

# CLIMATE INNOVATION LAB: Forest Finance Instruments

**ANZ** 

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# Climate Innovation Lab

- **Objective:**

- to mobilise and redirect capital investment into measurable, additional and climate-aligned projects and activities.

- **Outcomes:**

- to galvanise and accelerate the local conversation about opportunities for climate finance innovation;
- to bring climate finance concepts to market by ideation, selection, development, approval and execution.





# An Entrepreneurial Approach

- **Commercial entrepreneurship**
  - Bringing products to market to meet demand for climate alignment
- **Policy entrepreneurship**
  - Creating tools for policy makers to grab during ‘windows of opportunity’
- **Encouraging intrapreneurship**
  - A neutral platform for public/private sector intrapreneurs to innovate





# PARTNERS

Principals



Advisors



MōHIO



An aerial photograph of a vast, dense forest. The trees are a deep, rich green, and the forest floor is covered in a thick layer of mist or low-hanging clouds that rise from the canopy, creating a hazy, ethereal atmosphere. The mist is most prominent in the lower half of the image, partially obscuring the forest below. The upper half of the image is a pale, overcast sky.

Forest Finance:  
**THE LANDSCAPE**





**Native  
conservation  
forest**



**Exotic  
commercial  
forest**



**Pastoral  
agriculture**



PERMANENT FOREST

CONTINUOUS COVER FORESTRY

INTENSIVE FORESTRY



Native conservation forest

Carbon farming

Close-to-nature forestry

Selection and retention systems

Native commercial forest

Exotic commercial forest

Natural and assisted regeneration

Habitat restoration

Mixed native/exotic systems

Wood lots

Riparian planting

Agroforestry & silvopasture

Horticulture and cropping

Pastoral agriculture

Urban forestry



An aerial photograph of a vast, dense forest. The trees are a deep, rich green, and the forest extends to the horizon. A thick layer of white mist or low clouds hangs over the forest, partially obscuring the tops of the trees and creating a sense of depth and atmosphere. The sky above is a pale, overcast grey.

