



# Farming Under the Emissions Trading Scheme

by

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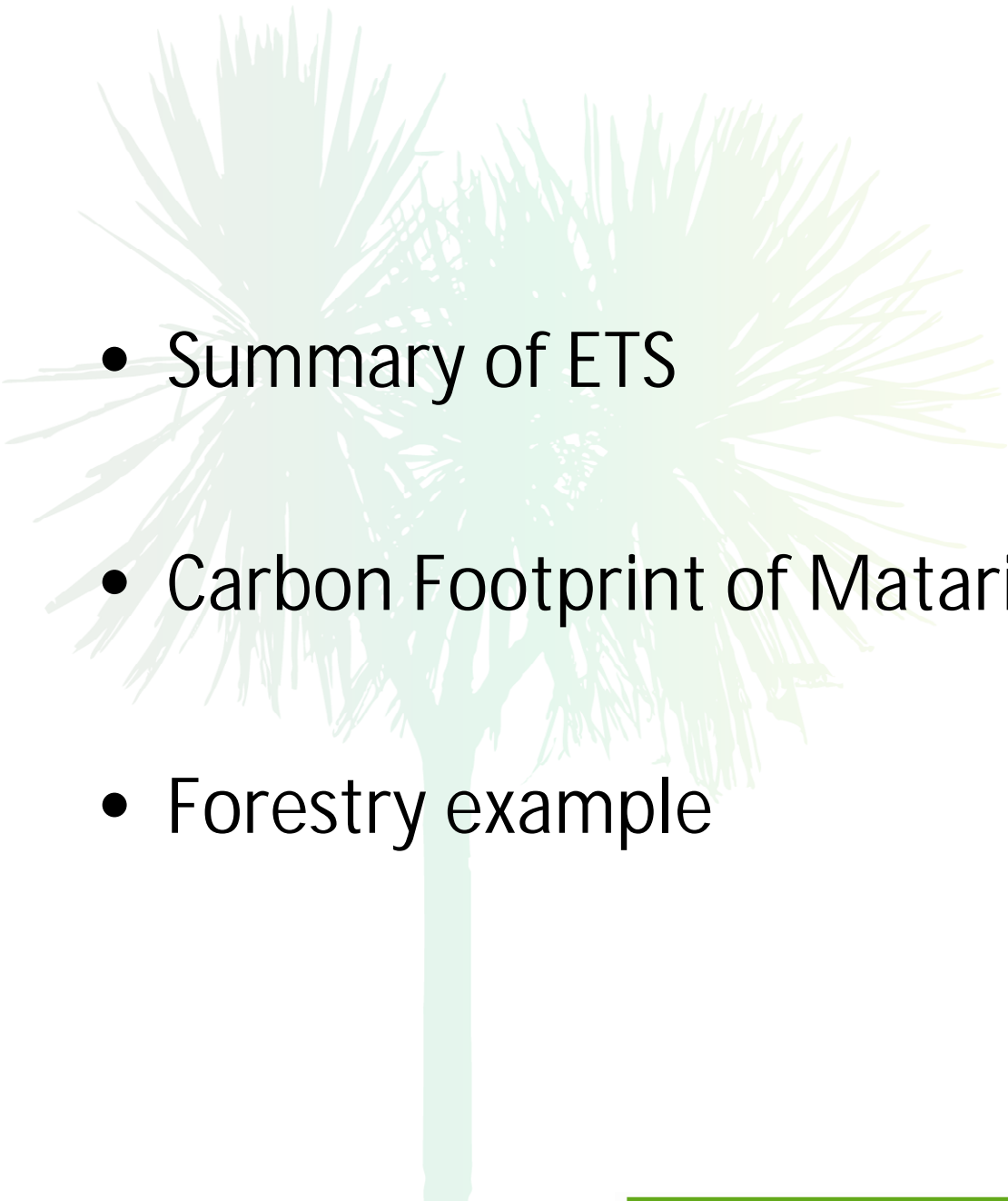


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- Summary of ETS
  - Carbon Footprint of Matariki Farm
  - Forestry example



