



FACT 2

Forestry Acquisition
Consolidation & Timber

PRIVATE FORESTRY CONSOLIDATION INVESTMENT PROSPECTUS

AN INITIATIVE OF



GREEN BELT

YOUR FOREST · YOUR FUTURE

Contents

i.	EXECUTIVE SUMMARY	1
1.	THE PROPOSITION	9
2.	GREEN BELT MANAGEMENT	18
3.	ASSET ACQUISITION	22
4.	TIMBER MARKETS	28
5.	LEGAL & TAX STRUCTURE	38
6.	EXIT STRATEGY	43
7.	CASH FLOW EXAMPLE	44

Forests and trees, when sustainably managed, make vital contributions both to people and the planet, bolstering livelihoods, providing clean air and water, conserving biodiversity and responding to climate change.

Managing forests sustainably means optimising their benefits, including timber and contributions to food security, to meet society’s needs in a way that conserves forestry ecosystems...”

- The Food and Agriculture Organization of the United Nations

Executive Summary

THE PROBLEM

Global research indicates that demand for timber is growing, driven by market forces, sustainability legislation, and technological developments in the sector. Ireland, while a prime location for forestry, is currently structurally ill-prepared to capitalise on this significant opportunity. The country's private forestry estate is fragmented - a significant portion of Irish forestry cover is comprised of small parcels of land in private ownership, making it difficult to efficiently commercialise as an asset.

THE SOLUTION

Green Belt Ltd - Ireland's leading private forestry management company - have created the second iteration of the **FACT (Forestry Acquisition Consolidation & Timber)** initiative with the specific purpose of harnessing this exceptional opportunity.

The FACT 2 initiative involves the creation of a company to consolidate, manage and ultimately bring Irish timber products to the market in an efficient, sustainable, and professional manner. In 2019 FACT raised €240,000 and acquired forests meeting the criteria outlined. We are seeking to build on that success, and raise €1 million in 2020, and invest it similarly.

Smaller parcels of forestry are unattractive to larger investment corporations and institutions. This explains in part the current under-utilisation of these assets, but also presents an opportunity. By sourcing and securing suitable forestry packages of c. 20 acres, FACT 2 will create clusters of semi-mature forestry in nationally strategic locations to service end markets including sawmills and biomass¹ facilities. Green Belt's extensive experience in this sector will allow us to explore opportunities in other value adding activities, known as Sustainable, Alternative Income Drivers (SAID's) which include wind and solar energy generation and the bioeconomy, as part of the investment management process.

“Wood is a globalised commodity. A constantly growing demand for the raw material in European markets has been anticipated by many foresight studies, and is expected to lead to a significant increase in competition in the sector, and higher imports into the EU in the coming decades.

The demand for forest products is increasing globally, notably in fast-growing, emerging economies. This trend shows that the EU forest-based sector cannot rely on increasing imports and underlines the importance of a long-term strategy for domestic resource mobilisation”.

- Handbook for wood mobilisation in Europe; Simwood, 2018

¹ Biomass refers to any timber-derived product eg. pellets capable of being converted to energy

THE OPPORTUNITY

This opportunity is being brought to the market by Green Belt Ltd – a progressive innovator in the Irish forestry market since 1982. Having established 400,000 acres of forestry for 10,000 clients, we are in a unique position to identify and access available assets within the private estate. Combining our network of professional Foresters across the country with operational efficiencies and carefully selected partners in the harvesting and haulage industry, Green Belt sees huge opportunities to increase the earning potential in each plantation.

In 2019, the first round of FACT raised €240,000 to invest in and consolidate a number of plantations nationally. This has proven the concept is successful.

To participants, the FACT 2 initiative represents the opportunity to own a tangible asset that offers strong, consistent and secure returns. As a tax free investment, forestry offer an ideal hedge against inflation. FACT 2 offers participants the opportunity to participate from an initial investment of only €20,000 – an ideal vehicle for pension, wealth and family security.

The market for all timber products is expected to increase progressively over the next 15 years¹. Demand from the UK and Europe for Irish processed roundwood is outstripping supply and is likely to continue to do so², with the private forestry estate playing an ever-increasing role in national supply figures. Further to this, it is expected that electricity production from wood will double by 2020 in Europe and triple in North America by 2030³.

Ireland’s private forestry estate has an increasingly important role to play in the delivery of material to the Irish and UK timber market. Currently providing approximately 16% of the Irish market, by 2027 the private estate will be supplying 50% of the projected available harvest⁴. Consolidating the private estate under fewer owners than the current 21,000 will improve the volume, scale, market power and commercial returns for all timber products harvested within these clusters.

This is the opportunity we are seizing.

1 Forestry Forecast, 2016 – 2035; Coford
2 IFFPA annual report, 2017
3 http://www.globalbioenergy.org/fileadmin/user_upload/gbep/docs/giz2015-en-report-wood-energy.pdf
4 Forestry forecast, 2016 – 2035; Coford

INVESTMENT OVERVIEW

INVESTMENT AMOUNT

€20,000 minimum

TIME SCALE:

10 years

STRUCTURE:

For your investment, you receive ownership of a parcel of a plantation. FACT 2 will manage the forestry on your behalf to ensure optimal growth rates & maximise profits.

As FACT 2 will acquire semi-mature plantations, we are factoring in a 10 year period before harvest. Once mature, we will harvest the trees & organise the sale of the timber to the best available market. Where land is part of the acquisition, the land will be sold off post-clearfell with profits accruing to investors unless the investors choose to commit this as a donation to the Peter McVerry Trust.

TARGET RETURN

5% Internal Rate of Return (IRR)

INVESTMENT OVERVIEW

Participants are invited to invest in blocks of €20,000 for a period of 10 years.

Green Belt Ltd will administer the activities of FACT 2, including all acquisition, negotiation, mapping, inventory and scheduling of harvesting and maintenance operations. Our team of professional Foresters and in-house Geographic Information Systems (GIS) experts are perfectly positioned to provide the necessary details to fully inform investment decisions.

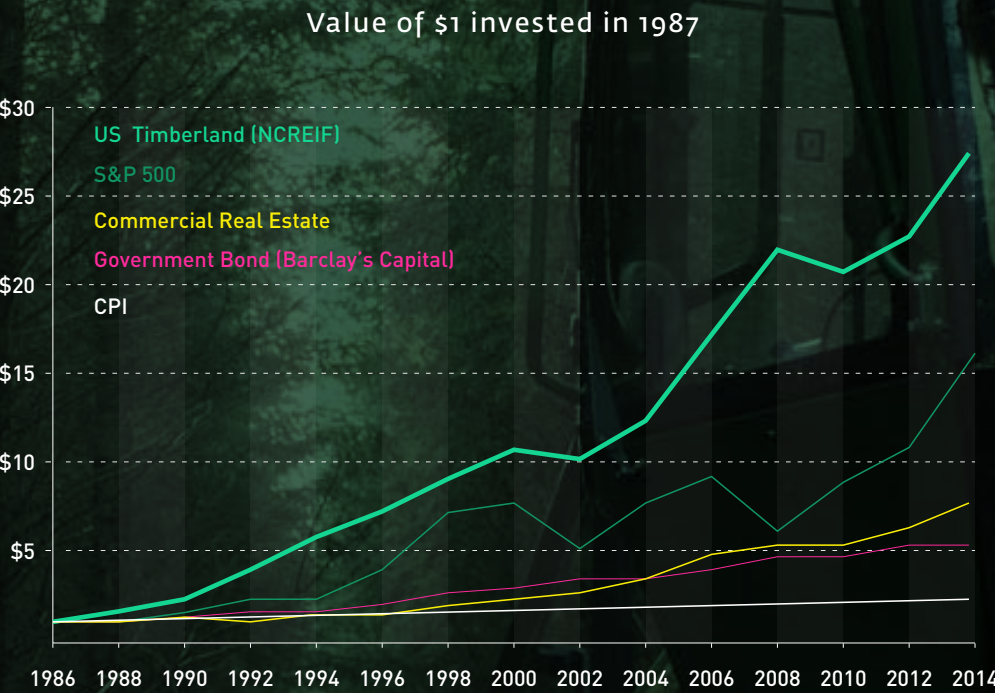
Assets will be acquired in two formats – land plus forestry, and forestry only. For land plus forestry acquisitions, the land under the forestry assets will be sold off post clearfell. For forestry-only acquisitions, the land will be retained by the original owner and the lien on the title possessed by FACT 2 will be relinquished. We estimate a split of 70:30 in favour of forestry only acquisitions.

