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9B19M097

PowerChina: international strategy and risk management

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In 2016, after integrating the entire business into one operational conglomerate, the Power Construction Corporation of China Ltd. (PowerChina) officially decided to put more efforts and resources into global competition. By the end of 2017, PowerChina had built 322 overseas offices in 109 countries, and in 2018, it ranked 10th in Engineering News-Record’s (ENR’s) list of the top 250 international contractors in 2018.[[1]](#footnote-1)

In 2017, the top 250 international contractors increased returns for the first time after three consecutive years of declining revenue, with a growth rate of 3.1 per cent in total turnover.[[2]](#footnote-2) In this circumstance, PowerChina confidently stated,

After integrating an environmental analysis of international and domestic development, opportunities and risks coexist. Combined with the integration of international business and localization in certain markets, advancement has determined that the next few years will be a rare opportunity for the development of PowerChina.

However, the more severe, competitive and changeable situation caused PowerChina’s vigilance. Therefore, in order to respond flexibly to possible challenges in 2019, PowerChina urgently needed to determine whether its current internationalization strategy was still appropriate for the future, if its risk management system was out of date, and how both the internationalization strategy and risk management system could be improved.

PowerChina[[3]](#footnote-3)

PowerChina was a highly diversified construction group that provided investment financing, planning and design, engineering construction, equipment manufacturing, and operations management for hydraulic and hydropower projects and infrastructure. Its principal businesses included energy and power, construction engineering (including surveying, planning, design, and project contracting), water ecological environmental governance, and the development and operation of other resources. The company had interests in real estate development and operation and in the manufacture and lease of related equipment. In addition, upon the authorization of relevant national ministries and commissions, PowerChina undertook functions such as national planning and review of hydropower, wind power, solar power, and other clean energy and new energy sources. With 186,000 staff, PowerChina achieved an operating income of ¥404.9 billion[[4]](#footnote-4) in 2018. PowerChina’s overseas income and market distribution data are shown in Exhibit 1.

PowerChina’s Internationalization

Before 1993, PowerChina was taking an inactive, opportunity-driven, and sporadic business approach. In 1964, in the first phase of the firm’s international development, one of PowerChina’s predecessors built the Jinkang Hydropower Station in Guinea—one of the first of China’s enterprises carrying out overseas projects.[[5]](#footnote-5) In 1982, Hydropower Fourteen Bureau, a subsidiary of PowerChina, entered the Lubuge Hydropower Project, the first hydropower project in China funded with a loan from the World Bank. This project enabled China’s hydropower industry (which had a relatively conservative orientation for being affected by China’s economic planning) to confront the impact of modern enterprise operations, which led PowerChina to establish a modern enterprise system. The venture opened a window to international operations.

Further, in 1985, PowerChina (again as its predecessor) became one of the first Chinese foreign economic subcontractors. At that stage, PowerChina was still experiencing the effects of China’s planned economy and thus lacked the capabilities necessary for modern engineering projects in project management and contract fulfillment, especially in markets outside of China. In addition, its competitiveness generally relied on employing low-cost labour. Nonetheless, PowerChina tentatively took its first step into international operations under the domestic and international effects of the external pull of trade by importing countries, the internal push of trade by the Chinese government, and the uncertainties of being inexperienced in management and global politics.

From 1993 to 1999, PowerChina was pursuing a step of independent exploration instead of being pushed by the Chinese government into international development. After obtaining a licence for construction and labour co-operation in foreign contracted projects, PowerChina seized the initial opportunity to invest and increase its efforts internationally. It established its first foreign office in 1994—the Sinohydro Nepal Representative Office—and undertook a hydropower station project in Ilam, Nepal in 1995. This was PowerChina’s first general contracting project overseas in the name of the China National Water Resources and Hydropower Engineering Corporation (CWHEC). In December 1995, PowerChina won the first project in Pakistan under CWHEC—an irrigation canal engineering in Patfield, Pakistan. Later, as its international competitiveness gradually improved, PowerChina built the first overseas engineering, procurement, and construction (EPC) project in Bangladesh in March 1999—the Maigalhart Power Plant Preparation Project, which was PowerChina’s first attempt at implementing its new EPC business model.

