

# ThaiTeak

industryre



# Disclaimer

Industry RE is not regulated by the FSA and is not authorised to offer investments advice to the general public. We recommend all customers seek independent financial advice prior to making any investment decision. The value of your investment may rise or fall. All projections contained in this document are based on historical performance and no guarantees in respect of income or capital growth are given expressly or by implication.

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# 1 Introduction

Industry RE has secured the right to forward purchase semi mature elite tissue culture teak trees currently growing in Thailand. The trees were planted in 2004.

These trees have been laboratory cloned from a gene bank of some of Thailand's elite teak trees and are known as Tissue Culture Teak. Tissue Culture Teak grows at above average annual growth rates and offers greater uniformity in terms of growing characteristics. This means that customers can expect low volatility in terms of future projected teak volumes and growth over a relatively shorter time frame. Trees grown under these conditions are expected to produce 1 cubic meter volume teak log in approximately 16 years rather than the traditional period of 23 years.

Our aim is to take advantage of the accelerated growing characteristics of these trees and create a five to ten year capital growth opportunity for our customers. The forestry management team will use its experienced management team to maximise the value of the teak at point of exit.

The trees are located within teak plantations established by Thai Orchids Lab Ltd (TOL) in 2004 and now under the control and management of Asia Teak. TOL is a privately owned Bio Tech company based in Thailand, that specialise in the scientific advancement of planting stock through tissue culture production. Their clients include major corporations from the agricultural, horticultural and forestry sectors. They have headquarters in Bangkok and the teak plantations are in Petchabun, Thailand which is well known as one of the best teak growing areas in Asia.

One of the key reasons that make this a compelling opportunity, is that the plantation owners are willing to offer a volume guarantee on the amount of timber produced. They are able to do this through their expert knowledge of growth rates and can underwrite this warranty by holding substantial amounts of teak trees as buffer stock, which are growing to approximately the same age and girth class and represents a reserve stock of over 50%. Should the annual growth rates unexpectedly drop below their current levels, the plantation owners will use their buffer stock to support the underperformance and in effect guarantee the delivery of a minimum volume of teak.

A guarantee of this type is extremely rare and supports the low risk nature of our offering.

# Opportunity History

Industry RE, under the guidance of Asia Teak, have been actively pursuing and appraising this tissue culture Teak plantation during the course of the last 18 months.

Industry RE is a group of companies committed to delivering sustainability, reduce carbon emissions and develop new energy from renewable sources. They are suppliers to Guardian Sustainable Business, part of the Guardian Media Group, through the content for the energy efficiency hub.

Industry RE are the major shareholders in the Green Awards. Launched in 2006 to critical acclaim, the GREEN AWARDS were set up to recognise and reward creative work that communicates the importance of Corporate Social Responsibility, sustainable development and ethical best practice in any sector and across any marketing discipline.

Industry RE has considered key factors in order to determine the validity of a project of this magnitude. They have analysed closely, the general market conditions, the plantation managers and their credentials, the forestry management methods used which includes detailed analysis of risk management procedures and the future performance of the asset outlining projected teak volume, teak pricing, the disposal strategies available and potential future revenues.

Having reviewed all of the key data Industry RE are now ready to launch what they believe is a truly unique, low risk opportunity to invest in a first class Teak plantation with the potential for significant yet relatively predictable future capital growth.

## Opportunity Highlights

- Elite Semi-Mature Tissue Culture Teak Trees.
- Trees Planted in 2004.
- Five To Ten Year Opportunity.
- Minimum Investment £10,000.
- Target Returns IRR +12%.
- Annually Audited By Leading Independent Auditors.
- Experienced Forestry Management Team.
- Volume Guarantee From Plantation Managers.
- Over 50% Reserve Stock As Security.

# Market & Pricing

The Teak Market in Asia is well established, with China being the largest worldwide importer followed by Japan and Indonesia.