Forest Finance:  
**INSTRUMENTS**



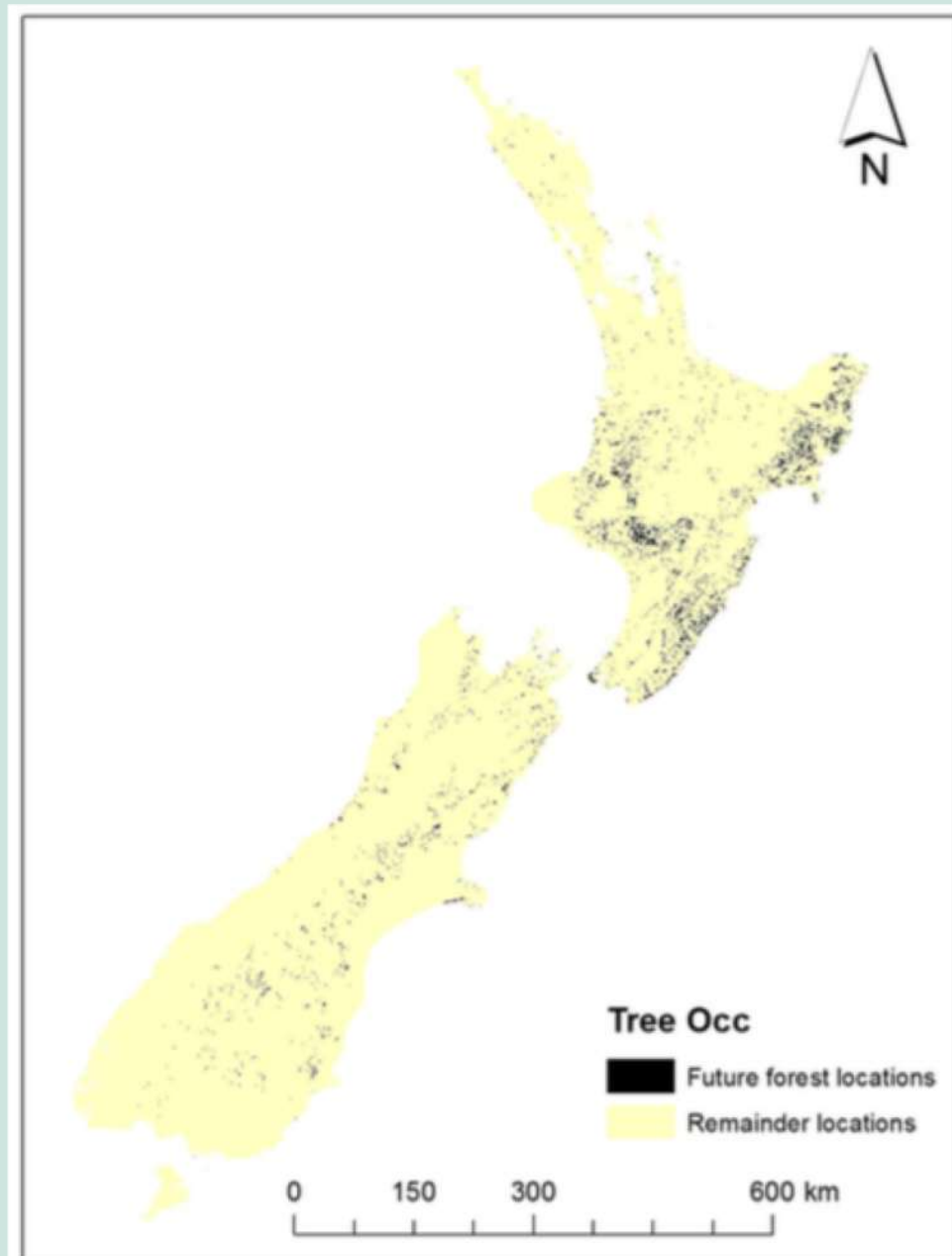
