



GPS Manufacturing Quarterly

China's Belt and Road: Implications for US Firms

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Overview

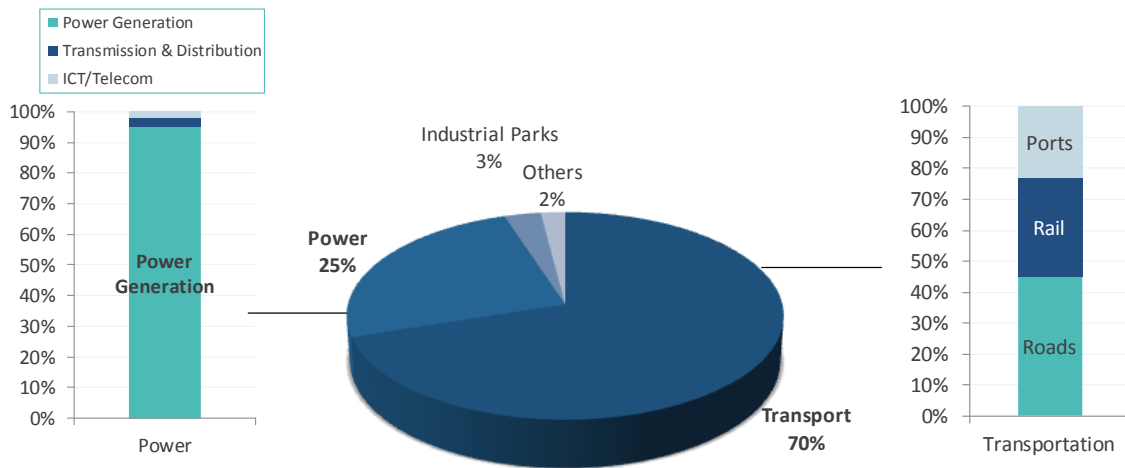
The Belt and Road Initiative (一带一路) introduced by President Xi in 2013 is a multi-faceted strategy that has been difficult to define as it weaves diverse aims - economic, financial and political - together under a romanticized rhetoric. CNBC¹ described the initiative as a way for China to "increase its global clout", while Forbes² regarded it as a way "to satisfy China's excess construction and industrial capacity and to provide an outlet for Chinese products to a growing class of emerging-market buyers". Because it is so broad, BRI can take many different forms, from infrastructure projects to people-to-people cultural exchanges. In this report, we focus on the opportunities to US companies arising from the slew of BRI infrastructure projects in the pipeline.

According to China's National Reform and Development Commission (NDRC), more than USD 1 trillion is said to have been committed by China to various BRI infrastructure projects so far. This funding spreads over more than 1,700 infrastructure projects across 61 countries. But beyond this broad statement, other official statistics on the breakdown of these 1,700 projects are almost non-existent. Based on a sample of 100+ BRI projects that GCiS tracks and monitors, we find that the majority of BRI projects are in transportation or power generation infrastructure building.

¹ <https://www.cnn.com/along-the-belt-and-road/>

² <https://www.forbes.com/sites/riskmap/2017/12/21/belt-and-road-chinas-strategy-to-capture-supply-chains-from-guangzhou-to-greece/#534288186237>

Figure 1: Breakdown of BRI Projects by Industry & Sub-Sector



Note: Based on 100+ well-known BRI projects tracked and monitored; may not be fully representative. Shares are for number of projects.

Source: GCIS

The BRI Landscape & Opportunities for US Firms

As resources are being poured into the building of industrial zones, high speed rail, pipelines, power and telecom networks in BRI countries, demand for building materials and equipment is strong. But, the fact remains that most BRI projects are geared towards reducing excess capacity for Chinese domestic companies, though international firms are also benefiting from this initiative. GE China, for example, saw their orders from Chinese EPC companies increase more than 500% from USD 400 million in 2010 to USD 2.5 billion in 2017.

