Executive Summary

C&J Cladding is a Texas-based technical welding services company that is considering expanding into Brazil. The opportunity for C&J to enter Brazil is highly compelling based on the projected growth of Petrobras, Petrobras' increasing need for cladding services, and also Petrobras' strong preference for domestic suppliers, in addition to the lack of independent cladding companies in Brazil. To enter Brazil, C&J is faced with numerous expansion options; however, C&J's strongest alternative is to enter Brazil by a staged timing of entry with the objective of establishing a limitada. This solution emphasizes C&J's relative advantages while minimizing execution risk and prolonging the exit option during completion of an extended diligence process. In addition, organic growth by establishing a limitada allows C&J to avoid numerous potential problems associated with partnership.

Section 1.0 of this document establishes the report objectives and describes C&J Cladding, Section 2.0 describes the market opportunity in Brazil, Section 3.0 establishes selection criteria, Section 4.0 describes C&J's expansion options, Section 5.0 provides an analysis of the options and recommends the strongest solution, and Section 6.0 concludes the document by recommending next steps that C&J should take to implement the recommended strategy.

1.0 Introduction

C&J Cladding, a Houston, Texas-based provider of technical welding services, is exploring the possibility of expansion into Brazil. The main objectives of this report are to describe the Brazilian market opportunity, establish selection criteria for choosing an expansion strategy, describe and analyze the expansion options, recommend an integrated strategy based on the selection criteria and options analysis, and propose next steps for implementation of the recommended strategy. This report is strongly based on the assumption that Brazil is an attractive marketplace for C&J Cladding and therefore does not fully address the possibility that C&J should abstain from entering Brazil to emphasize opportunities elsewhere.

C&J Cladding was established in 1995 to provide cladding and stress-relieving services to global oilfield original equipment manufacturers (OEMs) and regional machine shops. C&J currently operates from one location in Texas to support offshore, surface, marine, and subsea development applications predominantly located in the Gulf of Mexico. Cladding is a process of fusion-bonding a corrosion-resistant alloy onto a base metal. It is a technical process requiring expertise in materials, welding and heat-treating, along with investment in computer-automated precision welding systems. Cladding is beneficial for C&J's customers because it significantly extends wellhead components' operating life and minimizes the need for high-cost repairs.

2.0 Market Opportunity

The opportunity for C&J Cladding to establish operations in Brazil is compelling based on several factors. First, investment in the development of Brazilian energy market infrastructure is poised for explosive growth. Most of this growth will be driven by Petrobras, the major integrated oil producer majority-controlled by the Brazilian government. As part of its growth plans, Petrobras expects to begin producing 1.126 million barrels a day of oil equivalent from its new "pre-salt" fields by 2017. Petrobras has already invested $1 billion into developing these fields, which could contain up to 80 billion barrels of oil and potentially catapult Brazil into the top 10 oil producers globally. Petrobras expects an average annual output growth of over 7 percent through 2012, a prediction that is not impacted by the recent decline in oil prices since the company's plans for pre-salt production are based on an oil price of $35 per barrel.[1]

More importantly, Petrobras' emphasis on developing "pre-salt" fields has significantly increased the need for cladding services in Brazil. "Pre-salt" deepwater and ultra deepwater development projects require full cladding on all pressure-containing seal and wetted surface components. Currently, there are neither integrated nor independent cladding companies in Brazil to meet this increasing demand. The only available cladding capability is completely limited to the four dominant OEMs: FMC, Cameron, Aker Solutions, and VetcoGray.

Secondly, Petrobras has a strong preference for sourcing from the domestic market, as evidenced by its 2007 record of purchasing 70 percent of its goods and services from domestic suppliers. Petrobras is actively working with its 90 Global Partners and Original Equipment Manufacturers to accelerate development of the Brazilian supply chain base for goods and services specific to its needs.[2] C&J would clearly benefit from gaining status as a domestic independent cladding company in Brazil.