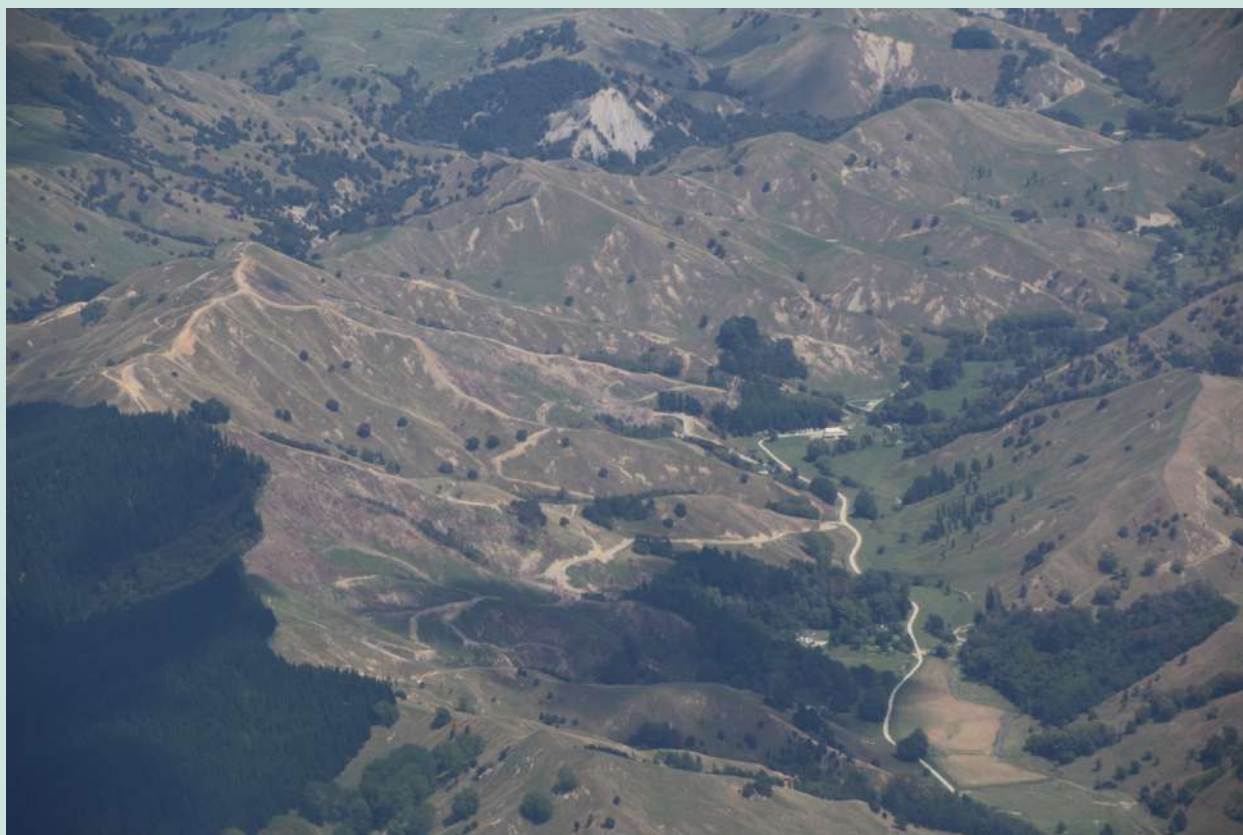
# ENVIRONMENTAL IMPACT BOND





