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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.

Contents

1	Introduction	6
2	Summary	7
3	PEP capital cost estimating methodology	10
	Estimating ISBL (inside battery limits) capital costs	14
	Estimating OSBL (outside battery limits) capital costs	19
4	Project development costs prior to executing an EPC contract	23
	Introduction	23
	Phases of project development costs prior to executing an EPC contract	23
	Key components of project definition	23
	Segmentation of project definition activities	24
	Front end planning	25
	Project governance	26
	Accurate front end scope definition	26
	Costs of project definition phase of project development	27
	Competitor evaluation study	30
	Feedstock supplier evaluation study	30
	Feasibility study	31
	Pre-FEED Study and FEED study	33
	Impact of project type on project definition costs	34
	Project development costs	34
	Site evaluation study	34
	Licensor technology evaluation	35
	Subsurface evaluation study	36
	Project constructability study	37
	Government permitting costs	38
	Environmental impact study (EIS/EIR)	39
	Socio-economic study	40
	Endangered/threatened species evaluation	40
	Local transportation and roadway evaluation	41
	Atmospheric emissions evaluation study	42
	Well or surface water taking permits	42
	Wastewater discharge (NPDES) permit application	42
	Air pollution permit application	44
	A solid waste (RCRA Act) permit application	45
	Permit application to construct (construction permit)	45
	Waterways/dredging permit application	47
	Cost activities prior to final investment decision (FID)	48
5	Infrastructure costs outside the plant gate	49
	Infrastructure costs at site outside plant gate	49
	Infrastructure costs remote from plant	52

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6	Financial costs	55
	Introduction	55
	Financial costs during construction	55
	Working capital	56
	Raw material accounts payable	56
	Raw material inventory	56
	Labor accounts payable	56
	Utilities accounts payable	56
	Finished product inventory	57
	Accounts receivable	57
	Taxes payable	57
	Freight payable	57
	Cash on hand	57
7	Project cost components beyond a PEPCOST EPC capital cost estimate	59
	Purchased land costs	59
	Process design package cost	60
	Plant models, either model shop or 2D/3D/4D computer models	60
	Capitalizable licensing costs	61
	Initial and spare charge of catalyst	61
	Project construction management (PMC) costs	62
	Maintenance shop equipment costs	62
	Offsite equipment delivery, storage and laydown areas	62
	Construction crew housing and worker offsite amenities	62
	Expatriate labor costs	63
	Liability insurance during construction	63
	Religious buildings and other site specific cultural amenities	64
	Project commissioning costs	64
	Startup costs	65
	Process equipment required only for startup or shutdown (startup spares)	65
	Advanced waste treatment (e.g., reverse osmosis and wastewater treatment for recycle)	65
	Storm water management and treatment systems	65
	Extreme design criteria	66
	Geotechnical facilities and/or secondary containment tank berms	66
	Appendix A—Cited references	67

Tables

Table 1	List of geographic location factors in 2017	7
Table 2	Impact of non-TFC costs on project capital cost estimate	9
Table 3	List of GTC patents on aromatics technology obtained via USPTO computer search	10
Table 4	Typical PEP patent summary table entries	11
Table 5	Conventional PEP design basis table	13
Table 6	Conventional PEP stream-by-stream material balance	14
Table 7	Conventional PEP ISBL equipment list with duty specifications	15
Table 8	PEPCOST purchase + direct installation cost for ISBL process equipment	16
Table 9	PEPCOST Total fixed capital cost for ISBL process equipment	17
Table 10	“Special packaged equipment” list from a 2016 PEPCOST equipment list	18
Table 11	Breakdown of major OSBL total fixed capital cost components	19
Table 12	Breakdown of OSBL capital cost components	19
Table 13	Cost of project definition activities as % of TFC	27
Table 14	Elements of a conventional conceptual study	28
Table 15	Primary sources of project risk	29
Table 16	Key characteristics of competitor firms	30

Table 17 Criteria used to evaluate potential feedstock suppliers	31
Table 18 Key components of a feasibility study	31
Table 19 Anticipated costs for project development activities	34
Table 20 Components of site evaluation study	35
Table 21 Range of government permitting costs for noncontroversial projects	38
Table 22 US National Environmental Policy Act submission requirements	39
Table 23 Cost activities prior to FID	48
Table 24 Infrastructure costs at site, outside plant gate	49
Table 25 Infrastructure costs remote from plant	52
Table 26 Financial costs during construction	56
Table 27 Working capital guidelines for various process types	57
Table 28 Typical working capital requirements for various process types	58
Table 29 EPC costs beyond the PEPCOST estimate	59

Figures

Figure 1 Value of PEPCOST index over time	7
Figure 2 Conventional PEP overall input/output diagram with material balance	10
Figure 3 Conventional PEP block flow diagram	12
Figure 4 Conventional PEP process flow diagram	12
Figure 5 Segmentation of major ISBL total fixed capital cost categories	18
Figure 6 Breakdown of OSBL capital cost components	20
Figure 7 Conventional secondary biological wastewater treatment plant block flow diagram	21
Figure 8 US EPA NPDES wastewater discharge form	43
Figure 9 Air permit application for the State of Illinois	44
Figure 10 Infrastructure costs at site outside plant gate	50
Figure 11 Infrastructure costs at site outside plant gate	53

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