



Introduction to Asset Management Concepts

Workshop no 4 – Part v

Keith Burwell – Regulatory Economist

Leaders in the design, implementation and operation of markets for electricity, gas and water.



 **MVV** Energie AG

*Edinburgh
Economics*

Principle of asset management concepts

- Developed for water and wastewater industry
- Employed to cater for anomalies of long and/or indeterminate life assets
- Can be employed in other sectors where appropriate

Cost breakdown

- Operational costs
- Capital investment
 - Repair / upgrading of existing assets
 - Replacement, e.g. new landfill
- Return on capital (profit and interest on loans)

Conventional accounting treatment of CAPEX

- Capital investment recovered through depreciation provisions
- Generally acceptable if asset lives reflect real lives
- Acceptable if investment is a small part of overall costs
- Can use historic cost depreciation if asset lives are short (5 to 10 years)
- Suits waste collection business

But

- Waste disposal may require an alternative approach

Problem of waste disposal

- Very capital intensive (conventional depreciation can be as much as 40% of total costs)
- Long life assets (15 - 20 years) and therefore prone to the effects of inflation
- Principal purpose of depreciation is to return capital investment of landfill development
- Funding of landfill development may vary requiring special regulatory accounting provisions

Serviceability & asset management

- Regulator's primary interest
 - Price
 - Service to customers
- Regulator not focussed on assets and their condition but what they can deliver
- Revenues set to maintain serviceability and cash flow
- Depreciation not necessarily recoverable on gifted assets but to be applied when funded from own resources

Implications for prices

- Actual investment may be lower than depreciation provisions if funded through grants
 - Keeps prices lower in the short term
- But
- Longer term price uncertainty