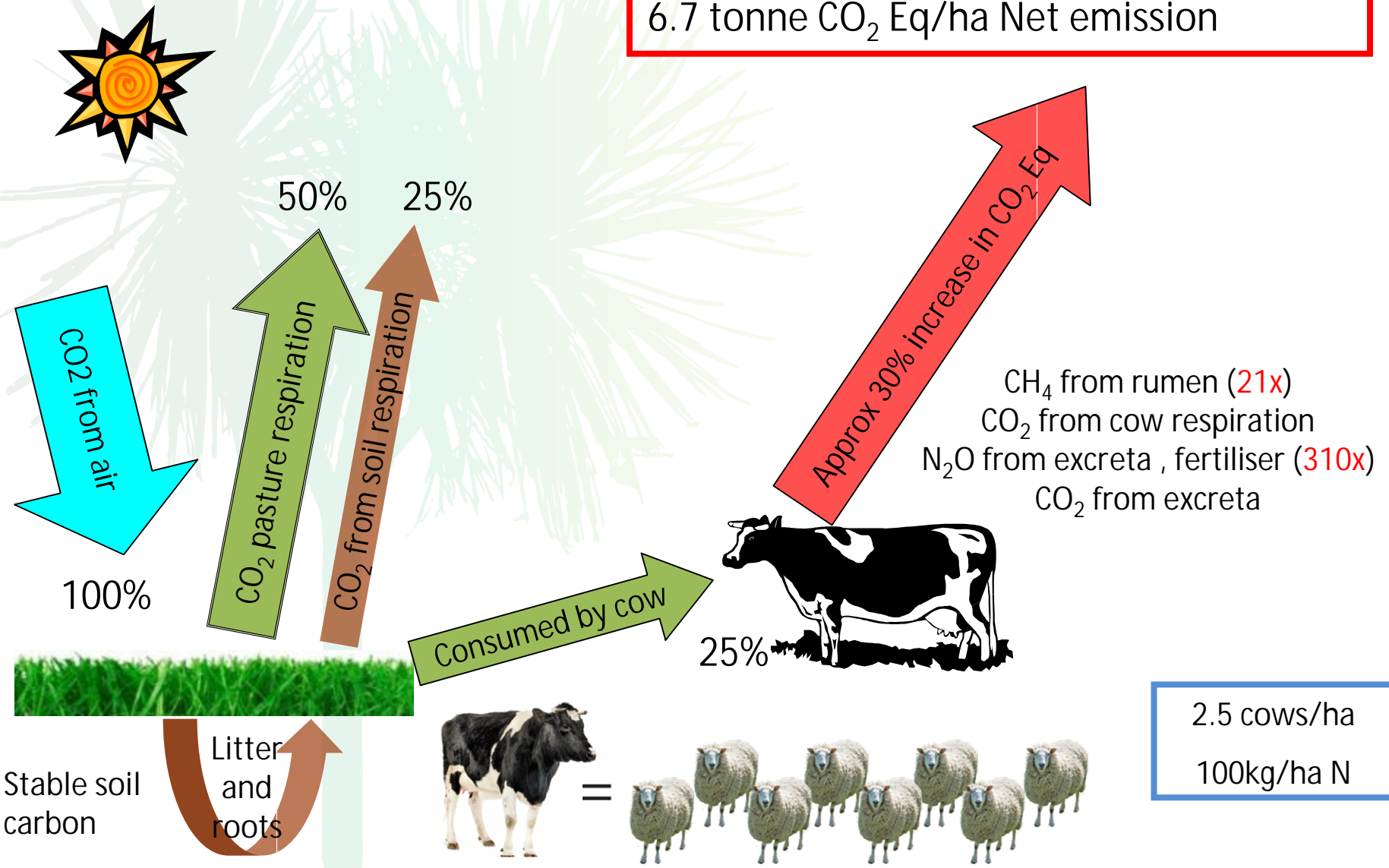
## Summary of ETS

- Overall target of 50% reduction by 2050
- Forestry started in 2008
- Energy sector in 1 July 2010
- Agriculture in 2015, 10% obligation increasing by 1.3% per year to 2050
- Fixed price for emitters of \$25 until 2012
- Recent trading of NZU's around \$17



