

financial statements can be prepared using normal economic methods such as straight-line.

There are other time-based methods, but these are the two which are classically used. There are potentially many usage-based methods. For example, it would be relatively simple to allocate depreciation on a van according to the number of kilometres travelled in the year. In practice such methods are rarely used except by companies which extract minerals, particularly oil companies.

Units of production method

Mineral resource companies usually expense the mineral asset as it is extracted for sale – this is called the *depletion method* or the *units of production method*. Supposing a company acquires a quarry for extracting ore, and the acquisition cost is €5m, the unexpired expense represented by this asset would be the unmined ore available on the site, and it is relatively simple to allocate the acquisition cost on the basis of the amount of ore extracted. If the engineers estimated that the quarry contained 10m tonnes of ore, the cost of the quarry could be divided over the resource:

$$\frac{\text{€5m acquisition cost}}{\text{10m tonnes ore in quarry}} = \text{Depreciation of €0.50 per tonne}$$

As the ore was extracted, the quarry asset could be expensed in direct relation to the ore. So if extraction was as follows:

<i>Year</i>	<i>Tonnes extracted</i>
1	500 000
2	1 200 000
3	1 400 000
	etc.

the annual charge for depreciation would be:

<i>Year</i>	<i>Annual depreciation</i>
1	(500 000 × €0.50) €250 000
2	(1 200 000 × €0.50) €600 000
3	(1 400 000 × €0.50) €700 000 etc.

Clearly the accuracy of the units of production method depends upon the accuracy of the estimate of the ore in the quarry, and this method is only suitable for assets where such estimates of the resource are possible and the utilization of the resource can be monitored in that way. However, it is a method of allocating expense which most closely follows the economic use of the asset, rather than working on an assumed utilization pattern.