Lastly, the growth of the Brazilian oil and gas industry is largely but not entirely dependent on the activities of Petrobras. Since the end of the oil monopoly in Brazil in 1998, all the large worldwide suppliers of subsea equipment, present in Brazil, have contracts with clients other than Petrobras. These subsea equipment suppliers, to which C&J provides its cladding services, have

[1] "Petrobras sees pre-salt output 1.1 mln bpd in 2017," *Reuters*, September 16, 2008, http://www.reuters.com/article/rbssIntegratedOilGas/idUSN1641920320080916, accessed December 2008
[2] Petrobras, 2007 Annual Report, http://www2.petrobras.com.br/ri/port/ConhecaPetrobras/RelatorioAnual/relat07/eng/rao2007.htm, accessed November 2008.

sizable contracts with Chevron, Shell, Eni, and Devon. It is estimated that the weights of orders from non-Petrobras clients in these companies' Brazilian portfolios varies between ten and fifty percent.[3]

Overall, C&J has the opportunity to provide OEMs such as FMC, Cameron, VetcoGray/GE, and Aker Solutions with Brazil-based independent cladding services or integrated cladding capacity tied to machining. This opportunity is compelling because not only is there a dearth of cladding companies in Brazil, but also OEMs need to competitively source forgings in the local Brazilian market to meet Petrobras' demands.[4] C&J would clearly benefit from gaining status as a domestic company in Brazil, and would additionally enjoy reduced overall manufacturing, transportation, importation, and administration costs compared with its domestic operations. Although it is highly likely that C&J's competitors will also establish operations in Brazil, the size of the market opportunity created by Petrobras' growth forecasts alone is sufficiently large to accommodate entry by many independent cladding companies.

3.0 Selection Criteria

C&J Cladding is a private domestic company with limited experience abroad. The most appropriate expansion strategy for C&J will accomplish the following.

- Effectively exploit the market opportunity as described above
- Emphasize C&J's relative advantages in filling the void for cladding services in Brazil
- Allow C&J to augment its capabilities as needed
- Facilitate the formation and development of strong relationships with suppliers, customers, and government officials

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[3] "New Clients Kindle the Subsea Market," Brasil Energy, February 2007, http://www.energiahoje.com/index.php?ver=mat&mid=24255, accessed December 2008

[4] Due to prohibitively high transportation expenses, forgings can only be sourced domestically if domestic cladding services are available.

- Address or mitigate institutional and informational voids
- Maximize the diligence process to reduce execution risk and extend exit option

4.0 Expansion Options

C&J Cladding is faced with several options for expansion into Brazil. The primary choice is the means of entry (organic or inorganic) and a secondary but related choice is the timing of entry (direct or staged). The various options are described below.

4.1 Means of Entry

C&J has several options for the means by which it could enter Brazil. It could grow organically by forming a local branch or wholly owned subsidiary, or inorganically by completing a merger or acquisition, joint venture or strategic partnership. Based on information provided by The Economist and Ernst & Young detailing the regulatory and business climate in Brazil, the following is a description of each possible option.

4.1.1 Local Branch

C&J could organize as a branch in Brazil. The time required to establish a local branch would be approximately six months, and establishment costs would be comparable to other business forms (described below). Branch profits, whether remitted to the C&J parent company or not, would be exempt from withholding tax. C&J would be required to allocate a certain amount of capital to the branch.

As a foreign company, C&J would require authorization by presidential decree to establish a branch in Brazil. To obtain this authorization, C&J would need to submit documentary evidence of its legal existence, a copy of its articles of incorporation, a list of shareholders, its most recent balance sheet, and a copy of the resolution to open a branch in Brazil. These documents must be properly notarized, certified by a Brazilian consul and then officially translated. Any branch established by C&J may not function until it has been registered and its authorization and documentary evidence published in the Diário Oficial (Official Gazette) and a local newspaper.

C&J would be required to operate under the same name (C&J Cladding) or could add the words "do Brasil" or "para o Brasil." C&J would also need to retain a permanent, fully responsible legal representative (of no specific nationality), whose name must be registered. C&J would be obligated to maintain accounts similar to those of an SA (described in Section 4.1.2 below) and annually publish its financial data. An annual meeting would not be required.[5]

4.1.2 Local Subsidiary

C&J may engage in business in Brazil by forming a local subsidiary. It has the option of either establishing a limitada, which is comparable to a European limited liability company, or sociedade anônima (SA), which is comparable to an American corporation. Organized as an SA, C&J could be set up as either "closed" or "open;" open companies are differentiated by having publicly traded shares.

The formation process is similar for each corporate structure but simpler in the case of limitadas, which would result in a lower set-up expense. Limitadas do not require external auditing, and little disclosure is required overall. As a limitada, which is not registered on any stock exchange, C&J would not be required to reveal financial information such as operating expenses or year-end profits. Limitadas are also not required to maintain a minimum deposit balance in any bank. If C&J establishes itself as a limitada in Brazil, stakeholders of C&J would be prohibited from selling their stakes (quotas) in the company without gaining consent from all other stakeholders. Limitadas may not issue preferred shares or debentures.