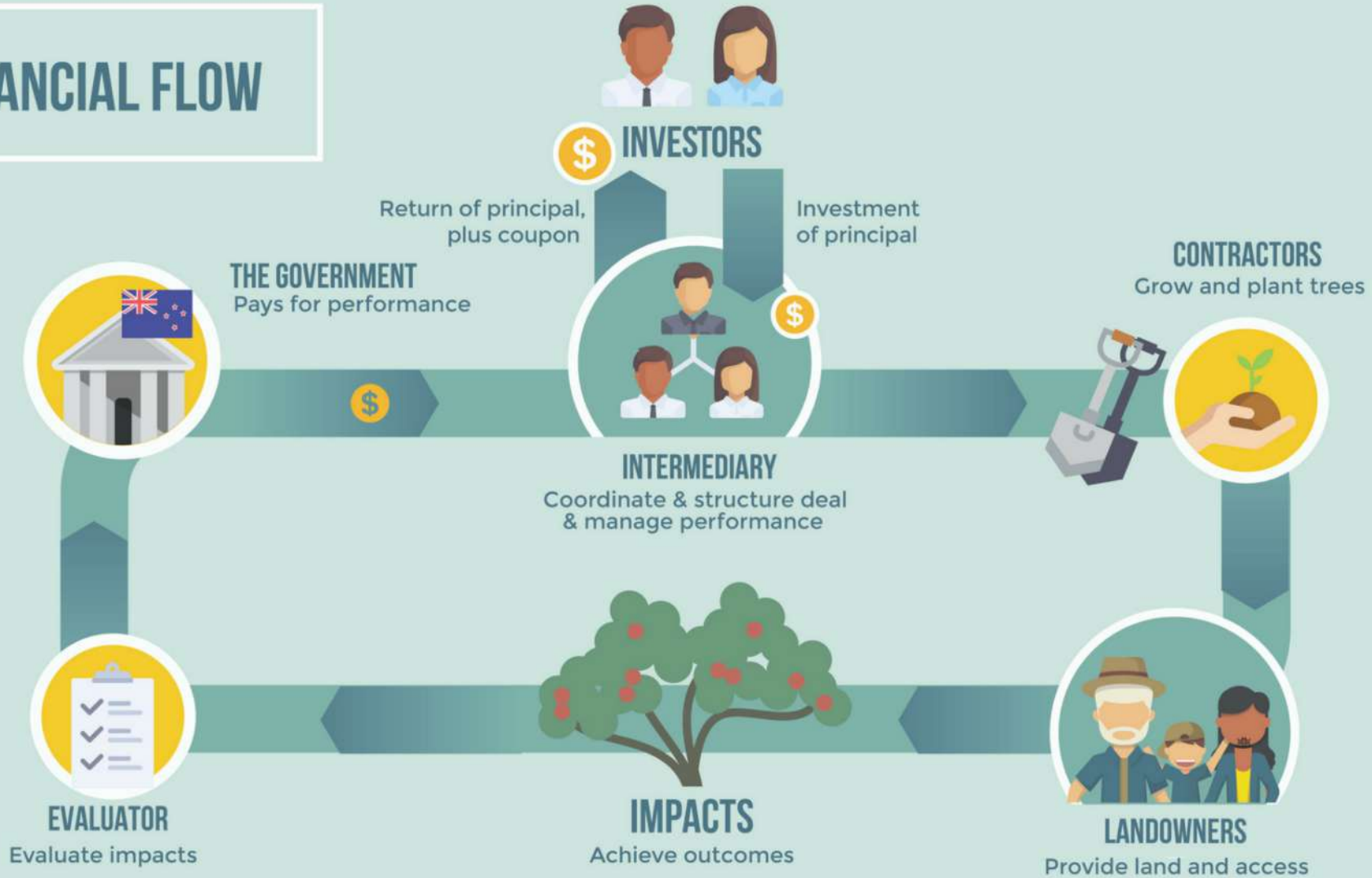
**Table 1: Updated afforestation scenarios from Watt et al. (2011)**

