

# Lecture 1.

## Chapter 8- Non-current Assets & Intangible Assets.

Three primary activities for property, plant and equipment (main non-current assets);

1. Acquisition of non-current assets
2. Depreciation of non-current assets over their useful life
3. Disposal of non-current assets.

### LO1.

#### Recording, expensing and reporting non-current assets

Non-current asset- a tangible resource that is expected to be used in operations for more than one year and is not intended for resale.

Examples; buildings, equipment, furniture, fixtures, etc.

Reported on the statement of financial position.

#### Recording non-current assets

Following the cost principle, non-current assets should be recorded at the cost of acquiring them. This includes all the costs incurred to get the asset delivered, installed and ready to use.

These include; (not limited to);

- Purchase price
- Taxes and duties on the purchase
- Fees such as legal costs
- Delivery costs
- Insurance costs during transit
- Installation costs.

#### Expensing non-current assets

A non-current asset is converted to an expense as it is used or consumed.

The expensing of non-current assets is accomplished through depreciation.

Depreciation- the process of allocating the cost of a non-current asset over its useful life.

- Application of the matching principle- some of the costs should be expensed, or matched in the same periods in which revenue is generated from the non-current asset.

- For accounting purposes, depreciation is a process of allocating an asset's cost, not a method of determining an asset's net realisable or market value – depreciation is NOT about getting an asset to its' market value!

Depreciation expense- the portion of a non-current asset's cost that is recognised as an expense in the current period.

Recorded at the end of an accounting period, with an adjusting journal entry.

Accumulated depreciation- the cumulative amount of depreciation expense recognised to date on a non-current asset. Contra-asset account. Amount subtracted from the non-current asset amount to yield the carrying amount (book value).

Depreciation applies only to those assets with limited useful lives. Not land, for example.

Depreciation expense is debited. Accumulated depreciation is credited (contra-asset account).

Carrying amount- the unexpired cost of a non-current asset, calculated by subtracting accumulated depreciation from the cost of the non-current asset. (Net book value).

## LO2.

### Calculating depreciation expense

When a company has depreciable assets, it must calculate depreciation expense each period.

Doing so requires the following information about the asset;

- Cost
- Residual or salvage value
- Useful life
- Depreciation method

Cost- the historical cost of a non-current asset – what you bought it for.

Residual/salvage value- an estimate of the value of a non-current asset at the end of its useful life.

Useful life- refers to the length of time the asset will be used in operations.

Depreciation method- how are you going to spread its costs over its life. Straight line, etc.

### Depreciation methods

1. **Straight-line method**- spreads depreciation evenly over the useful life of an asset. The same amount of depreciation expense each period.

$$\text{Depreciation expense} = \frac{\text{Cost} - \text{salvage value}}{\text{useful life}}$$

2. **Reducing balance method**- an accelerated depreciation method, that results in more depreciation expensed in the early years of an asset's life, and less in the later years.

➤ For purposes in Australia, the reducing balance rate is 2 times the straight line rate.

Accelerated depreciation methods may match expenses to revenues better than the straight-line method. More depreciation expense is recorded when the asset is more useful in its early years.

$$\text{depreciation rate} = 1 - \sqrt[N]{\frac{\text{residual value}}{\text{cost of fixed asset}}}$$

N = the number of periods.

Note, that the depreciation rate is applied to the carrying amount of an asset, not is depreciable amount. Because an asset's carrying amount declines as the asset is depreciated, the amount of depreciation expense will therefore differ each period.

Depreciation expense = Depreciation rate x Carrying amount.

3. **Units- of-activity method**- a method in which depreciation expense is a function of the actual usage of the asset.

Both the straight-line and reducing-balance methods are a function of the passage of time rather than the actual use of the asset.

In contrast, the units-of-activity method of depreciation calculates depreciation based on use.

Because it relies on an estimate of an asset's lifetime activity, the method is limited to assets whose units-of-activity can be in some way determined.

Depreciation expense per unit of expected activity;

$$= \frac{\text{Cost} - \text{salvage value (depreciable amount)}}{\text{useful life in units}}$$

Note; this calculation is very similar to straight line calculation. Depreciable amount is divided by estimated life; but instead of calculating depreciation expense per year, depreciation expense per unit is calculated.

Depreciation expense = Depreciation expense per unit x Actual units of activity.

### LO3.

#### **Adjustments made during a non-current asset's useful life.**

Since non-current assets are used for multiple years, companies sometimes need to make adjustments as new information is available or as new activity occurs.

These adjustments can arise from the following:

- changes in estimates
- additional expenditures to improve the non-current asset
- significant declines in the asset's net realisable value

#### Changes in depreciation estimates

Estimates can differ from actual experience. When estimates are materially wrong, revisions can be made. This is called a change in estimate.

When an estimate is changed, the change is made prospectively, meaning that the change affects only the calculation of current and future depreciation expense (not the past).

Once an estimate is revised, current and future depreciation expense is calculated with the new estimate. This is done by;

1. Determining the remaining depreciable amount of the asset at the time of the revision.
2. Depreciating that cost over the remaining useful life using the same depreciation method.