[5] The Economist Intelligence Unit, *Country Commerce: Brazil*, September 2008, www.eiu.com, accessed October 2008

The time required for C&J to establish a limitada would be approximately two weeks. C&J would be subject to the same tax consequences for either corporate structure.

The following is a comparison of the most important aspects of the limitada and SA structures.

- **Capital.** There is no minimum capital requirement or maximum capital limitation for either SAs or limitadas. In the case of the SA structure, capital must be totally subscribed and at least 10 percent deposited in a bank. Capital may be paid in cash or in kind; if in kind, it must be appraised by shareholders after appraisal by three experts appointed by shareholders. More than 5 percent of SAs' annual net income must be set aside in a legal reserve until the reserve reaches 20 percent of total capital. The capital of limitadas may be changed by simply revising founding deed, and there is no legal reserve requirement.
- **Founders & Shareholders.** Companies that adopt the SA structure must have at least two founders, although those founders are not required to maintain a direct interest in the venture. SA founders and shareholders are not subject to nationality or residence requirements; however, foreign shareholders must maintain legal representatives in Brazil. Limitadas must maintain at least two shareholders, although neither one must be a Brazilian resident to qualify as the managing shareholder.
- **Management.** Limitadas are not subject to any management regulations or requirements. SAs that are publicly listed ("open") are required to maintain an administrative council comprised of a board and executive directorate. This board must have a minimum of three members who legally reside in Brazil and the executive directorate must have a minimum of two members who legally reside in Brazil. These members, who serve for up to three years, must be elected by shareholders and can be dismissed by the council. No more than a third of council members may serve as directors.

- **Disclosure.** Limitadas are not subject to disclosure or fiscal-council requirements. Only "open" SAs must undergo external auditing and publish annual financial reports. Open SAs must maintain a fiscal council that examines the company accounts every three months and issues a statement at the end of the fiscal year. Open SAs also must publish annual reports, balance sheets, income statements and annual meeting minutes in the Diário Oficial and another well-known newspaper.
- **Control.** Limitadas are not subject to any special control provisions except as contained in the company's founding deed. Under the SA structure, minority groups are not guaranteed board representation unless the company charter provides for it. Under the "open" SA structure, where an administrative council is required, a 20 percent minority of shareholders is entitled to elect one member. Shareholders representing 10 percent of the capital have the right to elect one member of the fiscal council.[6]

4.1.3 Merger

C&J could enter the Brazilian market by merging with a domestic company. Brazilian law does not place any special restrictions on mergers with foreign companies. Mergers are broadly regulated by the June 1994 Antitrust Law 8884, which stipulates that review by the Administrative Council for Economic Defense (CADE; a semi-autonomous agency of the Ministry of Justice) is required for mergers between companies with combined revenue of R400 million or more. Mergers are generally permissible except when they are considered to create monopolistic conditions and abuse a dominant position, that is, when such a merger might result in a firm being able to eliminate its competition in the local market. The merger approval process was streamlined in August 1996 with CADE's adoption of Resolution 5, which established a standard form and application instructions.

[6] The Economist Intelligence Unit, *Country Commerce: Brazil*, September 2008, www.eiu.com, accessed October 2008

CADE further developed its merger review process in August 1998 by adopting the Organization for Economic Cooperation and Development (OECD) framework for reporting. In addition to CADE review, large-scale mergers in the petroleum, energy and telecommunications sectors must be examined and approved by the respective regulatory agency.[7]

4.1.4 Acquisition

C&J also could enter the Brazilian market by acquiring a domestic company, through purchase of either its assets or shares. Brazilian law does not place any special restrictions on acquisitions by foreigners. Similar to the merger regulations, approval from CADE is required when an acquisition would result in control of at least 20 percent of a particular market. Acquisitions are scrutinized by CADE for their potential anti-competitive implications. Based on Antitrust Law 8884, CADE is empowered to identify sectors where one company or a group of companies holds a dominant position. In addition to CADE review, large-scale acquisitions in the petroleum, energy and telecommunications sectors must be examined and approved by the respective regulatory agency.[8]

4.1.5 Joint Venture

C&J may enter Brazil by establishing a joint venture. A joint venture may take the form of a limitada, SA, or consortium agreement, although the latter form is generally only adopted for significant infrastructure projects.[9] Similar to the merger regulations described above, approval from CADE is required when a joint-venture agreement would result in control of at least 20 percent of a particular market.[10]

