



PRODUCT OVERVIEW · CAPITAL COST ESTIMATION

# FPSO CAPEX ESTIMATING TOOL

Rapid parametric capital cost estimation for FPSO and floating production projects, built on 30+ years of real offshore project data.

### THE CHALLENGE

**Early-stage FPSO cost estimates are time-consuming, inconsistent, and routinely exceed final costs by 20–40%.**

FPSO projects range from USD 200M to USD 3B+. Accurate concept-phase estimates are critical for FID confidence and investment decisions.

### KEY CAPABILITIES

01

#### Parametric Estimation

Input vessel capacity, region, hull type and processing configuration. Receive a calibrated cost estimate in minutes — not weeks.

02

#### Real Project Benchmarks

Cost models calibrated against 30+ delivered FPSO, FPS, and FSO projects across six continents and four decades of offshore experience.

03

#### New Build & Conversion

Separate cost models for purpose-built FPSOs and tanker conversions, each with distinct cost drivers and regional adjustment factors.

04

#### Cost Breakdown by Element

Detailed cost split across hull, topsides processing, mooring systems, marine works, hook-up, commissioning, and project indirects.

05

#### Regional Cost Factoring

Location-adjusted estimates covering West Africa, SE Asia, Brazil pre-salt, North Sea, Gulf of Mexico, and Middle East regions.

06

#### Export & Reporting

PDF cost report and Excel workbook with full breakdown, sensitivity tables, and project comparison matrix — ready for FID or board review.

### ENGINEERING & VISUALISATION OUTPUTS INCLUDED

#### Equipment List

Preliminary major equipment list with quantity, duty, and indicative weight and size — suitable for early procurement planning and logistics assessment.

#### 3D Module Layouts

Conceptual topsides module arrangement with dimensional envelope — visualises deck utilisation, integration constraints, and module crane lift weights.

#### Mass & Space Summary

Parametric topsides weight and footprint estimate — supports hull sizing, stability assessment, and marine spread planning at concept stage.

30+

Years Experience

12+

FPSO Projects

6

Global Regions

\$3B+

Capex Covered

### WHO BENEFITS

#### Operators & NOCs

- Rapid concept-phase cost check before committing to FEED expenditure.

#### FPSO Contractors

- Independent benchmarking and commercial bid support at early project stages.

#### Investment & Finance

- Capex range definition for FID, project finance, and board approval packages.

#### Project & Cost Engineers

- Standalone cost reference throughout concept and pre-FEED project phases.

### Request Access or a Free Demonstration

Complimentary licences available to qualifying operators and project teams.

[contact@areussi.com](mailto:contact@areussi.com)

[areussi.com](http://areussi.com)



DELIVERABLES & USE CASES

# WHAT THE TOOL DELIVERS

CORE DELIVERABLES

### Budgetary Cost Estimate

Class 4 / Concept Phase

A fully structured Class 4 estimate (AACE standard) suitable for early project sanctioning and internal budget approval. Outputs include total installed cost (TIC) with P10/P50/P90 confidence bands, broken down across hull, topsides processing, mooring, marine systems, hook-up, commissioning, and indirect project costs. Accuracy typically +/-30-50% at concept phase, improving as inputs are refined.

### Pre-FEED Cost Basis

Concept Screening & Selection

A structured cost basis for use as a pre-FEED reference point. The parametric model allows rapid sensitivity runs across production capacity, hull size, water depth, oil/gas processing ratio, and topside weight — enabling concept comparison and option selection before committing to detailed engineering expenditure. Multiple concepts can be compared in a single session.

### Bid Benchmarking

Contractor Evaluation Support

An independent reference estimate for benchmarking submitted FPSO contractor bids. Provides an objective baseline for commercial negotiations — identifying where bids deviate significantly from parametric norms and prompting targeted clarification. Particularly valuable for operators with limited in-house FPSO cost experience entering new geographic basins or vessel types.

### FID & Investment Pack

Investment Decision & Finance

Structured cost outputs — breakdown, regional adjustment factors, analogous project references, and sensitivity ranges — formatted for inclusion in FID documentation, investment committee presentations, and project finance submissions. Lenders and equity partners require credible cost substantiation; parametric estimates grounded in real project data provide that foundation at a fraction of the cost of a full estimating study.

ADDITIONAL USE CASE

### Feasibility & Screening Study

- For business development teams evaluating new acreage or assessing discovered resource viability, the tool provides a fast, credible FPSO cost indicator. Within minutes of entering field parameters — water depth, peak production rate, storage requirement, and geographic region — the tool returns a cost range sufficient to support a preliminary NPV assessment and go/no-go screening decision.

COST ESTIMATE CLASS ALIGNMENT — AACE STANDARD

AACE Class	Project Phase	Accuracy Range	Tool Application
Class 5	Concept Screening	±50–100%	Indicative range only
Class 4	Concept Study / Budgetary	±30–50%	Primary — full parametric output
Class 3	Pre-FEED / Feasibility	±20–30%	Sensitivity & concept benchmarking
Class 2	FEED / Budget Control	±10–20%	Bid benchmarking reference

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