	Option 1	Option 2	Option 3
LUC 6 erosion assumptions	Severe to extreme	Moderate to extreme	Slight to extreme
North Island Area ('000 ha)	531	756	1,640
South Island Area ('000 ha)	138	375	1,283
Total Area ('000 ha)	670	1,131	2,923



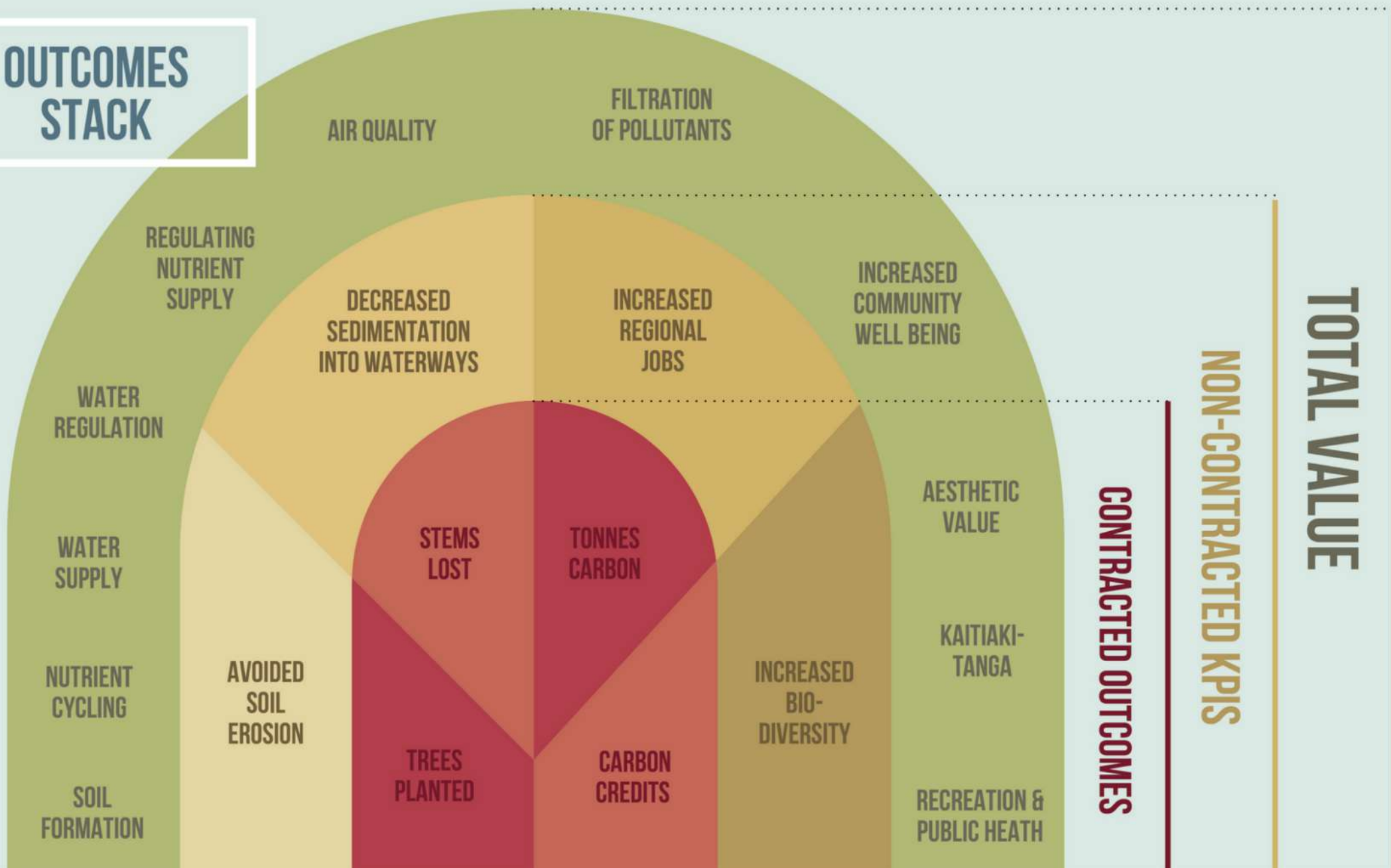


# FINANCIAL FLOW





# OUTCOMES STACK





# LEVERAGED CARBON FUND





# Leveraged Carbon Fund

- **Objective:** to upscale conventional forestry systems
- **Outcome:** improved access to capital for forestry
- **Structure:**
  - Acquire forests through freeholdings and forestry rights
  - Sell NZUs via off-take agreements with large emitters
  - Use proceeds to service a loan facility that prudently leverages the fund's assets
  - At end of holding period, sell upscaled assets to institutional buyer



