

Te Uru Rākau Forestry Research Programme

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Forestry Research Programmes

The Forestry Research Programmes are covered by a multi-year fund which is designed to address the long-term nature of many challenges presented by climate change.

The Emissions Reduction Plan (ERP) lays out the commitments and actions we'll take to meet our domestic and international climate change targets.

Te Uru Rākau – New Zealand Forest Service is delivering research across three key priority areas:



Maximising Forest Carbon

- Carbon inventory improvements
- ETS default table improvements
- Forest management for carbon improvements



Native Afforestation

- Seed and germplasm supply
- Propagating forest-grade native trees
- Establishing successfully in diverse environments



Woody Biomass

- Harvest and recovery of woody residues from our forests
- Radiata pine short rotation forestry
- Alternative species and regimes – biological drivers
- Alternative species and regimes – economic & policy drivers

Woody Biomass

How the Woody Biomass Programme came to be:

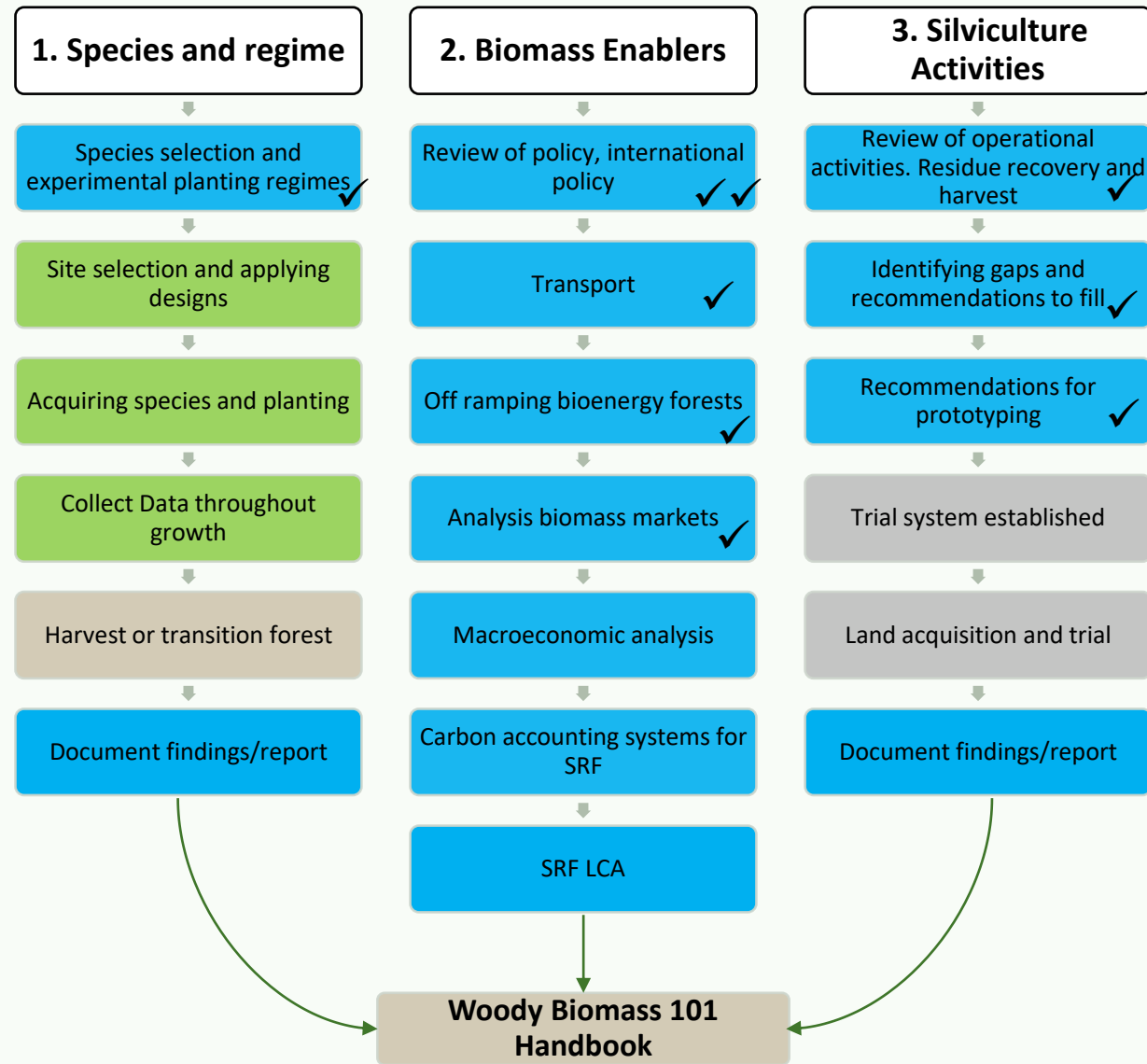
- Climate targets
- Phasing out imported fossil fuels, working with industry to transition energy use to bioenergy
- We need something to replace coal for process heat
- Woody Biomass proposed as an ideal candidate
- Demand expected to increase due to policies and regulations
- Woody Biomass supply shortage is predicted in the 2030's
- To investigate supply – Research will be exploring:
 - the planting of bioenergy crops trialling alternative management regimes
 - recovering excess biomass for bioenergy.
- We are doing this work for the public, people, and foresters.

Research Flow

In-field species/regime research

Desk based activity – Data gathering, reviewing, analysis

In-field mechanical



Current work

Woody Biomass

Investigating:

- International Woody Biomass usages,
- Advanced Woody residue recovery,
- Short Rotation Forest (SRF) regime designs,
- Woody biomass transport,
- Bioenergy offramps,
- Woody residue market analysis.

Upcoming work

Desk based research – Harvesting research, macroeconomic analysis.

Field Trial – woody residue recovery, scavenger and integrated approach.



Current deliverables are posted on our Forestry Research website.

<https://www.mpi.govt.nz/forestry/forest-science-and-research/>

Forestry Programmes and NZDFI Linkage

Areas of the Maximising Forest Carbon and Woody Biomass programmes have similar research aims to NZDFI's Marlborough decarbonisation case study.

These include dedicated carbon sequestration and woody biomass bioenergy studies.

Woody Biomass connections

- Planting dedicated forests (SRF)
- Investigating the growth of different Eucalypts
- Analysing networks to enable and optimise woody biomass
- Investigating how silviculture management can contribute to bioenergy
- Woody biomass markets



Thank you.

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