

## Qubist Cost Engineering Capability Statement

Providing decision makers with accurate and commercial astute cost analysis and advice

Qubist Pty Ltd is an advisory business that provides expertise to clients with utility and infrastructure assets. We help clients create greater value, new possibilities and superior outcomes for their assets and organisations.

Qubist provides solutions across the entire project lifecycle. We understand the specific challenges involved in running an organisation and call upon decades of industry experience to assist our clients – ensuring strategic, practical, and commercially orientated results.

Our private and public sector clients include government agencies, contractors, and legal organisations.

## **Qubist Approach**

Qubist's approach to cost engineering is conditioned by a wealth of industry experience and understanding of all sources of costs and using world's best practice cost engineering tools and techniques.

Qubist understand reliable and accurate estimates require a thorough project analysis by practitioners with subject matter expertise. Wherever appropriate, Qubist's approach is based on first principles. First principles for Qubist means:

- understanding the project objectives
- assessing the level of maturity of project deliverables
- understanding a contractors' view of direct and indirect costs
- appraising of project-specific and systemic risks
- considering the project execution plans and execution environment
- making appropriate adjustments for commercial terms

## **Equipped to address cost challenges**

We support clients' portfolio, program, and project management challenges by providing expert advice on capital cost estimates, risk assessments, whole of life estimates, and independent estimator services to ensure decision integrity.

| The challenge                                 | Our capability                                                                                                                                                                             |
|-----------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Providing reliable forecast to completion     | We apply a risk-based approach to residual risks, potential claims, and other variables to analyse projects and prepare a forecast cost to completion.                                     |
| Reflecting the project execution plan         | Qubist takes a cost planning approach, using our deep subject matter knowledge, to fill the gaps between what is required to satisfy project completion and what is shown in the drawings. |
| Evaluating the cost of contracting strategies | Qubist works with clients to model contracting scenarios, select the appropriate strategy, and ensure that the estimate reflects that strategy.                                            |



| The challenge                                     | Our capability                                                                                                                                                        |
|---------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Aligning schedule and costs                       | Qubist develops an integrated construction methodology and schedule as the basis for estimates.                                                                       |
| Reflecting the current local market               | Qubist draws upon its experienced estimators to ensure the best available expertise is applied.                                                                       |
| Benchmarking cost estimation                      | Qubist conducts benchmarking exercises for public and private owners by drawing upon project and portfolios collected with over 25 years of experience                |
| Minimising unwarranted conservatism               | Qubist can identify drivers of uncertainty and propose methods to minimise contingency requirements.                                                                  |
| Assessing construction methodologies              | Our background in construction allows us to evaluate construction options and optimise safety, schedule, and cost outcomes.                                           |
| Providing expert estimates for dispute resolution | Our cost estimation capability covers the full range of estimating requirements from high level cost assessment to detailed forensic analysis and cost determination. |
| Managing alliance and incentivised contracts      | Qubist's commercial expertise in alliance and EXI contracting ensures a greater level of cost transparency and cost assurance.                                        |
| Support for financial transactions                | Qubist can validate asset maintenance cost forecasts and associated programs for refinancing activities                                                               |

## **Relevant Project Experience**

Below is a selection of relevant Cost engineering experience of our team:

| Capability  | Sector               | Sample Experience of our Team                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|-------------|----------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Engineering | Hydrocarbons         | <ul> <li>Independent Estimator, Dampier to Bunbury Natural Gas Pipeline, WA</li> <li>Independent estimates reviews Origin Energy, QLD</li> <li>Independent estimate reviews, APLNG, QLD</li> </ul>                                                                                                                                                                                                                                                                                                |
|             | Power                | <ul> <li>Independent Estimator – Sydney Water – Renewable Energy Alliance</li> <li>Independent estimate review, Fremantle gas power station, WA</li> <li>Estimate reviews, Burdekin Dam Hydro Electric Scheme, QLD</li> <li>Cost benchmarking services – Ausgrid</li> </ul>                                                                                                                                                                                                                       |
|             | Minerals &<br>Metals | <ul> <li>Independent estimates, Alpha Coal, QLD</li> <li>CAPEX update, Roy Hill Mining Project, Hancock Prospecting, WA</li> <li>EPCM check price, Cerrejon Coal Mine, Colombia</li> </ul>                                                                                                                                                                                                                                                                                                        |
|             | Transport            | <ul> <li>Independent Estimator – RMS – Sydney Harbour Bridge Alliance</li> <li>Cost estimating services – TfNSW – Sutherland to Cronulla Active Transport</li> <li>Preparation of concept cost estimates, North West Rail Link, NSW</li> <li>Capital cost estimate review, Northern Sydney Freight Corridor, NSW</li> <li>Busway Extension, QLD</li> <li>Expert advice on parallel estimate, Gateway Motorway Upgrade, QLD</li> <li>Independent estimate review, Penlink Motorway, VIC</li> </ul> |
|             | Water                | <ul> <li>Independent Estimator – Sydney Water – Various alliances</li> <li>Independent Estimator – Hunter Water – Hunter Water Alliance</li> <li>Cost estimating services – Sydney Water – various projects</li> <li>Cost estimating services – Hunter Water – various projects</li> <li>Cost estimating services – WaterNSW – various projects</li> <li>Cost benchmarking services – Sydney Water</li> </ul>                                                                                     |
|             | Other                | <ul> <li>Best Practice Cost Estimating Standard for Publicly Funded Road and Rail Construction         <ul> <li>Department of Infrastructure and Transport NSW</li> </ul> </li> <li>State Infrastructure Strategy, Review of Project Costs – Estimates and Cost Planning Infrastructure NSW</li> </ul>                                                                                                                                                                                            |

