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9B18M081

IMPSA: Restructuring to Innovate with existing Resources

Daniel Friel wrote this case solely to provide material for class discussion. The authors do not intend to illustrate either effective or ineffective handling of a managerial situation. The authors may have disguised certain names and other identifying information to protect confidentiality.

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In the fall of 2012, Juan Carlos Fernandez, an executive vice-president at Industrias Metalúrgicas Pescarmona S.A. (IMPSA), was returning from Sao Paulo, Brazil, to the company’s headquarters in Buenos Aires, Argentina. He had just finished negotiating a multimillion-dollar loan from la Caixa Econômica Federal, a large bank in Brazil. This loan, backed by the Brazilian Development Bank (Banco Nacional de Desenvolvimento Econômico e Social, or BNDES), would enable the company to begin construction of a new windmill park in Brazil. The negotiation had been tough but Fernandez had received good terms for the loan; however, he could not yet reflect on his recent success. He knew that, on his return, Enrique Pescarmona, the chief executive officer of IMPSA, was expecting him to present a restructuring program. Fernandez thought he knew what he would recommend, but he was plagued by doubts. He knew that Pescarmona would want a radical plan, albeit based on the company’s existing resources. However, Fernandez worried that any significant change would jeopardize the company’s recent success.

Just one year earlier, IMPSA had been recognized by Ernst & Young and the London business magazine *CampdenFB* as having achieved the highest level of growth of any family business in the world from 2008 until 2010. In that period, the company’s revenues had increased by 115 per cent. In 2012, IMPSA had a backlog of orders valued at US$3.3 billion.[[1]](#footnote-2) Although the orders provided the company with substantial breathing room for the near future, Fernandez knew that the key to IMPSA’s success was its ability to adapt to changing circumstances. This company had become the largest producer of windmills in Latin America after having been in this business for only six years. It made its first windmill in 2005, and its first windmill park was up and running by 2009.

As Fernandez prepared for his meeting with Pescarmona, he reminded himself that his boss believed in reinventing the company every six or seven years—and six years had already passed since IMPSA had entered the windmill business. Fernandez was convinced that the company might need to consider getting out of the windmill business, as competition in this sector had been growing fiercer by the year. He asked himself whether the company could really entertain such a strategy. After all, the sales of windmills to Brazil alone had accounted for 60 per cent of the firm’s growth in the fiscal year 2010–11. He thought that IMPSA might even be able to take a more assertive position on its windmills by moving aggressively into Southeast Asia. By doing so, the company could take advantage of its previous experience in that region. Fernandez had spent more than 18 years developing the company’s business in Southeast Asia. Yet, he was unsure. Perhaps it would be advisable to undertake a larger restructuring of the company, focusing again on the design and manufacturing of equipment for hydropower plants and continuing its merger and acquisition activities. The latter had been an important source of income for the company in Asia and Brazil. This restructuring plan could also include moving into services, including the refurbishing of older dams and windmill parks. As he looked out the airplane window, he focused on a large cloud. However, he could not determine whether it was just a passing storm or something larger.

The History of IMPSA: Self-sufficiency and Expansion

Although IMPSA was technically formed by Luis Pescarmona in 1965, the roots of the company went back to 1907, when Luis’s father, Enrique Epaminondas Pescarmona, arrived in Mendoza, Argentina, from Italy and established a metal workshop to make gates and replacement parts. In the beginning, his business focused primarily on the construction business and was limited to the domestic market. In 1943, the precursor to IMPSA opened its first industrial plant in Mendoza. Twenty-five years after Enrique Epaminondas’s death in 1947, his namesake grandson began to manage the firm. He was driven by the idea that IMPSA needed to develop its own technology and knowledge base in every part of the value chain of its products. He was convinced that such a strategy was the best means to ensure the company’s survival during the economic fluctuations that had gripped Argentina in the 1960s. Based on his evaluation of both the Argentine economy and the company’s prospects for future growth, Pescarmona proposed to focus the company on the production of high-value-added products that could be exported. His guiding slogan was “Argentine Technology for the World.” His evaluation of the assets of his company and his country convinced him that IMPSA should focus on the production of cranes, dams, components for nuclear power plants, and pressure vessels.