# GREEN COVERED BOND



# Green Covered Fund

- **Objective:** to improve issuer's access to capital
- **Outcome:** investment into sustainable and impact-oriented forestry
- **Structure:**
  - Create a cover pool within issuing bank of low-risk assets, such as certified sustainable forests
  - Use cover pool as collateral for bond to attract long-term funding
  - Cover pool provides investors with dual recourse against the issuer and the collateral



# CONTINUOUS COVER FORESTRY FUND

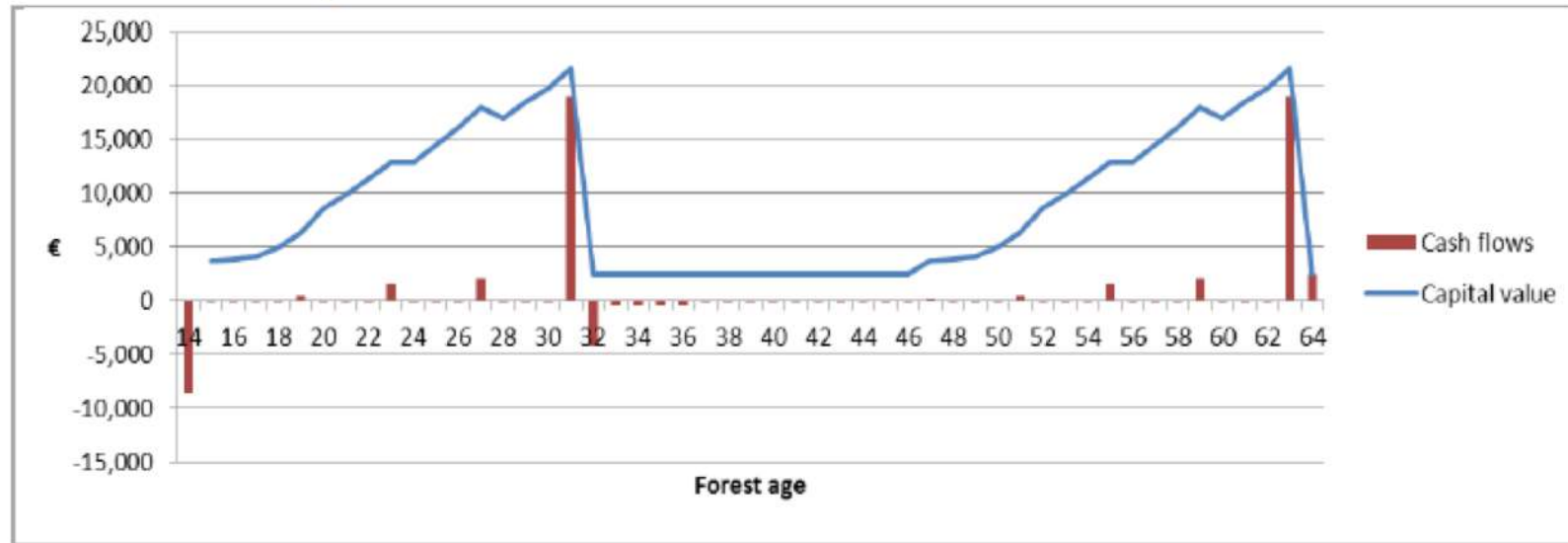


# Continuous Cover Forestry Fund

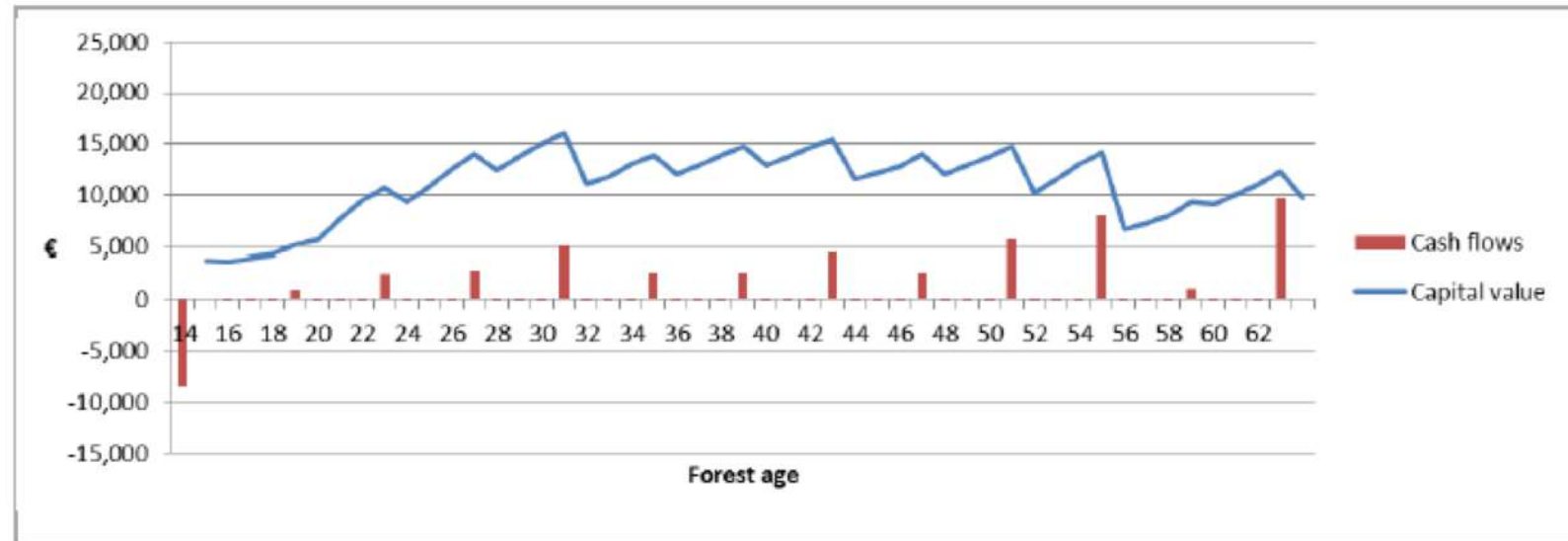
- **Objective:** to upscale continuous cover forestry (CCF) systems
- **Outcome:** to overcome transition barriers by using a vertically integrated fund that pools silvicultural expertise
- **Structure:**
  - Acquire forests for CCF conversion and establish new uneven-aged forests
  - Use blended finance to capture wider public benefits of CCF and manage transition risks