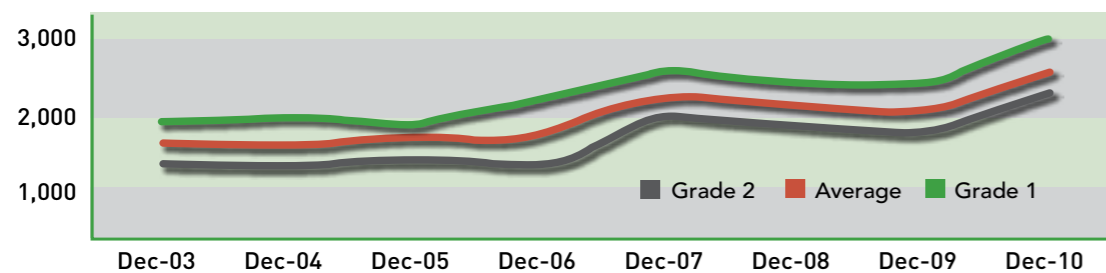
These countries are consumers of manufactured products and requiring teak logs and planks for their own manufacturing industries. Thailand is well placed to supply this demand. Thailand's geographical location with its large and expanding manufacturing industry, alongside substantial Thai Board of Investment (BOI) tax incentives, make Thailand the ideal country to grow teak on a commercial basis.

Teak commands an exceptionally high price compared to other commodity hardwoods due to a combination of its desirability for specific applications and the shortage of supply. During the last century, Asian countries, including Thailand, deforested over 50% of their natural forests and subsequently since 1989 there has been a United Nations (UN) ban on the logging of natural teak. The only major country unaffected is Myanmar and whilst logging here continues, the amount available annually is diminishing. Plantation teak is now emerging on the market but a universally recognised UN report from 2001 indicates that there will continue to be a shortage of supply over demand until at least 2030. This has led to an average market price increase of circa 7% per annum over the last 10 years.

Myanmar Teak Log Price Index December 2003 to December 2010 - Data source International Tropical Timber Organisation (ITTO)

	Dec-03	Dec-04	Dec-05	Dec-06	Dec-07	Dec-08	Dec-09	Dec-10	Jun-11
Grade 1	1,985	2,055	1,993	2,317	2,688	2,509	2,478	3,129	3,128
Grade 2	1,599	1,555	1,663	1,570	2,198	2,063	2,002	2,531	2,943
Average	1,792	1,805	1,828	1,944	2,443	2,286	2,240	2,830	3,036

The chart is intended to show teak price trending over the last 7 years which averaged at 6.5%.



Prices are shown in Euro. Prices per Hoppus Ton = 1.8 cubic meters

## Auction Process

When carrying out research and due diligence on the pricing in Thailand it is firstly important to understand the various different methods available. For the purposes of price analysis for the resale, the auction pricing system has been used. Teak auctions in Thailand are managed by the Thai Royal Forestry Department who subsequently sets what is known as a minimum auction bid price (MBP). This is designed to support/under pin the price of teak logs. It is widely acknowledged that the actual prices at auction can fetch 20-40% more than the MBP.

# About Asia Teak



Anglo Asia Forestry Company, a United Kingdom Ltd company under registration number (0655 2385) "AsiaTeak" is a timber company whose sole expertise is in the growth of teak for commercial production. AsiaTeak continues to develop its own assets worldwide and have created what many believe is the management blue print for optimum teak production.

They do this by applying unique and often expensive management methods to ensure maximum volumes per acre across all of its plantations in both Sri Lanka and Thailand. In more recent years they have developed a corporate framework to enable the forward sale and release of some their planting stock for private contract. This forward order contract offers clients the potential to take advantage of this highly profitable market by buying teak now on a future delivery contract.

The collective goal of Asia Teak and its group of companies is to produce the world's most sought after and valuable teak trees. This will be achieved through expert forestry management policies, an intimate understanding of the market place and strong corporate governance. This will provide a solid foundation with which to maintain the consistent growth of the business worldwide and deliver on its obligations to its customer throughout the medium to long term.