By 1972, IMPSA began to participate in the international bidding process for dam and crane projects. Since that time, it had undertaken 150 projects in 40 countries. As of 2012, the firm had 7,000 employees throughout the world, of which 2,000 were employed in its hydro and wind power divisions. The company prided itself on having good relations with the unions in Argentina, a country noted for strong, and often aggressive, unions. By 2012, the average blue-collar worker had been with the firm for 15 years, while the average white-collar employee had 21 years of experience in the company. That year also marked 30 years since the company had begun to work in Brazil.

IMPSA Corporation was a holding company that consisted of IMPSA Hydro, IMPSA Wind, IMPSA Energy, IMPSA Process, and IMPSA Environmental Services. Within the IMPSA group, the company had several smaller businesses in the fields of insurance, wine, logistics, satellite tracking systems, and automation and communication systems. In general, 80 per cent of the sales of this company derived from its renewable energy divisions, namely IMPSA Hydro and IMPSA Wind. The last-twelve-months (LTM) results in consolidated sales for IMPSA during the period ending on July 31, 2011, were AR$4,639 million,[[2]](#footnote-3) representing a 48 per cent growth in terms of Argentine pesos. Consolidated sales for this period rose by 62 per cent, and 50 per cent of this growth was driven by the company’s wind division. Sixty per cent of the firm’s total sales in this period occurred in Brazil, and most sales were in the wind division. The total debt of IMPSA was US$1.166 billion in 2012, of which $347 million was without recourse. The LTM consolidated EBITDA (earnings before interest, taxes, depreciation, and amortization) for the period ending on July 31, 2011, was AR$620 million. See Exhibit 1 for the evolution of IMPSA´s EBITDA. In August 2011, a significant backlog of orders worth $3.3 billion on this company’s books caused Fitch Ratings to upgrade its bond rating from AA– to AA (see Exhibit 2 for IMPSA’s earning statement from 2012).

IMPSA’s Minor Divisions

IMPSA Energy was the company division that developed and obtained investment for hydroelectric and wind power projects. It had obtained financing for projects that generated 2.800 megawatts (MW) of energy using hydroelectric plants and 2,300 MW from windmill parks. This division had received several awards for the financial structuring of a hydropower complex in the Philippines. This project involved the creation of four hydropower plants and included financing from 19 different banks. Both hydroelectric plants and windmill parks needed long-term financing because they required large initial expenditures in infrastructure that paid off only in the long-term. Given the size of such investments, government involvement, either directly or indirectly, was necessary to reduce the potential uncertainty for outside investors.

IMPSA Process was the company division that worked with firms in the oil, gas, petrochemical, chemical, and fertilizer industries. It developed, designed, manufactured, and installed equipment in this field. As with the other divisions of this firm, this one specialized in turnkey solutions. Working together with the automation division, this division was able to offer solutions to its clients that included communication, monitoring, supervision, as well as control and electrical systems. This division was able to tap into the larger company’s expertise in designing and producing metal products that required complex welding requirements.

IMPSA’s division of Environmental Business provided management and advice to firms involved in urban health and sanitation. It operated in Argentina, Uruguay, and Brazil. This division focused on the collection and disposal of a multitude of different types of waste products, as well as the design, construction, and operation of waste treatment plants. It also provided technical, commercial, financial, and managerial support to utility companies and other related services. It had also recently ventured into projects targeted at reducing greenhouse gas emissions through the generation of energy from renewable resources.

IMPSA Port Systems was originally one of the four divisions created by Enrique Pescarmona in his reorganization of IMPSA in the early 1970s. Between 1983 and 2007, this division had undertaken 67 significant crane projects in 15 different countries. More than half of these projects were undertaken in Asia. The company’s success in this region caused executives to open a factory in Malaysia because a significant cost for this product was transporting products from the company’s factory in Mendoza, Argentina. IMPSA Port Systems also used the factory it opened in Malaysia to produce parts for the firm’s hydroelectric projects in the broader region. Similar to the situation at IMPSA’s other divisions, this division also operated, maintained, and refurbished products in various countries. It also specialized in turnkey projects. At one time, it was the second-largest producer of port cranes in the world. In 2005, it developed and installed the world’s largest port crane in Malaysia. In 2008, IMPSA Port Systems began to see a rise in demand for crane maintenance, a business it had entered just eight years earlier. The growth in this market apparently arose out of the economic downturn and the resulting reluctance of port operators to invest in new cranes. Over time, the company dedicated fewer resources to this business because Chinese competitors, some of which had actually been trained by IMPSA, had turned cranes practically into a commodity. The composition of IMPSA’s sales shifted dramatically between 2007 and 2011. In 2007, its hydro business accounted for 67 per cent of its billings, followed by a variety of other businesses that totalled the other 33 per cent. By 2011, IMPSA’s wind business constituted 51 per cent of its sales, followed by its hydro business at 38 per cent, and other businesses making up the remaining 11 per cent of revenue.