#### Expenditures after acquisition

Most non-current assets require expenditures throughout their useful lives.

The accounting treatment for expenditures made during the useful life of a non-current asset depends on whether they are classified as 'capital' or 'revenue' expenditures.

- A capital expenditure increases the expected useful life or productivity of the asset. Recognised as an asset- this is because the useful life of the asset has been extended.
- A revenue expenditure maintains the expected useful life or productivity of the asset. Repairs and maintenance. These are expensed in the period in which they incurred. They are not added to the cost of the asset.

## Asset impairment

Sometimes, a non-current asset's 'recoverable amount' will fall substantially due to changing market conditions, technological improvements or other factors.

When a non-current asset's recoverable amount falls materially below its carrying amount, the asset is considered impaired.

- Under *AASB 136* entities apply conservatism by writing these assets down from their carrying amount to their recoverable amount (through use or sale).

Normally any loss on impairment is an expense.

- Special rules apply to impairment of assets previously revalued and reversal of impairments.

## Asset revaluations

The accounting standards *AASB 116* allows either the 'cost model' or the 'revaluation model' as an entity's accounting policy to measure plant, property and equipment.

Cost model- after recognition as an asset, an item of plant, property and equipment shall be carried at its cost less any accumulated depreciation and any impairment loss.

Revaluation model- if fair value can be measured reliably the asset shall be carried at a revaluation amount.

There are a number of restrictions on management simply revaluing assets to boost business profits.

- One is that all assets in a 'class' must be revalued.

## LO4.

### Disposing of non-current assets.

The accounting for the disposal of a non-current asset consists of the following three steps;

1. Update depreciation on the asset
2. Calculate gain or loss on the disposal
3. Record the disposal.

Steps explained;

1. Record any necessary depreciation expense (possibly for a partial period) to update the accumulated depreciation account.
2. Calculate any gain or loss on the disposal by comparing the asset's carrying amount to the proceeds from the asset's sale, if any.
3. Prepare a journal entry that decreases the asset account and its related accumulated depreciation account.
4. Record any gain or loss on the disposal.

Examples in textbook page 141/142.

The gain/loss on disposal of an asset can be calculated as follows;

- Proceeds from sale	....
- Cost of asset	...
- Less: accumulated depreciation ...	
- Carrying amount at (date)	....
- Loss/gain on sale	....

## Evaluating a company's management of non-current asset's

A company manages non-current assets by acquiring them, using them productively and then replacing them.

Therefore, two issues of importance for any company with non-current assets would be as follows;

1. How productive are the company's non-current assets in generating revenues?
2. What is the condition of the company's non-current assets?

One means to find out if a company is using their non-current assets productively to generate revenue, is to calculate the non-current asset turnover ratio.

### Non-current asset turnover ratio

A comparison of total revenues to the average carrying amount of non-current assets that measures the productivity of non-current assets.

$$\text{Fixed asset turnover ratio} = \frac{\text{total revenues}}{\text{average net book value of fixed assets}}$$

Where average book value is;

$$\text{Beg. Net book value} + \text{Ending Net book value} / 2$$

Companies want this ratio to be higher than lower.

A higher ratio means that a company is using its non-current assets more effectively to produce more revenue.

### **Average life and age of non-current assets.**

Average useful life = cost of fixed assets/ depreciation expense

Average age = accumulated depreciation/ depreciation expense

## LO5.

### **Intangible assets**

An intangible asset is a resource that is used in operations for more than a year but that has no physical substance.

Examples; include patents, goodwill, copyrights, franchises, trademarks.

Businesses often possess other long-term assets known as intangible assets, including the following:

- A patent is the right to manufacture, sell or use a particular product or process exclusively for a limited period of time.
- A trademark or trade name is the right to use exclusively a name, or symbol, to identify the business.
- A copyright is the right to reproduce or sell an artistic or published work.
- A franchise is the right to operate a business under the trade name of the franchisor.
- Goodwill is an intangible asset equal to the excess that one company pays to acquire the net assets of another company.

## **Recording intangible assets**

Like all other assets, intangible assets are recorded at their acquisition costs.

However, what is included as an acquisition cost can vary given the type of intangible asset and how it is acquired.

In general, if an intangible asset is acquired through an external transaction, its cost is the purchase price.

- A common example of an intangible that is created through an external transaction is goodwill.
- Goodwill is created when one company buys another company and pays more than the value of the net assets of the purchased company.

Goodwill is an intangible asset equal to the excess that one company pays to acquire the net assets of another company.

Goodwill created internally by a company cannot be recorded as an asset because its cost cannot be reliably determined.

## **Amortisation**

The process of spreading out the cost of an intangible asset over its useful life.

Amortisation applies only to intangible with limited lives, like patents.

Assets with indefinite lives (i.e. trademarks and goodwill) are instead examined periodically to check for impairment.

Amortisation should be based on the shorter of the legal life or useful life.