	**9 674**
Hunan_Euc							69	2,448		**2 518**
Hunan_CFir							1,076	89	77	**1 241**
Hunan_Pine							1,723	120	46	**1,889**
TOTAL	**223**	**73**	**119**	**5 807**	**15 494**	**4 674**	**6 451**	**8 706**	**4 919**	**46 467**

(by Province, Species and Year of Planting)

The area weighted average age of the predominant eucalypt crops is three years.

Figure 5-1:
Area of Planted Forest Owned by SFC as at 31 December 2010



(by Province, Species and Year of Planting)

5.2 Field Inspections

Based on the area description of the Planted Forest provided by SFC as part of the 2010 valuation, Pöyry undertook a field inspection exercise within the Planted Forest estate[2]. This was at specific locations selected by Pöyry in Guangxi Province during January 2011. In addition, Pöyry visited log processors, markets and Forestry Bureaus in Guangxi, gathering basic data and information on log prices.

The work undertaken during the field inspections comprised:

- Establishing a small number of inventory plots to record tree measurements
- Recording GPS locations and associated land form and vegetation type
- Interviews with Forest Bureaus
- Interviews with staff at wood-processing facilities and log buyers.

See the Background Papers for the Field Inspection of the Planted Forest.

5.3 Forest Yield

Yield tables are used to represent how the volume of wood per unit area changes with age for a *typical* stand for each type of forest in SFC's estate. Ideally, yield tables and matching or associated stocked area information would be available to cover the full range of site conditions, stand management and other factors that influence yield across a large forest estate like SFC's.

At this stage, SFC is not at a level of detail or sophistication in the implementation of its forest inventory program or Forest Management Information System (FMIS)

[2] In selecting areas to inspect in the field, Pöyry considers the new forest area description provided by SFC, whether there are significant new areas of forest since last year (in the case of Planted Forest, that means new planting), and where Pöyry has recently been as part of the progressive field inspection process to better understand the estate as a whole.

that captures the inherent variability within a large forest and matches specific yield representations with specific areas.

However, SFC has made significant advances with both of these processes during 2010. Insofar as describing the growth and yield of the planted eucalypt forest, SFC has made available to Pöyry measurement data from 316 plots established in 2010 across a range of sites and age-classes within its Planted Forest estate. This is a major step forward in the description of yield potential from the forest.

Pöyry has analysed these data and, as a result, has adjusted the yield table representing the forecast growth and yield of SFC's Planted eucalypt Forest. This new yield table (as at December 2010) is shown in graphical form in Figure 5-2 below. At the average harvest age of six years, the increase has been from 127 to 141 m^3/ha, or 11%. Pöyry considered the data at the provincial level, i.e. splitting it between Guangdong and Guangxi provinces. However, there were no significant differences in total recoverable volume (m^3/ha) between the two provinces, and so just one yield table has been used to represent the growth and yield expectation from SFC's Planted eucalypt Forest.

During Pöyry's field inspection in Guangxi province in January 2011, a total of five plots were established and measured in Planted eucalypt Forest that was three and four years old. These data, along with Pöyry's measurement data for 2008 and 2009, and the data from SFC's 316 plots are shown with previous yield curves and the current yield curve, in the background papers.

The yield curves underlying the yield tables used in the 2010 SFC valuation for Planted eucalypts, Chinese fir and *Pinus elliotti* are shown in Figure 5-2, Figure 5-3 and Figure 5-4.

The charts show projected recoverable volume per hectare, by log type and age. The legend indicates the log type or log grade. These are defined by small end diameter (sed) of the logs.

- 2099 refers to an sed of > 20 cm
- 1420 refers to an sed of >14 to 20 cm
- 0614 refers to an sed of 6 to 14 cm.

Figure 5-2:
Yield Curve applied to Eucalypt Crops planted by SFC – 2010 Valuation

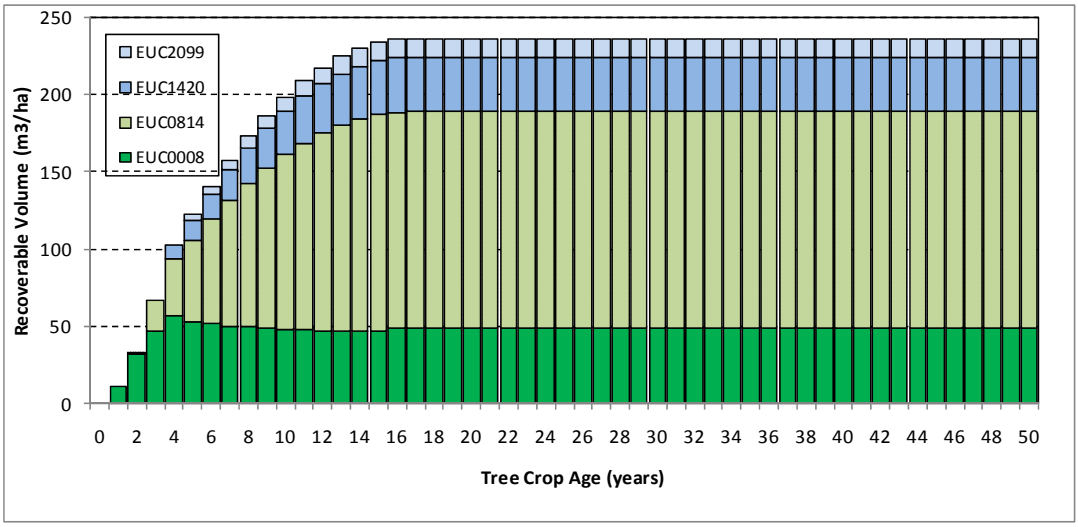


Figure 5-3:
Yield Curve applied Chinese Fir Crops planted by SFC – 2010 Valuation