During this time period, PowerChina actively participated in international bidding and began to upgrade its business model. Facing the uncertainties brought about by the international economic situation at the time, such as the Southeast Asian economic crisis, information asymmetry, and market competition, PowerChina actively advanced its international business through management initiatives.

From 2000 to 2005, PowerChina integrated its international business resources. In 2000, it proposed using the “four unifications” principle of international business (which it created), whereby management, PowerChina’s allocation of foreign economic resources, its use of group brands, and its outreach and co-operation were unified. PowerChina used this process to begin its formal venture into international business. After two years, in 2003, PowerChina officially became a central enterprise supervised by China’s State-Owned Assets Supervision and Administration Commission (SASAC). Since then, the company targeted the global market with the unified image of the Sinohydro brand.

In its biggest win since establishing the Sinohydro brand, PowerChina won its bid for the Merowe Dam Project in Sudan, the largest single project in China’s international engineering history. With a total contract value of about US$2 billion,[[6]](#footnote-6) PowerChina ranked within the upper 100 of the top 225 ENR international contractors for the first time, even though it already had 28 projects remaining under construction in 19 countries globally.

In 2004, PowerChina completed the first integration of its international business, and Sinohydro Corporation Limited was formally established to oversee the international business within the group. During this resource integration phase, PowerChina entertained the idea of centralizing its operations because it recognized the abundant returns brought by large projects and brand power. Therefore, even though PowerChina faced the uncertainties brought about by the international economy, terrorism, market differences, and competition, it still chose to discount risk and to emphasize speed to market as it explored overseas markets and continued tendering for projects.

From 2006 to 2015, PowerChina was in a fast-track phase of its internationalization strategy. It put forward and vigorously implemented a priority strategy for its international business development—a development trend of international business known (created by PowerChina) as “big group, broad market, great brand, and vertical integration.” Hence, from 2006 to 2009, PowerChina successfully entered the high-end market of the Middle East, West Africa, and the Americas.

By 2011, PowerChina was established and its international business was scattered across three platforms, including the groups overseas, two international companies (Sinohydro and HydroChina Corporation), and overseas subsidiaries through which the expansion of overseas markets sharply accelerated. For instance, in 2012, the company successfully opened markets in Bosnia and Herzegovina, Belarus, and Poland, thus achieving a breakthrough in the high-end market of the European Union (EU). Taking this step involved promoting diversified development. For instance, in 2013, PowerChina successfully signed the first subway construction contract in the overseas market—the T217 section of Singapore’s Thomson–East Coast subway line. The company also signed its first overseas photovoltaic power plant project—Algeria’s solar photovoltaic project.

Notably, in 2015, the company’s first investment project in Laos promoted the implementation of the whole industry chain integration strategy aboard,[[7]](#footnote-7) completing the complete array of investment activities in one year. By the end of 2015, PowerChina had 1,067 project contracts under construction through 96 countries. Among them, 604 projects with a total contract value of $37.2 billion were undertaken among 42 “Belt and Road” countries, aiming to follow the home country government central policies.

Facing increasingly fierce competition, PowerChina focused on developing core strengths, emphasizing the continual extension and improvement of its industry chain and attaching importance to innovation, technology, and preliminary planning. The company faced three problems: (1) the increasingly complex uncertainties associated with project financing; (2) bilateral and multilateral relations, increasing costs, and an uncertain international economy; and (3) the challenge of responding to the company’s need to control risk. PowerChina demonstrated an awareness of market competition risk, investment risk, and capital risk, and then strengthened its ability to follow the Chinese government’s policies by emphasizing the priorities of international strategy and promoting the company’s ability to finance its commitments.

The most recent international strategy was put forward in 2016. In this strategy, PowerChina proposed the “three steps and three majors” principle of international business. Here, the “three steps” consisted of integrating the group’s international business, localization, and globalization. The “three majors” included the “great transformation” strategy, whereby PowerChina was to be transformed from a traditional contractor to a comprehensive infrastructure investment group. This big integration strategy, according to PowerChina, followed national initiatives such as the Belt and Road Initiative and integrated with local socio-economic development. It was the strategy of a great brand insisting on making the parent brand, PowerChina, strong and promote parent–child brands, which included Sinohydro and HydroChina.