IMPSA’s hydropower business

In 2012, China was the leading producer of hydroelectricity, accounting for 22 per cent of the hydroelectric energy produced worldwide. It was followed by Brazil, the United States, and Canada. Each of these countries accounted for 8 per cent of the hydroelectricity generated in the world.[[3]](#footnote-4) IMPSA’s hydro business was active in 40 countries and had generated an installed capacity of 24,000 megawatts (MW) throughout the world. In 2012, it was building installations that would provide an additional 16,980 MW of energy in Latin America and beyond. In 2011, IMPSA had 30 per cent of the hydropower market in Latin America, followed by EC Power with 19 per cent, Alstom with 16 per cent, and Andritz with 15 per cent. This division of IMPSA offered projects ranging from the simple procurement of equipment to turnkey operations. IMPSA’s expertise in managing the engineering, civil works, and installation of electromechanical equipment for hydroelectric plants enabled it to offer turnkey solutions to its clients. The company also offered a full range of services related to maintaining, servicing, and refurbishing hydroelectric power facilities. It had plans to open a factory in Suape, Brazil, to be better able to serve its clients in that area. This new plant was seen as a means to enable IMPSA to better serve clients in other parts of the world as well (see Exhibit 3 for the underdeveloped capacities for hydropower throughout the world).

In the 1980s, IMPSA opened an advanced hydro laboratory in Mendoza, Argentina. In this laboratory, engineers made scaled models of projects to be undertaken by the company. It had two independent stations for testing two different models simultaneously. Each of these stations could simulate any type of water elevation and flow, permitting engineers to optimize their designs of water turbines. These stations enabled engineers at IMPSA to set efficiency records for Kaplan turbines, a product developed by Viktor Kaplan in 1913 and used widely in this industry. Engineers at this division were pioneers in using integral calculations for synchronized machines. In the early 1990s, this firm developed the first software that was able to design, verify, and simulate hydro generators in one program. One of the particular challenges confronting this division was designing hydro turbines that could be dismantled into relatively small pieces to transverse underdeveloped roads. For example, the company had once designed a turbine that could be cut into three pieces so that it could be transported across a wooden bridge without leading to its collapse. Hence, design and logistics proved critical for this business, especially in emerging markets. This division of IMPSA benefited from working with IMPSA’s logistics company. This part of the company was formed because, early on, executives had wanted to avoid the high costs of working with the few quality providers of heavy trucks and trailers for transporting IMPSA’s products in Argentina.

Every dam and hydro turbine needed to be customized to fit the particularities of where it would be located. Nevertheless, the majority of the inputs for a dam needed to be locally sourced. Only the hydro turbine and the related electrical equipment needed to be made in IMPSA’s factory in Argentina. The factory that IMPSA was planning to open in Brazil was to be located on the Atlantic Ocean, enabling parts to be easily shipped around the world. The shipping of such parts was difficult from the firm’s factory in Mendoza because it was 600 miles (966 kilometres) from the port of Buenos Aires. To ship from Chile required sending parts over the Andes Mountains. To ship its products to clients in Asia, it was less expensive to go over the Andes than to send the goods through the Panama Canal. A factory in Suape, Brazil, would come to provide IMPSA with ready access to clients in the western hemisphere as this city was on the northern Atlantic coast of Brazil.