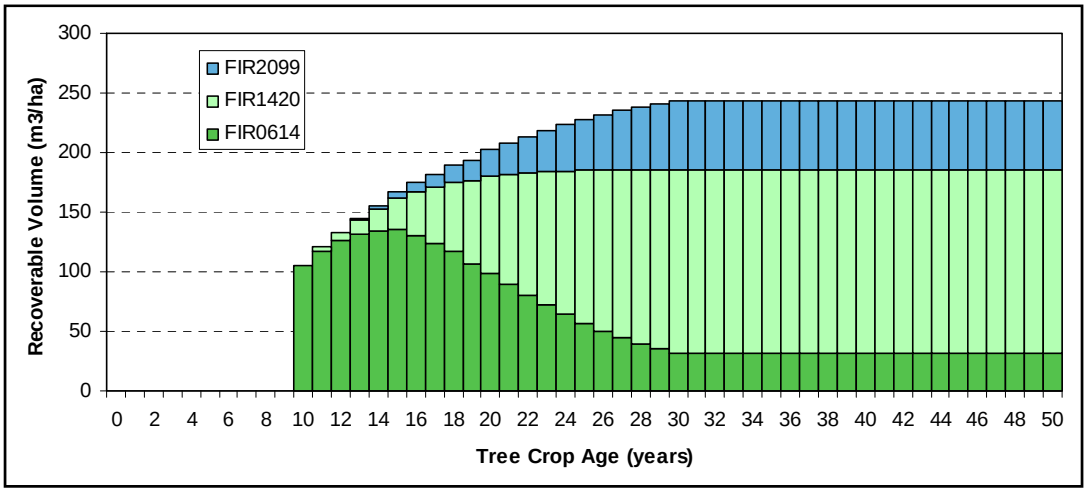
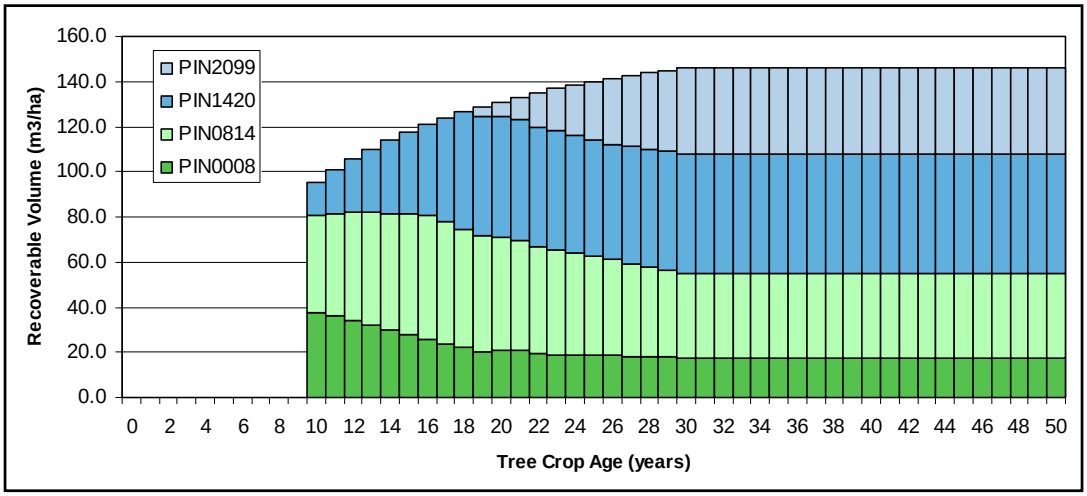


Figure 5-4:
Yield Curve applied to *Pinus elliotti* planted by SFC – 2010 Valuation



SFC routinely applies genetic improvements and intensive silvicultural management such as fertilising and weeding in its Planted eucalypt Forest.

Inventory data will continue to be collected and analysed, and adjustments to yield tables made as appropriate.

5.4 Statement on Yield Tables and Estimates of Growth and Yield

In Pöyry's forest valuations in Australasia, the Americas, Africa and Europe, the forest owner or manager usually provides Pöyry with an area description and a yield description of the forest. These descriptions are typically in the form of tables of the stocked area and associated recoverable yield expectations, by species, location and age.

Pöyry then spends some time, during the field inspection phase of a valuation assignment, verifying the reasonableness of these area and yield statements. The focus importantly, is on verification, in contrast to the generation or development of this forest description information.

In this valuation, while SFC has provided Pöyry with tables of the stocked area of forest owned as at valuation date, it has not provided Pöyry with tables or any predictions of growth and yield. Rather, this aspect of the forest description has been left to Pöyry.

From the area description provided by SFC, Pöyry selects where to focus its field inspections. The focus is typically on locations, species and age-classes that in Pöyry's opinion will contribute most to the total forest value. Where there are significant new areas of forest in the estate, Pöyry will endeavour to visit these locations and species.

As part of the field inspections, SFC provides maps of forest area and forest record information on species and age of the crops within these areas. GPS data is recorded in the field and later used in conjunction with the maps to compare areas of forest as mapped and recorded, against that independently assessed using satellite imagery. The existence of tree crops by species and age, as per the maps and forest records, are also verified as part of the field inspection process.

As outlined above, in the absence of yield tables to verify, Pöyry has established a small number of inventory plots, and measured SFC's various tree crops in locations of interest. Using these data, collected over several years, Pöyry has developed a set of yield tables that broadly describe the average growth and yield of SFC's estate. These are generic yield tables, by species. Pöyry does not claim that these broad-based and generic yield tables adequately capture the full extent of variation in site and crop quality characteristics, nor in turn adequately reflect the true mean growth and yield that will be realised from the forest estate as a whole.

In 2010, as a result of SFC implementing an inventory program, the data situation for the Planted eucalypt Forest has improved markedly. Along with an upwards adjustment of expected mean recoverable volume (m^3/ha), the precision of that estimate, or the confidence we can have in it has also improved. Pöyry's statistical analysis of the data from SFC's 316 plots that were provided, indicate a PLE of +/-5%. What that means, is that we can be 95% confident that the true mean recoverable volume (m^3/ha), for the Planted eucalypt Forest lies within + or - 5% of the stated mean (i.e. the yield table).

6 COSTS

Forestry operations are those operations associated with the establishment and maintenance of the forest crop up until the time of harvest. Harvesting costs are covered in Section 6.2.

6.1 Direct Costs of Forestry Operations

The following table summarises the direct costs of forestry operations for planted eucalypt crops, Chinese fir and pines.

Over the year 2010, China experienced inflation of around 4.6%, as measured by CPI. Fuel prices rose by nearly 8%, and throughout the country, the minimum wage rose by an average of 12%.

