Oil and gas megaprojects

Megaprojects, the new norm in the industry, deliver mixed results

Companies are increasingly engaging in multibillion-dollar, technically and operationally demanding projects, called “megaprojects” to commercialize unconventional and frontier opportunities as well as unexploited conventional reserves. EY examined the performance of 365 of these megaprojects across the globe and determined that, despite the significant capital investment involved, a majority of the projects were over budget and/or behind schedule across segments and geographies. Numerous factors contribute to these poor results; however, as the majority are internal elements, reversing this trend is within reach.

Megaprojects bankroll

Estimated cumulative investment

- **US$22.4t** in global oil and gas sector (2014-35)
- **US$1.9t** in natural gas transmission and distribution networks (2014-35)
- **US$700b** in LNG facilities (2014-35)

Most projects are facing cost overruns and delays

- 64% Face cost overruns
- 73% Report scheduling delays

Completion costs are 59% higher than initial cost estimates, on average, representing an incremental cost of US$500b.

Investment by region

- **US$482b** 75 projects North America
- **US$379b** 60 projects Europe
- **US$206b** 38 projects Middle East
- **US$214b** 34 projects Latin America
- **US$350b** 59 projects Africa

Investment by segment

- **Upstream** US$1.08t
  - 163 projects
  - Average size: US$6.6b
- **Pipeline** US$348b
  - 46 projects
  - Average size: US$7.6b
- **LNG facilities** US$539b
  - 50 projects
  - Average size: US$10.8b
- **Refining** US$607b
  - 106 projects
  - Average size: US$5.7b

Post-FID project performance

- 35% Overrun
- 65% On budget

Cost overruns: Current vs. FID

- 75%-100% 3
- 50%-75% 1
- 25%-50% 4
- <25% 5
- On budget 7

Number of projects

Post-FID analysis conducted on a sample made up of the 20 largest projects.

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