BRI is a very broad label, covering not just G2G infrastructure projects, but also those undertaken by provincial authorities or commercial entities with the respective BRI host countries. Over the longer term, private companies are also expected to take advantage of the enhanced connectivity put in place in the earlier stages as they enter BRI markets. At present, large BRI projects will continue to be fronted by China's state-owned enterprises (SOEs). Furthermore, Chinese contractors will be leveraging their existing set of capabilities³ to execute these projects, and thus opportunities that arise from outbound BRI projects will not be very different from what your company is currently facing in China.

³ Competitive advantages and organizational capabilities develop over a considerable period of time.

In general, these are the same products that go into a high-speed rail system, power plant, port, etc. If your company has had success for these types of projects in China, then it should be a good fit for outbound BRI projects. Some equipment or components are not procured directly by Chinese contractors but by system providers and for such indirect use, the relationship is likely to be with an OEM, contractor or subsidiary. Outside these areas, other areas such as IT and logistics are also developing.

“[Chinese EPCS] are still procuring mainly *in China*. They have a very strong network *in China*, knowing how to procure technical skills, materials, machinery *in China*. They have a good knowledge-base *in China*. That is their unique competitive advantage.”

Foreign CEO who has competed and collaborated with Chinese EPCS

Figure 2: Examples of Products for BRI Projects

Direct Use (via Chinese EPCS)	Indirect Use (via OEMs, design contractors, etc.)
Primary power equipment (e.g. turbines)	Power components, etc.
Construction & Materials handling equipment	Components, coatings, etc.
Industrial controls	Drives and related products.
Core IT and Telecom equipment	IT components, etc.

Mechanics & Value Chain

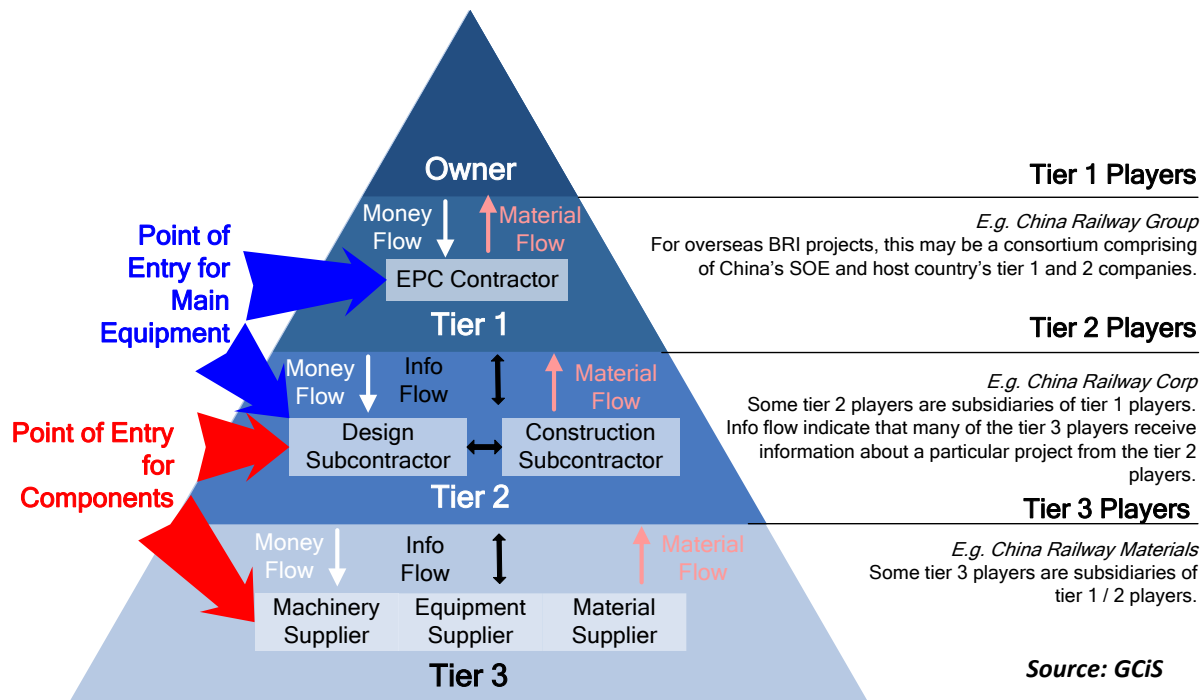
Large BRI projects (e.g. power plant construction) are often broken down into numerous sub-contracts, which are then awarded in phases by different players. In general, after the project has been awarded by the owner to tier 1 players, the general contractor will break up the entire contract into smaller packages and subcontract relevant parts to tier 2 and/or tier 3 players. The detailed value chain will vary from project to project but most will have the basic structure as shown below in Figure 3.