[7] The Economist Intelligence Unit, *Country Commerce: Brazil*, September 2008, www.eiu.com, accessed October 2008
[8] The Economist Intelligence Unit, *Country Commerce: Brazil*, September 2008, www.eiu.com, accessed October 2008
[9] Ernst & Young, *Doing Business in Brazil*, April 2007, accessed October 2008
[10] The Economist Intelligence Unit, *Country Commerce: Brazil*, September 2008, www.eiu.com, accessed October 2008

4.1.6 Strategic Partnership

Lastly, C&J has the option of entering Brazil by forming a strategic partnership. In Brazil, a partnership is incorporated when individuals are mutually obligated to both contribute goods or services for an economic activity and share the results. Brazilian corporate legislation provides for several different types of partnership; however, most are oriented toward the professional services industry. The form of partnership potentially appropriate for C&J's operations is the de facto corporation (sociedade em comum). Under this form of partnership, a group of persons whose activities are not organized according to a formal contract (for example, by laws not duly registered with the competent authorities) and who jointly perform business may be regarded as a legal entity for tax purposes.[11]

4.2 Timing of Entry

Secondary to C&J's choice of entry means is the choice of entry timing. C&J Cladding has the option of entering Brazil either directly to establish operations as efficiently as possible or indirectly by staging its entry based on predetermined goals and metrics.

Direct entry would involve establishing cladding operations in Brazil as efficiently as possible with the objective of minimizing set-up costs and maximizing direct output. C&J's management, working from Texas, would need to develop a detailed plan for market entry that specifies a step-by-step plan for choosing a location, completing the necessary legal steps, and relocating or hiring the necessary staff. Direct entry would not facilitate the development or strengthening of local business relationships in Brazil.

Staged entry would involve sending very few members of C&J management to Brazil with the objective of first penetrating the market before establishing physical operations. Under this scenario,

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[11] Ernst & Young, *Doing Business in Brazil*, April 2007, accessed October 2008

the team would not initiate cladding operations until they first develop reasonably strong relationships with suppliers, customers, and government officials; gain a deeper understanding of Brazilian market trends; and also complete the necessary legal steps for establishing the chosen corporate structure. Staged entry would likely require three additional months of diligence and would also require relocation by selected members of C&J management.

5.0 Analysis and Recommendations

The expansion options described above are primarily based on information published by The Economist and other reputable sources. Although none of this information is factually incorrect, my original research, which I obtained by conducting numerous interviews with industry professionals in Brazil, yields some additional important insights. The following analysis combines the factual data presented above with input from several professionals from the Brazilian business community and government organizations.[12]

First, there are no longer any legal distinctions between majority-foreign-owned and majority-domestic-owned companies in Brazil, based on August 1995 amendments to Brazil's 1988 constitution. Whether foreign or domestic, legally registered companies have the same rights.[13]

C&J first must consider the choice of entry means. Of my numerous interviews, I received strongly worded advice both in favor of and against both organic and inorganic growth. The arguments in favor of organic growth cite the relative ease of establishing corporate structures in Brazil, regardless of company origin. The arguments in favor of inorganic growth cite the importance of local market knowledge, which C&J could likely more easily acquire than develop. Conversely, the arguments against organic growth cite the high level of risk inherent in

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[12] Original interviews conducted by telephone between 11/11/08 and 12/5/08 with Evodio Kaltenecker, GE Energy; Mauricio Vasconcelos, United States Commercial Service; Peter Bellows, Gates Do Brasil Indústria E Comércio Ltda; Elvis Gamboa, VetcoGray; Joseph Sigelman and Greg Weisman, PetroTiger; Antonio Bebiano, Sidel Group; and Alberto Stender, Petrobras

[13] The Economist Intelligence Unit, *Country Commerce: Brazil*, September 2008, www.eiu.com, accessed October 2008

independently establishing operations in Brazil as a foreign company with limited local experience. Lastly, the arguments against inorganic growth cite the numerous possible conflicts and issues inherent with any partnership. If C&J were to develop some form of partnership with a Brazilian company, it likely would encounter minor and possibly major conflicts regarding the business strategy of the partnership; these conflicts may include but not be limited to how fast to grow, which segments of the market to penetrate, and where to build new facilities. To establish a partnership, C&J would most likely need to give up equity; in addition, upon to choosing to exit the partnership, C&J will likely have created its strongest competitor. One way to mitigate some, but certainly not all, of these risks would be to partner with a company engaged in a non-competing yet complementary business.