## Summary of Asia Teak :

- Established Teak Growers
- Plantations in Thailand and Sri Lanka
- Tissue Culture Teak
- 30 Years Forestry Management Experience
- Holding company domiciled in the UK
- Assets secured via The Asia Teak Trust
- Unique purchase order system
- Annual financial and forestry auditing



ThaiTeak

# Forestry Asset Management

Asia Teak is globally recognised as a world leader in Teak management. Through years of research and development of various methods and techniques, including land preparation, fertilization, watering and tree spacing, Asia Teak developed what many believe is the optimum management blue print for commercially produced Teak.

The maintenance and asset management schedule undertaken by Asia Teak on behalf of the customers is extensive.

## Risk Management

As with any agricultural business mitigation of risk is crucial. The types of risk associated with a plantation such as this include fire, flood, and severe droughts that could cause either damage to the stock or impact growth rates and subsequently affect future value.

Whilst the careful selection of the plantation locations and climate reduces these risks, they are mitigated further through careful water management and fire prevention methods. For example the plantation's are manned 24 hours a day from a purpose built fire watch tower and have strict fire risk management procedures. To date since 2004 there hasn't been a single fire incident reported on the plantation.

## Maintenance Schedule

A highly detailed and effective maintenance schedule is in place to support the plantation and growth of the trees.

## This includes

- Weeding and weed control
- Fertilizing
- Soil testing
- Ploughing (if necessary)
- Pruning
- Growth measurement and assessment
- Watering by sprinkler and drip irrigation
- Pest monitoring and pest control
- Drainage and water way management

It is due to these high standards of maintenance and care, combined with the tissue culture element, that the trees experience above average annual growth rates and are able to therefore create a far shorter investment/growth cycle compared to standard practice.

## ASIA TEAK FORESTRY MANAGEMENT TEAM



Dr. Paiboolya Gavinlertvatana PhD, is Chariman and founder of Thai Orchids Lab. studied biotechnology at university in the USA. Dr. Pai returned to Thailand to start Thai Orchid Lab in 1988. His company is now one of the largest producers of tissue culture planting stock for commercial agriculture in Asia.



Paul Rockwood has been involved in the Asian Plantation business all his life and his grandfather established a substantial coconut estate in Sri Lanka in 1920. He has added to this by establishing AsiaTeak, a teak plantation business in Sri Lanka. He comes from a strong commercial background and until recently sat on the UK Procurement board of Compass Group PLC, a FTSE 100 company.



James Churchman is a director and shareholder and over the last few years has developed extensive knowledge of the teak market. James has a strong commercial background and sits on the board of The Alternative Exchange Ltd, which is a private equity and fund distribution company.

## INDUSTRY RE



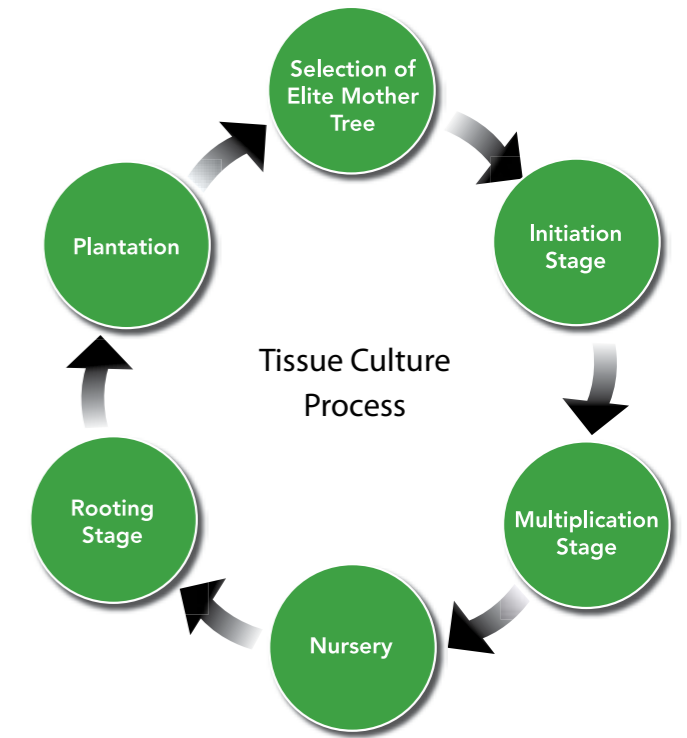
Ian Hamilton is the founder and Managing Director of Industry RE after previously holding roles as a business development and channel management specialist within the financial services and green technology sector. Industry RE has developed investment opportunities to deliver sustainability, reduce carbon emissions and develop new energy from renewable sources. He is a Fund Director for the Silex PCC Ltd sustainable fund and holds non executive positions at the International Green Awards and mytreefrog.com.