IMPSA’s Windmill Business

IMPSA began research on the development of windmills in the 1990s, leading to the creation of IMPSA Wind. After having made some prototypes in Argentina in 2005, the firm finished its first wind park in 2009 in Brazil. The factory that IMPSA opened in 2005, in Mendoza, Argentina, produced 75 windmills per year. Four years later, IMPSA opened a factory in Brazil that made 300 windmills per year. In 2011, this division of IMPSA was the market leader in Latin America with 19 per cent of this market, followed by General Electric with 17 per cent, and Vestas, the world leader, with 10 per cent (see Exhibit 4). Similar to the hydro division, the mission of IMPSA Wind was to provide its clients with integrated, turnkey solutions. It offered a variety of services and products that ranged from supplying clients with equipment to setting up and operating installations. Part of IMPSA Wind’s turnkey operations involved conducting detailed wind measurements up to a year before the installation of a windmill park. These studies helped the firm determine the best location to install its equipment.

IMPSA Wind initially licensed patents of generators from the German company Vensys, while it was developing a generator that did not need a gearbox. The company quickly patented UNIPOWER, a direct-drive wind turbine in which the blades of the windmill were directly coupled to a generator. This design eliminated the need for a gearbox, while also increasing efficiency and reducing maintenance. Using this technology, IMPSA was able to develop a 2.1 MW windmill. Its goal was to be able to design windmills that could produce 3.5 MW. Although company executives preferred to develop IMPSA’s own technology before entering into a particular business, the company decided to enter the Brazilian market using patents from another company because of Brazil’s incredibly rapid growth in the windmill market. Nevertheless, the critical part of any windmill was the frequency converter, which enabled the energy generated by the windmill to be converted into the type of energy needed for an electrical grid. IMPSA had a company dedicated to the production of such converters. It originally developed this product to supply its own port crane business. IMPSA Wind had one research and development centre in Brazil and one in Argentina.

IMPSA also had its own expertise related to windmill blades. However, it did not always make the blades used in its windmills. Whether the company bought blades from a supplier or made them itself depended on the potential availability of quality suppliers. For many of the components of its windmills, there were initially no suppliers in either Argentina or Brazil. However, the company did not simply wait for suppliers to emerge in either of these countries. Instead, it developed its own suppliers and gradually relied less on its own production as other companies came up to speed. When IMPSA first opened its factory in Brazil, it had only two suppliers. By 2012, it had more than 100. Developing suppliers in the windmill business was not difficult because, unlike in the market for hydroelectric plants, many of the inputs had practically become commodities.

Innovations within this sector generally diffused quickly, leading to a dramatic decline in margins. It was only a matter of time before companies in this sector would begin to produce blades from fibre carbon instead of fibreglass. Blades made from the former material would be lighter and therefore would generate more electricity. Nonetheless, engineers at IMPSA did not think that the business of producing such blades would be profitable for more than the short term, as they believed that this knowledge would quickly diffuse to other producers in this sector. In Europe and the United States, citizens preferred offshore windmill projects to onshore ones because the latter generated noise that bothered local residents and there was little uninhabited land suitable for windmill parks, particularly in Europe. Nevertheless, offshore projects were much more expensive than onshore projects. By contrast, Latin America had more than enough uninhabited territory suitable for onshore projects. Consequently, IMPSA concentrated on onshore products because its windmill business was focused almost exclusively on Latin America.

The best wind for generating electricity was steady but not necessary strong. If the wind was too strong, it could actually bend the blades of a windmill causing the rotor to be unable to turn. Nevertheless, having good consistent winds was not enough. Windmill parks also needed to able to be hooked up to an adequate electrical infrastructure that was capable of receiving the electricity generated. Many locations in the southern part of Argentina and in the eastern part of Brazil had excellent, consistent winds but lacked the necessary energy infrastructure. However, growth in IMPSA’s wind power business was not limited to Latin America. IMPSA Wind had also entered into a joint venture agreement with PetroVietnam to develop windmill parks in Vietnam, Laos, Cambodia, Thailand, and Myanmar. Together, the companies had begun constructing a windmill park to produce 600 MW. The joint venture agreement with PetroVietnam also included the manufacturing of hydroelectric equipment.

