Outcome Logic Model for Mid-Rise Wood Construction Project PGP Programme

Long term outcomes
(end of programme and years after)

Strong alignment from forests to end-users to deliver faster, more cost-effective and environmentally better mid-rise buildings using high-value engineered/pre-fabricated timber solutions.

If successful New Zealand will benefit through

Medium term outcomes
(2021-2022)

- Demand for high-value wood products increases by 188,000 m3 p.a.
- Value-added investment in CLT, glulam, pre-fabrication, etc
- Creation of an estimated additional 168 regional jobs
- Better demand from (stable) domestic log customers
- Platform for export expansion

If successful the Wood processing industry will benefit through

Short term outcomes
(2018-20)

- Demand for wood products increases by 188,000. Extra 324,000 t logs processed
- Annual CO2 emissions improve of 243,387t.
- 20% of new apartment and hotel projects
- The programme supports the business case for value-add investment in wood processing, eg. a scale CLT plant, new glulam & pre-fabrication plants
- Next wave of professionals and developers embrace wood construction

If the activities of Mid-Rise Wood Construction Programme are successful

Activities & Outputs
(Across entire programme)

1. Bring together core team of architects, engineers, constructors, quality surveyors and CLT, engineered & framing suppliers & pre-fabricators. All must agree to open-source their work
2. Industry co-investor works with developer to design and build two projects – a 5 storey apartment block, then a 5+ storey hotel or commercial block
3. Measure all time, costs & CO2 on each project, benchmark those against concrete/steel construction
4. Publish case study booklets of all time/cost/CO2 for the projects, as well as open-sourced detailing as a blueprint for others to follow. Develop website for further info and downloads, next steps & team contacts
5. Promote via PR, web, social media & seminars

Enablers & Inputs

- Bring together core team of professionals as Centre of Excellence in wood design
- Develop collaboration across supply chain
- Design/build apartment, & commercial prototypes
- Document & publish all designs, costs, benefits

Problems & Opportunities

- Increase demand for wood processors by opening up mid-rise building market & aligning supply chains/professionals
- Create demand to support investment in value-add wood processing (CLT, glulam panel, prefab
- Address objections to mid-rise timber via 2 measured & documented local projects. Open source designs/details
- Prove cost, speed & CO2 benefits of mid-rise wood

Additional benefits
for the sector and New Zealand

- Regional Employment
- Faster build rate
- More construction with less builders (leveraging factory staff)
- Reduce New Zealand's CO2 liabilities
- Enhancement of New Zealand's important clean green image
- Less wastage and landfill
- Less truck movements – emissions and main city road congestion / lost productivity