# Agricultural greenhouse gas emissions

6.7 tonne CO<sub>2</sub> Eq/ha Net emission



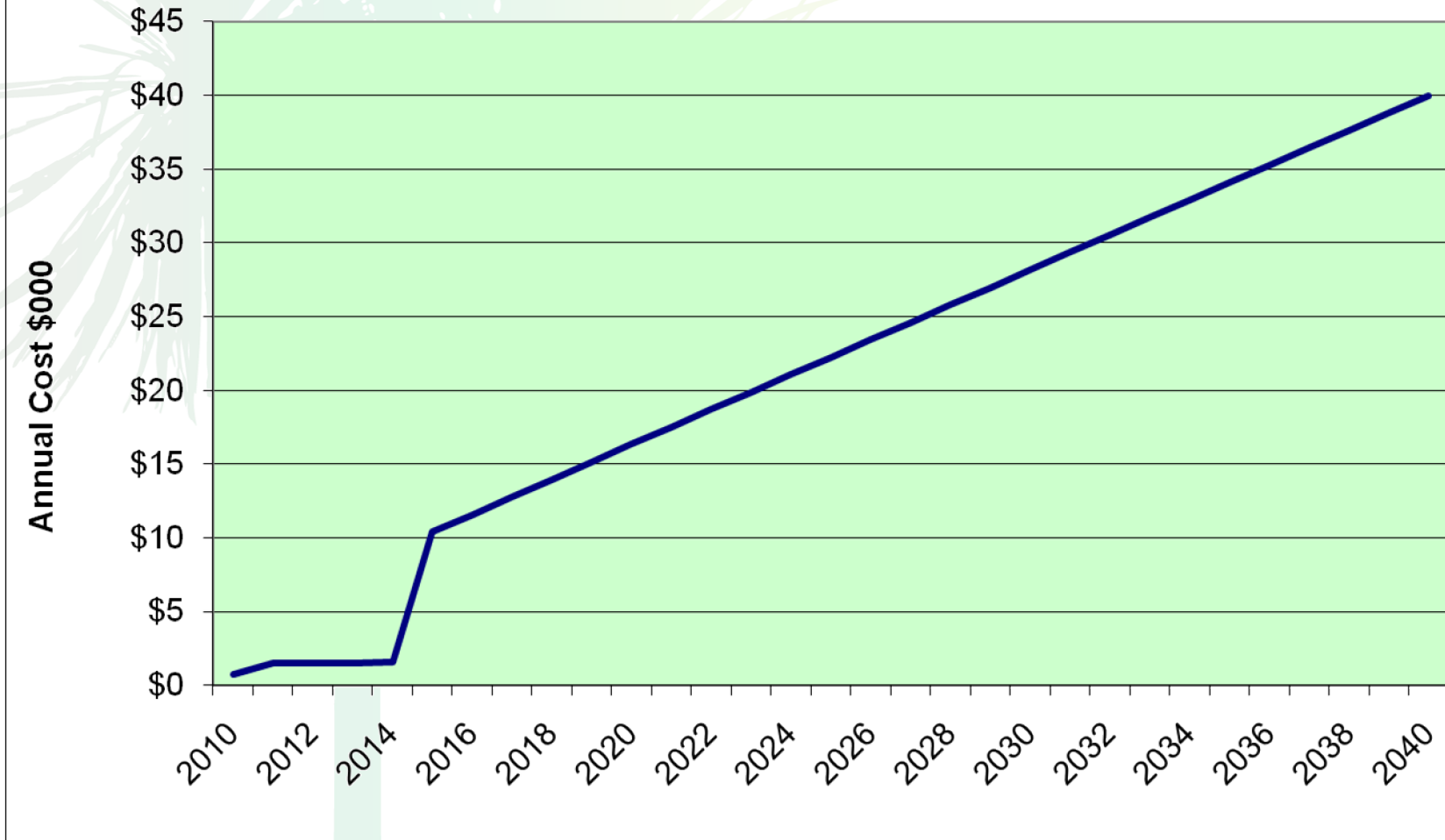
# Carbon Footprint of Matariki Farm

- ETS emissions = 4,533 NZU's, based on:

| Type              | Number |
|-------------------|--------|
| Ewes              | 9,756  |
| Cattle            | 694    |
| Fert (tN)         | 14.2   |
| Electricity (kWh) | 36,000 |
| Petrol (l)        | 8,000  |
| Diesel (l)        | 15,000 |



