

## Chapter B13 - STANDARD FOR DISCLOSING CHANGE IN VALUE OVER TIME

### Revision History

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**Original Standard**

Released in May 1999

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**Revision in August 2023**

Main changes are:

- Standard B13.3 requiring “The approach used to assess the value change attributable to each component. If a cumulative analysis is carried out, the order in which each component is changed should also be documented.”
  - Addition of an example disclosing change in tree crop value over time.
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## Chapter B13 – STANDARD FOR DISCLOSING CHANGE IN VALUE OVER TIME

**Purpose** The purpose of this standard is to declare changes to a previously reported value for the same forest, and to provide the user with an understanding of the sources of the change in value.

### STANDARD B13.1

**Analysis of change** The depth of scrutiny to which changes in value over time are analysed shall be consistent with:

- the purpose of the valuation;
- the valuer's terms of reference; and
- the detail of component inputs and calculations for the previous valuation, that is available to the valuer.

### STANDARD B13.2

**Notify changes** Where a previous valuation has been made for the same forest, the valuer should notify the following changes, to the extent that is practicable:

- the date of the previous valuation and change in value since the previous valuation;
- any significant change to the methodology adopted; and
- any significant changes in component inputs.

### STANDARD B13.3

**Impact of changes** To the extent that is practicable, the valuer shall calculate and report:

- the impact of changes to methodology and to individual component inputs, on the change in total value;
- the change in value since the previous valuation broken down into its major components; and
- the approach used to assess the value change attributable to each component. If a cumulative analysis is carried out, the order in which each component is changed should also be documented.



## GUIDANCE NOTES ON VALUATIONS FOR DISCLOSING CHANGE IN VALUE OVER TIME

### Background

A range of factors affect the change in value of a forest from one year to the next. Not only will the trees grow and be harvested but there are likely to be changes in the key inputs of yield estimates, costs of production, growing costs, and market prices for logs. Parts of the estate may be acquired or divested. Accounting standards (specifically IAS 41) require that the causes of the change in value are identified.<sup>1</sup>

Change analyses can be most rigorously conducted when the valuation is primarily based on discounted cashflow modelling. To conduct the exercise thoroughly requires that the valuer has access to a detailed version of the previous year's model(s). There should be no difficulty where the valuer themselves was responsible for the prior exercise. Difficulties arise where someone from a different firm was responsible. It has not been general practice for forest investment managers to make previous valuers' models available when the responsibility for the valuation is rotated. There is a perceived risk of compromising the incoming valuer's independence if the prior set of cashflows is released<sup>2</sup>.

### Approach

The following table shows an example of how a reconciliation to the previous tree crop valuation can be presented. The impact on value from changes in key inputs can be calculated by changing the inputs in a step-wise manner. In the example below the valuer has derived the time weighted (discounted) unit rates in the process of quantifying the change in the overall value.

When an optimisation process is used in the valuation there can be an interaction between factors. A change in any input can lead to a revised woodflow. Such behaviour can make disentangling the reasons for change more challenging. In the example below, it appears that the forecast yields are significantly lower in the current valuation. This may be due to a revision of the yield tables (i.e. lower forecast volumes at a given age) but may also be the result of stands being harvested at a younger age (resulting in a lower volume per hectare). Acquisition

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<sup>1</sup> IAS 41 states the following: "An entity shall present a reconciliation of changes in the carrying amount of biological assets between the beginning and the end of the current period. The reconciliation shall include: (a) the gain or loss arising from changes in fair value less costs to sell; (b) increases due to purchases; (c) decreases attributable to sales and biological assets classified as held for sale (or included in a disposal group that is classified as held for sale) in accordance with NZ IFRS 5; (d) decreases due to harvest; (e) increases resulting from business combinations; (f) net exchange differences arising on the translation of financial statements into a different presentation currency, and on the translation of a foreign operation into the presentation currency of the reporting entity; and (g) other changes."