Pöyry has used this information on inflation factors, along with costs from our databases and cost information gathered during the SFC field inspection to adjust forestry and harvesting costs as shown in the following sections.

Table 6-1:
Forest Operations Direct Costs (RMB/ha) - December 2010

Year in Rotation	1	2	3	4	5+
Eucalypt species – Planted					
All Land Preparation and All Year 0 Establishment Related Costs	6 295	0	0	0	0
Crop Maintenance & Tending - fertiliser, weeding, singling, thinning	0	2 740	2 740	690	0
Crop Protection Costs - security, fire prevention, forest health & pest control etc.	0	155	120	120	120
Eucalypt species – Coppiced					
All Land Preparation and All Year 0 Establishment Related Costs including Yr 1 singling	2 740	0	0	0	0
Crop Maintenance & Tending - fertiliser, weeding, singling, thinning	0	2 740	690	0	0
Crop Protection Costs - security, fire prevention, forest health & pest control etc.	0	120	120	120	120
Chinese fir and Pine species					
All Land Preparation and All Year 0 Establishment Related Costs	8 315	0	0	0	0
Crop Maintenance & Tending - weeding, thinning	0	1 520	1 140	0	0
Crop Protection Costs - security, fire prevention, forest health & pest control etc.	0	35	35	35	35

The costs assumed to apply to the various tree crops in the SFC Planted Forest estate, as summarised in Table 6-1, were derived from a combination of Pöyry's in-house database and specific data obtained from interviews with Forest Bureaus as part of the field inspections. Overall, forestry costs increased by just over 15% (in nominal terms) during 2009.

Land preparation and year 0 establishment-related costs include all costs of planning (design), site preparation and tree crop establishment, including clearing the land of debris to facilitate planting and tree growth, hole digging, planting of seedlings (or cuttings), the costs of seedlings at the planting site, setting base fertiliser, refilling holes and any other operations necessary. These operations and costs occur in the first year of the rotation, and before the trees are one year old.

Crop maintenance and tending are post-year one or post-establishment operations, typically occurring in years two and three of the rotation. They are ancillary to initial establishment and are essential to the effective establishment, development and vigorous growth of the tree crop. These operations and costs include the purchase and application of fertilisers, weeding and singling.

Crop protection costs are those costs incurred to protect the tree crops from theft (illegal harvesting and theft of logs from the forest) and fire damage, including education and public relations, training in fire suppression, and fire risk monitoring. Other than for eucalypts, Pöyry has applied a standard cost of RMB2.3/mu/a, or RMB35/ha/a. In the case of eucalypts, there is the additional cost of forest health monitoring and pest control. Eucalypts have been found to be more susceptible to pests and disease, such as bacterial wilt and wasp attack, and require more intense health monitoring and remedial operations. Security, fire prevention and pest control costs in eucalypts amount to about RMB120/ha/a.

Forestry costs have only a small impact on the market valuation which is confined to the cash flow arising only from the current crop. The highest forest operations costs are associated with land preparation and establishment and these operations are already complete insofar as the current crop is concerned. Some crop maintenance and tending costs are incurred in association with the current crop over the next three to four years, and the relatively small costs of crop protection are incurred until harvest.

6.2 Direct Costs of Harvesting and Cartage

Direct harvesting and cartage costs are all of the direct costs incurred between the standing tree and delivery of the logs to the point of sale. In China, most harvesting operations are labour-intensive. Trees are typically felled by axe or handsaw, cut to length in the forest and then carried to the roadside by hand. The main cost elements are:

- Tracking and road making for harvesting
- Tree felling
- Delimbing the fallen tree
- Cutting the stem to log lengths in the forest (a typical length is 2 m length to facilitate hand carriage to the road. Chinese fir stems are often left longer, reflecting their lighter weight and some end-use in longer lengths)
- Carriage to a truckable roadside (commonly by hand or a combination of carrying by hand and some in-forest cartage on trolleys or motor driven tractors)
- Storage of logs
- Debarking
- Truck loading
- Cartage of logs to the mill or other point of sale.

As with the forestry operations, Pöyry obtained information on current harvesting costs during the field inspection process.

Evidence suggests that during 2009, logging costs in southern China increased by about 18%. Based on the information obtained from field inspections and data and information from other recent projects, Pöyry constructed the following generalised cost table for harvesting in the four provinces and three species comprising the SFC Planted Forest estate. This is not simply the application of an 18% increase on last year's cost, but takes account of other information, and a rationalising of harvesting costs between species and provinces as well.

Table 6-2:
Logging Costs by Province and Species (December 2010)

Province	Species	RMB/m^3	Province	Species	RMB/m^3
Fujian	Eucalypts	70	Hunan	Eucalypts	70
Guangdong	Eucalypts	70	Hunan	Chinese fir	120
Guangxi	Eucalypts	70	Hunan	Pines	160

Logging costs (from standing tree to logs at truckable road) vary on a per-m^3 basis with the green density of the logs, or weight per unit volume. Broadleaf species have the highest density, with the pines being lighter per m^3. These species are typically cut to lengths of about 2 m so that they can physically be carried out of the forest by hand. Chinese fir is by far the lightest, and is often carried in log lengths of up to 8 m. It is easier than the other species to fell, delimb and carry. The cost of logging eucalypts is relatively low because these forests are much more intensively roaded and the carriage distances are quite short. Eucalypt forest land is also typically less steep and much easier to work on than the land carrying the other species.

6.2.1 Harvest Roading Costs

In this valuation, rather than assume that the forest is sold as stumpage, it is assumed that the forest is managed and harvested by the forest owner. Accordingly, a provision for harvest roading at RMB10/m^3 harvested has been added to the harvest costs given above.

