



# Astana Power Plant Energy Storage Project: Key Insights for Global Bidders

**\*\*Astana Power Plant Energy Storage Project: Key Insights for Global Bidders\*\*** **\*\*Understanding the Tender Scope and Target Audience\*\*** The **\*Astana power plant energy storage project\*** tender represents a pivotal move in Kazakhstan's energy transition. Primarily targeting: - Energy storage system manufacturers - EPC contractors specializing in grid-scale solutions - Renewable integration experts - Financial institutions funding energy infrastructure Imagine building the "heart" of Kazakhstan's power grid - that's essentially what this 250MW/500MWh storage system aims to become. With Astana's winter temperatures plunging to  $-30^{\circ}\text{C}$ , the project demands **\*cold-weather optimized battery solutions\*** that even polar bears would approve!

**\*Why This Tender Matters Now\*** Kazakhstan's energy ministry plans to increase renewable share to 15% by 2030. But here's the catch: Solar and wind currently suffer 35% curtailment during peak generation. The Astana project could slash this waste through: - Advanced frequency regulation - Intraday energy shifting - Black start capabilities

**\*\*Technical Specifications Breakdown\*\*** The RFP outlines strict performance thresholds: | Parameter | Requirement | Cycle Efficiency |  $>92\%$  @  $-20^{\circ}\text{C}$  | Response Time |