Wind Potential and Financing

Energy derived from windmills was the world’s second-largest source of renewable energy behind hydroelectric power. In 2011, the latter accounted for the generation of 980 gigawatts (GW) of power in 2011, while the former generated 159 GW. From 1998 until 2010, the average rate of growth of installed capacity in the windmill industry was 28.7 per cent. Nevertheless, by 2010, wind power accounted for only 2.5 per cent of generated energy in the world. By comparison, hydropower accounted for roughly 15 per cent of electricity worldwide. Fossil fuels, by comparison, generated 69 per cent of all energy in 2010. Denmark derived 21 per cent of its energy from wind, followed by Portugal with 18 per cent, and Spain with 16 per cent. Nevertheless, China was the leader in installed capacity, followed by the United States, where three out of the top 10 manufacturers of wind turbines were located. Europe had a total of 85,983 MW of installed capacity followed by Asia with 61,182 MW.

At the same time, in 2010, more new capacity was installed in emerging markets than in the developed world. Some of the best wind resources in the world were located in Latin America. Moreover, the winds in this region were better suited to the generation of electrical power because they could generate power, on average, 50 per cent of the time, whereas windmills in Europe customarily generated power only 30 per cent of the time. Nevertheless, this region had only 1,982.9 MW of installed capacity, of which almost 50 per cent, 920 MW, was concentrated in Brazil. By contrast, Argentina had an installed capacity of only 54 MW. Nevertheless, Argentina was estimated to have the wind capacity to generate 2,231 GW. By comparison, Brazil could generate up to 143 GW.

By the beginning of the 21st century, Brazil had derived roughly 70 per cent of its energy from hydropower. Given Brazil’s extensive dependence on this source of energy, droughts in 2001 and 2002 provoked an energy crisis, causing the government to turn increasingly to wind power as an alternative. Nevertheless, by 2010, wind power generated only 1 per cent of this country’s energy. To spur more activity, the Brazilian Development Bank (BNDES) provided substantial support for windmill projects, including those of IMPSA. One of its priorities was the development of renewable energy sources. Although this bank helped firms to substantively reduce the interest rates for their loans, it also required that 60 per cent of all content of such projects came from Brazil.

Roughly 60 per cent of the energy consumed in Argentina was generated by fossil fuels, whereas 35 per cent came from hydroelectric power and an estimated 5 per cent from nuclear. The electrical power generated by windmills was minuscule, despite the installed capacity of wind power having almost doubled between 2009 and 2010. The Argentine government had set the goal of obtaining 8 per cent of the country’s energy from renewable resources by 2020. It provided a set of subsidies to encourage investments in this area. In 2009, it asked for bids on projects to generate 1,015 MW of sustainable energy, with 500 MW to come from wind power. Nevertheless, the greatest challenge facing any firm seeking to undertake a windmill project in Argentina was obtaining the financing necessary for the large initial investment. Argentina did not have a development bank similar to the BNDES in Brazil. Although an investment in windmills was more expensive per kilowatt hour to set up than traditional thermal energy generated by burning gas or oil, the fuel was free.

The ability of firms such as IMPSA to secure financing for projects in Argentina was also significantly hindered by high levels of economic uncertainty largely generated by unpredictable government behaviour and the lack of a transparent regulatory framework for investments. Although the official inflation rate hovered in the low teens, the unofficial inflation rate was, on average, 25 per cent. The intransigence of the government in resolving conflicts with international investors further contributed to a climate marked by high interest rates and low foreign investment. These conditions, along with the lack of a development bank, undermined prospects for receiving long-term investments for projects such as windmill parks. Although organizations such as the International Finance Corporation at the World Bank, the Development Bank of Latin America, and the Inter-American Development Bank offered some financing for such projects, they took up to a year and a half to make their decisions. Given the volatility in Argentina, this period was simply too long to wait. Nevertheless, IMPSA had been able to work with some provincial governments in Argentina to secure financing directly from them instead of the national government. In general, the Argentine government lacked coherent policies to promote economic development through a coherent energy policy, while the government of Brazil had well-developed policies in this area.

Expertise in Controlling the Value Chain

In all of its divisions, IMPSA specialized in turnkey solutions. The company provided solutions for its clients in areas ranging from project design and development to procurement and construction. The firm possessed expertise in all of the areas of its value chains even if it did not directly produce the equipment or perform the services involved. Although the company preferred to outsource less critical components and services, it always sought to retain expertise in all parts of its value chain because top executives at the firm were convinced that they needed to be able to respond rapidly to any potential problems with the company’s suppliers.