There are no annual dividends made over the 10 years. Instead, FACT 2 focuses on a capital growth strategy. We are targeting returns of 5% per annum⁵ compounded over the timeline.

A unique element to this investment, and new for 2020, is the opportunity to assign the returns from the land sale element of your investment to a charity. We have selected the Peter McVerry Trust as our charity partner for 2020 and are delighted to be able to potentially commit up to €30,000 to their charity post distributions to the investors and at the wind up of the company. The investors returns are from the timber revenue. We are suggesting the taxable return from the land sales (est 30% of acquisitions are land and forest and the underlying land is valued at 10% of the investment value).

5 See p. 44 for sample cash flow. Returns are based on biological growth, market demand and asset value.

PERFORMANCE OF TIMBER INVESTMENTS VS OTHER (US MARKET)



Sources: NCREIF, S&P 500 Composite w/dividends reinvested, Barclays Capital Government Bond Index, CPI - All Urban Consumers, not seasonally adjusted. This graph illustrates the performance of various asset classes over time as reflected by widely-accepted market indices.

Forestry has never been more relevant than it is today in terms of the climate change agenda

— Imelda Hurley, CEO, Coillte, 2020

Developing the bioeconomy will also help us achieve our carbon mitigation objectives by reducing our reliance on fossil fuels, decarbonising our society by promoting more sustainable bio-based products, and growing rural and regional businesses and jobs. A successful transition to a low-carbon and circular economy will depend on integrating sustainable economic development into our economic model.

— September 3rd, 2019. Bioeconomy Implementation Group's First Progress Report to Government

The reality is that the price of timber will be entirely influenced by supply and demand and the efficiencies or otherwise of the production chain

— Savills Rural research, April 2019

Buildings can be an additional carbon sink, they are part of a bunch of larger scale solutions that [reduce] emissions.

— Chris Reyer, Potsdam institute researcher, February, 2020

Almost everything that is made from oil today could alternatively be made from wood in the future.

— BBI JU, December, 2019

SUSTAINABILITY

The launch of the **UN Sustainable Development Goals (SDGs)** in 2015 has made clear that the global community relies heavily on the private sector to solve some of the most urgent problems the world economy is facing. Companies and institutional investors are being asked to contribute to these goals through their business activities, asset allocation and investment decisions⁶.

Beyond countries and corporations, there is an increasing awareness among consumers that their general consumption has an impact on the environment and society⁷. Forestry assets and processes must be managed sustainably so they are economically, environmentally and sociably viable.

Bioenergy sources – such as woody biomass – will play a crucial role in meeting long term climate targets⁸. For this reason, FACT 2 will serve the emerging Bioeconomy as well as traditional markets. The Bioeconomy should promote circularity through solutions and innovations that reuse and recycle materials, maximising resource efficiency through the use of unavoidable wastes and environmental sustainability.

If sustainably sourced and produced, Bioenergy brings considerable environmental and socio-economic benefits. Wood biomass, derived from the forest products industry, is the largest single source of renewable biomass and it enables European power generators to repurpose existing coal-based infrastructure with a renewable alternative that reduces the carbon intensity of electricity generation by up to 85% on a life-cycle basis⁹.

⁶ http://www.undp.org/content/dam/undp/library/corporate/brochure/SDGs_Booklet_Web_En.pdf

⁷ IEA; <http://www.iea.org/statistics/statisticssearch/report/?country=IRELAND&product=indicators&year=2015>

⁸ International Renewable Energy Agency, April, 2017

⁹ Ref: <https://bioenergyinternational.com/opinion-commentary/40817>

The Proposition 20/20/20

The Proposition

Green Belt is presenting an opportunity to consolidate fragmented areas of the private forestry estate across Ireland into more productive and efficient blocks of forestry – known as **Clusters** under the umbrella of FACT 2.

Each cluster will be strategically located close to end markets. Assets will be chosen based on their quality and also proximity to the end user - including sawmills and wood chip users.

20/20/20

The focus of the acquisition will be forests of **20 years old**, of **20 acres in size** and **yield class 20**.¹ The supporting infrastructure around these assets is critical to the success of the investment and is a key focus at due diligence phase. Participants will benefit from the biological growth in the timber, the appreciation in value of the timber, and the security of an investment for the future in a tangible asset that generates positive results.

According to Coford - Mobilising Ireland's Forest Resource, 2015:

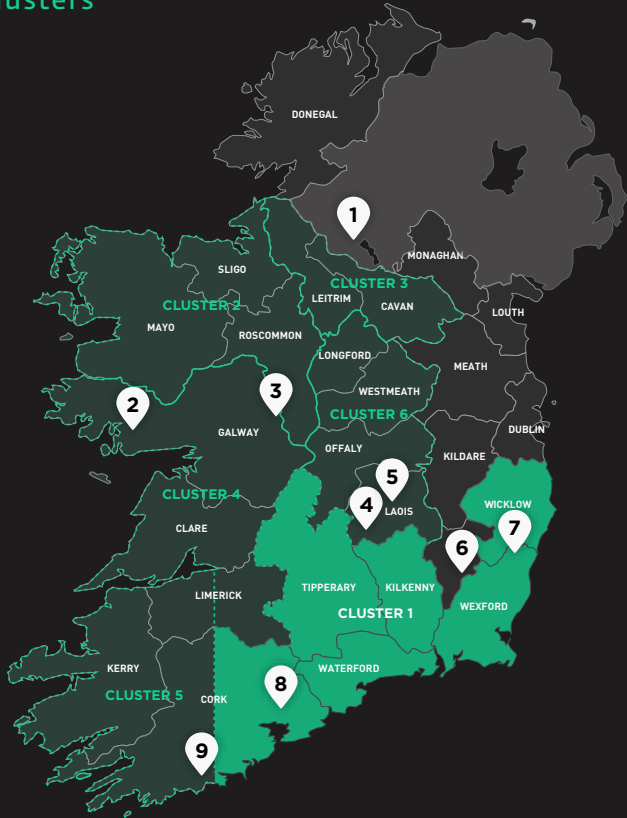
"Wood mobilisation is recognised as one of the most significant challenges facing the forest sector over the coming decade. It is about realising expected increases in wood supply, and meeting rising demands for wood fibre from all major end users, in an efficient and cost effective manner. It means making the most of the existing state and private forest resource and efficiently moving wood fibre along the supply chain to the processor."

¹ Yield class is defined as the potential growth rate or yield of a forest, expressed as cubic meter per hectare per year. There will be some flexibility in the selection of forestry for acquisition, with these criteria used as a guideline.