In addition, PowerChina established an international business management model that clarified five unified activities. This model involved unifying strategic planning, brand management, market layout and marketing, performance supervision, and risk prevention. This model also defined five centres of regional headquarters that comprised marketing, project supervision, information, social responsibility, and the Communist Party of China.

PowerChina’s OPerations under the newest Strategy

Context

Since 2016, increasingly complex global conditions and new initiatives from the domestic Chinese government had profoundly impacted PowerChina’sinternationalization process. In this environment, the world economic recovery remained slow and uneven so that nations chose to stimulate economic growth by expanding investment in infrastructure construction. Competition in the international market continued to intensify, with debt ratios in some countries extremely high and de-globalization forces and mindsets becoming apparent. Fortunately, global energy and electricity demand showed stable growth, especially in developing countries where demand for energy and electricity infrastructure rose rapidly. Among them, traditional energy still dominated, and although clean energy initiatives were growing rapidly, clean energy was still subject to various constraints.[[8]](#footnote-8)

In China, the grand design for the Belt and Road Initiative highlighted that the strategic position of international business in enterprises was prompted by introducing new foreign investment methods and promoting international co-operation with energy initiatives.[[9]](#footnote-9) However, as the projects relying on foreign aid concessional loans or preferential export buyer credit were discounted, the centralized policy orientation of “government guidance, enterprise-led, and market-oriented operation” became more obvious.[[10]](#footnote-10) Moreover, while emphasizing that enterprises should undertake their own risk assessments and mitigation, foreign exchange regulation and overseas investment opportunities were increasingly tightening.

PowerChina’s Current Activities

On March 10, 2016, PowerChina reorganized and integrated its international businesses involving the overseas business unit, Sinohydro, and HydroChina to form PowerChina International. In the same year, PowerChina decided to establish regional centres in the following six regions: East and South Africa, Central and West Africa, the Middle East and North Africa, Asia Pacific, Europe and Asia, and the Americas.

In addition, regarding its organization, the company made changes to its business department in 2017 (see Exhibit 2) and achieved developments in many fields of operation by improving its training system, regulating employee promotion, reforming its investing and financing, publishing 150 regulations, establishing an overseas volunteers’ group, establishing a compliance committee, and implementing an evaluation system to measure performance. PowerChina’s capacity was gradually improved, and the operation became more compliant with its business target.

In 2018, the company successfully issued a five-year non-redeemable senior perpetual bond in Hong Kong for the first time, which marked the company’s appearance in the international capital market. This development delivered a boost to the company’s capital operation.

The intricacies of the environment had made PowerChina aware of the increasingly fierce competition in international business, which included competition among PowerChina’s subsidiaries. This meant that PowerChinabecame more committed to the idea of centralized management and that its international businesses needed to be re-integrated. Thus, as a largeenterprise, the team followed and benefited from policies that produced initiatives like the Belt and Road Initiative and others.

As well, PowerChina firmly promoted globalization initiatives, improved its ability to integrate resources, and paid increased attention to risk and project performance. To deal with uncertainties such as political turmoil, project financing, and trade barriers, PowerChina concerned itself with four types of risk—those that related to performance, compliance, non-traditional security, and integrity—and it moved forward with setting a globalization strategy.

In this new era, PowerChina’s international business strategy achieved strong outcomes and reform dividends appeared. Overall, the company ranked 17th among ENR’s top 150 international design contractors and ranked first of ENR’s 225 international contractors. With respect to industry status, PowerChina ranked first in the power industry internationally, third in the water industry internationally, and it entered the fields of sewage and hazardous waste treatment. With respect to status of overall operation income in different markets, PowerChina ranked second in Africa, seventh in Asia, tenth in the Middle East, and seventh in Latin America.

