On Dec. 2, 2013, CITIC Pacific's Sino Iron Project, the world's largest magnetite mining project, celebrated its first shipment of magnetite concentrate.

The Sino Iron Project is the largest single investment in Australia's resources sector by a Chinese company. It is also one of the few projects in Australia's resources sector which is wholly owned by a Chinese enterprise, as well as China's largest overseas "greenfield investment" project. However, because such investments need to strictly follow the investment laws and regulations of the host country and rigid costs are difficult to avoid, the requirements on investors' management level are high.

The Sino Iron Project was commissioned in 2006. The original planned investment was US$ 4.2 billion, and it was supposed to start delivering processed ore in 2009. However, after construction began, the project ran into a spate of delays and legal snags. By the time of the first shipment seven years later, capital investment in the project approached US$ 10 billion. Additional investment is still required to reach completion.

Liu Jie, an academician at the Chinese Academy of Engineering and a metallurgical industry expert, thinks the project is of historic significance to the iron ore mining industry. This view is widely recognized in the industry, not only because of the scale of the project, but also because of the lessons that can be drawn from it.

CITIC Pacific signed an engineering, procurement and construction (EPC) contract with Metallurgical Corp. of China (MCC) in 2007. MCC was charged with overseeing the technological process for digging the mine and building processing facilities. According to standard procedures, the first step in the project should have been to ship several tons of ore samples back to China for large-scale industrial testing and demonstration. But this important step was largely overlooked during the project's commissioning phase.

Australia's iron ore industry has long maintained a focus on the extraction and export of hematite. Hematite has relatively high iron content, and it only needs to undergo a simple crushing and sifting process before it can be used directly in steel production. In comparison, the iron content of magnetite is rather low, and only after it undergoes an extensive process of crushing, sifting, grinding, sorting and filtering can it be used in steel production. But even the most seasoned Chinese steel companies have little experience and ability in large-scale magnetite mining.

Although CITIC Pacific and its partners ultimately uncovered the technical bottlenecks, this typical "Chinese-style" approach to construction, design, and modification which was meant to cut costs ultimately resulted in inestimable time and money costs in an environment like Australia with particularly strict requirements on engineering quality, environmental protection, and labor protection.

With Australia's labor shortage, the average salary for a miner in Western Australia is well over AU$ 100,000. The Australian Government requires all workers to earn at least a grade six on the International English Language Testing System, and a large number of Chinese workers were prevented from working on the project due to Australia's labor visa regulations. This caused actual costs of the project to mushroom far beyond CITIC Pacific's previous optimistic estimates.

Litigation risk is another major variable which may affect the future of the Sino Iron Project. Disputes over royalties, patent fees for iron ore production, options of iron mines, and control over the project's Cape Preston port have entangled CITIC Pacific in a series of lawsuits with Clive Palmer, an Australian businessman and owner of the mineral rights for the mine.

The selection of local partners is an important factor which can affect the success of cross-border investment. An industry insider familiar with foreign investment said Chinese investors should sharpen their vigilance before choosing a partner, become more familiar with the business environment and laws and regulations of the target investment country, and be prepared to deal with all kinds of potential risks.

Two production lines have been put into operation so far. CITIC Pacific estimates that based on experience of constructing the first two lines, the construction period of the remaining four lines will be about two years, and after the project goes into full production, total production capacity will reach 24 million tons of iron concentrate per year. For the Sino Iron Project, the ability to achieve profitability as soon as possible will depend largely on future iron ore prices and the successful commissioning of subsequent production lines.

CITIC Pacific had insufficient understanding of Palmer before entering the Sino Iron project. Palmer’s structure of transaction was very complex when selling magnetite mining rights to CITIC Pacific. Former CRA Limited (now Rio Tinto Limited) General Counsel for 14 years, lawyer Zhang Baishan (Robin Chambers) pointed out that this transaction was unusual in the form of mergers and acquisitions in the resources industry in Australia, and Palmer's terms were very unique, the only one in the Australian mining industry so far.