Target Areas: FACT 2 Clusters

Sawmills

- 1. Balcas, Fermanagh
- 2. ECC
- 3. Murrays, Ballygar
- 4. Coolrain, Laois
- 5. Laois Sawmills
- 6. Murrays, Ballon
- 7. Woodfab, Wicklow
- 8. Glennons, Fermoy
- 9. Graingers, Cork



	Target counties	Sawmills and end users in proximity
Cluster 1	East Cork, Waterford, Wicklow, Wexford, Tipperary and Kilkenny.	Glennon Brothers, Murrays Timber, Bord na Móna
Cluster 2	Mayo, Sligo, Roscommon	ECC, Murrays Timber
Cluster 3	Leitrim, Cavan	Balcas, Medite for MDF
Cluster 4	East Limerick, Clare, Galway	ECC, Glennon Brothers, ports for export
Cluster 5	Kerry, West Cork, West Limerick	GP Wood, Biomass plants/ CHP facilities (all clusters)
Cluster 6	Laois, Offaly, Westmeath, Longford	Murrays Timber, Glennon Brothers, Bord na Móna

TARGET AREAS

FACT 2 will cluster target acquisitions in strategic locations across Ireland. These acquisitions will further benefit from their proximity to other Green Belt managed forests and the economies of scale this brings.

With the increasing demand in biomass, the cluster will also benefit from an advantageous proximity to Bord na Móna depots and ESB power stations. The introduction of the Support Scheme for Renewable Heat (SSRH) will see smaller scale Combined Heat and Power (CHP) facilities established, which will require woody biomass for consumption.

Market research carried out by Green Belt across a representative selection of the target market has indicated we should take a nationwide approach in establishing these clusters. Funds invested into this initiative will be deployed across assets as they are acquired.

A primary focus will be to identify and negotiate the acquisition of suitable forestry plantations across all six clusters. Our professional Foresters will work through active lists to secure these forests within the criteria set out by FACT 2.

STRONG DOMESTIC HOUSING DEMAND

Forecast Average Housing Unit Demand Per Annum

Region	2020 /21	2022 /23	2024 /25	2026 /27	2028 /29	203 0/31	Total Needed
						Forecast	Forecast 2020/31
Greater Dublin Area	14,754	15,490	16,278	17,123	18,030	19,006	201,359
Dublin	10,740	11,279	11,856	12,475	13,140	13,855	146,690
Mid-East Region	4,014	4,211	4,422	4,648	4,890	5,151	54,670
Midland Region	1,772	1,849	1,933	2,022	2,117	2,221	23,827
South-East Region	3,116	3,243	3,380	3,527	3,684	3,854	41,610
Border Region	2,467	2,572	2,683	2,803	2,933	3,072	33,062
West Region	2,169	2,255	2,347	2,446	2,552	2,667	28,871
Mid-West Region	1,456	1,511	1,570	1,633	1,701	1,775	19,291
South-West Region	4,516	4,719	4,936	5,168	5,417	5,685	60,881
Nationwide	30,250	31,639	33,126	34,721	36,435	38,280	408,901

Source: CSO/ Initiative Ireland Research & Population Analysis and Forecasts

- Greater Dublin Area:** Dublin, Wicklow, Kildare, Meath
- Midland Region:** Laois, Longford, Offaly, Westmeath
- South-East Region:** Waterford, Tipperary, Wexford, Kilkenny, Carlow
- Border Region:** Louth, Leitrim, Sligo, Cavan, Donegal, Monaghan
- West Region:** Galway, Mayo, Roscommon
- Mid-West Region:** Clare, Limerick
- South-West Region:** Cork, Kerry

CONSTRUCTION INDUSTRY DEMAND

Future forecasts for housing across Ireland (see table opposite) strongly suggest increased indigenous demand for Irish timber in the construction industry. There is a further strong potential for Cross-Laminated Timber (CLT) construction, increasing the demands on Ireland’s timber resource.

The leading regions in CLT production include Austria (the largest producer), Germany and other Europe regions. Global consumption regions are also concentrated in Europe. In 2016, Austria accounted for about 41% of global total consumption, and Germany about 15%.

The worldwide market for CLT is expected to grow at a compound annual growth rate of roughly 9% over the next five years, and is expected to reach \$980 million USD in 2024, from \$640 million USD in 2019².

“The increasing move towards CLT-constructed buildings continues as a popular option in the UK and Europe, forestry growers in Ireland are likely to benefit significantly from the increasing demand for all categories of saw-log.”³

2 REF - <https://www.marketwatch.com/press-release/global-cross-laminated-timberclt-market-2020-global-industry-size-sharetop-countries-data-future-challengesrevenue-demand-industry-growth-and-top-players-analysis-to-2024-2020-03-04>

3 Ref - <https://www.irishexaminer.com/breakingnews/farming/innovative-clt-timber-todeliver-profit-boost-for-forestry-sector-839425.html>

SUPPLY DEFICIT

Item	2014	2020
Roundwood Supply Forecast	3,064,000m³	3,756,000m³
Demand Forecast & Residue Offset		
Roundwood for sawmilling	2,059,000m³	2,617,000m³
Roundwood for boardmills	730,000m³	880,000m³
Residue for boardmills	670,000m³	720,000m³
Forest-based biomass	994,000m³	1,871,000m³
Sawmill residue offset	-1,016,000m³	-1,315,000m³
Boardmill residue offset	-89,000m³	-103,000m³
Net Demand	3,348,000m³	4,670,000m³
Shortfall in supply	-284,000m³	-914,000m³

THE RATIONALE

Utilising research carried out by independent bodies such as COFORD (Council for Forest Research and Development – representative body from the Forest Sector in Ireland), FII (Forest Industries Ireland) and Teagasc (the national Agriculture and Food Development Authority), it is clear to see the high demand for timber into the future.

The COFORD Roundwood Production Forecast 2016 – 2035 estimates that there will be an increase in the Net Realisable Volume (NRV) from today’s **3.95 million m³** to **7.86 million m³ in 2035**⁴. The private estate will play a large role in this production as it continues to mature due to broad areas of planting in the 1980’s and 1990’s.

However, the increasing level of demand for material will be in excess of supply, as the below figures highlight.

These figures highlight a stark reality for Ireland’s private forestry estate – there is simply not enough available timber being mobilised to market.

To help address this supply deficit, our FACT 2 consolidation plan will cluster groups of local forests under one management regime and provide economies of scale to achieve improved pricing, improved market options and improved harvesting conditions. This will deliver vastly improved commercial returns. Results will be further maximised by the innovative approach Green Belt uses to sell timber by-product directly to specific markets.