Tier 1 players are typically the larger/SASAC groups (*jituan*), which act as EPCs. In these groups, the functions of design, engineering, procurement/construction are all done by in-group companies. Often there is a consortium, and sometimes Chinese large private/listed firms.

Procurement entry points vary based upon one’s product and understanding your firm’s point of entry is critical. Procurement is usually done in China, but this is not always so.



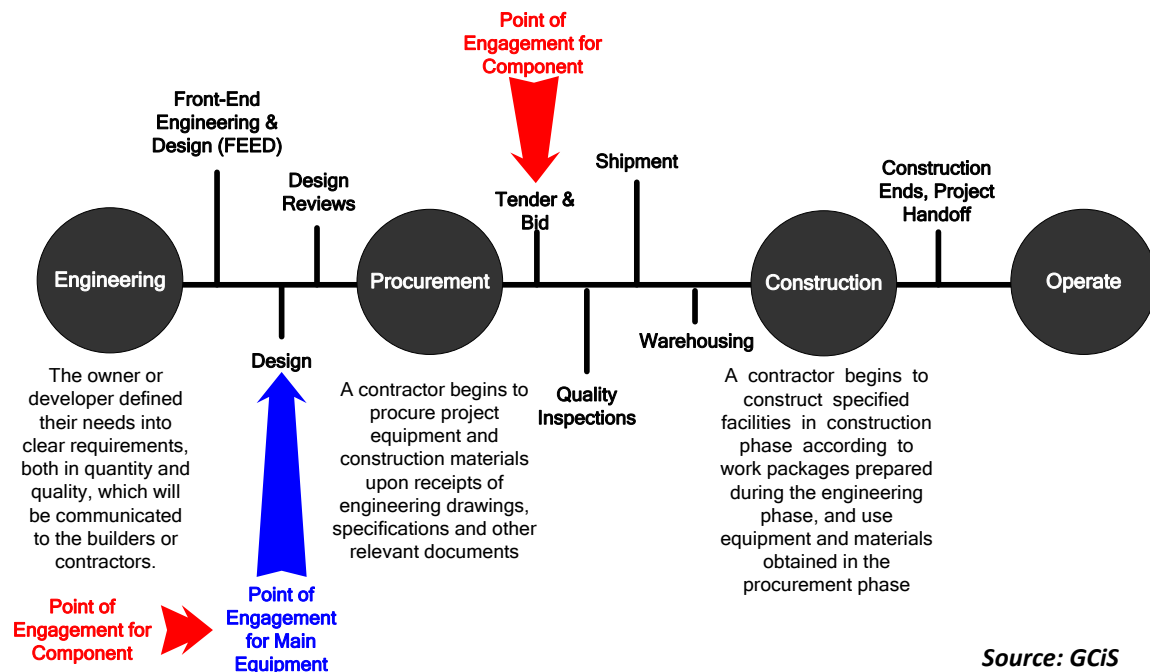
Figure 3: Typical BRI EPC Project Value Chain



The general contractor would typically invite their pool of downstream materials/equipment suppliers to bid. Vertically integrated subsidiaries or affiliated companies within a consortium might also be part of this process. Practice differs in different BRI host countries due to host country's competition laws. Competitive procurement laws differ in the EU (i.e., Hungary) compared to African countries, for example. In general, pre- and post-qualification of equipment or material suppliers depends on the project owner and project complexity. There is typically no special BRI qualification other than meeting Chinese national and sometimes host country qualifications.

Vendors sometime need to pre-qualify to be on EPCs' Approved Manufacturer List - Chinese SOEs like the State Grid conduct an annual pre-qualification exercise. Whilst this is required on the surface, the process by which a company gets on the list of the tender evaluation process is not entirely transparent. Again, entry and engagement points vary based upon one's product and understanding your firm's point of entry is important. (See Figure 4 below).