6.2.2 Cartage Costs

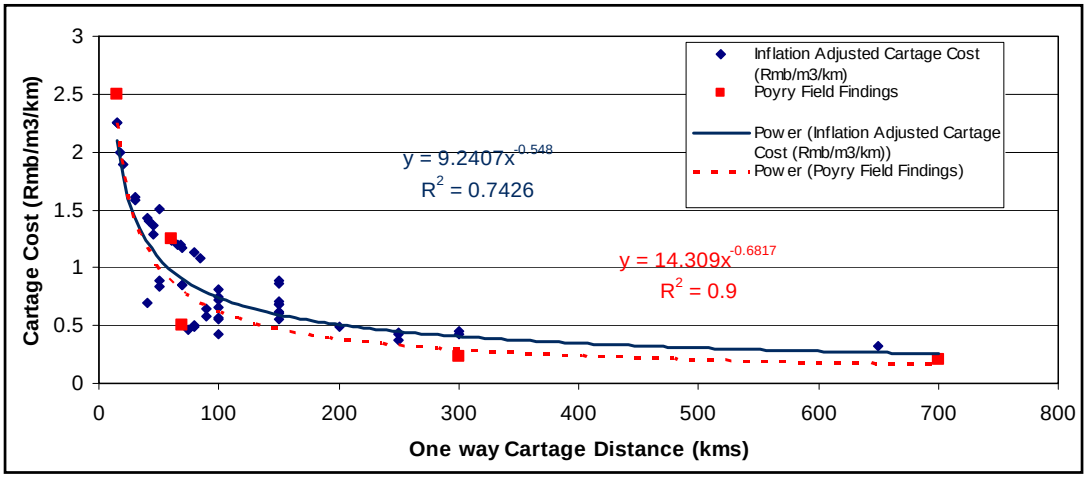
As part of the 2008 valuation, historical cartage cost data from Pöyry's in-house database were adjusted to real costs as at 2008, based on China's published CPI, and plotted against cartage distance. The resulting cost curve (Figure 6-1) was benchmarked against five data points collected during the 2008 field inspection.

The associated cost equation

$$\text{Cartage cost: RMB/m}^3\text{/km} = 9.240 * \text{one-way cartage distance (km)}^{-0.548}$$

was then applied to assumed average cartage distances for the various provinces and species.

Figure 6-1:
Unit Cartage Cost on Cartage Distance (December 2008)



No cartage cost data were obtained as part of the 2010 valuation. While diesel costs to the consumer have risen by around 8% over the past year in China, the cost of diesel contributes less than one third of the total cost of running a log cartage truck. However, wages costs have also increased significantly, and cartage costs are assumed to have increased by about 12% during 2009.

Table 6-3 summarises the assumed average cartage distance from the forest to the point of sale, and the cartage costs applied in the forest estate model. The point of sale in every case is assumed to be at-mill-gate. The differences in cartage costs between 2009 and 2010 are a combination of the assumed general cartage cost increase and rationalisation of cartage distance assumptions applied in 2009. In other words, the 2010 cartage costs are not an 'across the board' increase of 12% from those of 2009.

Table 6-3:
Assumed Average Cartage Distance and Cartage Cost for Logs (December 2009)

Province	Average Cartage Distance (km)	Cartage Cost (RMB/m^3)
Fujian	100	87
Guangdong	60	70
Guangxi	60	70
Hunan	100	87

In Pöyry's opinion, these are reasonable estimates of the average cartage distances (and costs) likely to apply to the cartage of logs from SFC's Planted Forest areas to market. As concentrated forest areas become due for harvest, wood processors are likely to establish processing plants near these resources. SFC itself is one organisation that is planning to establish plants to utilise such forest produce and reduce log cartage costs. Pöyry is also aware of other prospective participants in wood processing who are considering doing the same.

6.3 Forestry Overheads and Indirect Costs

In addition to direct costs, all businesses incur indirect costs. These costs are sometimes called overheads. Indirects or overheads are all those costs that are not direct labour or materials or are not easily associated with particular units of production.

In the general management of the forest, units of production are usually areas (ha) of forest that are treated in a specific way or undergo particular treatment operations. In the harvesting phase, they refer to the volume of logs that are harvested (m^3).

Forestry businesses' overheads are usually divided into those associated with the general management of the forest estate and related forestry operations, and those more closely connected to harvesting activity.

Forestry overheads and indirect costs comprise two parts. These are the forest business management and administration cost of running the forestry business, and indirect costs associated with forestry operations.

6.3.1 Forest Business Management and Administration Overhead Cost

These are the total spend of the forest management business excluding all direct forestry operations costs, the cost of land rentals, and costs associated with harvesting and marketing activity. This provision is intended to cover the costs of:

- All staff remuneration (corporate, management, administrative etc.)
- Offices rental, power, telecommunications, and other expenses
- Vehicle running
- Information technology and software licenses etc.
- Training
- Research and development
- External professional services e.g. legal, audit, other consultancies
- Public relations and communications
- Insurance
- Repairs, maintenance and depreciation of assets
- Memberships, levies and subscriptions.

Pöyry has a considerable amount of experience in assessing forestry overhead costs in forest businesses around the world. As in last year's valuation, Pöyry has not obtained particular overhead costs for SFC's forestry business but has considered a wider and generic estimate of the costs of running a forestry business of a similar size in New Zealand and Australia.

This cost is related to the area of forest, although there are not always economies of scale. Pöyry has applied an annual overhead cost of **RMB280/ha.** This is RMB20/ha or 7% lower than was applied in the 2009 valuation of the Planted Forest estate, and is about 75% of the current cost in New Zealand and Australia. However, a significant proportion of the total cost is in staff remuneration and running offices. These are lower-cost items in China. The reduction in annual overhead cost is a reflection of the significantly larger total forest estate that the Planted Forest is a part of, and managed as part of.

6.3.2 Indirect Costs associated with Forestry Operations

Forestry operations are typically accompanied by supervision and quality control costs. As a provision for this, Pöyry has incorporated an 'on-cost' of **10% of the direct cost** into the forest model. This is the same rate as applied in the 2009 forest valuation.

6.4 Harvesting and Marketing Overheads and Indirect Costs

Harvesting and marketing overheads are all of the harvest-related costs that are not otherwise included in the direct costs. Harvesting taxes and fees are treated as an indirect because they are external impositions rather than direct costs.

6.4.1 Harvesting and Marketing Overheads

For a forestry business that is carrying out its own harvesting and marketing, there are associated overhead costs incurred. These cover the costs of:

- Harvest planning and engineering (roads and landing)
- Pre-harvest inventory
- Supervision of the harvesting operation to ensure value recovery
- Marketing, administrative and accounting costs associated with sales
- Other costs of sale such as log volume/weight measurement, scaling etc.