These achievements reflected on PowerChina’s “three steps” principle in the fifth stage. First, integration of the company’s international businesses reached high levels. Establishing the group system was completed and the early stages of the three-dimensional marketing system had occurred. At the same time, the directors’ responsibility for developing the group’s large projects led to an official launch of internationalization. Second, localization initiatives strengthened in that the six regional headquarters were all established and were functioning normally, and localization processes achieved breakthroughs in communicating and co-operating with clients from which contracts were to be won. Third, globalization initiatives continued to progress, with PowerChina having 322 foreign subsidiaries in 109 countries, including 150 foreign subsidiaries in 42 Belt and Road countries. PowerChina also merged with the Italian company Geodata Engineering SpA in 2017.

The Development of PowerChina’s Risk Management

Risk Ignorance

As a centralized enterprise dependent on the government of China, PowerChina typically ignored risk when first entering the international arena to the extent that its degree of risk awareness was low and its performance results rarely changed the levels of its commitment in foreign markets. Although the separation of government and enterprise was promoted, the mindset in PowerChina was subject to an inertia that weakened its awareness of risk management of its overseas businesses. Until 2013, the risk perception of PowerChina’s overseas business was restricted to realizing that overseas investment projects were characterized by huge investments, long cycles of construction, and a long payback period. Consequently, political instability and economic fluctuations in the market, natural disasters, unfavourable changes in policies and laws, tax increases and reductions in preferences, trade sanctions, and international litigation were likely to constrain overseas construction and investment business, but their riskiness was not formally assessed.

As a response, in 2011 and 2012, PowerChina moved to establish a basic risk management system with specific systems for specific risks. Its previous risk management systems were not then sufficiently advanced to be operational and thus, risk management systems were not able to measure risk and protect PowerChina from losses.

Risk Response: Major Risks Level

With competition in overseas markets intensifying further, PowerChina divided the risks of overseas business into market competition risk, investment risk, and capital risk for the first time in its annual report. Therefore, in treating risk, and depending on the risk characteristics it identified, PowerChina established an overseas regional headquarters to take a leading role to further improve the quality and efficiency of its overseas operations. Further, PowerChina generally strengthened co-operation between its strategic group and the whole chain, which included investment, planning, and design, project contracting, equipment manufacturing, and operation of projects, by analyzing foreign market trends and the core advantages within the company’s foreign markets. This approach involved planning for market selection and determining how to enter these markets before investing in them.

In addition, for risk management, PowerChina implemented a strict overseas business supervision and management system. The company also undertook four activities: inspecting and risk consulting for projects, expanding the information channels of overseas businesses, establishing completed emergency response mechanisms to properly handle non-traditional security emergencies, and promoting the professional control system of overseas risks. PowerChina also addressed its human resources, strengthening the employment and training of its talent in local areas and further establishing resource allocation and improved management and incentive priority support systems.

Risk Response: Enterprise Level

Since 2016, in addition to the previously discussed unfavourable conditions, PowerChina’s risk management had been challenged by intensifying trade protectionism, the privatization of investment entities, the growing debt ratio of some countries, and tightening foreign investment supervision in China (see more details in Exhibit 3).

In response, PowerChina set the risk management objectives of “control significant risk, special risk, and risk factors” and established an enterprise risk management (ERM) approach (see in Exhibit 4). It drew on the ERM framework published by the Committee of Sponsoring Organizations of the Treadway Commission (COSO) in 2004, with internal and external links and a combination from point to surface. This meant combining internal control with external risk management and integrating professional or significant risk management with overall risk management. According to this approach, procurement included risk identification, risk assessment, and risk treatment.

First, risk identification adopted an “evaluating from top to bottom, integrating vertical and horizontal aspects” approach, which involved moving from site risk to department risk and, finally, to company risk to recognize the hierarchy and the uniformity of risk. Concurrently, information was collected across all departments and at all levels of the company’s hierarchy, addressing important challenges and analyzing each risk within the company’s policies and regulations and their implementation, and within organizational responsibilities, human resources, and technology to ensure that risk identification was broad and accurate.