Figure 4: Project Sequence and Procurement Processes



Opportunities for US Firms

Most large US companies in China have longstanding relationships with key BRI players, and thus a seat at the BRI Table. They also have presence in BRI target countries. Some already had BRI strategies or programs 2-3 years ago. This includes the likes of Honeywell, Cummins, GE, Rockwell, Caterpillar and Dell. Also, Chinese SOEs have been winning projects in BRI countries, and US companies - like Honeywell and GE - have been supplying their products to Chinese SOEs before the formalization of BRI. For US companies that are already plugged into the BRI ecosystem, deepening partnerships with Chinese partners at all applicable tiers continues to be important.

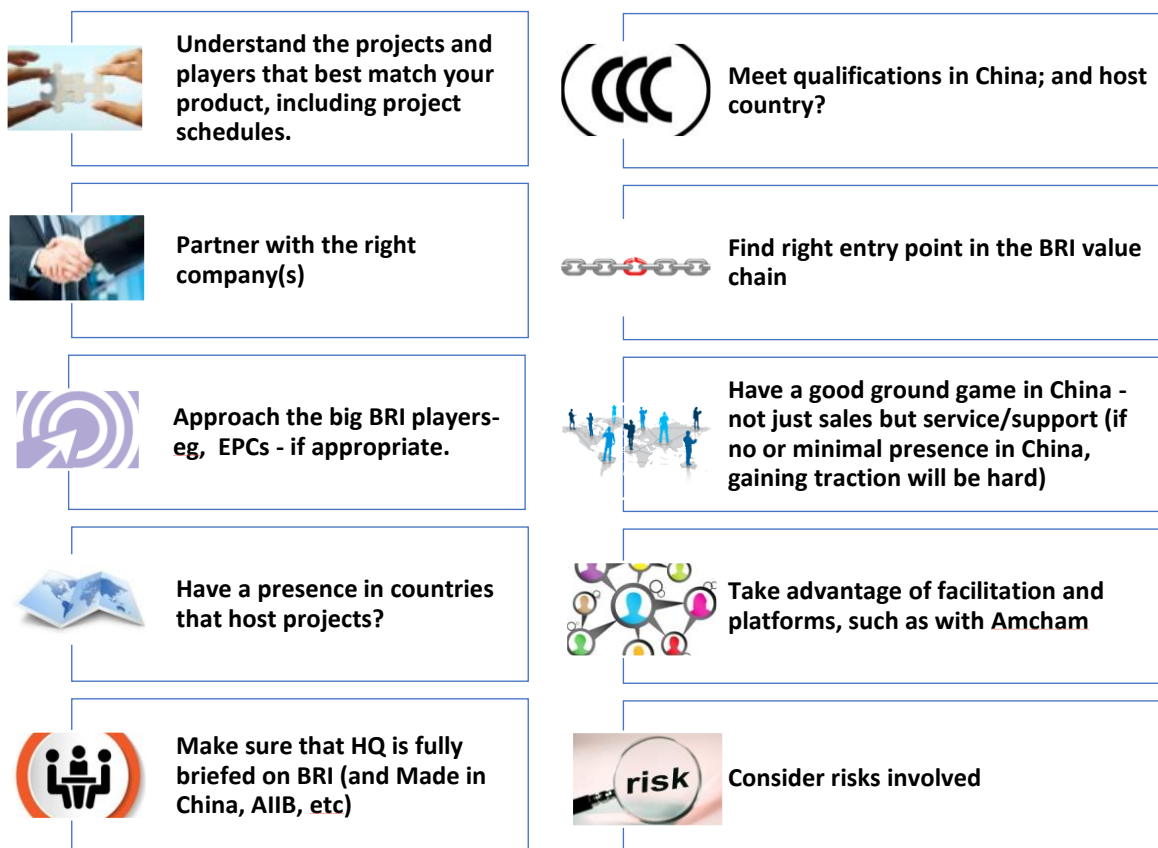
US firms can take advantage of existing BRI networking platforms. Companies can leverage the resources of business associations such as AmCham, or can seek out matchmaking opportunities provided by the US Embassy's BRI working group. There are also numerous BRI-related events and forums driven by fellow US companies and government sponsored think tanks. The China International Contractors Association (CHINCA) also plays an important role in foreign companies' involvement in BRI activities. CHINCA will be hosting a major BRI forum on June 8 in Macao.

