



## ETERNAL FAUCETS LIMITED

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*Elizabeth M. A. Grasby revised this case (originally "Ideal Faucet Limited" written by Connie Badame under the supervision of Richard H. Mimick) 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.*

*Version: 2016-11-15*

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In June 2014, Greg Lawrence, chair of the planning committee for Eternal Faucets Limited (Eternal), was reviewing the company's activities and outlook for the fiscal year (FY)2015. The president of the company had just informed him of an opportunity to purchase several new machines that, with the implementation of some new production methods, would decrease Eternal's variable manufacturing costs by 10 per cent. The committee had already prepared projected statements for FY2015 based on the company's current process. The president had requested that Lawrence prepare a report evaluating this new purchase opportunity for the next meeting that was scheduled in one week's time.

### THE INDUSTRY<sup>1</sup>

The plumbing industry, which included faucet manufacturing, was closely linked to residential construction and non-residential construction. The demand for faucets was more heavily concentrated in the residential housing market (e.g., single family homes and multifamily apartment buildings) than in the non-residential construction market (e.g., commercial structures like retail stores, office buildings, and industrial facilities). Faucet sales were also influenced by the level of consumer spending which had a direct influence on the residential renovation expenditure market.

#### Residential Construction

Housing affordability (e.g., prevailing and expected mortgage interest rates), demographic factors (e.g., population growth and household formation trends) and economic factors (e.g., employment growth and household income) affected the overall demand for new residential construction. For example, when household income levels declined, Canadians cut back on discretionary spending such as spending on investments in home renovation projects.

#### Non-Residential Construction

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<sup>1</sup> Information in this section is drawn from Sarah Khan, "IBISWorld Industry Report OD5328: Faucet Manufacturing in the US," IBISWorld, April 2015, accessed August 9, 2016, <http://clients1.ibisworld.com/reports/us/industry/Default.aspx?entid=5328>; Chrystalleni Stivaros, "IBISWorld Industry Report 23822bCA: Plumbing in Canada," IBISWorld, April 2016, accessed August 9, 2016, <http://clients1.ibisworld.ca/reports/ca/industry/default.aspx?entid=1946>.

In the non-residential construction markets, the overall health of the business sector and the level of consumer spending directly determined the need for new office buildings, retail stores, warehouses, and other structures—all of which required installations of plumbing. A lot of volatility was anticipated in the non-residential construction market for the next few years.

### **Historical Performance**

The plumbing industry had experienced wide sales fluctuations over the past decade. The global recession in 2008 to 2009 had dried up demand for all construction, especially residential construction. Per capita disposable income also put a constraint on household spending for expensive home improvement projects.

From 2010 to 2013, although the industry had recovered significantly, albeit not to its previous level of success, new residential construction dipped sharply again in late 2013 due to concerns about an overheated market, which again prompted a cutback in demand.

### **Industry Outlook**

The industry had experienced early signs of improvement in 2014, having benefited from increasing residential renovation expenditures. Over the same period of time, significant volatility in new construction had kept revenue growth in check.

Over the longer-term, it was forecast that increasing economic activity would improve in both the non-residential and the residential sectors. Single-family home construction (i.e., housing starts) was expected to continue to recover slowly along with housing demand. Commercial construction was projected to grow, based on anticipated increases in consumer spending which encouraged businesses to expand their facilities. Private spending on home improvements and renovation projects was also expected to increase due to the projection of a higher per capita disposable income.

## **ETERNAL FAUCETS LIMITED**

### **History**

Eternal was one of several major Canadian manufacturers of high-quality faucets for bathrooms, kitchens, and bars that were included in the new construction market as well as the replacement and renovation markets. Its products were sold globally through plumbing wholesalers who then sold them to plumbers, builders, and renovators. Additionally, an increasing proportion of Eternal's faucets were sold directly through retail chains.

Since its inception, Eternal had been profitable annually but sales volumes were difficult to predict with accuracy and had varied widely from year to year—as did profitability—due to the many environmental factors mentioned earlier. In the past year, Eternal's faucet sales had increased by more than the industry average and had resulted in a record earnings performance for the company. Management believed that this was due to its expanded product line, increased market penetration, its retail chain sales initiative, and the growth of the do-it-yourself market. The committee's projected statement of earnings (i.e., income statement) for FY2015, based on the company's existing manufacturing process, is provided in Exhibit 1.

### **The New Equipment Opportunity**

The new equipment under consideration would cost CA\$10 million<sup>2</sup> and would be depreciated over 10 years using the straight-line method of depreciation. The acquisition of the new equipment combined with improved production practices would increase productivity and decrease the variable manufacturing costs by 10 per cent. The committee would also had to consider other factors not reflected in Eternal's projected statements, such as the plumbing industry outlook in Canada and its impact on the future demand for faucets.

## **DECISION**

As Lawrence began his analysis, he realized that he would have to fully evaluate this equipment purchase opportunity from both a qualitative and quantitative perspective and include in his consideration the inability to accurately predict Eternal's sales. Regardless of the industry outlook for faucets, he knew the nature of the industry could change quickly and that the company could be vulnerable to as much as a 20 per cent reduction in its annual sales volumes.

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<sup>2</sup> All currency amounts are in CAD; CA\$1 = US\$0.72 on December 31, 2015.

**EXHIBIT 1: PROJECTED STATEMENT OF EARNINGS (CA\$)**  
**For the year ending December 31, 2015**

Sales (1,000,000 units)		\$ 40,000,000
Manufacturing costs:		
Material	\$ 4,850,000	
Labour	5,350,000	
Fixed overhead	7,550,000	
Variable overhead	<u>8,900,000</u>	
		26,650,000
Selling costs:		
Fixed	3,600,000	
Variable	<u>2,390,000</u>	
		5,990,000
Administration costs:		
Fixed	2,300,000	
Variable	<u>450,000</u>	
		<u>2,750,000</u>
Total costs		<u>35,390,000</u>
Net income before tax		<u>\$ 4,610,000</u>

Source: Company files.