Pöyry has also undertaken a considerable amount of work in assessing harvesting and marketing overhead costs in forest businesses around the world. For a large business, with an annual log production of over 1 million m^3, these costs are typically in the range of USD2-7/m^3, or about RMB15-50/m^3. The range usually relates to the extent to which the company uses its logs internally or sells to other parties, and the degree to which it manages its own harvesting and marketing activity internally, as opposed to contracting out that function.

Historically, SFC has generated its main revenue from the sale of stumpage (standing trees), and often associated land use rights that it has held. However, increasingly SFC has sold 'stumpage' (the right to harvest the trees) and not the land use rights, and then undertaken the reforestation after the buyer of stumpage has harvested the tree crop. SFC has indicated to Pöyry that it intends to move into harvesting its own trees, and will progressively increase processing of the logs produced as well.

In previous valuations, Pöyry has applied a 'Log Traders Margin' effectively as a proxy for harvesting and marketing overheads. This was applied at the rate of **5% of the gross log sales price**. In this valuation, Pöyry has taken the view that because the scenario that is being modelled for the purposes of generating a wood flow and cash flow assumes a sale of the entire forest, and the ongoing management of that forest in the long-term, it is more appropriate to assume management of the harvesting operation by the forest owner. All this has meant is the replacement of the 5% of gross log sales price as a cost, with what Pöyry considers an appropriate harvesting and marketing overhead for a large forestry business in China. This has been applied at RMB20/m^3. It has also meant the

inclusion indirect harvest-related costs of RMB10/m^3 for tracking and road making in support of harvesting operations (as mentioned above).

6.4.2 Harvest Taxes and Fees

Harvest Tax

According to government policy document (Ministry of Finance PRC & State Forestry Administration PRC 2009(32)), this equates to a maximum of 10% of the log sales revenue.

Pöyry's understanding is that log 'sales revenue' is of the 'First Sales Price' and that 'First Sales Price' means the log price at the forest gate or roadside and not at-mill-gate. (The latter could mean a higher tax imposition simply because of higher log cartage costs).

Each province and county is able to set its particular harvest tax rate at any level, up to the maximum of 10%. While tax rates vary from county to county, and between forests and forest owners, Pöyry has assumed and applied the maximum rate in the cash flow and valuation model.

In addition, there are other fees payable to Forest Bureaus in relation to harvesting. These are:

Harvest Inventory and Survey Fee

A harvest inventory and survey fee is charged by the third party/organisation that holds the forest inventory and survey qualification issued by the forest authority. This charge applies to the total standing volume (TSV) and ranges from RMB3 to 10/m^3 of the inventory total standing volume.

Pöyry has applied a standard harvest inventory and survey fee of RMB6.5/m^3. Accordingly, harvest taxes and fees within the model are 10% of roadside price plus RMB6.5/m^3.

7 LAND RENTALS (COST OF LAND USE)

SFC pays for the land it uses for forestry purposes. These payments are in the form of annual rentals. Land rentals in China, as in other parts of the world, vary widely with the quality of the land and its uses. Some specialist forestry crops, such as poplars and bio-fuel species, can face rentals of more than RMB1 800/ha/a. Forestry crops typically face much lower land rentals.

During Pöyry's field investigations in 2008, information was obtained on land rentals for eucalypts. These ranged from RMB15 to 90/mu/a, with an average of RMB25/mu/a (RMB375/ha/a). Other information obtained by Pöyry in early 2009 indicates a range of RMB13 to 29/mu/a (RMB195 to 435/ha/a), with an average of RMB325/ha/a being paid for eucalypt forest land in southern China. This equates to a mid-point of RMB350/ha/a from these two sources, for eucalypts.

In the 2009 valuation of SFC's Planted Forest, Pöyry applied a land rental of RMB355/ha/a to every stocked hectare of eucalypt. In this valuation, as at 31 December 2010, Pöyry has increased this by around 5%, to RMB375/ha/a.

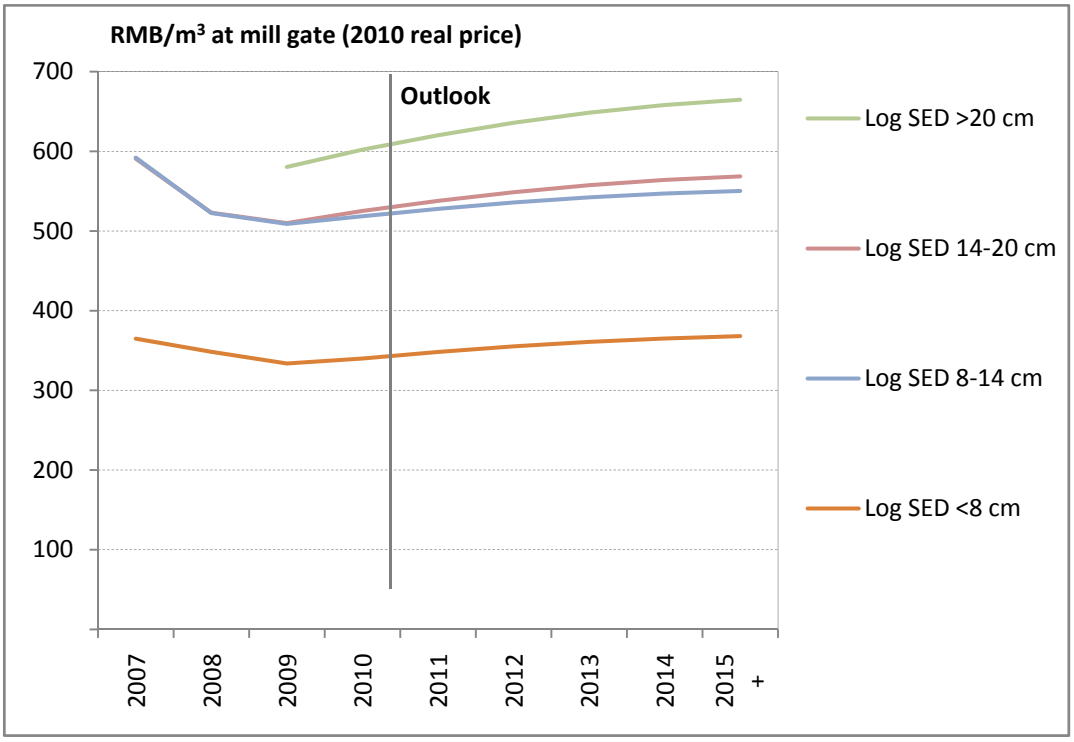
A rental of RMB275/ha/a has been applied to the Chinese fir and pine.