For US companies that are now looking to access BRI-related opportunities, there are the normal issues of sales in China: price competition, preference for local products, effort involved in sales, understanding the market. Dealing with the large Chinese SOEs or players is difficult for all, and SMEs in particular. Also, under the current climate of rising protectionism, partnerships with Chinese companies are also likely to be more difficult. For a start, smaller US suppliers could consider partnering with US firms that are already in the BRI.

Notes of Caution for US Firms

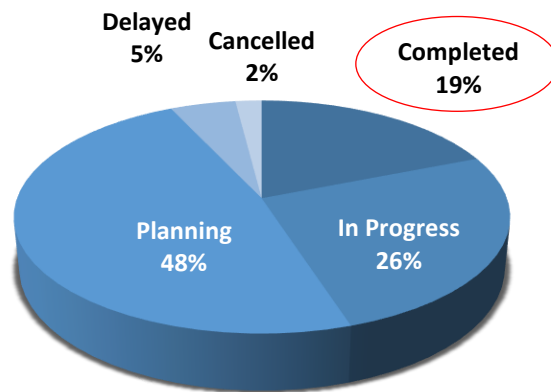
Import vs. Localize – In general, Made in China 2025 will make it more difficult for imported products to find traction. In recent years, US companies like Parker Hannifin and Eaton have already shifted part of their manufacturing capabilities to China to enhance their competitiveness in China. However, the implementation of this policy is not homogeneous across China's industries and can be selective even within the same industry.

Figure 5: Ways to Approach BRI



Changing Regulations & Business Planning – For instance, earlier this year, China removed the longstanding tax breaks for *smaller* imported agricultural equipment (e.g. <180 hp tractors, <6 row rice harvesters) but accorded tax breaks to selected types of *larger* equipment like large horsepower tractors, self-propelled agricultural sprayers as well as its components (e.g. clutch, hydraulic motor, cutter and spray system). Frequent and ad-hoc policy changes in China could have significant impact on companies' revenue and growth prospects. In the same vein, an understanding of how regulatory trends affect the continuity and scale of China's involvement in BRI is also critical to US companies in laying out your BRI strategy in market.

Figure 6: BRI Projects by Project Status



Note: Based on 100+ well-known BRI projects tracked and monitored; may not be fully representative. Shares are for number of projects.

Risk Management – Large infrastructure projects typically have long gestation periods ranging from 10 to 30 years and their commencement or completion could be subjected to changes due to political interference over the years. Based on our research as of end 2017, only about 19% of BRI projects are completed. Delayed, suspended or cancelled projects accounted for about 7% of total. Each company needs to determine risk levels, in terms of; cost of entry, licensing, performance requirements, technology transfer, adherence to US law, etc.



About the Author

Since our founding in 1997, GCiS has provided value added analysis and strategic recommendations based upon first-hand field research with a clear focus on China. GCiS, using proprietary research management methods, has for 20 years provided transparent, trustable and actionable research for our multi-national clients.

With offices in Beijing, Shanghai and Wuhan, GCiS offers both custom research services and publishes a range of multi-client studies related to our target industries. GCiS applies its standards and methods to both custom and multi-client research. This ranges from technology to industrial markets, chemicals & materials, power & energy, building & construction, industrial & capital goods, medical systems, and transport. Learn more at www.gcis.com.cn.

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AmCham Shanghai's Government Policy Support (GPS) Program is dedicated to helping members navigate the impact of industrial policy on business. Drawing from the knowledge of industry experts in business, academia, and government, GPS provides members with the latest policy developments and valuable insights into how these translate into commercial opportunities and challenges for companies.

This report is the first in a series of quarterly reports available exclusively to GPS Program members. For more information, please contact gps@amcham-shanghai.org.

