

## PROPERTY, PLANT AND EQUIPMENT: IAS 16

### Definition

Property, plant and equipment (PPE) are tangible assets that:

- a) are held for use to produce/supply goods and services, for rental to others, or for administrative purposes; and
- b) are expected to be used during more than one period.

### Recognition

The cost of PPE are recognized as assets only when:

- a) probable that future economic benefits associated with the item will flow to the entity; and
  - b) the cost of the item can be measured reliably
- spare parts/servicing equipment = inventory
  - major spare parts/stand-by equipment = PPE when expected to be used more than one period or it can be used only in connection with an item of PPE

### Measurement at recognition

- PPE is initially measured at cost
- Cost includes the following:
  - **Purchase price** import duties and non-refundable taxes, **net of discounts and rebates**
  - Any costs **directly attributable** to bringing the asset to the **location and condition** necessary for it to be capable of operating in the manner intended by management.
  - Estimate costs of dismantling, removing, or restring the site on which the PPE is located (Asset Retirement Obligation)
- **Directly attributable costs** include the following:
  - costs of employee benefits arising directly from the construction or acquisition of the item of property, plant and equipment;
  - costs of site preparation;
  - initial delivery and handling costs;
  - installation and assembly costs;
  - costs of testing whether the asset is functioning properly, after deducting the net proceeds from selling any items produced while bringing the asset to that location and condition (such as samples produced when testing equipment); and
  - professional fees (legal, accounting)
- the following are **not capitalized**:
  - costs of opening a new facility;
  - costs of introducing a new product or service (including costs of advertising and promotional activities);
  - costs of conducting business in a new location or with a new class of customer (including costs of staff training); and
  - administration and other general overhead costs.

- **Incidental Operations**
  - **Incidental operations** = not necessary to bring the item to the location and condition necessary for it to be capable of operating in the manner intended by management
  - The revenues and expenses incurred from incidental operations are recognized in the **income statement**
  - Example (car park until construction starts)
  
- **Borrowing Costs**
  - See borrowing costs notes
  - Borrowing costs on qualifying assets are capitalized

### Measurement after recognition

There are **two methods** of measuring PPE after initial recognition:

- i. Cost Model
- ii. Revaluation Model

#### 1. Cost Model

- Carrying value = cost less any accumulated depreciation and any accumulated impairment losses

#### 2. Revaluation Model

- At each revaluation date, the PPE is revalued to fair value
- The revalued amount is still amortized over the remaining useful life of the PPE
- Revaluations should be done with sufficient regularity to ensure that the carrying amount does not differ materially
  - There is no requirement to do a revaluation every year
- Carrying value = FV@ date of revaluation less accumulated depreciation and any accumulated impairment losses
- If an item of property, plant and equipment is revalued, the entire class of property, plant and equipment to which that asset belongs needs be revalued on the same date
  - If one building is measured with the revaluation method; all other buildings must also be revalued on the same date that the building is revalued at

### How to use the revaluation method

- **Initial Revaluation**
  - **gains** – goes to **other comprehensive income – revaluation surplus (OCI)**
  - **loss** – goes to **profit & loss (P&L)**
  
- **subsequent revaluation**
  - **gains** – goes to **P&L to the extent of reversing previous losses; the remainder goes to OCI**
  - **losses** – goes to **OCI to the extent of reversing gains in OCI; the remainder goes to P&L**

- The revaluation surplus included in accumulated other comprehensive income may be transferred directly to retained earnings when the asset is derecognised.
  - This may involve transferring the whole of the surplus when the asset is retired or disposed of.
  - However, some of the surplus may be transferred **as the asset is used by an entity**. In such a case, the amount of the surplus transferred would be the difference between **depreciation based on the revalued carrying amount of the asset** and **depreciation based on the asset's original cost**.
  - Transfers from revaluation surplus to retained earnings are **not made through profit or loss**

**Advantages and disadvantages of using the revaluation method:**

Advantages	Disadvantages
<ul style="list-style-type: none"> <li>• Higher asset value = stronger balance sheet</li> <li>• Better debt to equity</li> <li>• Better comprehensive income if asset increase in value</li> </ul>	<ul style="list-style-type: none"> <li>• Higher amortization = lower net income</li> <li>• Losses go through P&amp;L</li> <li>• No benefit on ultimate sale since asset already valued at FV; little or no gain on sale of asset on P&amp;L</li> </ul>

**Deprecation**

- **Amortization expense** = (cost – residual value)/useful life
  - Useful life = period asset will be available for use or units expected to be obtained from the asset
  - Residual value = amount asset is expected to be sold for @ end of useful life **less** the cost of disposal
  - The residual value and the useful life of an asset shall be reviewed at least at each financial year-end (any changes accounted for as change in estimate)
- Depreciation of an asset begins when it is **available for use**; i.e. when it is in the location and condition necessary for it to be capable of operating in the manner intended by management.
- Depreciation does not stop when the **asset becomes idle or is retired from active use** unless the asset is fully depreciated (when the asset becomes held for sale, depreciation stops)
- Depreciation stops when Carrying Value ≤ Residual Value
- Depreciation methods
  - depreciation method should reflect the pattern in which the asset's future economic benefits are expected to be consumed by the entity
  - The depreciation method applied to an asset shall be reviewed at least at each financial year-end and (changes are accounted for as a change in estimate)
  - Examples of methods
    - straight-line method,
    - declining balance method
    - units of production method

### Depreciation of significant components/parts

- Each part of an item of property, plant and equipment with a **cost that is significant in relation to the total cost of the item MUST be depreciated separately**
  - Compare cost of part to total cost of the PPE
  - No choice but to amortize separately if it is a major component of the asset.
- An entity allocates the cost of a PPE to its significant parts and depreciates each significant part separately
- Example: Airplane (separately depreciate engine, airframe, cabin); Building (roof, windows)
- Significant parts may have different useful lives than full asset and IFRS wants us to have a more accurate amortization expense

### Subsequent Costs

- **Major replacement**
  - Examples: replacing interior wall of a building, engine of a plane
  - The cost of the replacement is capitalized (as long as probable future economic benefits and cost is measurable)
  - The carrying amount of the parts that are replaced (the old parts) is derecognised
    - even if the old part was not separately recognized and amortized, we will still need to estimate an amount and derecognize it
- **Major Inspection**
  - Example: Air Canada performs major inspections on planes every 5 years
  - Cost of major inspection is capitalized (as long as probable future economic benefits and cost is measurable)
  - Any remaining carrying amount of the cost of the previous inspection is derecognised
    - even if the previous inspection was not separately recognized and amortized, we will still need to estimate an amount and derecognize it

### Comparison to ASPE:

- incidental operations; under ASPE income from incidental operations are capitalized until substantial completion
- only cost model is allowed under ASPE
- amortization calculation is different under ASPE
- Under ASPE, significant components are separately amortized only when practicable and the useful life of the significant component is estimable
- ASPE uses betterments vs. repairs in determining subsequent capitalization
- Under ASPE no requirement to derecognize the carrying value of the items replaced