4 Forestry Roundwood production Forecast 2016- 2035; Coford, 2016.

The return on your investment

Investment Sum

€20,000

Term

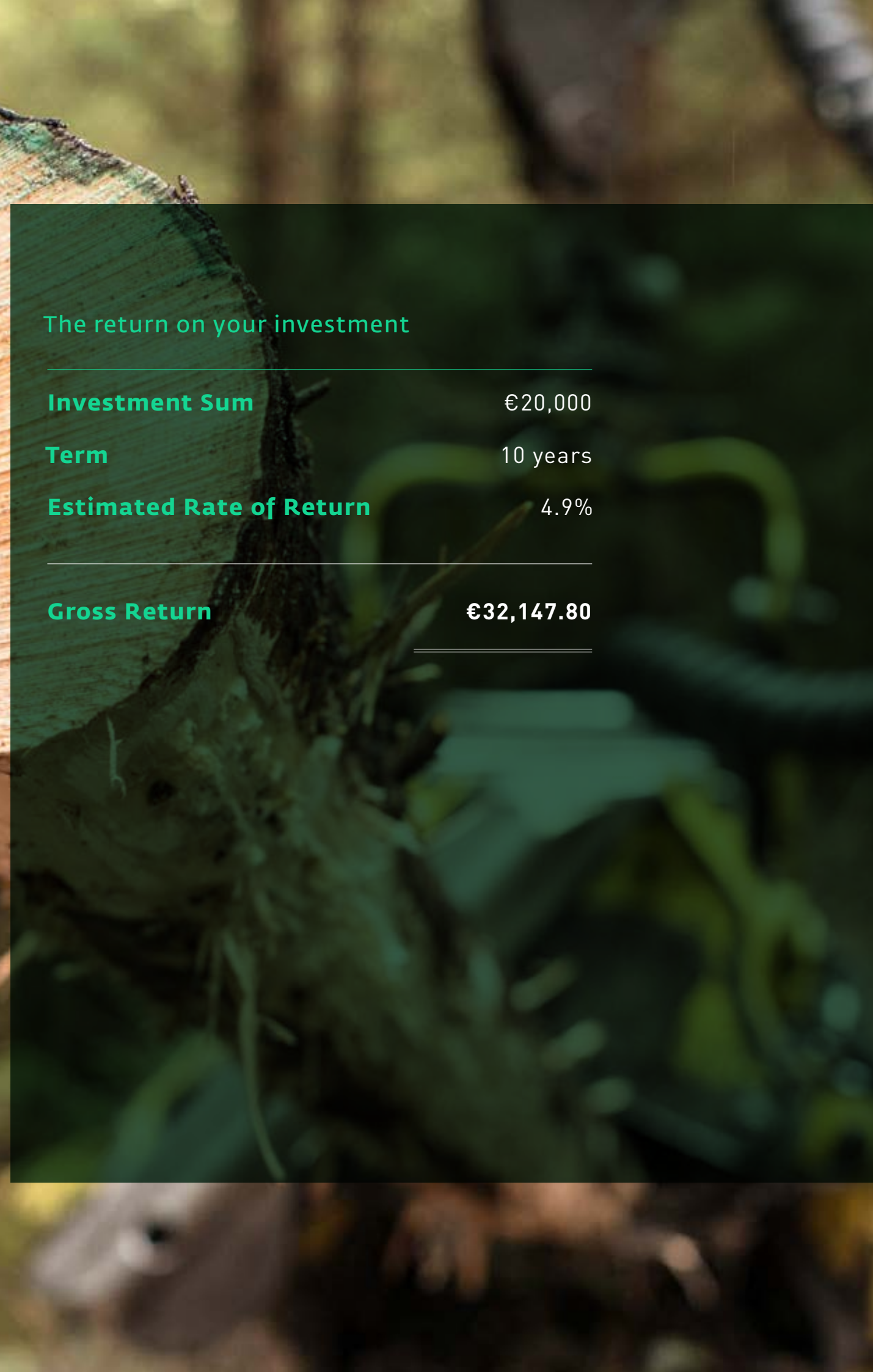
10 years

Estimated Rate of Return

4.9%

Gross Return

€32,147.80



CLUSTER EXAMPLES

Analysis of the location and density of established forestry across Ireland and the location of the main sawmills in the industry has led to the identification of cluster zones. FACT 2 clusters will be based within 80km of end markets to minimise haulage costs and to increase operational efficiencies.

PRICE PAYING CAPACITY FOR FORESTS

To deliver the target IRR⁵ (Internal Rate of Return) for FACT 2, particular emphasis is placed on asset acquisition price. While the guideline criteria focuses on plots of a minimum of 20 acres, other complementary assets of lower area size will be open for consideration.

There is a competitive market rate per acre/hectare that can be paid for acquisitions, beyond which they are not financially viable. This price will be determined by the detailed inventory carried out by Green Belt. As a performance related reward, Green Belt will earn 20% off each percent of the IRR beyond the 5% hurdle rate.

Factors determining the price paying capacity for the forest are:

- timber volume per hectare
- estimated timeline to clearfell
- proximity to market
- percentage of sawlog
- ease of access

5 IRR is sometimes referred to as “economic rate of return” or “discounted cash flow rate of return.” The use of “internal” refers to the omission of external factors, such as the cost of capital or inflation, from the calculation. <https://www.investopedia.com/terms/i/irr.asp>

Green Belt Management

Green Belt Ltd is Ireland's largest private forestry management group. Since 1982 Green Belt has established more than **400,000 acres** of commercial forestry for almost **10,000 private and institutional clients** across Ireland.

Green Belt pioneered the development of the private forestry estate in Ireland and were instrumental in the inception of the grant and premiums scheme. As a major influencer in the forestry industry, we are continually looking to shape policy and improve the conditions for afforestation, harvesting and the forest owner.

Over our 38 years, we have managed forestry investment for individuals, institutions and pension funds across Ireland, the UK and further afield including in Panama, Central America. We have assets under management of c. **€500 million** and are continually evolving our service offerings to provide an enhanced customer experience in forestry investment.

OUR TEAM



MAURICE RYAN

Maurice has a bachelors degree in Marketing and a distinction in an Executive MBA from Trinity College Dublin. Maurice focuses primarily on the development of the company's harvesting activities and the logistical infrastructure of delivering material to markets. Maurice now manages the investment portfolios of the High Net Worth individuals investing in Irish forestry, as well as the institutional investment clients under Green Belt's management. Part of this role includes the valorisation of timber assets through Sustainable Alternative Income Drivers (SAID's).



IMELDA CONNOLLY

Imelda is Chief Financial Officer for the Green Belt group and has a broad depth of knowledge and experience across numerous sectors. A highly qualified Chartered Management Accountant ACMA, Imelda brings a practical, focussed and analytical focus to Green Belt. Imelda also enjoys working with, and turning timber.



HUGO MCCORMICK

Hugo is Chief Operations Officer, monitoring and implementing standards across the group's operations and functions. Hugo qualified with a 1st class honours degree in Agricultural Sciences from UCD. Since 1992, Hugo has developed his skillset with Green Belt to become one of the most respected foresters nationwide and indeed further afield. Hugo applies his analytical and practical knowledge to planting,



Peter McVerry Trust



Peter McVerry Trust is a national homeless and housing charity, committed to reducing homelessness, the harm caused by substance misuse and social disadvantage. The charity provides low-threshold entry services, primarily to younger people and vulnerable adults with complex needs, and offers pathways out of homelessness based on the principles of the Housing First model.

Our Vision is an Ireland that supports all those on the margins and upholds their rights to full inclusion in society.

Peter McVerry Trust responds quickly and effectively to the emerging needs of those impacted by homelessness and continues to expand our shelter provision to provide high quality, professional supports mainly to individuals but also to couples and families.

While providing a growing number of homeless services the charity is also a Tier 3 approved housing body, and a strong advocate for investment in, and development of social housing stock in Ireland. Currently the largest provider of Housing First in Ireland, Peter McVerry Trust continues to expand its housing stock across Ireland in order to provide more secure pathways out of homelessness for those in need.

At Peter McVerry Trust we don't just help people secure a home, we support them to keep their homes, integrate into their community and secure education, training and employment.

Peter McVerry Trust will continue to dedicate resources in the areas of prevention, education, social integration and social enterprise projects in the coming years, all with the aim of decreasing and ultimately eliminating homelessness across Ireland.

Asset acquisition:

Each cluster will be strategically located to make use of the infrastructure and market forces in place around it. Each of the clusters will be independent and non competing. The primary end markets are the 8 largest sawmills in the country.

ASSET SELECTION

The selection process for each cluster will initially be based on an assessment of the species makeup of the forest and planting year. An up to date aerial assessment will be made via drone or aerial imagery providers.

