



PARA BELLUM ADVISORS

PROJECT FINANCE · CONSTRUCTION PHASE

Hedging Construction Phase FX Exposure – Utility-Scale Solar Development

SCENARIO TYPE	Project Finance – Construction Phase
ASSET CLASS	Renewable Energy Infrastructure (Utility-Scale Solar)
RISK FOCUS	Construction-phase FX timing and liquidity risk under milestone-driven delivery
PRIMARY OFFER	Hedge Rebuild™
RELEVANT SERVICES	Hedge Rebuild™ · Milestone-aligned FX overlay · Construction phase liquidity redesign · Collateral stress-testing

THE SITUATION

Utility-scale solar project. Offshore equipment. Multi-currency capex. AUD-denominated debt. EPC packages with USD and CNY exposure tied to manufacturing, shipping, delivery, and commissioning milestones.

At financial close, the FX story looked straightforward. Treasury locked in forwards against the construction budget. Settlement dates matched the base-case schedule. Lenders were satisfied that FX risk was fully hedged. The model showed clean conversion of foreign capex into AUD at known rates.

In practice, construction does not run to a fixed calendar. It runs to weather, shipping congestion, grid approvals, subcontractor availability, and equipment lead times.

Everyone in the room knows that. The hedge doesn't. The embedded assumption: delivery timing uncertainty can be absorbed without economic or liquidity consequence. That assumption holds – until the project moves off the base-case path.

HOW THE TRAP FORMS

Usually quietly. Panels arrive later than planned. Inverters ship early. One milestone slips; another pulls forward. None of it is dramatic. The project is still on track.

But the FX hedges are fixed in time. Treasury rolls one forward. Closes another early. Accepts a small gain or loss and moves on. Considered part of normal execution friction.

Then the moves compound. A delayed shipment means an fx forward contract matures before cash is needed. Proceeds sit idle or are converted back at spot. A pulled-forward milestone means paying spot FX because the hedge is not live yet. Collateral postings fluctuate as mark-to-market moves against timing mismatches.

Individually, each adjustment looks manageable. Collectively, the hedge has stopped behaving like protection and started behaving like a second construction risk.

WHAT TYPICALLY BREAKS

Timing risk dominates price risk

The issue is not the FX rate – it is when cash moves versus when hedges settle. The original structure priced FX correctly but assumed certainty of timing that never existed in a milestone-driven build.

Hedges reference budgets, not behaviour

The hedge aligns with the base case schedule, not the probabilistic distribution of delays and accelerations. Once reality diverges, the hedge amplifies noise rather than dampening it.

Collateral was never stress-tested

Initial models assume FX hedges are cash neutral. They rarely model adverse mark-to-market under delivery slippage and volatility. Collateral demands peak precisely when construction liquidity is most constrained.

Binary choices appear artificially early

By the time issues surface, the project is presented with false options: keep rolling hedges and absorb volatility and collateral pain or unwind and accept visible losses mid-construction. Neither was ever intended at approval.

THE STRUCTURAL INSIGHT

The mistake is to treat this as an execution failure. It is a structural one.

The starting point is recognising the constraint set: construction timing is uncertain by definition; liquidity during build is finite and fragile; hedges must flex with milestones, not calendars. Any structure that ignores those realities will fail under stress.

FX exposure driven by commitment – signed EPC obligations – is fundamentally different from exposure driven by timing. Until timing optionality is explicitly recognised, hedging remains blunt.

Replacing rigid date-specific forwards with milestone-aligned or window-based structures that activate when cash is required – not when a calendar page turns – is the core structural response. The objective is rate certainty when cash moves, not rate certainty on day one.

INTENDED OUTCOMES

- ▶ Liquidity resilience – FX hedges stop competing with construction funding for cash; margin movements become manageable and subordinate to delivery priorities.
- ▶ Economic coherence – FX outcomes track realised capex rather than forecast schedules; variance becomes explainable rather than apologised for.
- ▶ Governance clarity – boards and lenders understand where FX risk sits, how timing affects it, and why outcomes move quarter to quarter.
- ▶ Execution optionality – delays, accelerations, or scope changes no longer force hedge unwinds or emergency rolls; the structure absorbs uncertainty instead of amplifying it.
- ▶ Agency restored – the project manages FX risk deliberately rather than reacting to it under pressure.

WHERE THIS APPLIES

Most relevant where construction capex is materially offshore; delivery timing is milestone-driven rather than date-certain; FX hedges are linear and calendar-fixed; and liquidity buffers are finite during build.

Generally, less relevant where capex is largely domestic, physical settlement offsets FX exposure, construction timing is genuinely fixed contractually, or FX exposure is immaterial relative to total capex.

TYPICAL ENGAGEMENT PATH

Hedge Rebuild™ – Milestone-aligned FX overlay and construction-phase liquidity redesign.
Secondary: Collateral stress-testing, forward restructuring, EPC-aligned settlement framework. Scope confirmed following a focused diagnostic review.

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Illustrative scenario based on common construction-phase project finance patterns. Details have been anonymised. Outcomes depend on EPC structure, hedge documentation, market conditions, and liquidity constraints. Not investment advice.