<sup>2</sup> A possible pathway to averting independence issues would be if the incoming valuer does not receive the information with which to conduct the change analysis until after they have submitted their draft result. The next issue to arise is whether the cashflow modelling formats are adequately aligned to permit a straightforward comparison. Valuers may be justifiably apprehensive about the difficulties they may face. Factoring a sufficient allowance into the fee quotation to cover reconciliation with an unsighted cashflow format may lead to an uncompetitive bid. At the time of writing, it has remained general practice not to request a reconciliation for the period at which the valuers change.



or disposal of a portion of the forest can also be expected to affect both the average yield per hectare and the total volume harvested.

A change in the average log price may be the result of several factors including:

- A change in the unit price of each log grade.
- A change in the log mix which could be a result of revisions to yield tables or a different harvesting strategy that means stands are harvested at different ages resulting in a different log mix.
- A change in the market mix – this could be due to such things as a change in the relative price between different destinations, or a change in transport costs influencing whether or not destinations in closer proximity are preferred.

Timing factors will also have an impact on other unit rates. For example, the reduction in roading costs in the example below may be the result of harvesting areas with low costs earlier in the current valuation, as opposed to the average unit roading costs actually declining.

The example below also illustrates an additional feature. A sale of a portion of the asset has resulted in an increase in value. Normally it would be expected that selling part of the forest would result in a reduction in the value of the remaining asset. However, in this case it has resulted in an increase. This is because the assets sold previously made a negative contribution to the value – their sale has therefore improved the value.

The valuer should attempt to describe these interactions even if there are practical challenges in quantifying and presenting the impacts. If they are aware that certain unit inputs to the forest estate model have not changed from one version to the next, they should declare as much. The attributed change can be reassigned to a wash-up category with an understandably nebulous name such as “factor-woodflow” interaction.



Example disclosing change in tree crop value over time

|   | Value<br>(\$000) | Change in<br>value<br>(\$000) | Unit rates         |                       |                      |
|---|------------------|-------------------------------|--------------------|-----------------------|----------------------|
|   |                  |                               | Unit               | Previous<br>valuation | Current<br>valuation |
| Previous valuation                                | 1 890.1          |                               |                    |                       |                      |
| Discount rate                                     | 1 991.4          | 101.3                         |                    | 7.00%                 | 6.50%                |
| First year of previous year's<br>cashflow removed | 1 826.5          | (164.9)                       |                    |                       |                      |
| Advance Cashflow                                  | 1 972.5          | 146.0                         |                    |                       |                      |
| Sale of part of crop                              | 1 980.1          | 7.6                           |                    |                       |                      |
| Yield   | 1 936.2          | (43.9)                        | m <sup>3</sup> /ha | 727                   | 679                  |
| Average log price                                 | 2 080.9          | 144.6                         | per m <sup>3</sup> | 125.21                | 128.95               |
| Harvest Costs                                     | 2 070.5          | (10.4)                        | per m <sup>3</sup> | (31.37)               | (31.64)              |
| Harvest Roding                                    | 2 087.8          | 17.3                          | per m <sup>3</sup> | (7.68)                | (7.23)               |
| Harvest Management & OH                           | 2 079.3          | (8.5)                         | per m <sup>3</sup> | (4.15)                | (4.37)               |
| Transport Costs                                   | 2 075.7          | (3.6)                         | per m <sup>3</sup> | (20.98)               | (21.08)              |
| 3rd Party Share                                   | 2 059.6          | (16.1)                        | per m <sup>3</sup> | (1.10)                | (1.52)               |
| Change in Area                                    | 2 062.1          | 2.5                           |                    |                       |                      |
| Forest Growing Costs                              | 2 060.5          | (1.6)                         | per ha             | (28.85)               | (30.50)              |
| Overheads   | 2 063.8          | 3.3                           | per ha             | (75.93)               | (81.16)              |
| "Other" Costs/Revenues                            | 2 052.8          | (10.9)                        | per ha             | (36.33)               | (38.85)              |
| Notional Land Rental                              | 2 062.3          | 9.5                           | per ha             | (69.80)               | (69.78)              |
| Current valuation                                 | 2 062.3          |                               |                    |                       |                      |