Once we are satisfied that all stakeholders are in agreement to proceed, we progress to timber measurement phase. This entails detailed plot taking. Pre 1st thin, inspection paths are cut to stratified plot locations and trees are numbered for future reference and auditing purposes. GPS units are used to locate the points where the plots are to be taken.

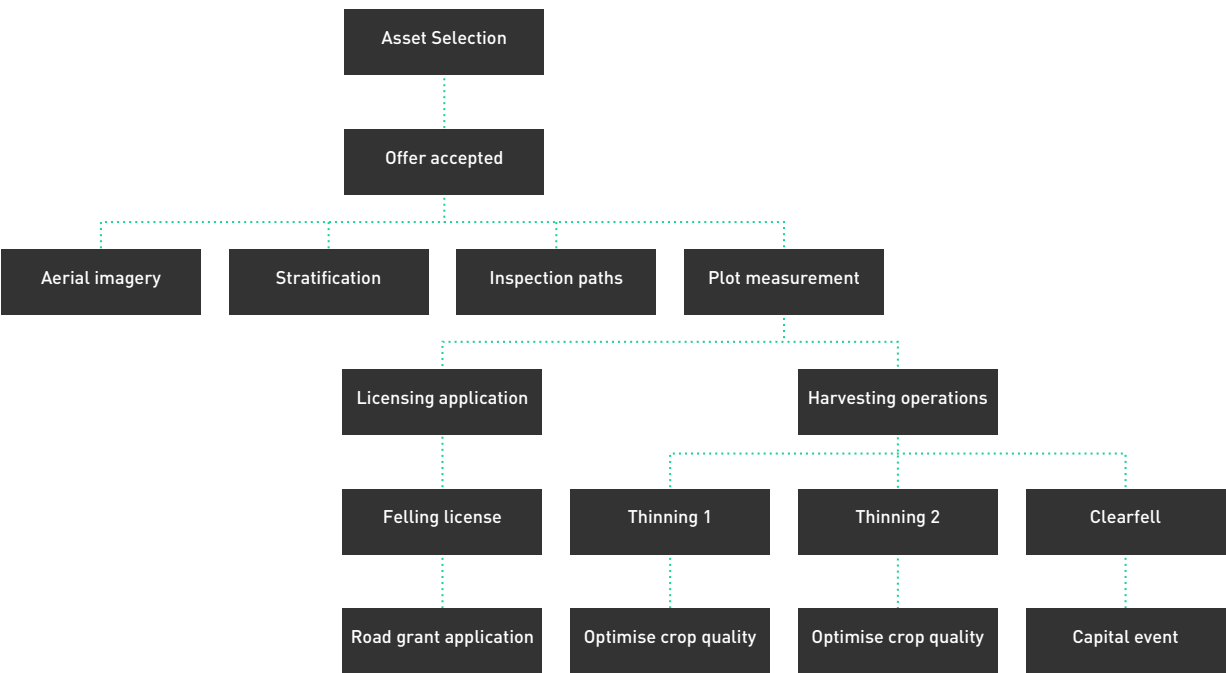
The information gathered from these plots (top heights, diameter at 1.3m above ground etc.) will be processed into a usable format to determine the growth rates of the timber – known as the yield class – and the optimum time to harvest. This process also allows us to future plan timber volumes to market.

Harvesting operations are planned with careful consideration to natural and cultural features, including, but not limited to, wildlife and archaeological elements.

Harvesting is undertaken with sophisticated harvesting machine. This machinery incorporates high tech capabilities for felling, processing and measuring length and diameter, thus optimising the timber revenues. Assortments are cut based on pre-determined market demand.

Timber, once cut, is collected by a forwarder and drawn to a landing point at the forest roadside and stacked in product piles. These piles are then collected by timber hauliers for delivery to markets within 100km.

ACQUISITION PROCESS



TIMBER PRICING

While there have been fluctuations in Irish timber pricing over the last 10 years, the data confirms that there has been a consistent upward trend in timber values.⁶

For the private estate, this is a positive as demand for timber is forecast to increase globally. According to the FAO (the Forestry and Agriculture Organisation of the United Nations), world consumption of wood products will rise by **60%** over the next 25 years (to 2040), with China expected to build 50 new cities to cater for its ever expanding population.

By making logging operations, transport and manufacturing more efficient, improved revenues will be generated by FACT 2. Profitability in the sector depends on constant innovation. Green Belt recognises the vital importance of science-based best practice as an essential element in our expert timberland management.

6 Prices available on www.itga.ie, as of November 2016

AVERAGE PRIVATE TIMBER PRICES v CONSUMER PRICE INDEX 2005 - 2019



RISKS

With increased levels in trade and greater mobility of larger numbers of people, the risk from the introduction of exotic pests and diseases is ever present. One of the key objectives of the Forestry Inspectorate of Irish Department of Agriculture, Food and the Marine (DAFM) is to implement the forestry aspects of the EU plant Health Directive 2000/29/EC, which includes monitoring and control programmes for harmful forestry pests and diseases.

Damage may also be caused to forests by abiotic factors, with fire and wind the most common cause⁷. Fires occur habitually each year in Ireland and reach their peak in spring, particularly in forests established on formerly unenclosed land, with a preponderance of purple moor grass and heather vegetation. The scale of fire damage in public forests has decreased in recent years, excluding protracted dry periods in Spring 2010/11.

Careful asset selection and sustainable forestry management principles deployed by Green Belt will mitigate against wind and fire risk.

APHIDS - Green Spruce Aphid. Forest owners may notice -especially in spring and early summer- browning and needle loss in Sitka and Norway spruce. The culprit is a small insect called the Green spruce aphid (*Elatobium abietinum*). New growth is unaffected and the contrast of the old sparse needles and the green new needles is striking.

Control of the aphid is limited; chemicals are really only effective in nurseries or in garden centres. Fortunately, trees seldom die, but increment can be reduced. Infestations really only last for a year and the trees tend to recover. Mortality can occur in some cases particularly if the trees are under stress from some other cause e.g. water logging, nutrient deficiency etc.

Cold winters keep the aphid populations down; a period of cold temperatures -7C⁰ will kill off the aphids.⁸

⁷ Forest Statistics Ireland, 2017; DAFM

⁸ <https://www.teagasc.ie/crops/forestry/advice/management/green-spruce-aphid/>

PINE BARK BEETLE - The great spruce bark beetle is a non-native pest of spruce and pine trees (species in the *Picea* and *Pinus* genera) which, if left uncontrolled, could cause serious damage to the United Kingdom's softwood timber industries. Sitka spruce (*Picea sitchensis*), Norway spruce (*P. abies*), Scots pine (*Pinus sylvestris*) and Corsican pine (*P. nigra*) are important species for these industries.

The presence of the beetle in Central and Eastern Europe since 2018, again arising from the warmer winters, has seen a larger volume of timber on the market across Europe and thus a slight depression in timber prices in Ireland.

BREXIT - A real issue but with zero tariffs of timber exports to our main market, the main challenges will be time and bureaucracy around the logistics. There are also numerous other markets across Europe for Irish timber not used indigenously.