Temporarily putting aside the decision of organic or inorganic growth, it is important to briefly analyze the advantages and disadvantages inherent in each possible means of expansion.

The disadvantages of establishing local branch outweigh any possible advantages. The six month process is longer than other processes and there is no savings on establishment costs. Gaining the authorization by presidential decree usually involves lengthy delays. In practice, owing to these bureaucratic difficulties in obtaining such authorization, few branches of foreign companies operate in Brazil.[14]

The advantages of establishing a local subsidiary are relatively strong. In addition, according to The Economist Intelligence Unit 2008 Country Commerce Report, many foreign firms prefer to establish limitadas rather than SAs. Limitadas are easier to set up, and have fewer formalities and less public disclosure requirements than SA structures. The main difference to consider when electing for one or the other form of business is that only corporations are entitled to issue shares to

[14] Ernst & Young, *Doing Business in Brazil*, April 2007, accessed October 2008

be publicly traded in the stock exchange, while limitadas tend to be more appropriate vehicles for structuring foreign direct investments in Brazil due to the relatively simple governance requirements.

It is clear that a private foreign company like C&J is best advised to establish a limitada structure if it chooses to expand organically. Establishing a limitada does not prevent C&J from later transitioning to an SA structure if that ever were to become desirable, and more importantly, limitadas allow for the easiest exit. It is important to note that it typically takes several years to fully close down any corporate structure in Brazil, limitadas included. Also, whether foreign or domestic, it is difficult to set up a limitada in two weeks; however, limitadas are still much simpler to establish than SAs.

A merger, acquisition, joint venture, or strategic partnership may be feasible from a legal standpoint but, as discussed above, C&J would need to carefully consider any potential targets or partners. Merging, acquiring or partnering with another company would impose on C&J major operational changes and challenges that extend well beyond the scope of just expanding into a foreign market. In addition, other than for professional partnerships, the partnership form is not often used in Brazil.

Based on the above analysis, organic growth by establishment of a limitada is the optimal means of expansion for C&J. Next, considering the subject of entry timing, direct entry and staged entry have differing advantages and disadvantages. Direct entry would be the least capital-intensive, enabling C&J to enter Brazil very efficiently with minimal overhead costs. Direct entry would not provide the opportunity for C&J management to cultivate important relationships in Brazil and also would not preserve C&J's exit option afforded by an extended due diligence process. Staged entry, however, would be the more capital-intensive approach but also would enable C&J management to develop crucial relationships with customers, suppliers, and government officials. Taking the approach of staged entry, C&J management could expect to add approximately three months to the diligence process. Staged entry would be the more prudent approach because it would extend the exit option during the time that C&J is developing these important relationships. For C&J, the importance of relationship development outweighs the need for efficient market entry; therefore, staged entry is recommended over direct entry.

Overall, I recommend that C&J enter the Brazilian marketplace by a staged timing of entry with the objective of growing organically by establishing a limitada.

6.0 Conclusion

Staged entry to establish a limitada meets the selection criteria established in Section 3.0 above. To implement this recommendation, C&J should take the following next steps.

- Identify two members of management, preferably one with technical knowledge and one with sales experience, to lead the expansion effort
- Develop a diligence plan that accomplishes all of the following—
    - Determines to what extent the home market model can be replicated in Brazil and what adaptation is required
    - Identifies potential suppliers and customers and the relevant governmental agencies
    - Determines the best location to establish operations based on the location of suppliers, location of customers, industry-specific incentives established by the government, and tax consequences
- Begin cultivating business and governmental relationships while in Texas to continue strengthening those relationships upon arriving in Brazil
- In Brazil, conduct extensive diligence and aggressively develop existing and new business and governmental relationships

- Establish the limitada corporate structure only after extensive due diligence and relationship building is sufficiently complete

C&J will likely find expansion into Brazil to be challenging in numerous expected and unexpected ways. It will potentially be difficult for C&J to send any members of management to Brazil without negatively impacting the Texas operations. In addition, translating C&J's business model to the Brazilian market will not likely be seamless; therefore, it will be crucial for C&J to adapt effectively and remain open to experimentation. Finally, the state of the political and social system broadly in Brazil will impact every aspect of C&J's operations in both direct and indirect ways.