# Costing Outsourcing 8 marks

Summer 2018 Paper 31



**Table 2: Outsourcing road transport of fuels in country X – costs and other data**

| | |
|---|---|
| Estimated value of existing PGP trucks (purchased in 2013) | $5m |
| Annual depreciation charge for existing trucks | $5m |
| Annual variable costs of operating PGP trucks per litre of fuel transported | $0.10 |
| Estimated value of PGP distribution centre | $8m |
| Annual fixed costs of operating distribution centre | $20m |
| Annual allocation of Head Office administration costs to the distribution centre | $4m |
| Specialist road transport company: cost to PGP per litre of fuel transported | $0.13 |
| Total litres transported annually by PGP | 600m |

**PGP's organisational structure**

Under state ownership, a hierarchical organisational structure with a long chain of command was created. This structure has remained largely unchanged since privatisation. In some functional departments there are eight levels of hierarchy below the director of the department. One of the reasons for this structure was the centralised decision-making and bureaucratic style that existed in the state-owned PGP. Another reason was that whenever PGP expanded – internally or externally – a further level of hierarchy was often added to share out the additional administrative workload. The directors have now agreed to substantial changes in the organisational structure to overcome some of the problems caused by a tall, narrow hierarchy. The most significant of these is a management delayering programme. At least two levels of hierarchy will be removed requiring substantial changes to the role of managers and other employees.

**Sales forecasting**

PGP undertakes sales forecasts, including the use of the moving average method, for all of the markets it sells in. Total demand for most oil and gas products in most national markets is price inelastic. However, demand for these products from individual oil and gas companies is relatively price elastic as it is difficult to differentiate them to create a distinct brand identity. Sales forecasts have to take into account the seasonal demand for some oil and gas products – such as energy for heating – and also cyclical changes in global demand which is influenced by the rate of growth of major world economies. Last year, PGP had excess oil refining capacity and high inventories due to inaccurate sales forecasts. The trend in demand for all types of oil and gas products is influenced by many factors. PGP's Marketing Director is reviewing the sales forecasting methods used by the company.

**Ratio analysis of accounts**

Each year, PGP's Finance Director undertakes a ratio analysis of the end of financial year accounts. He compares the performance of the business with energy industry averages. Some of the ratios used in the latest comparison are given in Table 3. Some stakeholders are concerned about PGP's financial performance and the Finance Director wants to improve these accounting ratios in future. He recognises that this will be difficult at a time when global demand for oil and gas is being affected by a general economic slowdown.

2(a) Refer to Table 2. Calculate the difference between the annual cost of outsourcing the transport of fuel in country X with the existing annual cost of transport. (8 marks)

| | **Current Cost($)** | **Outsourcing Cost($)** |
|---|---|---|
| Variable Cost | 600m x 0.1 = 60m | 600m x 0.13 = 78m |
| Fixed Cost | 20m | |
| Depreciation | 5m | |
| Allocated Head Office Cost | 4m | |
| **Total** | **89m** | |

Cost saving = 89m - 78m = $11 million