IMPSA executives were aware that economic uncertainty could quickly undermine the viability of even quality suppliers in emerging markets. IMPSA also vertically integrated a product or service as a means of taking advantage of opportunities resulting from increases in margins caused by the failure of suppliers. For example, if necessary, this company had the capacity to rapidly ramp up production of its windmill blades. Although it produced less than 50 per cent of the blades used for its windmills, it was capable of producing all the blades it needed within 18 months. Nevertheless, only 50 per cent of production at its windmill factory in Brazil was for the firm’s own use. The expertise and technology IMPSA had in terms of every component in its products proved valuable when setting up the factory in Suape, Brazil. When the company first arrived, the areas had no quality metallurgy suppliers for the components IMPSA needed. To address this problem, IMPSA sent its own employees to train its future suppliers.

To a certain extent, the expansion of IMPSA into new businesses was driven by the needs of its existing businesses. The company originally started building cranes to work on the electrical power stations in its hydroelectric power plants. The company leveraged what it had learned from making this product to begin making port cranes. IMPSA Wind could develop quickly and could realize high-quality standards because this new division was supported by work done on frequency converters for port cranes and expertise in the company’s automation division. The ability of IMPSA to offer turnkey solutions to its clients derived from the expertise that it had in every part of the value chain of all of its products. This expertise enabled the firm to develop new businesses based on both the emerging needs of its clients and the potential needs of other divisions within the company.

Research and Development: incremental innovations

The main goal of research and development at IMPSA was the continuous improvement of existing technologies related to every part of the value chain of all its products. Discoveries in these areas often enabled IMPSA to enter new businesses. At the same time, any small improvement in the efficiency of the main components of its hydropower generators or windmill turbines significantly increased the amount of energy generated. This focus on efficiency made some engineers reflect on the inefficiencies of older renewable energy installations. This research enabled IMPSA to develop a business focused on improving the efficiency of existing installations merely by replacing their parts with newer, more efficient ones. The efficiency of a hydro turbine, for example, could be improved by 15 per cent or 20 per cent merely by replacing its components. The expertise of this company in all parts of the value chain enabled it to make such improvements.

IMPSA did not seek to patent many of the improvements it made. In the windmill and hydropower industries, the most important innovations had already been patented. Consequently, IMPSA focused on making incremental innovations. Executives at this company contended that such innovations were generally not worth patenting because IMPSA’s competitors could easily copy its innovations without violating its patents by asking for IMPSA’s patents and changing a few aspects of the design contained within them. Moreover, some firms in some countries simply did not respect patents. IMPSA occasionally avoided patenting certain discoveries because its executives did not want IMPSA’s competitors to know what they were doing. For example, to avoid competitors understanding the components of its improved turbine, IMPSA chose not to patent its improvements on the Kaplan turbine.

Executives at this company were well aware that the context in which they operated had a significant impact on their ability to conduct research and development. Although the Brazilian government offered firms more assistance than what was available in Argentina, the latter country had a number of high-ranked universities that produced many qualified engineers. The Brazilian universities were not providing the same level of quality as those in Argentina. However, this firm did not simply rely on engineers from Brazil and Argentina. It also had an international young professional program that attracted people from other parts of the world to live and work in Mendoza, Argentina.

The Next Step

As Fernandez arrived in his office and turned on his computer, he started to think again about the meeting that was to occur in a half an hour. He wondered whether IMPSA’s experience in the crane business had any relevance for the strategic decisions the company was about to make. In the end, the real business in windmill production was about putting wind parks together, not about the actual production of the parts. Was there nevertheless a reason to continue producing some windmill parts? Should the company focus instead on making and designing bigger windmills that generated more power? At the same time, offshore windmills were a growing market in Europe. Should IMPSA enter that market? Fernandez was unsure. What about Asia? Perhaps the firm should just focus on its UNIPOWER generator and use its expertise to expand in that market. He believed that whatever strategy IMPSA chose should be informed by the structure of the industry for electricity. He knew that 79.7 per cent of all electricity in the world in 2012 was generated by fossil fuels and nuclear power. Hydropower accounted for only 15.3 per cent, followed by all other renewables, including wind power, at 5 per cent.[[4]](#footnote-5)