While some land rentals are pre-paid (acquired for the current rotation with the purchase of the tree crop), these pre-payments amount to a pre-payment for a land-related asset. Ignoring land rentals in the cash flow would effectively over-estimate the value of the tree crop.

8 LOG MARKET AND PRICE OUTLOOK

Pöyry develops its view of price outlooks by taking into consideration various price influencing factors. These are discussed in detail in the Log Market and Price Outlook included in the Background Papers. With these factors in mind, Pöyry has reviewed log price trends in China, especially since 2007 (Figure 8-1). Pöyry has used the above inputs to develop the prices included in the 2010 valuation model. Comparison of the 2010 prices with those assumed in the 2009 valuation model showed these prices to be broadly consistent between years. This effectively means that forecast long-run prices remain approximately the same, in absolute terms, as those applied in last year's valuation.

Figure 8-1:
Log Price Trends by Grade



SED = small end diameter.

9 WOOD FLOW AND ALLOCATION MODEL

The physical and financial descriptions of the forest, as outlined above, are brought together in the form of input to the forest estate model from which wood flows and cash flows are generated. The forest estate model employs a linear programming formulation which allows constraints to be specified and applied to the management and harvest of the forest estate. These constraints include the specification of:

- Minimum and maximum harvest ages by species
- Replanting assumptions in terms of croptypes and expected future crop yields
- Levels of harvest volume (or area), in total or by specified parts of the forest estate, by species and location and period
- Where appropriate, the minimum and maximum volumes of particular log grades that can go to certain destinations.

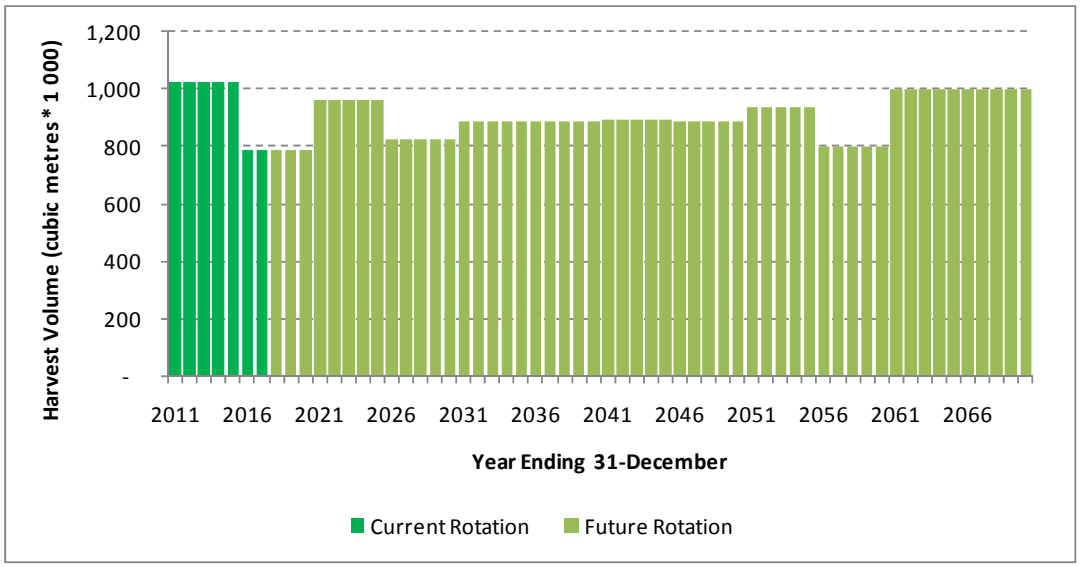
With every constraint incorporated in the model, and the tighter or more limiting any particular constraint, the lower the value of the forest will be. This is simply because the 'optimal solution' is more constrained, and in turn has to be lower.

The constraints applied reflect Pöyry's experience in China and have been structured to generate a practicable harvest pattern as shown in Figure 9-1, Figure 9-2 and Figure 9-3. The patterns (by species and Province) allow reasonable management of harvesting resources, avoid any undesirable impact on log market and maximise the value from the estate.

9.1 Wood Flow

The following graphs show the results of the wood flow modelling.

Figure 9-1:
Wood Flow by Rotation



Note, the estimate of the market value of the forest is based on the wood flow and cash flow of the current rotation only.

Figure 9-2:
Wood Flow by Origin (Province)