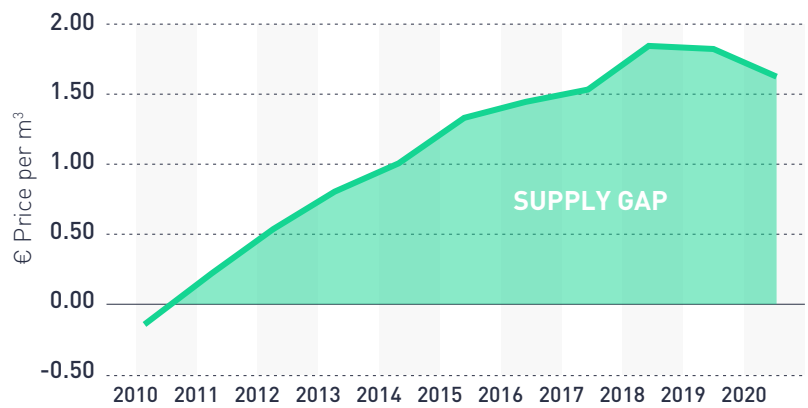
COVID 19 - The Coronavirus has affected businesses nationally and globally with a lockdown closing most operations. This has affected the trade in timber products and affected the pricing of timber harvested in the private estate. Once the virus is clear and business resumes, we anticipate a strong reaction and thus a bounce rate in timber prices.

Timber Markets

Demand for timber products is forecast to outstrip supply to 2020 and beyond¹. Providing a supply base to meet this demand to all sectors underpins the logic of FACT 2. By creating strategic clusters, we are maximising the return from each forest under management and enabling a scenario whereby we can enter into supply contracts to sawmills and biomass users. Profits will be optimised through the efficient management of harvesting machines, volumes and the logistics around the delivery of the harvested material to the best in market destinations.

Ireland has **8 main sawmills** that processes the majority of the **3.3 million m³** of timber harvested across Ireland². 77% of processed material is exported to the UK, including Northern Ireland, and the Benelux countries³. As the processing industry has improved efficiencies and quality of material, Ireland has evolved to become a net exporter of sawn timber and wood based panel products, which contributed **€111 million** to the Irish exchequer in 2015⁴. As the housing recovery and construction trade gains momentum in Ireland, with a necessity for 30,000 – 40,000 homes annually⁵ further demand for Irish timber is expected.

Roundwood supply demand gap - island of Ireland 2010 - 2020



1 Mobilising Ireland’s forest resource, Coford report, 2015

2 IFFPA report, 2017

3 IFFPA report, 2016

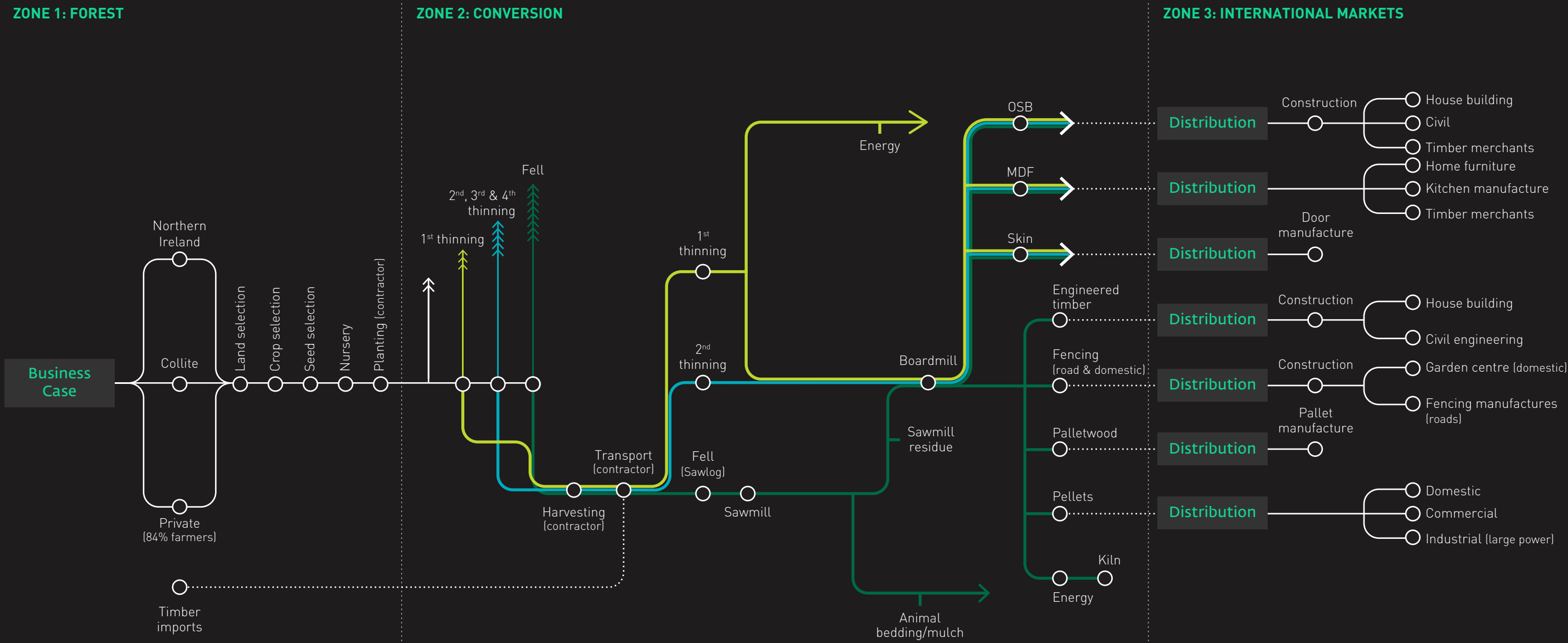
4 CSO

5 Initiative Ireland Housing report, 2017; Census reports 91, 2016

“Give me six hours to chop down a tree and I will spend the first four sharpening the axe.”

- Abraham Lincoln

FOREST INDUSTRIES INTERNATIONAL SUPPLY CHAIN



As mentioned in the Mobilising Ireland’s Timber Resource report from 2015:

“Boardmill demand (including the use of sawmill residues) is forecast to increase from 1.4 million cubic metres in 2014 to 1.6 million cubic metres by 2020, an increase of some 14% overall. Sawmilling demand is forecast to rise at a substantially faster rate, from 2.67 million cubic metres in 2014 to 3.28 million cubic metres by 2020, an increase of 0.61 million cubic metres, some 23% or 3.5% year-on-year. The rates of growth in demand for raw material are directly linked to the expected growth in product demand. The higher rate of projected demand for the sawmilling sector accords with the ‘Recovery’ scenario prediction of GDP growth of 4% over the period 2015-2020, outlined in the ESRI medium term economic outlook”⁹.

IRELAND’S SHARE OF UK FOREST PRODUCTS INPORTS BY PRODUCT TYPE BY VOLUME (2014-18)

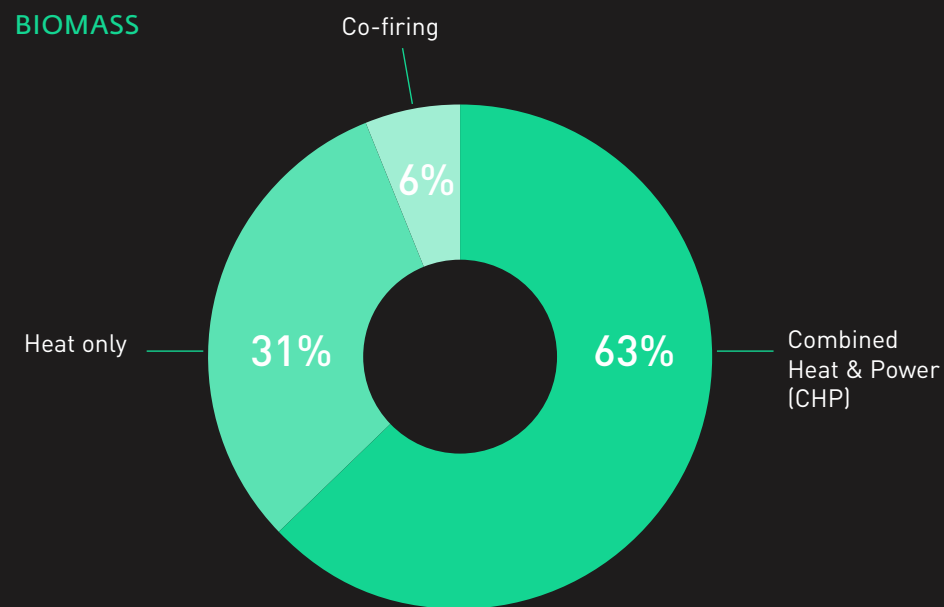
Product	% of imports				
	2014	2015	2016	2017	2018
Sawn softwood	6	6	5	7	6
Particleboard including OSB	1	14	14	12	14
Fibreboard including MDF	7	35	32	29	31