### Clearfell real returns per hectare



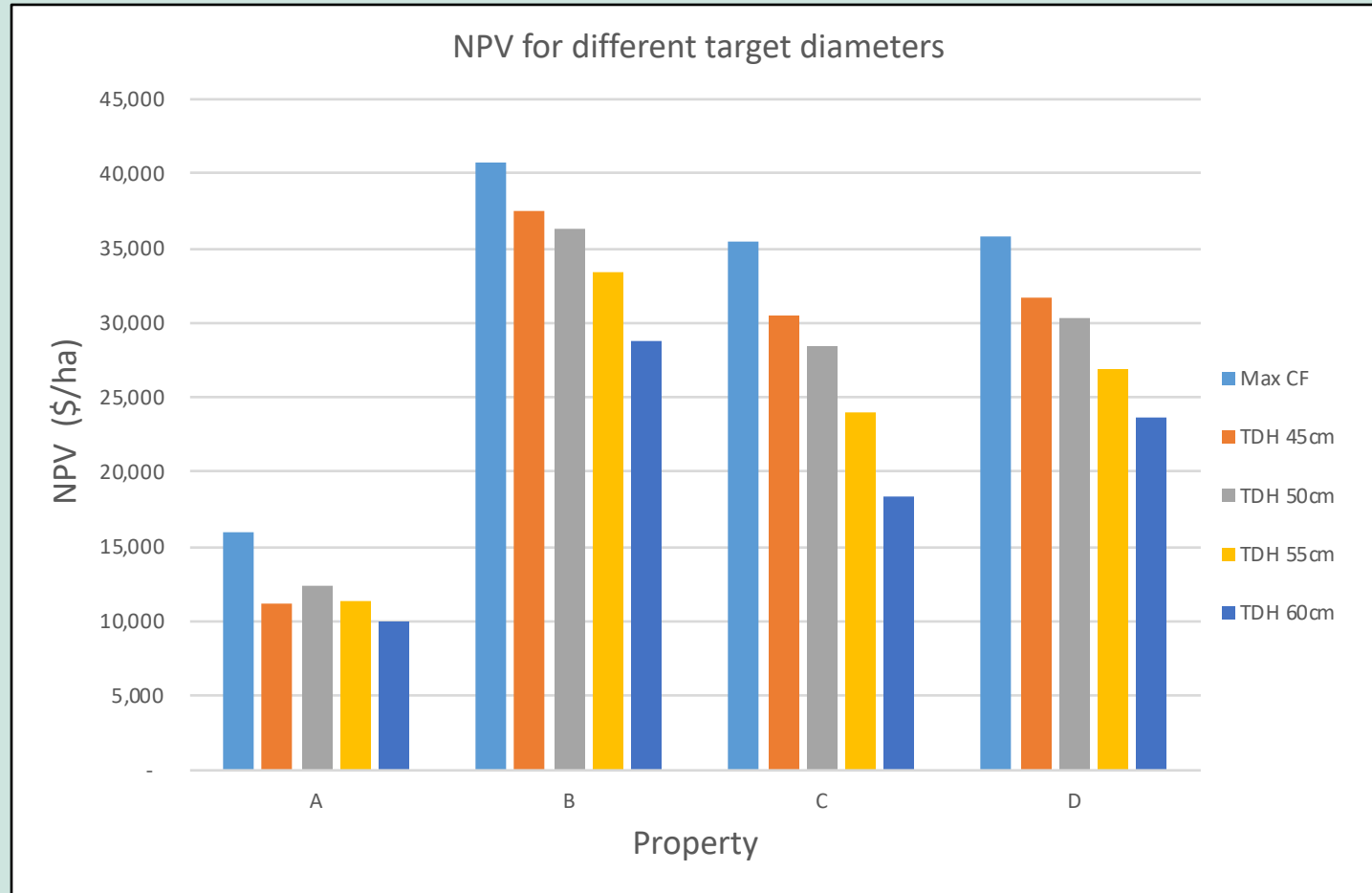
### CCF real returns per hectare



—Investment logic for €12.5 million investment into CCF in Ireland by the European Investment Bank (EIB) through its natural capital finance facility (NCFC).

P. McMahon, D. Sarshar, and P. Purser, 2016. *Investing in Continuous Cover Forestry*. Report prepared by SLM Partners.

# Targeted Diameter Harvesting (TDH) system



—Based on the Wardle Family's forest, Woodside, near Oxford.  
—Modelled for sites in the southern North Island.

Mark Bloomberg, Eric Cairns, Denny Du, Harriet Palmer and Chris Perry, 2019. 'Alternatives to clearfelling for harvesting of radiata pine plantations on erosion-susceptible land', *New Zealand Journal of Forestry* 64(3), pp.33–39.







# NGĀ MIHI NUI

## Thank you

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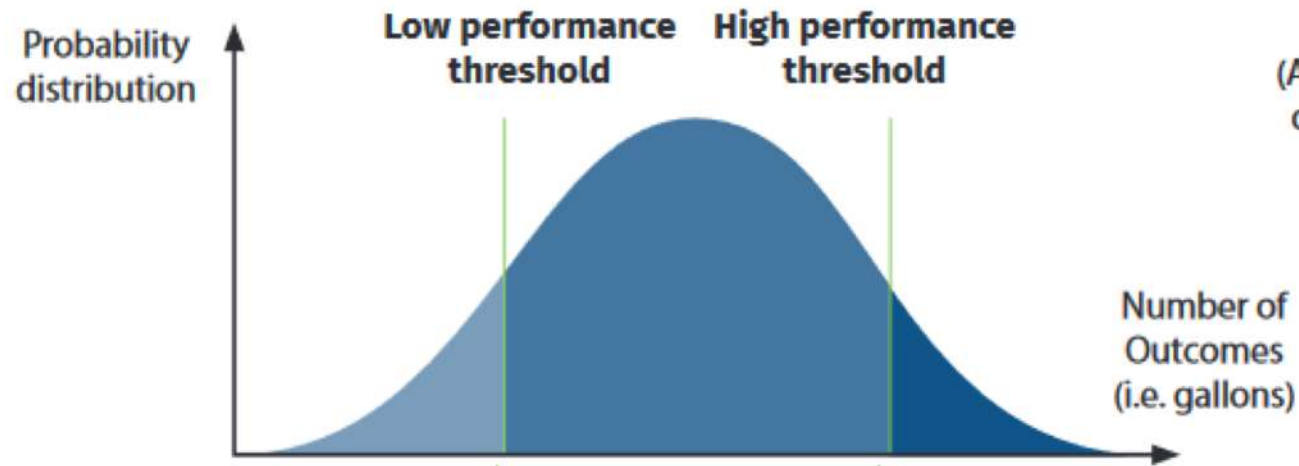