Second, the analysis of risk adopted the “combine internal aspect with external aspect” approach, which analyzed not only the internal risk factors but also those at the industry level. This approach was also concerned with domestic and international economic and political situations and with integrating internal and external aspects to form a global risk database. Operationally, information was collected primarily from questionnaires and gathered from functional departments’ discussions and company leadership’s opinions. Specifically, information was derived from risk assessment questionnaires that related to corporate strategy, major investments, large capital use, marketing, quality of construction, safety, and project operations related to corporate reputation and sustainability. Other issues the company considered it needed to assess for risk were evaluated by assessing the integrity of companies’ leaders and senior managers.

Collecting risk information according to the already mentioned objectives facilitated an understanding of the important focus of managers and what motivated risk and the impacts of internal and external risks. PowerChina initially drafted a list of its top ten major risks. It then comprehensively combined qualitative and quantitative analyses to determine how a company could ascertain the dominant and basic characteristics of each risk statistically.

The company assessed the biggest risks by considering their occurrence and the degree and extent of their influence. PowerChina used the political, economic, social, and technological (PEST) and strengths, weaknesses, opportunities, and threats (SWOT) frameworks for this analysis. A risk coordination map was then drawn and the specific methods of implementing risk management were described in four dimensions, namely, the impacts, management strategies, specific solutions, and the responsible departments.

The Next Considerations

After two years of restructuring and integration, working within the complex situation of the downturn in international markets, fierce competition, and political instability in some countries, PowerChina’s overseas production and operation indicators continued to rise against the trend. Despite their growth, the more severe, competitive, and changeable situation emphasized PowerChina’s need to remain vigilant. Therefore, as the company aimed to maintain a strong growth trajectory in 2019, PowerChina needed to carefully consider whether the company’s current internationalization strategy was still appropriate, if the company’s risk-management system was out of date (see Exhibit 5 as a reference), and how both could be improved.

EXHIBIT 1: POWERCHINA’S OVERSEA’S INCOME AND MARKET DISTRIBUTION

Table 1: 2011–2017 Operating Income

Table 2: Distribution of Operating Income by Region

Note: ¥ = CNY = Chinese yuan renminbi; ¥1 = US$0.14.

Source: PowerChina, *Annual Reports*, 2012–2018.

EXHIBIT 2: PowerChina’s MANAGEMENT CODE OF INTERNATIONAL BUSINESS



Source: Company documents, 2017.

EXHIBIT 3: CHANGES AND CAUSES OF MAJOR RISKS IN 2017 COMPARED WITH 2016

| **Serial Number** | **Major Risks in 2016** | **Major Risks 2017** | **Conditions** |
| --- | --- | --- | --- |
| 1 | Marketing risk | Performance risk | Adjustment of risk order |
| 2 | Performance risk | Marketing risk | Adjustment of risk order |
| 3 | Safety production and quality risk | Safety production and quality risk | Remained |
| 4 | Exchange rate risk | Compliance risk | Adjustment of risk order and name |
| 5 | Talent reserve risk | Investment risk | Adjustment of risk order |
| 6 | Brand management risk | Human resource risk | Adjustment of risk order and name |
| 7 | Survey and design risk of construction | Exchange rate risk | Adjustment of risk order |
| 8 | Legal risk of foreign operations | Cost control risk | New risk |
| 9 | Cash flow management risk | Cash flow management risk | Remained |
| 10 | Investment risk | Survey and design risk | Adjustment of risk order and name |

Source: PowerChina, “Comprehensive Risk Management Report,” 2017.

EXHIBIT 4: RECENT FRAMEWORK FOR POWERCHINA’S ENTERPRISE RISK MANAGEMENT

risk management strategy + practical solutions + identified responsible department

**Risk Response**

**Risk Assessment Methods**

* according to the company’s risk assessment standard table
* qualitative and quantitative analysis of the probability and impact degree of risk occurrence in the risk database
* analysis of the causes of major risks using PEST and SWOT frameworks

**Representation of Results**

* top ten risks
* risk maps
* top ten risk changes in adjacent years and their explanatory tables

**Risk Assessment**

**Risk Identification Sequence**

* job risk ≫ department risk ≫ company risk ≫ external risk

**Risk Identification Scope**

* within the company, horizontally covering all departments and key business matters
* outside the company, referring to the industry level, domestic and international economic and political situation

**Collection Methods**

* mainly based on questionnaires, supplemented by functional departments to discuss and solicit opinions from company leaders
* the scope of the investigations covers company leaders and senior managers

**Risk Identification Results**

* risk database consisting of 67 risks facing the company in the strategic, financial, market, operational, and legal categories.