# Tissue culture teak

The trees growing on this plantation have been grown from tissue culture saplings as opposed to the usual method of growing from seed. This process involves the genetic cloning of plants from the tissue of specially selected old growth mother trees. The mother trees are selected subject to the characteristics of their timber such as growth rate, colour, density of wood and resistance to disease. The climate and soil type of the plantation also determine the selection of the best mother trees.

Thai Orchids Lab (TOL) is considered to be one of the world's leading experts in the field growing plants from tissue culture. This method, which was developed by Dr. Paiboolya Gavinlertvatana PhD, is designed to produce uniformly fast growing trees which are straight and tall with desirable aesthetic characteristics. TOL are able to demonstrate the benefit of their system over that of growing from seed by comparing the physical difference in trees of various ages grown by both methods in the same geographical location under similar conditions.

The trees that were planted in 2004, that will be grown to maturity, are experiencing average growth rates of 8cm-8.5cm per annum. This means that the trees will be able to produce 1mt3 of timber in approximately 16 years as opposed to 20+ years if grown from seed.



## ACCELERATED GROWTH RATES

10 years growth  
85cm GBH  
0.4 mt3

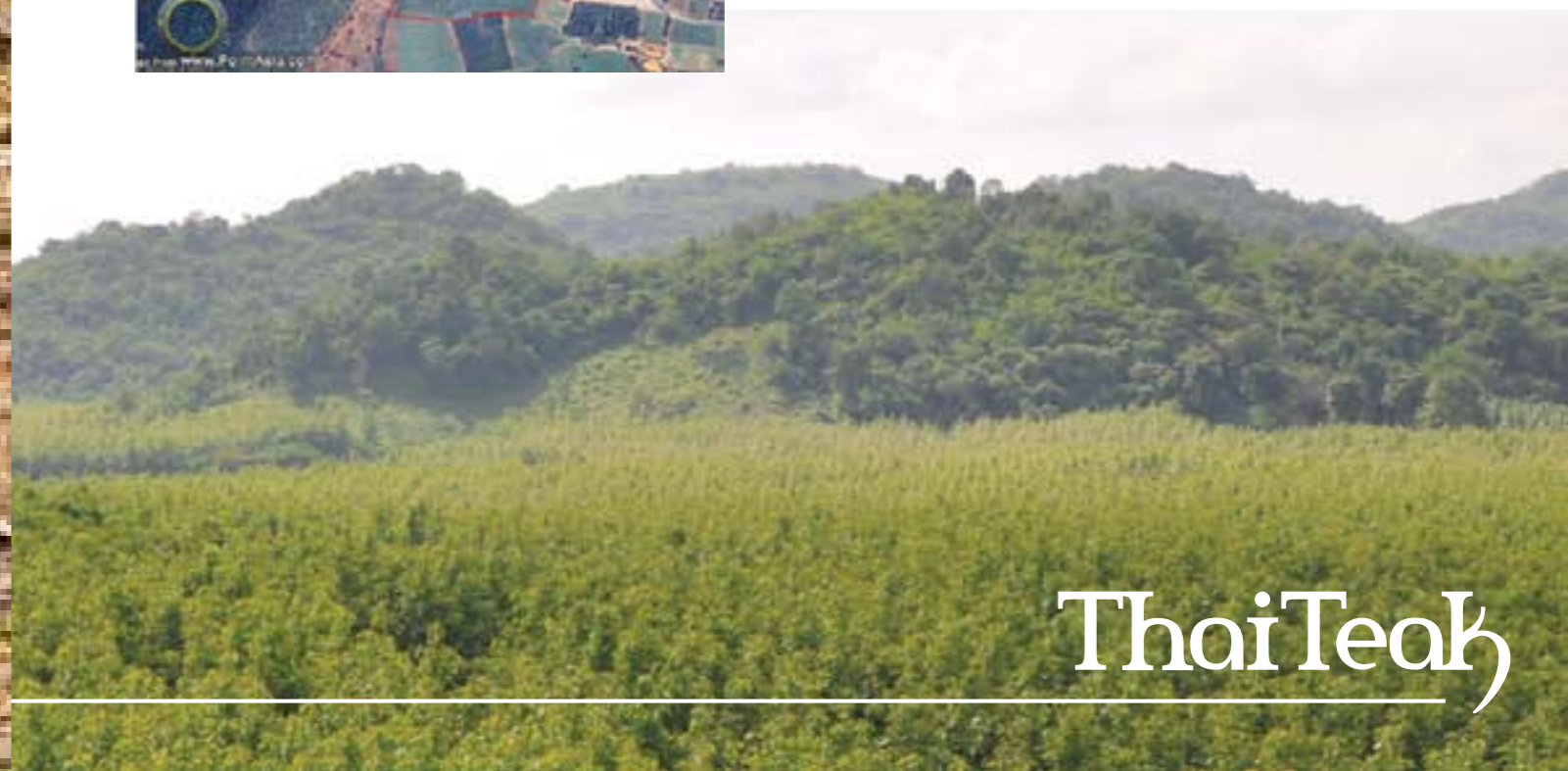
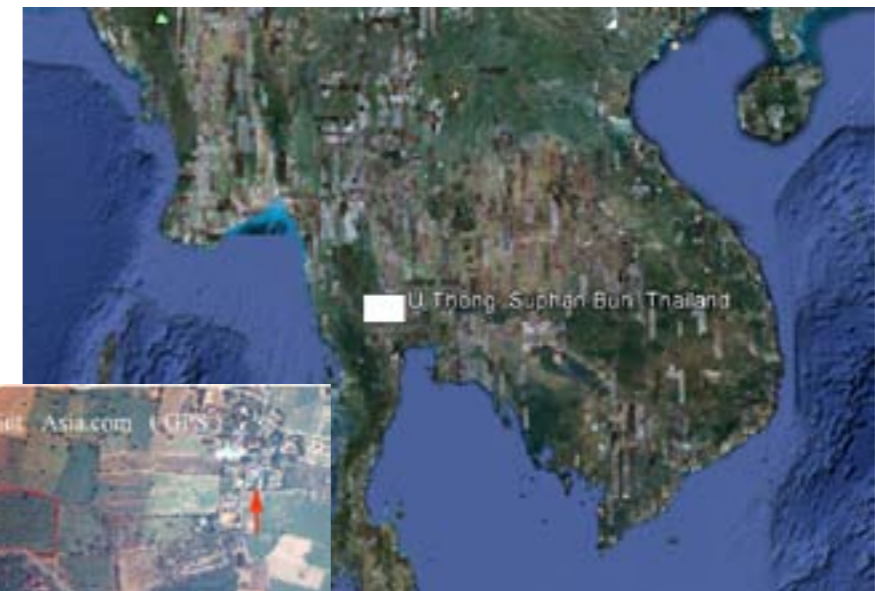
16 years growth  
125cm GBH  
1.0 mt3

Tissue culture teak is widely acknowledged as producing some of the world's most sought after teak. Equally as important from a commercial production perspective are the facts that tissue culture grows at superior growth rates to standard seed and has greater uniformity. If you combine the genetic elements with a detailed forestry management and maintenance schedule you create a blue print for optimum teak production and ensure that each acre of teak planted produces the largest volume of timber and subsequently the maximum value per acre.



