PROJECT ASSURANCE

INDEPENDENT, OBJECTIVE, METRIC DRIVEN, INSIGHTS INTO PROJECT RISK AND READINESS.



INTRODUCTION Informed Project Decision-Making

Project Assurance and Readiness Reviews done differently.

Quantified evaluation which evaluates:

- The difficulty, complexity, riskiness of the project.
- The readiness, maturity, development of the project.
- Effective actions recommended to manage the risk and increase readiness.

Objectives:

- Allow companies to make informed capital project decisions.
- Give project teams meaningful and actionable insights.
- Use data to remove subjectivity from Assurance.

Key Differentiators:

• **Objective:** Our metrics remove subjectivity, opinions, and feelings and provide quantified outputs.

- Metric Driven: Assurance based on proprietary toolkits and indices which provide a risk score and readiness score.
- Independent: Assurance separated from internal bias and politics.
- **Standardized:** Provides consistency across all assurance activities and allows progress to be monitored over time. Can also compare different projects meaningfully.
- Actionable: Assurance that provides clear levers and actions for an organization to implement to increase readiness and reduce risk.
- Insightful: Data that informs capital investment decision making.

THE TOOLS / METRICS The TECOP Risk/Readiness Toolkit

The TECOP Toolkit contains 200+ discrete metrics. Each has a 1-5 scale with clear definitions to be selected.

The toolkit scores every metric but also generates an overall "Risk Score" and "Readiness Score" out of 100.

The TECOP toolkit has been developed from industry research, benchmarks, and decades of hands-on project experience.

Customizations: We have developed the following tool 'modifiers' to provide more accurate results for specific project types with unique risk profiles:

- Decommissioning Index.
- Carbon Capture & Storage (CCS) Index.
- New Energies Index.



Example Metric from Technical Indices	1	2	3	4	5
Technical Novelty (T0014)	Project type completed many times with same technology. Fully established and proven technology with extensive historical data	Minor new technology elements. Minor modifications to well- established technology; proven with minor adjustments	Proven technology but new applications or locations OR New technology within a proven concept. New technology but supported by substantial research and testing	Innovative technology with limited practical application and data. Many elements of new technology	Project concept is new and contains unproven technology. Highly experimental technology with no practical application or data.

OUTPUTS – Risk Score Standardized and Metric Driven



EXAMPLE: Risk / Difficulty Level

• Inputs are converted into a 'Risk Score' indicating how inherently difficult/complex/risky the project is.

- Detailed breakdowns of every metric available.
- Specific actions recommended against high-risk areas.



OUTPUTS – Readiness Score Standardized and Metric Driven

100 100 90 90 80 80 75 Recommended Readiness score at FID 70 70 60 60 49 50 50 42 38 40 40 30 30 20 20 10 10 Example graph shows 'Readiness Scores' across TECOP (low readiness project) \cap \cap Technical Economic Commercial Organisational Political **Overall TECOP** Score

Medium High

Low

---- Readiness

EXAMPLE: Readiness Level (for FID)

• Inputs are converted into a 'Readiness Score' indicating how mature/ready/developed the project is.

- Detailed breakdowns of every metric available.
- Specific actions recommended against low-readiness areas.



REPEATIBILITY Monitoring Progress to Readiness



Demonstrating and quantifying progress

- Running the standardized assurance process in each project phase allows progress to be tracked over time and the effectiveness of actions to be monitored.
- Ideally, readiness increases and risk reduces over time (as in the example shown here).
- The readiness 'thresholds' are adjusted over time.

APPLICABILITY Phases & Project Types



Flexibility for all phases and project types

Our Assurance is suitable for all project phases and can even be used mid-phase to evaluate work required to prepare for the next gate. Thresholds are adjusted for earlier phases.

The TECOP tool can be applied to all project types in all industries. However, we have developed some specific 'modifiers' for different project types to make the results even more specific. In earlier phases where multiple options are being reviewed it may be more suitable to use the TECOP toolkit to compare and contrast different options and determine which should be progressed. See our 'Concept Comparison' product for more on this.

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Within the TECOP tool is an 'Organisation Maturity Index' section which can be effectively deployed as a standalone metric to evaluate the health and development of the project team.

Standardized and Repeatable Process

Our process is a combination of team surveys and interviews with stakeholders. The following steps are followed:

- Grounding sessions to ground our team in the project and are used to introduce the process and agree which metrics will be run.
- 2. The TECOP tool is then issued to key project team members to score the selected metrics.
- 3. Analysis of responses (and areas of misalignment)
- 4. Follow-up discussions with stakeholders to explore themes and dig deeper into key findings.
- 5. Results shared and discussed with team.
- 6. Final updates and report out.

Low admin and low disruption process

We know project teams are busy progressing the actual work so our process is designed to have a very low administrative burden for the project teams and not disrupt delivery.

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Full Report Out and Actions

Our process will complete with a full written report and presentation of results including recommended actions.



RECOMMENDATIONS Effective, Actionable, Timely

Actions that Deliver Results

We want project teams to succeed and deliver effectively. Our recommended actions are always designed to be effective and achievable. As experienced project people, we hope to assist you in implementing the suggested actions.

TECOP	Action	Importance / Urgency	Status
Technical	Action 1		
Technical	Action 2		
Technical	Action 3		
Political	Action 4		



DECOMMISSIONING READINESS Modifier Example

Decommissioning Risk Index

Decommissioning projects are unique and attract a different risk profile which includes (not exhaustive):

- 1. Political: Additional regulatory requirements and attention, especially for assets that have ceased production.
- 2. Technical: Ageing assets with a much larger risk of discovery work and scope growth during execution.
- 3. Organizational: Less corporate support and willingness to fund due to capital constraints and lack of revenue at project completion.
- 4. Commercial: Immature industry and developing skillsets amongst contractor organizations.

The Decomm modifier adds Decomm specific risks and changes the weighting of risks to better reflect the different risk profile of these projects.

Decommissioning Readiness Index

Decommissioning projects are not progressed according to standard project development processes. Reviewing 'Readiness to execute' requires different focus including:

- 1. Political: Approval for work. Alignment with commitments and expectations.
- 2. Technical: Consideration of technical risks and challenges.
- 3. Commercial: Availability and competency of contracted suppliers.
- 4. Organizational: Funding and commitment to execute. commitment to execute.

The Decomm modifier adds Decomm specific readiness factors and changes the weighting of metrics to better reflect the requirements of these projects.

CASTLE CONTROLS

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