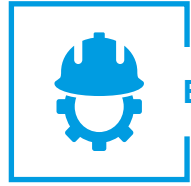




TECHNOLOGY LICENSING

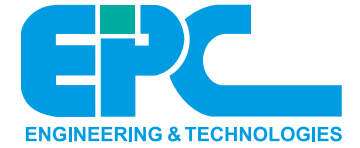


ENGINEERING SERVICES



PLANT CONSTRUCTION

IDEAS INSIDE <sup>EPC</sup>



## Polysilicon Solutions

New polysilicon plants and equipment packages  
Revamp of existing polysilicon plants

### CONTACT

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### Sun moves us - PolySi solutions

EPC and GEC start where it all begins – with the element silicon, as a natural resource of our planet earth. By an elaborate process, polycrystalline silicon (polysilicon) is generated, which is suitable for solar panel manufacturing with a purity of more than 99.9999 %. EPC and GEC are your unique partner for turnkey and functional package projects.

A MEMBER OF  
**EPC** GROUP



EPC Group is certified per DIN EN ISO 9001

IDEAS INSIDE <sup>EPC</sup>





## German Engineering, Technology and Equipment Deliveries

The unique approach for high quality and early start - up for complete PolySi-projects



EPC with its more than 250 engineers worldwide and more than 140 years of engineering tradition is well-known for high-quality processes and plants. EPC's scope of engineering and delivery is TCS synthesis, vent-gas recovery systems, rectification units with its experts know-how as well as utility systems and infrastructure together with civil engineering of complete plants. Furthermore, EPC is a reliable, strong customer-oriented partner with clients in the solar industry from all over the world.

GEC as a consulting-/ engineering and vendor firm is a partner of EPC with the scope of CVD reactors and peripherals, hydrochlorination & hydrogenating conversion with experts know-how, analytics, filaments and polysilicon treatment. Established in 2001, GEC has already more than 160 reactors ordered by clients, more than 135 reactors are delivered and in operation. With the supplying equipment, they already produced several thousands of MT PolySi for clients in Germany, USA, Japan, China and India.

**EPC** GROUP and **GEC** offer the complete range of services

### THE TARGETS OF OUR CLIENTS

- Reduction of total costs per produced kg Si by increasing manufacturing capacity with each phase
- Lower total energy consumption, e.g. by recuperation
- Own TCS-Production, main supply by implementing hydrogenating conversion, including separation and rectification steps
- Integration in existing production site and infrastructure
- Extension of existing value chain (ingots, wafers, cells)
- Enhanced global competitiveness

### FUNCTIONAL TURNKEY

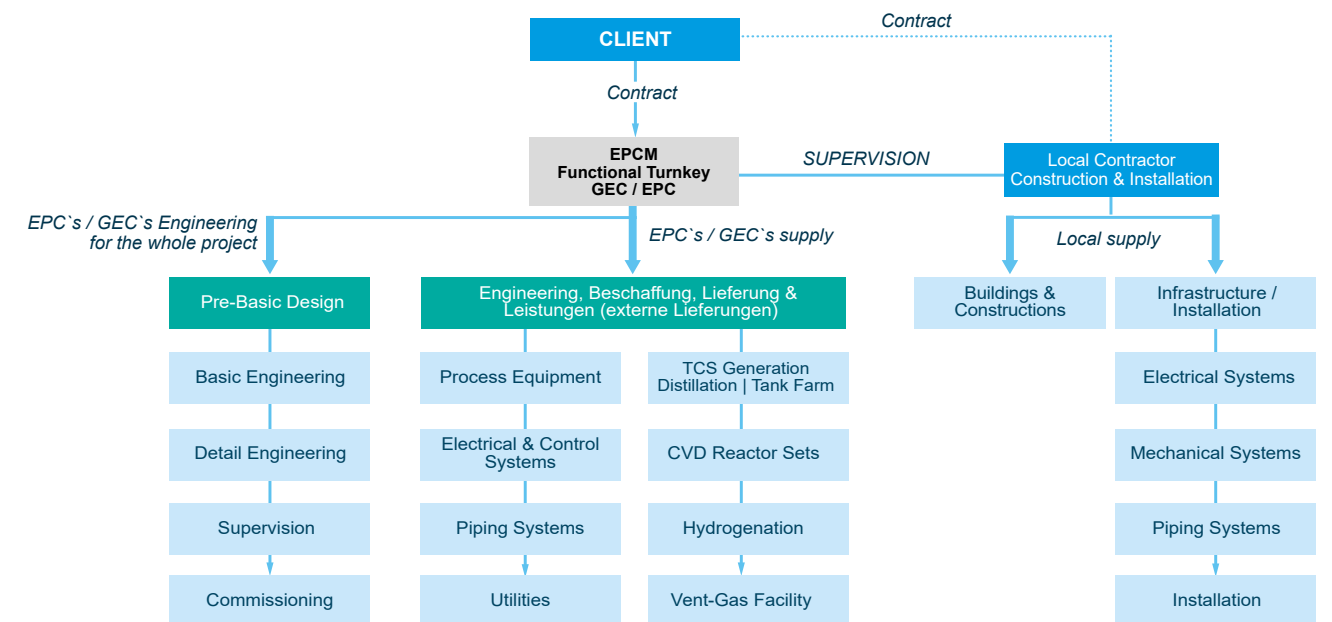
- Pre-Basic Design
- Basic & Detail Engineering
- Civil Engineering
- Procurement
- Construction Management
- Commissioning
- Start-up

## COMPETITIVE ADVANTAGES

- German provider of functional turnkey projects
- German quality for engineering services & equipment supply
- German reliability for short project realization time & start-up
- Worldwide experience
- Plug & play equipment and systems designed for solar grade and electronic grade poly-silicon
- Low investment & operating costs - optimized CAPEX and OPEX values
- Energy-saving systems design
- Integration of existing infrastructure

## UNIQUE ADVANTAGES

Integration of local supply in combination with engineering and supervision by EPC / GEC



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