Project Engineering, Design, Procurement and Construction

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Core Business Strengths
Total Project Capability for Kazakhstan

- Operation
- Commissioning
- Construction Services
- Training
- Decommissioning
- Operation
- Commissioning
- Training
- Construction Services
- Procurement
- Detailed Engineering
- Environmental Engineering
- Project Management
- Strategic Studies
- Feasibility Studies
- Economic Evaluations
- Process Design
- Design Packages

Underpinned by HSE excellence
Technical Capability

Underpinned by HSE excellence
Foster Wheeler for Kazakhstan

Delivering Successful Projects

Experience, Skills, Services, Organisation, People, Systems, Cost, Schedule, Safety, Quality

Underpinned by HSE excellence
Integrated Management System

**HSEQ Management System Scope**
BS EN ISO 9001 : 2008
BS EN ISO 14001 : 2004
BS OHSAS 18001 : 2007

**Key**
- B Proposals
- C Project Management
- D Process
- E Engineering
- F Materials Management
- G Construction
- H Information & Communication Technology
- J Human Resources
- K Quality Management
- L Project Control
- M Sales and Marketing
- N Commissioning
- P Pharmaceuticals
- Q Finance
- R Oil & Gas/Business Solutions
- S Facilities Management
- T Fired Heaters
- U Legal Services
- V Compliance
- X Corporate
Project Delivery Platform

Kazakhstan
Project Delivery Model

- Process Design
- Engineering & Design
- Procurement & Material Control
- Construction Contracts
- Fabrication Management
- Site Management
- Completion & Handover Management

Project Management & Control Systems

Project Data Systems
Cost Estimate

Western Style
- User - Owners, Investors, Cost Control
- Allowed contingency
- All the project expenses are included
- Construction part estimate based on past experience and quotes from Construction Contractors – Adequate price
- Quantities of bulk materials can be estimated

Kazakhstan State Style
- User – State Expertise, Government Bodies
- Allowed contingency – 0%
- Some expenses can not be included due to Estimate requirements i.e. procurement management, insurance, office support
- Construction estimate based on approved unit rates that is escalated according to the inflation rate – lower than adequate price
- No estimation on quantities of bulk materials
Cost Estimating Capabilities

What we propose within the cost estimate procedure:

- to make resource based and analog based western style cost estimation with price proposals for future EPC execution
- to make bridge between two styles of estimate and provide differences for understanding
- to give client most convenient and effective way to control cost estimate prepared for state expertise
Challenges, which foreign EPC contractors are experiencing in Kazakhstan, could be mitigated if EPC contractors manage to build cooperation with Kazakhstan contractors.

Key challenges existing in the Kazakhstani market

**Key challenges**

| Engineering & project execution | • Lack of experience in executing projects through EPC contractors  
|                                 | • Need to comply with Kazakhstani standards and norms  
|                                 | • Language barrier  
|                                 | • Lack of effective interaction and integration between Contractors and Kazakhstan Design Institutes (KDI)  
| Procurement                     | • Limited experience of EPC contractors working with Kazakhstani equipment and materials suppliers  
| Logistics                       | • Lack of experience of dealing with Kazakhstani logistic companies  
| Construction                    | • Difficulties experienced by EPC contractors in managing Kazakhstani construction subcontractors  

• EPC contractors still continue to experience challenges that are specific to Kazakhstan market  
• Building cooperation with Kazakhstan contractors will allow more effectively mitigate these challenges and ensure EPC success in Kazakhstan
Key conclusions

1. Oil and Gas Industry in Kazakhstan is currently going through development of new and modernization of existing facilities. Oil & gas companies are in decision-making process of choosing the Engineering & Construction companies to execute the projects.

2. Involvement of foreign EPC-contractors allows Kazakhstan oil&gas companies to manage and execute large projects with minimum increase of own resources.

3. The success on the Kazakhstan EPC market is possible, if foreign contractors are:
   - Ready to take project execution risks under the EPC scheme
   - Able to organize effective management
   - Capable to mitigate challenges, specific to Kazakhstan market, by building cooperation with Kazakhstan contractors.

4. At the same time, Kazakhstan engineering and construction contractors are also demonstrating a strategic interest in the local EPC market and are actively expanding their services towards EPC. The winners could be both Kazakhstan and foreign contractors depending on their level of activeness and determination to propose the optimal project execution and value proposition for the Owner.