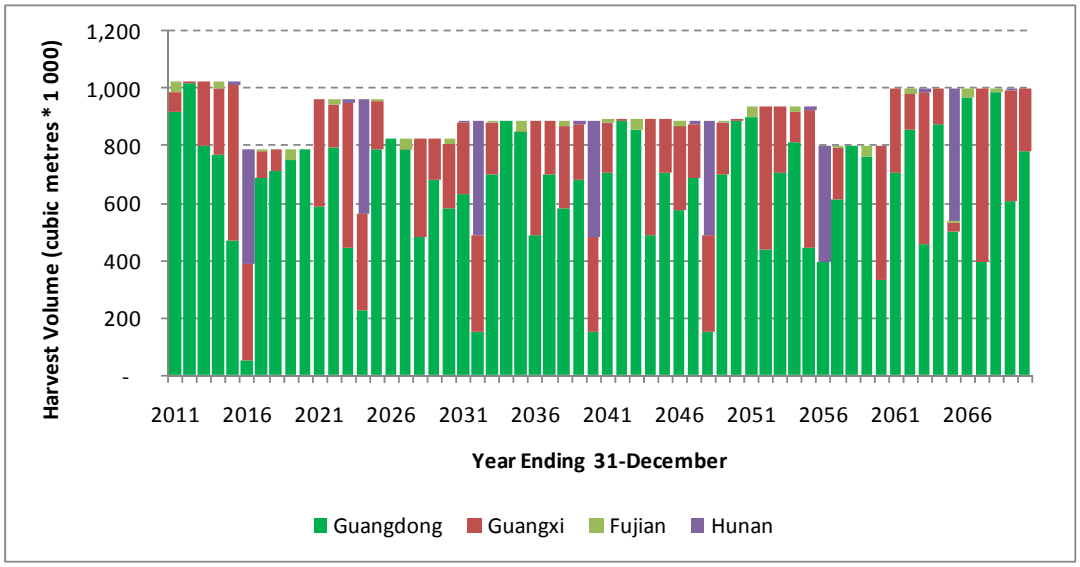
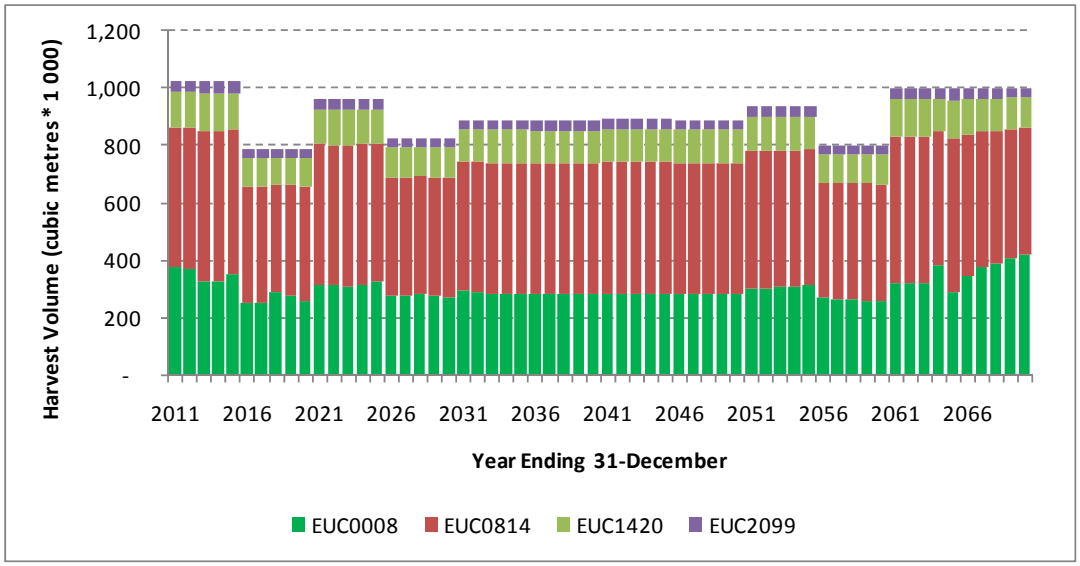


Figure 9-3:
Wood Flow by Log Grade



The annual volume modelled as being harvested and sold over the first five years of the model is 1 022 000 m^3. In Pöyry's opinion, this level of harvest is achievable, in terms of market absorption under the Chinese log market outlook developed in the Background Papers.

Note that about 33% of the volume harvested comprises the smallest and lowest-priced log grade. This is used almost exclusively as pulpwood. Sixty two percent of the total comprises the two middle size and priced grades (a mix of pulpwood and sawlog), and just 5% of the volume is in the largest-sized grade that sells for the highest price, and is used as sawlog and veneer logs.

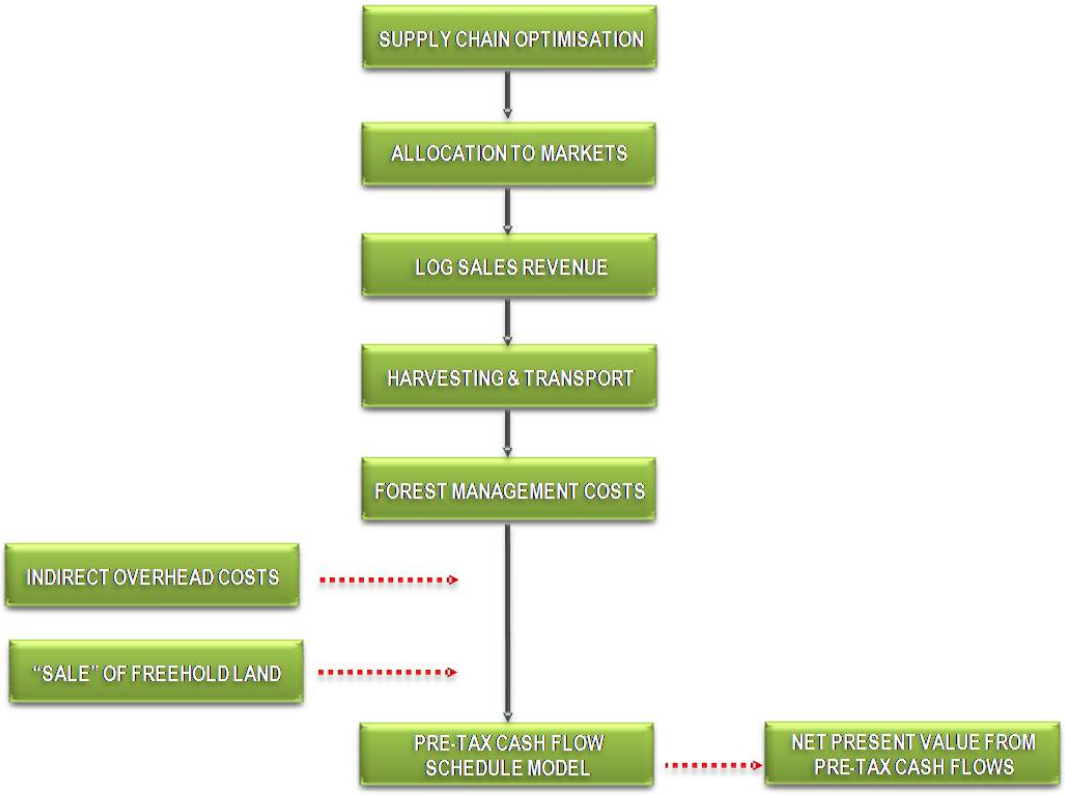
10 DISCOUNTED CASH FLOW VALUATION

10.1 Overview

The diagram below illustrates the structure of the valuation model. Generation of the initial inputs (the wood flows) has been described in the previous section. Revenue is generated at each log destination, the price point being delivered at mill gate (AMG). Harvesting and transport costs, annual forest management costs, indirect overhead costs and the cost of land-use (rentals) are deducted from this revenue to give an operating margin.