As Fernandez arrived in the meeting room, one thing became clear. IMPSA was an important player in the renewable energy business. Within this industry, it had a significant amount of experience in many parts of the value chain. Fernandez thought that the company should maintain that focus. How could the company leverage its knowledge? This line of reasoning caused him to consider the world’s economic situation. Although he knew that renewable energies were the future, he was unsure how this future would be shaped by what appeared to be a continuing economic crisis. Some indications suggested that the economic crisis might worsen. Perhaps the demand for energy in Latin America would decline as people reduced their consumption. Would similar behaviour occur in other countries? The questions just kept getting larger.

As Pescarmona entered the room to begin the meeting, Fernandez remembered that he was known for reminding his executives that learning to deal with the uncertainties in Argentina was an excellent training ground for learning to work in other emerging markets. Business people in this country were accustomed to addressing problems not only in the political and economic sphere but also along the value chain. This approach had taught them to be flexible. As the meeting began, Fernandez wondered how the company could build on these ideas to take it forward.

Exhibit 1: Evolution of IMPSA’s Cash Flow, by EBITDA, 2007–2011 (In US$ Millions)

Note: EBITDA = earnings before interest, taxes, depreciation, and amortization; LTM = last twelve months

Source: Created by authors from company files.

Exhibit 2: IMPSA’s Earnings Statement, December 31 and January 31, 2011

(In Thousands of argentine pesos)

Consolidated Statements of Financial Position

|  |  |  |
| --- | --- | --- |
| **Assets** | **12.31.2011** | **01.31.2011** |
| **Current Assets** |  |  |
| Cash and cash equivalents | 394,218 | 187,632 |
| Other financial assets | 18,626 | 24,331 |
| Trade receivables | 2,107,322 | 1,160,315 |
| Other receivables | 83,880 | 59,647 |
| Related parties | 14,794 | 116,163 |
| Other assets | 760,459 | 782,134 |
| Inventories | 378,448 | 330,877 |
| **Total Current Assets** | **3,757,747** | **2,661,099** |
|  |  |  |
| **Non-Current Assets** |  |  |
| Other financial assets | 16,423 | 5,689 |
| Trade receivable | 4,192 | 25,036 |
| Other receivables | 142,590 | 1,594 |
| Related parties | 112,875 | 159,635 |
| Other assets | 242,029 | 77,266 |
| Deferred tax asset | 3,953 | 4,617 |
| Investments in associated companies | 28,561 | 10,888 |
| Property, plant, and equipment | 892,157 | 731,718 |
| Intangible assets | 3,204,947 | 2,260,505 |
| **Total Non-Current Assets** | **4,647,727** | **3,276,948** |
| **Total Assets** | **8,425,474** | **5,938,047** |

Exhibit 2 (continued)

|  |  |  |
| --- | --- | --- |
| **Liabilities and Equity Liabilities** | **12.31.2011** | **01.31.2011** |
| **Current Liabilities** |  |  |
| Trade payables | 1,545,744 | 1,216,434 |
| Related parties | 121,364 | 51,446 |
| Borrowings | 1,113,981 | 675,487 |
| Taxes | 124,365 | 100,796 |
| Other | 81,316 | 87,790 |
| Provisions | 17,026 | 10,718 |
| **Total Current Liabilities** | **3,003,796** | **2,142,671** |
|  |  |  |
| **Non-Current Liabilities** |  |  |
| Trade payables | 362,617 | 187,256 |
| Related parties | 24,718 | 174,804 |
| Borrowings | 4,055,053 | 2,637,019 |
| Taxes | 14,414 | 6,466 |
| Deferred tax liabilities | 209,599 | 240,903 |
| Other | 37,490 | 8,274 |
| Provision | 40,075 | 23,299 |
| **Total Non-Current Liabilities** | **4,743,966** | **3,278,021** |
| **Total Liabilities** | **7,747,792** | **5,420,692** |
|  |  |  |
| **Equity** |  |  |
| Equity attributable to owners of Company | 653,657 | 494,315 |
| Non-controlling interest | 24,025 | 23,040 |
| **Total Equity** | **677,682** | **517,355** |
| **Total Liabilities and Equity** | **8,425,474** | **5,938,047** |