**The collection of risk information and establishment of risk database**

Source: Created by the case authors.

EXHIBIT 5: Enterprise Risk Management Integrated Framework

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Governance & Culture** | **Strategy & Objective Setting** | **Performance** | **Review & Revision** | **Information, Communication & Reporting** |
| 1. Exercises board risk oversight | 6. Analyze business context | 10. Identifies risk | 15. Assesses substantial change | 18. Leverage information and technology |
| 2. Establishes operating structures | 7. Define risk appetite | 11. Assesses severity of risk | 16. Reviews risk and performance | 19.Communicates risk information |
| 3. Define desired culture | 8. Evaluate alternative strategies | 12. Prioritizes risks | 17. Pursues improvement in enterprise risk management | 20. Reports on risk, culture, and performance |
| 4. Demonstrates commitment to core values | 9. Formulates business objectives | 13. Implements risk responses |  |  |
| 5. Attracts, develops, and retains capable individuals |  | 14. Develops portfolio view |  |  |

Source: Committee of Sponsoring Organizations of the Treadway Commission, *Enterprise Risk Management: Integrating with Strategy and Performance* (June 2017), accessed October 11th, 2018, www.coso.org/Documents/2017-COSO-ERM-Integrating-with-Strategy-and-Performance-Executive-Summary.pdf.

1. “ENR’s 2018 Top 250 International Contractors 1–100,” Engineering News-Record, August 2018, accessed May 4, 2019, www.enr.com/toplists/2018-Top-250-International-Contractors-1. [↑](#footnote-ref-1)
2. Ibid. [↑](#footnote-ref-2)
3. SinoHydro, HydroChina and CWHEC, represented in the following case, were all predecessors of PowerChina. And PowerChina still uses these brands for overseas bidding. [↑](#footnote-ref-3)
4. ¥ = CNY = Chinese yuan renminbi; ¥1 = US$0.14. [↑](#footnote-ref-4)
5. “PowerChina Advances in Asia and Africa,” *China Daily*, January 7, 2019, accessed July 11, 2019, www.chinadaily.com.cn/m/powerchina/2019-01/07/content\_37423644.htm. [↑](#footnote-ref-5)
6. Dollar amounts are in US$ unless otherwise specified. [↑](#footnote-ref-6)
7. The integration of industry chain meant that PowerChina was not only a construction contractor. This meant that it was also playing an active role in investment, planning, and design, project contracting, equipment manufacturing, and operation of projects. . [↑](#footnote-ref-7)
8. Jin Rui, “Infrastructure Drives the Market and Regional Patterns Are Adjusted Again: A Review of the Performance of the World’s Largest 225 International Contractors in 2016,” *Journal of International Economic Cooperation* 11 (2017): 4–12, accessed October 5, 2018, http://kns.cnki.net/kcms/detail/detail.aspx?dbcode=CJFD& filename= GJJH201711002&dbname = CJFDLAST2018&uid= WEEvREdxOWJmb C9oM1NjYkZCbDdrdTVZb 3R1eV JlbzVMdThkZHdiTF VYSys%3D%24R1yZ0H6jyaa0en3RxVUd8df- oHi7XMMDo7mtKT6mSmEvTuk11l2gFA!! [↑](#footnote-ref-8)
9. Xi, Jinping, “Winning a Completely Well-off Society and Winning the Great Victory of Socialism with Chinese Characteristics in the New Era,” People’s Daily, October 28, 2018, accessed October 5, 2018, http://cpc.people.com.cn/n1/2017/1028/c64094-29613660.html. [↑](#footnote-ref-9)
10. Ibid. [↑](#footnote-ref-10)