The linear programming model generates all of these costs streams, since their profile depends on the harvesting strategy and age-class structure of the forest.

Figure 10-1:
Schematic Illustration of the Forest Valuation Process



10.2 Treatment of Taxation

This valuation has been based on real pre-tax cash flows to which Pöyry has applied what we consider an appropriate discount rate. This is to translate the pre-tax cash flow forecast into a net present value representative of the market value of the tree crop asset.

10.3 Scope of the Analysis

The valuation reported in this summary is for the **Current rotation analysis** - only the revenue and costs associated with the existing tree crop are included in the analysis.

The approach is consistent with wider business appraisal that generally seeks to confine the analysis to the current investment cycle, and thereby avoid unnecessary conjecture.

10.4 Timing of Cash Flows

Cash flows are assumed to arise, on average, at mid-period. Accordingly, with the first period being the 12 months from 01 January to 31 December 2011, the mid period is 30 June 2011. The first period's net cash flow has therefore been discounted for 6 months or 0.5 years, from 30 June 2011 back to the valuation date of 31 December 2010. Period 2 is from 01 January to 31 December 2012. The mid-period is 31 June 2012. Accordingly, the period 2 net cash flow has been discounted for 1.5 years, period 3 for 2.5 years and so on.

10.5 Date of Valuation

The date of the valuation is **31 December 2010**. The cash flows contributing to the SFC Planted Forest market valuation (current crop) arise during the seven-year period beginning 01 January 2011 and ending 30 December 2017.

11 VALUATION RESULTS

11.1 Exchange Rate

The cost and price data applied in the valuation is in Chinese Renminbi (RMB). The resulting cash flows generated from the forest estate wood flow and allocation model are also in RMB.

For reporting, Pöyry has assumed a USD to RMB exchange rate of 6.5918[3]. This is the published rate for 31 December 2010.

11.2 Valuation as at 31 December 2010

Pöyry has estimated the market value of the SFC Planted eucalypt Forest tree crop assets as at 31 December 2010 to be **USD175.635 million**. This is the net present value of the pre-tax cash flows arising from the future management and harvest of the existing forest crops during their current rotation. The valuation uses an 11.5% discount rate applied to real, pre-tax cash flows.

In addition, Pöyry has estimated the market value of the 3 130 ha of young planted pine and Chinese fir, (planted in 2008 and 2009) to be **USD2.102 million**. This has been valued on a simple single-hectare DCF model, applying an 11.5%/a discount rate. Harvesting is assumed to occur at age 15 years; the age generating the highest NPV when applying an 11.5% discount rate.

Thus, in total, Pöyry's estimate of the market value of SFC's Planted Forest (eucalypt, Chinese fir, and pine), as at 31 December 2010 is **USD177.737 million**.

[3] OANDA.com *The Currency Site* http://www.oanda.com/currency/converter/.

12 SENSITIVITY ANALYSIS

A sensitivity analysis has been conducted that addresses the main drivers of value within the current rotation valuation model. Because the Chinese fir and pines contribute less than 1% of the total value estimate, this analysis has, for simplicity's sake, been confined to impacts on just the inputs/assumptions, and value of the planted eucalypt forest component.

These are:

- Discount rate and log price changes (in combination)
- Changes in the level of fixed overhead costs
- Changes in the costs of production (logging, loading and log cartage)
- Changes in the level of land rentals
- *Changes in the level of forestry costs (to show that these are immaterial).*

Table 12-1:
Log Price Sensitivity

Scenario	Real Discount Rate applied to Pre-tax Cash Flows		
	10.5%	11.5%	12.5%
	Current Rotation Value (USD million)		
10% Real Price Increase	213.167	207.300	201.702
No Real Price Increase (Base)	180.642	**175.635**	170.859
10% Real Price Decrease	148.116	143.970	140.016

Table 12-2:
Overhead Cost Sensitivity

Scenario	Real Discount Rate applied to Pre-tax Cash Flows		
	10.5%	11.5%	12.5%
	Current Rotation Value (USD million)		
RMB375 O/Hd cost/ha/a (i.e. +25%)	179.272	174.291	169.540
RMB300 O/Hd cost/ha/a (Base)	180.642	**175.635**	170.859
RMB225 O/Hd cost/ha/a (i.e. -25%)	182.011	176.979	172.178

Table 12-3:
Harvest Cost Sensitivity

Scenario	Real Discount Rate applied to Pre-tax Cash Flows		
	10.5%	11.5%	12.5%
	Current Rotation Value (USD million)		
10% Harvest & Cartage Cost Increase	169.970	165.243	160.734
Harvest Cost (Base)	180.642	**175.635**	170.859
10% Harvest & Cartage Cost Decrease	191.313	186.027	180.984

Table 12-4:
Land Rental Cost Sensitivity

Scenario	Real Discount Rate applied to Pre-tax Cash Flows		
	10.5%	11.5%	12.5%
	Current Rotation Value (USD million)		
RMB445 rental cost/ha/a (i.e. +25%)	178.807	173.835	169.092
RMB355 rental cost/ha/a (Base)	180.642	**175.635**	170.859
RMB445 rental cost/ha/a (i.e. +25%)	182.476	177.435	172.626

Table 12-5:
Direct Forestry Cost Sensitivity

Scenario	Real Discount Rate applied to Pre-tax Cash Flows		
	10.5%	11.5%	12.5%
	Current Rotation Value (USD million)		
10% Forestry (estab related and mtce) Cost Increase	180.099	175.097	170.326
Forestry Cost (Base)	180.642	**175.635**	170.859
10% Forestry (estab related and mtce) Cost Decrease	181.185	176.173	171.392

The valuation result is most sensitive to log price with a 10% change in log price, causing a near 20% change in crop value. It is less sensitive to changes in the combined cost of harvesting and cartage, with a 10% change causing a 6% change in value. The valuation is largely insensitive to changes in annual overhead costs and land rental costs, with a 25% change in the cost of either item causing a 1% to 2% change in value. As discussed above and shown in Table 12-5, changes of 10% in forestry costs (establishment-related costs such as fertilising and weeding, and maintenance costs such as security and protection), have very little impact on crop value.