9 Fitzgerald, J. and Kearney, I. (Eds). 2013. Medium-Term Review, 2013-2020. Number 12. ESRI, Dublin.

TIMBER RESOURCE REPORT FOR MAIN IRISH SAWMILLS AS OF 2015

Sawmill	Annual capacity 000m ³	Annual turnover €m	Main products
GP Wood	251	42	Sawlog, Pallet
Glennon’s	600	95	Sawlog, Pallet
ECC	330	40	Sawlog, Pallet
Murrays 2	500	Unknown	Sawlog, Pallet
Balcas	268	100	Sawlog, Pallet, Pulp
Coolrain	100	Unknown	Pallet
Woodfab	410	175	Pallet
Laois	100	Unknown	Pallet, Stakes, Pulp
Masonite	10	Unknown	Pulp, chip
Edenderry	300	Unknown	Cofiring with pulp
Medite	410	€100	Pulp
Smartply	100	€54	Pulp
Rhode Bio	120	Unknown	Pulp, biomass

BIOMASS



Based on availability and existing market prices, forestry and the by-products of the forestry industry have the largest biomass resource potential. Right now, most of our bioenergy comes from sawdust and off-cuts which are by-products of the forestry industry.¹

Bord na Móna Managing Director Michael Barry said “Transitioning to the hybrid peat-biomass model is critically important to the continuing ability of Bord na Móna to remain a substantial employer supporting thousands of jobs in the Midlands. The transition to peat-biomass co-fuelling is also important from a national policy perspective as it underpins national energy security and helps Ireland to meet its binding renewable energy target for 2020.”²

¹ <https://www.seai.ie/technologies/bioenergy/biomass-in-ireland/>

² <https://www.bordnamona.ie/company/news/articles/bord-na-mona-backs-irish-biomass-supply-chain/>

BIOMASS

The demand for biomass in Ireland is due to outstrip supply. This woody biomass demand will be further supported by the introduction of the SSRH (Support Scheme for Renewable Heat) which is designed to increase the level of renewable energy in the heat sector. This will contribute to meeting Ireland’s 2020 renewable energy targets and reduce greenhouse gas emissions. The government funded scheme will support the adoption of renewable heating systems by commercial, industrial, agricultural, district heating, public sector and other non-domestic heat users not covered by the emissions trading system.”¹⁰

This scheme will see an increase in the use of woody biomass in Combined Heat and Power (CHP) systems as per the chart opposite. The Timber Mobilisation report identifies the need for a strategic approach to delivering assets to the market. The FACT 2 clustering program is an essential part of this mobilisation strategy.

“Rapid and effective implementation of the wood mobilisation recommendations... will be needed to avoid a high level of importation of biomass fibre for energy needs in the period up to 2020 (in the region of 1.2 million cubic metres per annum), and sawlog (up to 0.9 million cubic metres)... The analysis points to continuing and increased levels of competition for roundwood in the period up to 2020...”

¹⁰ <https://www.seai.ie/sustainable-solutions/support-scheme-renewable-/>

...much of the increase in demand will come from wood energy, driven by national and EU policies and a likelihood that fossil fuel prices will increase in the period up to 2020 and beyond”¹¹

The UNECE region harvested 1.19 billion m³ of industrial roundwood in 2018 to meet higher demand for wood raw materials, which was up by 5.1% from 2017 and by 7.9% since 2014. There were increases in removals of both softwoods (to 922 million m³) and hardwoods (to 264 million m³). Almost all the expansion of softwood roundwood removals and consumption in the last five years has been in Europe and the CIS (in the CIS almost entirely because of the Russian Federation), with log consumption in North America remaining fairly steady (graph 3.1.1).

Non-coniferous industrial roundwood removals increased by 5.5% between 2014 and 2018, to 264 million m³, with increases in all regions. Removals increased by 6.4% in Europe and by 15.2% in the CIS over the five-year period (graph 3.1.2).

Total roundwood removals in the UNECE region, comprising industrial roundwood and woodfuel, reached a record high of 1.4 billion m³ in 2018 after a sixth consecutive year of increase. North America accounted for 41% of the total harvest, Europe for 39% and the CIS for 20% (FAOSTAT, 2019)

Ref: <http://www.unece.org/fileadmin/DAM/timber/publications/SP48.pdf>

ASSET VALORISATION

Additional sources of revenue from **Sustainable Alternative Income Drivers (SAID's)**, such as wind and solar farms, will be considered as part of FACT 2. Green Belt has considerable experience in this area and will examine any opportunities to drive revenue in the Bioeconomy, creating local and rural employment. Opportunities to support and develop the burgeoning bioeconomy will present itself during the term.

CERTIFICATION

Numerous timber buyers seek accreditation such as that of the **Forest Stewardship Council (FSC)**, whose mission it is to promote environmentally sound, socially beneficial and economically prosperous management of the world's forests. The **Programme for the Endorsement of Forest Certification (PEFC)** – the world's leading forest certification organization – is also a sought-after accreditation from discerning buyers.

Forestry within the FACT 2 Clusters will come under the stewardship of the Green Belt group certification scheme, and will benefit from certification achieved by the group.

Legal and Tax Structure

The structure of this acquisition will be a standard limited company, limited by shares, and will trade as Green Belt Forestry Acquisition Consolidation & Timber (GB FACT 2). Persons are invited to subscribe for A ordinary shares with no preemption or voting rights. The initial investment will target **€1 million** for the consolidation of assets. The minimum investment amount to commence the business will be **€150,000**.

Green Belt Ltd will be manager and administrator of the limited company. Green Belt Ltd will be responsible for the identification, negotiation and ultimate acquisition of each forest that is taken under management. Doyle Fielding accountants have been assigned as independent accountants for FACT 2.

TAX INFORMATION

INCOME

S232 Taxes Consolidation Act 1997 (TCA) provides an exemption from Corporation Tax (CT) as follows:

Profits or gains arising from the occupation of woodlands managed on a commercial basis and with a view to the realisation of profits shall be exempt from income tax and corporation tax.

Based on Revenue guidance and established precedent in this area, the CT exemption should cover the proposed activities of the company:

- afforestation grants
- income from sale of thinnings, etc., arising in the course of managing the forestry
- proceeds from sale of standing timber, e.g. to allow another to fell and remove
- income from sale of harvested timber

CAPITAL GAINS:

The tax exemption does not extend to Capital Gains tax, which would arise on the sale of the land.

VALUE ADDED TAX (VAT)

The occupation of forestry is regarded as a farming activity for VAT purposes and is exempt from VAT, unless the company is otherwise VAT registered.

RELEVANT CONTRACT TAX (RCT)

Most activities concerned with harvesting forestry are covered by RCT and may require the company to register as a Principle.

DIVIDENDS

Dividends paid out of exempt income are exempt from Income Tax in the hands of the recipient. They are liable to USC and PRSI. The company is required to deduct standard rate tax on the payment, for which the recipient is entitled to a credit/refund.