## Location

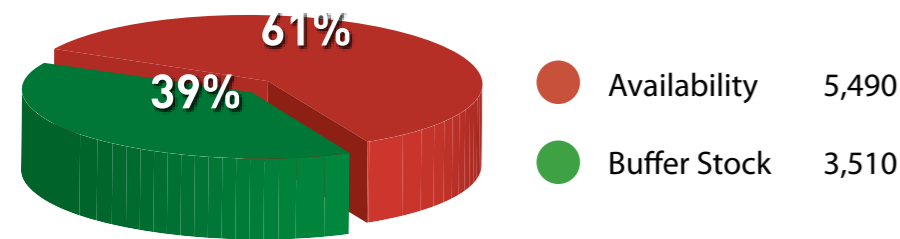
Site selection is crucial when establishing teak plantations. Soil drainage and good water supply are obvious considerations as are road access and local amenities. The U-Thong elite teak plantation is located in one of the best teak growing regions in Thailand which experiences the optimum levels of rainfall and the required periods of drought. This climate allows for the maximum growth of the tree and the required colouring.



# Teak Volume Guarantee

A “teak volume warranty” is when the plantation managers agree on an average size “yield” per purchase order on a set date in the future.

When considering the strength of a volume warranty it is important to assess the total amount of stock on site, what amount of stock is being forward sold and what amount is being held back to support the warranty. In this instance and on this particular plantation there are some 9,000 trees in total that will be grown through to maturity in around 16 years tree age. Only 5490 trees are being released on to the forward retail market, leaving 3510 trees as reserve or buffer stock. This reserve stock represents a reserve of 63% of the trees being forward sold. All the trees on the plantation are of the same age and girth class distribution.



The availability is the total amount of trees being released on the forward contract market. The buffer stock will be held by the forestry managers.

What does this mean to you?

This means that not only are you warranted to receive your order in full but your order will have an average size of 120cm GBH or 1mt3 volume teak log per tree.

Some trees will be slightly bigger and some may be slightly smaller but the average is underwritten. Should your trees not grow to the same levels over the course of the next 10 years then the managers will use their reserve stock to top up your order to the average size. In real terms if, out of the blue, the growth rates decided to drop by 50% down to 4cm GBH pa then the forestry managers would still have enough stock to support the volume warranty.

A warranty of this nature is rare and is what makes this a compelling opportunity. In order to support the growth rate calculations a performance audit will be carried out each year and the results reported to the customers. After 10 years a final performance audit will be scheduled to determine the outcome of the volume warranty.

# Financial Packages

Industry RE has secured distribution rights to a limited amount of elite tissue culture teak stock at AsiaTeak’s plantations at Utong, Thailand.

The trees, which were planted in 2004, are already showing average growth rates of around 8-8.5cm girth at breast height (GBH) per annum and are projected to produce around 1.1 – 1.2 mt3 average volume teak log per tree per order in 2021. Packages are initially priced at £30,000 for 100 elite teak trees.

The elite teak stock is the trees that will be pre identified as the stronger trees to be grown to maturity. It is standard forestry

management procedures to thin out around 30% of trees on a teak plantation. The thinning process is where the forestry managers will select the weaker trees and remove them from the plantation to allow the stronger elite trees to inherit all of the light, nutrients and energy to see them grow through to maturity and to subsequently produce the largest possible volume of teak log per individual tree, which is where the real value lies.

By only acquiring the elite trees, you are provided with an opportunity to experience consistent, predictable growth rate projections and therefore a lower risk investment in terms of volume and potential harvest values at time of exit.

The chart below demonstrates the current sizes of the elite trees, the average annual growth rates, the subsequent projected growth rates and potential volumes (mt3) teak log per tree.

