Estimation of Project Cost Beyond EPC Construction Costs

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Abstract

PEP has traditionally provided cost estimates that are limited to EPC (engineering, procurement, and construction) costs and contain a minimum of presupposition. We assume, for example, instantaneous construction and do not include the cost of land. This is deliberate—we want a client who intends to use our estimates in a more formal analysis not to have to back out numerous IHS-generated assumptions.

Total owner’s cost goes beyond this, however, and contains significant “other costs” that are required “from concept to commercialization.” Clients have from time to time asked us for guidance in identifying and then quantifying these additional cost burdens. These costs can be capital costs or noncapital costs, and they open our consideration beyond the physical boundaries of the plant to include infrastructure requirements that are necessary for the plant to be made operational.

This report details our analysis of significant project development costs, from concept to commercialization, which includes but is not limited to EPC costs. Since every construction project is unique, we present these costs as a range of the percentage of the EPC capital cost estimate. In this way, the client can use the PEPCOST EPC estimate as a starting point, and then build up their own estimate. We present our estimates of the likely ranges of investment required for product definition and development, permitting, and cost activities prior to the final investment decision. We also examine infrastructure costs both just outside the plant gate and remote from the plant. We identify and quantify those EPC costs beyond the typical PEPCOST estimate. Finally, we quantify financial costs during construction as well as requirements for working capital.
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