# MōHIO

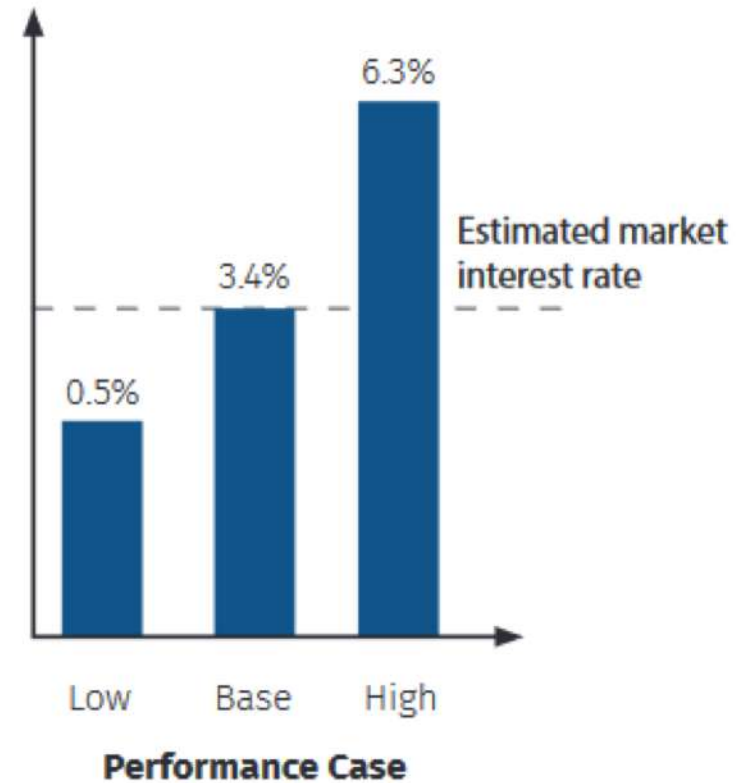




## DC Water EIB Performance Structure

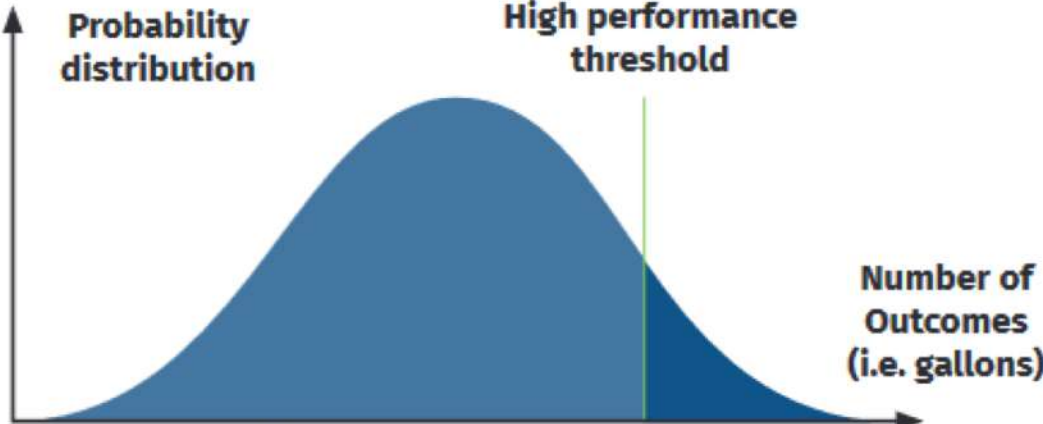


**Effective Return (%)**  
(Actual interest rate + effect of performance payment)



Performance:	Low	Base	High
<b>Fixed (Actual) Interest Rate:</b>	3.43% (market rate)	3.43% (market rate)	3.43% (market rate)
<b>Additional Payment:</b>	\$3.3M Clawback (Investors to DC Water)	None	\$3.3M Payment (DC Water to Investors)
<b>Probability:</b>	2.5%	95.0%	2.5%

# Atlanta EIB Performance Structure



<b>Performance:</b>	Base	High
<b>Fixed (Actual) Interest Rate:</b>	Below market rate (estimated)	Below market rate (estimated)
<b>Additional Payment:</b>	None	Atlanta DWM to Investors