ACCOUNTANTS



EUGENE DOYLE, FCA, QFA

Doyle Fielding Chartered Accountants were established in 1987 as Chartered Accountants and Registered Auditors based at Abbey Square, Enniscorthy, Co. Wexford. The firm provides a range of accountancy, audit, taxation and investment advice to a wide range of clients. The company prides itself on working closely with clients to provide a personal and efficient service. Doyle Fielding have extensive experience in the agriculture sector in general, and the forestry sector in particular.

TAXATION ADVICE

BRIAN HENNEBRY & ASSOCIATES LTD

Brian Hennebry & Associates is a tax consultancy practice based in Waterford, founded in 2000 by Brian Hennebry FCA CTA. The firm employs a team of Chartered Tax Advisors and provides a specialist taxation service to professional firms and individual clients as well as advising on the tax aspects of business investments. It will provide advice to Green Belt FACT 2 on taxation matters relevant to its activities.

LEGAL SERVICES

O’SULLIVAN MURTAGH SOLICITORS

Legal and conveyancing services will be provided by O’Sullivan Murtagh Solicitors. O’Sullivan Murtagh Solicitors are a general practice established over 30 years ago with offices in Cootehill, Co. Cavan and Carrickmacross, Co. Monaghan. The firm has developed a solid reputation in getting results for clients whether in commercial or property transactions, negotiations or litigation.

O’Sullivan Murtagh Solicitors have extensive experience in the agricultural sector - particularly in the forestry sector. Their work in this area comes from a range of corporate and institutional clients including private individuals, Irish and foreign companies, banks and pension funds.

Charlie Murtagh, partner in O’Sullivan Murtagh Solicitors, specialises in commercial property, corporate property and providing services to the agricultural and forestry sector. Throughout his career Charlie has practised in all aspects of land and property law. Charlie has wide experience with commercial property transactions and has advised banks, foreign companies and foreign nationals, property developers, retailers and various other business entities in complex property transactions.

COMMERCIAL SOLICITOR - JRAP O'MEARA



Kieran Moran is a Partner in the Corporate & Commercial Department of JRAP O'Meara Solicitors.

Kieran is an experienced commercial lawyer with a broad range of expertise acting for private clients and SME's in diverse areas such as:

- Commercial property
- Multi user developments
- Company start-ups
- Corporate restructuring, mergers and acquisitions
- Tax-legal structures
- Corporate compliance
- Technology and IP based companies
- Venture capital and private equity financing
- Bank restructuring
- Commercial agreements

Kieran works closely with accountants and tax experts to deliver to his clients team-based practical business advice, underpinned by sound legal understanding and principles.

He has represented a number of overseas corporates establishing in Ireland. Kieran is a graduate of UCC (BCL 1980), a qualified Solicitor, qualified Mediator and Associate of the Institute of Taxation in Ireland. He has lectured to the Law School of the Law Society of Ireland in Capital Taxation and Insolvency.

He is a former President of the Southern Law Association and remains a member of the SLA Council.



Exit Strategy

This limited company, FACT, will operate for a period of **10 years**. The clearfell of the timber will mark the end of trading. A fixed end date for these operations will not exceed 12 years – market conditions may dictate a delay in clearing the forest.

Each of the forests acquired will be of similar age with similar growth rates. Therefore, it is likely that the majority of clearfell operations will take place between years 9 and 11.

Thinning operations will take place as determined by the detailed management processes applied to the portfolio by Green Belt. Thinning of the plantations is an essential silvicultural process and is carried out to sustainable forestry management standards and under the regulation of the Department of Agriculture, Food and the Marine via the Forest Service.

Any variation on the management or sale of the assets will require a 67% majority ruling from shareholders. The limited company will be structured such that participants' investment earnings are returned at the end of the term, paid as a dividend. This dividend should benefit from the tax free occupation of woodlands.

Forest age (average)	22	21	22	23	24	25	26	27	28	29	30	31	32	
Investment duration		1	2	3	4	5	6	7	8	9	10	11	12	
YEAR	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Totals
INCOME														
Green Belt Funds	€15,000													€ 15,000
Investor Funds	€1,100,000													€ 1,100,000
Road grants	€33,833	€11,278												€ 45,110
1st thin	€18,428													€ 18,428
2nd thin				€33,318										€ 33,318
3rd thin							€22,212							€ 22,212
No Thin Clearfell												€80,620		€ 80,620
Clearfell											€756,000	€756,000	€378,000	€ 1,890,000
Sale of Clearfell Land													€75,938	€ 75,938
Total Income	€1,167,260	€11,278	€0	€33,318	€0	€0	€22,212	€0	€0	€0	€0	€756,000	€836,620	€3,280,625
EXPENDITURE														
Upfront Setup Costs - Legal, Tax, Marketing	€ 15,000													€ 15,000
Due Diligence Fees	€ 8,125	€ 4,375												€ 12,500
Acquisition of Forests	€ 1,010,763													€ 1,010,763
Acquisition Fees	€ 12,432													€ 12,432
Stamp Duty	€ 7,075													€ 7,075
Transaction + Legal Costs	€ 10,108												€ 6,250	€ 16,358
Commission for agents	€ 13,750													€ 13,750
Company Operating Costs	€ 5,000	€ 5,000	€ 5,000	€ 5,000	€ 5,000	€ 5,000	€ 5,000	€ 5,000	€ 5,000	€ 5,000	€ 5,000	€ 5,000	€ 5,000	€ 65,000
Annual Management Fee	€ 4,050	€ 4,050	€ 4,050	€ 4,050	€ 4,050	€ 4,050	€ 4,050	€ 4,050	€ 4,050	€ 4,050	€ 4,050	€ 4,050	€ 4,050	€ 52,650
Harvesting Fee	€ 3,400			€ 4,098			€ 2,732				€ 46,494	€ 46,494	€ 23,247	€ 126,465
Forest Road Construction	€ 55,080	€ 18,360												€ 73,440
Disposal Fee													€ 2,335	€ 2,335
Total Expenditure	€ 1,144,783	€ 31,785	€ 9,050	€ 13,148	€ 9,050	€ 9,050	€ 11,782	€ 9,050	€ 9,050	€ 9,050	€ 55,544	€ 55,544	€ 40,882	€ 1,407,768
														* € 1,872,857
CASH FLOW														
Opening Cash	€15,000	€22,477	€1,970	-€7,080	€13,089	€4,039	-€5,011	€5,419	-€3,631	-€12,681	-€21,731	€678,725	€1,459,801	€15,000
Investor Funds	€1,100,000	€0												€1,100,000
Annual Cash Flow - Excess Income/(Expenditure)	-€1,092,523	-€20,507	-€9,050	€20,170	-€9,050	-€9,050	€10,430	-€9,050	-€9,050	-€9,050	€700,456	€781,076	€413,055	€757,857
Closing Cash	€22,477	€1,970	-€7,080	€13,089	€4,039	-€5,011	€5,419	-€3,631	-€12,681	-€21,731	€678,725	€1,459,801	€1,872,857	€1,872,857
													IRR	4.9%

* Excess Income over Expenditure (for distribution to investors)



FACT 2

Forestry Acquisition
Consolidation & Timber

AN INITIATIVE OF:



GREEN BELT
YOUR FOREST · YOUR FUTURE

CONTACT

Maurice Ryan MBA

Director

Green Belt Ltd

Virginia

Co Cavan

Ireland

T: +353 (0)49 85 48000

M: +353 (0)87 675 3097

www.greenbelt.ie





FACT 2

Forestry Acquisition
Consolidation & Timber

AN INITIATIVE OF



GREEN BELT
YOUR FOREST · YOUR FUTURE