

Value versus villain

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Unsurprisingly, my main topic for this 'Last word' is post-harvest residues and their potential for good or bad. My first look at logging residues took place in the mid-1990s when working for LIRO. Birds-nests of logging slash perched on a hill in Nelson caught my eye and I started measuring how much of what was in there. My initial interest was in the potential for getting some value out of it, with concern over collapses of landing surrounds.

I have worked on this topic (amongst others) on and off since then. It is notable how much the landscape has changed over the years – from almost no interest from forest companies and fuel users in the 2000s to significant recent developments occurring in the use of landing residues for boiler fuel substituting for fossil fuels (coal and LPG). Most of this is driven by government policy such as carbon price and the intent to get rid of coal boilers in pursuit of lower carbon emissions. The use of these residues can potentially be a source of extra revenue to the forest manager or grower.

This year has seen yet another storm-related flood in an area with a lot of production forestry. Much of what makes the news points the finger at the forest industry, and logging residues, and at least some of this is probably warranted. Utilising logging residues in some value-add process would remove the potential for the logging debris to cause damage. If it is not left on the hillside (landing surrounds or cutover), it can't flow off it. The farmers, councils and homeowners will then be left with just the silt to deal with.

Utilise the residues – easy to say and harder to implement – change always is. However, for the residues, the where, when, what and how much is reasonably well known. Machinery and supply chains to get forest residues to bioenergy users or bio-product manufacturers exist and are entirely possible. The cost to extract and transport is also known. However, in some regions there needs to be a bit of extra effort and innovation as the supply of residue and demand for energy are mismatched, with an oversupply of

residues being the most problematic issue when searching for a solution to them causing harm.

Fortunately, there are multiple options for the use of the wood from logging residues: fuel, densified fuel (which can be transported much further economically), biochar, activated carbon and a range of biochemicals. Some of these processes are more developed than others and research is ongoing. Distributed manufacturing is a possible solution.

To more rapidly develop the commercial deployment of these various options will take effort, cooperation and collaboration from all players in the game – forest growers, loggers, truckers, investors, processors and government (local and central).

These residues have potential societal value, as well as the potential to cause harm. Some investment in the opportunities to utilise this material is in the interest of growers if we wish to maintain the right to harvest without increasingly severe restrictions on what operations are permitted.

In my view, the forest growers need to take a lead on this and some already are. There also needs to be support and leadership from government, via policy and the continuation/expansion of low-carbon support funds such as GIDI, and possibly support for feasibility studies including market intelligence on demands for a range of possible wood residue-based products.

There are multiple benefits in doing something productive with logging residues (increased revenue, new jobs) and a reduction in costs (less post-harvest management, court action, fines, operating restrictions). Even if the processing ventures are not immediately profitable in the short term, they may still add value due to the avoidance of the costs and impositions of failing to act. I find it hard to see a downside.

We also need to be proactive in our messaging. There will be more storms and it is probable that there will be more debris issues, so we need to let people know that we are doing something positive to reduce issues now and eliminate them in the long term.