Projected Growth of Teak Trees	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
End of Year	7	8	9	10	11	12	13	14	15	16	17
Tree growth in years	56.4	63.4	71.4	79.4	87.4	95.4	103.4	111.4	119.4	127.4	135.4
Girth at Breast Height (GBH)	17.64	21.19	22.74	25.29	27.83	30.38	32.93	35.48	38.03	40.57	43.12
Calculated mt3	0.19	0.26	0.33	0.42	0.52	0.63	0.74	0.87	1.01	1.17	1.34

Discretionary Harvest Period

As you will be the owner of your forward purchase order contract, you will therefore be offered set dates at which to realise the value of your assets. As the trees were planted in 2004 they will be of a harvestable age by around 2016 (12 years in tree age). Although we would always recommend growing teak until around 16 years in tree age, which produces around 1mt3 volume of teak, we do recognise that some customers may require liquidity far earlier. The discretionary harvest period allows customers to take delivery of

their order at any time between 5 (five) and 10 (ten) years after the order date, subject to operational terms and conditions. (There are times in the year to the climate that it will not be possible to fell the timber). By affording liquidity from year 5 (five) after the initial order, we are placing control firmly back in customers hands.

The value projections below show the potential harvest returns should you decide to take delivery of your order at the earliest point in 2016 and then subsequent increase in values year on year should you chose to defer delivery of your order.

Term of Investment	0	1	2	3	4	5	6	7	8	9	10
Year	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Return on Investment	-£30,000	£0	£0	£0	£0	£47,135					
Return on Investment	-£30,000	£0	£0	£0	£0	£0	£63,713				
Return on Investment	-£30,000	£0	£0	£0	£0	£0	£0	£78,651			
Return on Investment	-£30,000	£0	£0	£0	£0	£0	£0	£0	£95,873		
Return on Investment	-£30,000	£0	£0	£0	£0	£0	£0	£0	£0	£115,614	
Return on Investment	-£30,000	£0	£0	£0	£0	£0	£0	£0	£0	£0	£140,236

The projections use an inflation rate of 5% per annum and are based on the minimum auction bid price (MBP) as set by the Thai Royal Forestry Department.

# The Asia Teak Trust

When appraising an opportunity of this nature, one of the key areas that the plantation managers must provide for is protection of the underlying asset.

The Asia Teak Trust (The Trust) has been structured by Asia Teak for and on behalf of its customers to provide security should Asia Teak not be able to legally fulfil its contractual obligations under the purchase order. The Trust takes the form of a United Kingdom Ltd company called Asia Teak Ltd. The directors of this company are Simon Goldring and Stephen William Blair, who act as independent trustees of The Trust and are both partners at leading London law firm Radcliffes Les Braaseur.

Asia Teak entered into a declaration of trust with the trustees and signed a debenture which allowed a charge over the company's assets both present and future. The debenture and subsequent charge, that are registered with the relevant authorities in England & Wales, enables The Trust to realise the assets of the Company or its subsidiaries in the event that the company is unable to fulfil its contractual obligations to its customers.

Asia Teak is contractually bound under the declaration of trust to report to the trustees on all relevant financial activity of the business and in certain instances, requires the approval of the trustees. The Trust has an active role in the financial well being of the company and ultimately ensures that the beneficiaries of the trust (customers) are represented.

Each of our customers, upon signing the purchase order and remitting the order proceeds, immediately becomes a beneficiary of The Trust.

A summary of The Asia Teak Trust

1. The Asia Teak Trust is administered by independent trustees.
2. Asia Teak has granted a Debenture to The Trust over all its asset both current and future.
3. Asia Teak has lodged with The Trust all share certificates in relation to its companies together with the title and lease documents in relation to its plantations.

The Trust also has power to take such actions and steps to ensure that

1. The Company and its subsidiaries hold sufficient products to fulfil their obligations.
2. The Company and its subsidiaries are undertaking a forestry management programme to ensure that the Company is in a position to satisfy its obligations.
3. The Company and/or its subsidiary are the legal and beneficial owners of the land and of the trees planted there on;
4. The company and its subsidiaries are solvent.