Consolidated Statements of Comprehensive Income for the Irregular Eleven-Month Period Ended December 31, 2011, and for the Year Ended January 31, 2011 (In Thousands of Argentine Pesos)

|  |  |  |
| --- | --- | --- |
|  | **12.31.2011** | **01.31.2011** |
| Net revenues | 4,953,384 | 3,891,139 |
| Cost of sales | (3,790,485) | (2,956,953) |
| **Gross Profit** | **1,162,899** | **934,186** |
|  |  |  |
| Selling expenses | (53,385) | (121,720) |
| Administrative expenses | (380,412) | (278,467) |
| Subtotal | 729,102 | 533,999 |
|  |  |  |
| Interest income | 365,374 | 50,401 |
| Financial cost | (764,561) | (332,456) |
| Gain on fair value recognition of remaining interest in investments | – | 284,506 |
| Other income and expenses, net | 6,553 | (41,733) |
| Gain (loss) on investments in associated companies | 8,079 | (2,596) |
| **Profit Before Income Tax** | **344,547** | **492,121** |
| Income tax charge | (138,506) | (169,127) |
| **Net Profit for the Year** | **206,041** | **322,994** |

Exhibit 2 (continued)

|  |  |  |
| --- | --- | --- |
|  | **12.31.2011** | **01.31.2011** |
| **Other Comprehensive Income** |  |  |
| Translation of foreign operations | (45,714) | 55,294 |
| **Total Other Comprehensive Income** | (45,714) | 55,294 |
| **Total Comprehensive Income for the Year** | **160,327** | **378,288** |
|  |  |  |
| **Profit (Loss) Attributable to** |  |  |
| Owners of the Company | 206,460 | 322,125 |
| Non-controlling interest | (419) | 869 |
| **Profit for the Year** | **206,041** | **322,994** |
|  |  |  |
| **Comprehensive Income Per Common Share Attributable to Owners** |  |  |
| Weighted average ordinary shares | 321,700 | 321,700 |
| Basic and diluted (\*) | 0.50 | 1.15 |
|  |  |  |
| **Comprehensive Income Attributable to** |  |  |
| Owners of the company | 159,342 | 369,544 |
| Non-controlling interests | 985 | 8,744 |
|  |  |  |
| **Total Comprehensive Income for the Year** | **160,327** | **378,288** |

(\*) As of December 31 and January 31, 2011, the company had not issued financial instruments or others contracts giving holders rights to receive common stock of the company. Accordingly, diluted earnings per shares are equal to basic earning per shares.

Note: Conversion to dollars is difficult as Argentina has two exchanges rates. Beginning in June 2012, the Argentine government restricted the official sale of dollars, leading to the creation of an unofficial market. The official exchange rate on December 31, 2012, was 4.91 pesos to the U.S. dollar, while the unofficial rate was roughly 6 pesos to the U.S. dollar.

Source: Company files.

Exhibit 3: Percentage of Underdeveloped Hydroelectric Capacity per Continent

Source: International Energy Agency, *Technology Roadmap: Hydropower*, 2012, accessed January 4, 2017, https://www.iea.org/publications/freepublications/publication/2012\_Hydropower\_Roadmap.pdf.

Exhibit 4: Top 10 Countries in Wind Power Production

Source: The World Wind Energy Association, *2012 Annual Report*, May 2013, accessed May 17, 2014, www.wwindea.org/download/market\_reports/WorldWindEnergyReport2012\_final.pdf.

1. All currency amounts are shown in US$ unless otherwise noted. [↑](#footnote-ref-2)
2. AR$ = ARS = Argentine peso; AR$1 = US$0.241 on July 31, 2011. [↑](#footnote-ref-3)
3. REN21: Renewable Energy Policy Network for the 21st Century, *Renewables 2012 Global Status Report*, accessed January 4, 2017, www.ren21.net/Portals/0/documents/Resources/GSR2012\_low%20res\_FINAL.pdf. [↑](#footnote-ref-4)
4. Ibid. [↑](#footnote-ref-5)