### Financial Impact of ETS - Matariki Trust Farm Liabilities 2010 - 2040

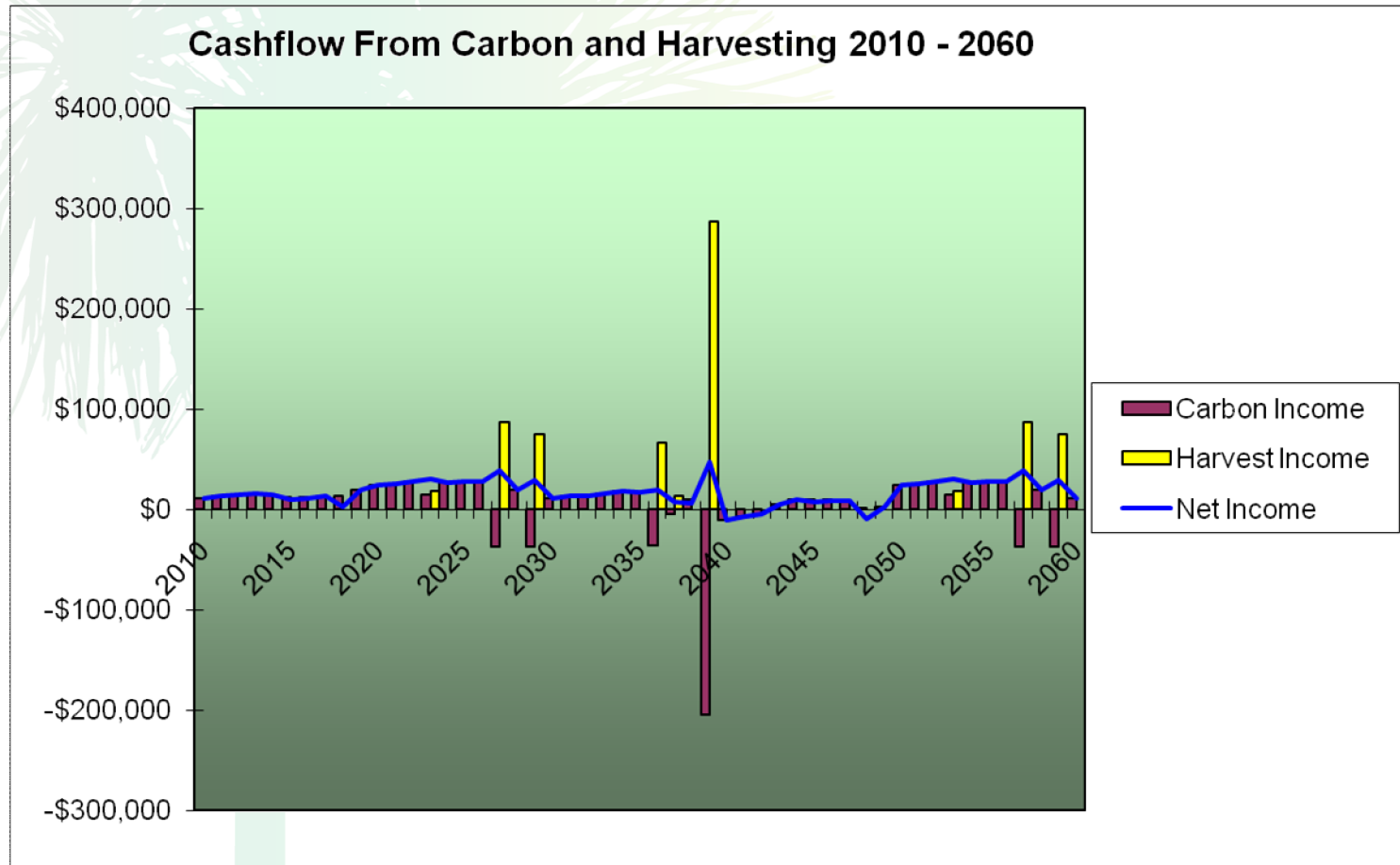


## Existing Forestry

- One off allocation of \$7,360 before 2012 and possibly \$11,840 post 2012
- Enter post 1989 and AGS into ETS with timber and carbon income could receive an average of \$17,400 pa, or \$293/ha/yr

| Type              | Area  |
|-------------------|-------|
| Pre 1990          | 16 ha |
| Post 1989 (Kyoto) | 37 ha |
| AGS               | 22 ha |

# Analysis using the Greenco Carbon Forestry Model Existing Kyoto Forest Estate



## Forestry Example – New forests

- 20ha of radiata pine every five years up to 100ha
- Cost of establishment \$32,000 every 5 years, could be paid by revenue from existing forest.
- Modelled to return an average of \$31,500 per annum over 50 years, or \$316/ha/yr
- This would cover liabilities for whole farm until 2040.



# Analysis using the Greenco Carbon Forestry Model 100ha New Forest