Copies of all legal documents in relation to the trust are available on request.

# The Audit

Each year, after the teak trees are 3 years in age class, a forestry audit will be commissioned. This audit is designed to provide key data on the amount of trees planted, which can then demonstrate the levels of buffer stock held, and also the growth rates of the trees which is an indicator of the forestry managers performance. Asia Teak carries extensive data on its own plantations and this is the data that will be verified each year.

## Performance Auditing

Data will be collected and processed to allow for comparative analysis with the current forestry management data with regard to number of teak trees, their girth class distribution and the general condition of the trees.

## Reporting

The forestry audit will then be processed and each customer will receive a copy of the audit by soft copy. Or by hard copy on request.

# The Purchase Order

In order to provide customers with the requisite level of security for an opportunity of this nature, a forward purchase order contract has been adopted.

This is where you will be place an order for a set number of trees to be delivered on a set future date. By not allocating specific trees from the plantation at this stage, you are protected from potential climatic risks that could affect the trees in terms of mortality or the slowing of growth rates. Asia Teak company policy is that they will not sell more than 75% of the trees on any one plantation. They do this for two reasons. Firstly to create future value for the business and secondly to provide an adequate buffer/reserve stock with which to underwrite their customers order.

In simple terms 100 trees ordered today, will be delivered as a completed order in full 10 years after your order date. Whether you are buying teak for personal use or for commercial reasons you will purchase your teak via a forward purchase order, just like you would do with any other product which has a future delivery date.

The purchase order is what contractually binds the customers to the forestry managers.

# Risks and Variables

## Natural Risks

Mortality of the trees is very low with risks from pests or disease being virtually nil once the trees have reached three years. Whilst there exists a climatic/natural risk of fire, flood or drought these are extremely rare in these specific locations and are also further mitigated by experienced staff working and living on site 24/7 combined with the detailed forestry management schedule. Underpinning most of these climatic risks will be the multi-peril crop insurance.

## Teak Pricing

Commercially the main risk is the future market price of teak. Whilst no-one can know for certain where this will go, historically this asset does not correlate to other market forces and over the last 10 years teak market prices have risen steadily by an average of 7.5% pa. The future expectation is for demand to increase against a diminishing supply so the likelihood is that this rate will increase further, however, caution dictates the conservative 2.5% rate of market value inflation used in this plan.

To mitigate teak pricing fluctuations, our expert management team will be analysing the timing of the release of the timber on the market and do have a discretionary two year extension in order to navigate this potential risk.

## Economic

Recently, Thailand experienced GDP growth by 8.0% in 2010 making it one of the fastest growing economies in Asia and the fastest growing economy in South East Asia. The country has a GDP net worth of 9.5 trillion Baht (on a purchasing power parity (PPP) basis), or US\$584 billion (PPP) making it the 24th largest economy in the world. This classifies Thailand as the 2nd largest economy in Southeast Asia after Indonesia. At present there remains a degree of economic volatility world wide, but we do not expect this to impact the opportunity.

U-Thong Plantation  
May 2011

## Investment Highlights

- 100 Trees for £30,000
- Acquiring 7 year old semi mature elite trees
- 10 Year Investment with early exit options from year 5
- Approved by UK SIPP Trustees
- Projected £140K Return
- Investment secured through UK Trust Structure
- Limited availability

## U-Thong Plantation May 2011

### Key Facts About Teak

- Teak wood is good-looking, smooth, sturdy and durable.
- It is resistant to bad weather. A garden bench made of teak is capable of withstanding rain and sunlight for several years even without periodic maintenance.
- Unlike furniture made of other materials, teak furniture does not require artificial polishing or oiling.
- Teak wood is rich with silica and natural oil content that make it resistant to all kinds of insects.
- Teak is very suitable for structural works and carved designs for its sturdiness, elasticity and ease of use.
- Teak wood does not rot or splinter even if it remains in contact with metals like iron for years due to the presence of silica and oil content.

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