

Manitoba Hydro 2014/15 & 2015/16 General Rate Application

Tolko Industries Presentation

Background

Tolko Industries Limited is a privately-held company based in Vernon, B.C. The company started with a single sawmill near Vernon in 1956. The Western Canadian enterprise now includes lumber mills, plywood/veneer plants, Oriented Strand Board (OSB) facilities and a kraft paper operation. The company employs about 3,100 people.

Tolko's Manitoba operations are located near the town of The Pas, Manitoba, approximately 630 kilometres (390 miles) northwest of Winnipeg and has 330 direct employees and approximately 250 indirect contracted workers in Manitoba.

The operations consist of a kraft pulp and paper mill with annual capacity of 170,000 tonnes of superior strength sack kraft paper, and an idled sawmill with annual capacity of 160 million board feet of lumber. Fibre needs of the operations are satisfied through an integrated woodlands operation managing an 8.7 million hectare (22 million acre) Forest Management License. The paper operation includes two boilers which generate steam to cook wood chips into pulp and to dry the paper.

Churchill Forest Industries built the Manitoba facilities. The sawmill commenced operation by 1969 and the paper mill started up in 1971. The Province of Manitoba took over from Churchill Forest Industries in 1973. Repap Enterprises Inc. purchased the assets from the Province of Manitoba in 1989. Finally, Tolko acquired the assets from Repap in 1997.

Manitoba Kraft Papers (MKP) manufactures several different kraft paper products used primarily for cement sacks (>75%) and other building products, as well as for agricultural products, chemicals and a wide variety of other end uses. This "A" grade product is characterized by superior strength and permeability, and is used in the most demanding bag applications.

Tolko has invested in significant capital upgrades to maintain competitiveness since it took over the Manitoba facilities. Process improvements made in recent years have enhanced efficiency, quality, and reduced operating costs. Improved energy efficiency and environmental performance has been a particular focus of the investments in the past five years. As an example, in 2012, Green Transformation Program projects were implemented to reduce steam costs (\$13.4 million of the \$15.8 million spent was provided by the Federal government).

Markets and Cost Overview

Markets

Tolko shipped about 164,000 tonnes of paper in 2014. Markets included: Canada 15%; USA 33%; Mexico 18%; Other Export 34%.

Transportation

Tolko's paper product is shipped to its final destination by truck, rail and ship. Manitoba Kraft Papers has direct access to a rail line and highways from the mill. Product is initially shipped via rail or truck direct to customers in Canada, US and Mexico or to vendor managed locations in the US or Canada. Product is shipped by rail to ports in Vancouver, Montreal, New Orleans, or Gulfport for international export. In 2014 Tolko's breakdown of transportation mode was as follows: Truck 1539 loads; Rail 1663 60' cars; Ship 2291 40' export containers.

In the paper industry, the supplier typically pays the cost of transportation of the product to the customer. At Tolko Manitoba, outbound freight costs represent about 15% of the total delivered cost of the paper product.

Tolko also manages large quantities of inbound materials. Fibre (wood chips, logs and hog fuel) is the largest commodity to be managed. As an example, in 2013 almost 17,000 loads of chips, pulp logs and hog fuel arrived by truck and about 440 loads of logs arrived by rail car.

Fibre

Fibre cost represents approximately one-third of the total paper manufacturing cost. The largest component of fibre cost is transportation. Despite a plentiful supply of fibre, Tolko faces long haul distances in Manitoba caused by forest land use and stewardship constraints. Costs are also under pressure due to transportation inefficiencies with constrained truck design and load limits on the roads. Rail supply of logs is also hampered by poor infrastructure which limits train speed.

Labour and Salary

The Manitoba operations currently employ approximately 330 salaried and hourly people at the paper mill, the sawmill/chipper operations and woodlands (with a payroll of approximately \$37 million). In addition, about 250 individuals work in the woodlands and are employed and managed by independent contractors.

The Manitoba Operations are the primary employer for the town of The Pas and surrounding population.

Energy

Mill steam needs are generated with a chemical recovery boiler and a power boiler. Approximately 60% of the steam comes from the recovery boiler, fuelled by black liquor (recycled lignin waste product of the chip pulping process) and bunker C oil. About 40% of the steam comes from the power boiler, which is fuelled by biomass waste (hog fuel), waste oil and bunker C oil.

In 2014, approximately 136 GWh of electricity was purchased from MB Hydro at a cost of approximately \$6 million.

In the period between 2000 and 2013 the mill competitiveness decreased dramatically when natural gas became relatively cheap compared to Bunker C due to the shale gas revolution. Bunker C used to be at a discount to oil (65%) but by 2013, that was far from the case.

Tolko's operation does not have access to natural gas while its competitors do. The nearest gas pipeline infrastructure is nearly 200 km away. Estimated costs to extend a pipeline to The Pas are in the order of \$180 million and not proven to be feasible.

Because oil prices increased threefold since 2000, the mill has focused on reducing the use of high cost bunker C and waste oil. Successful results have been achieved in conjunction with Green Transformation Projects. Total steam production required to support the mill is down considerably since 2003, reflecting improved mill efficiencies. Power boiler fossil fuel consumption is on a reducing trend as a result of increased recovery boiler liquor solids burning and increased substitution of lower-cost hog fuel. In sum, fossil fuel consumption has been reduced by 33% since 2009 and 50% since 2004. The mill continues to focus on efficiency improvements in all areas of energy consumption and generation.

Despite efficiency improvements, total steam generation and power costs per tonne of paper increased 33% from 2010 to 2014. In the same period, power rates to Tolko have increased by 19.4%. Longer-term between 2000 and 2014, power rates have increased by 52.3%.

At one time, Tolko attempted to join the curtailable rate program, but was told that it was oversubscribed. As an energy intensive business, Tolko utilizes DSM opportunities in its businesses to maintain competitiveness in the global market place. Tolko has found that DSM programs are instrumental in making electricity savings accessible and affordable. To this end, in recent months the Tolko Manitoba operations and MB Hydro have been negotiating a load displacement agreement.

Pulp and paper operations in other jurisdictions have also had the opportunity to participate in government and utility supported bioenergy programs that have valued biomass power generation significantly higher than in Manitoba. In BC, industrial operations have received in excess of \$100/MWh for power under long term contract as a result of two bioenergy calls and an integrated power offer by BC Hydro. In Quebec, Hydro Quebec has entered into eight agreements with biomass electricity producers (mostly pulp and paper operations) to purchase energy at an average of \$112/MWh.

Other

The Tolko kraft paper mill is a single-line small-scale facility. Other mills with competing products generally have multiple production lines and larger facilities producing multiple products. As such, economies of scale are much higher with our competitors.

Conclusions and Summary

Tolko's Manitoba operations are challenged from a competitiveness point of view due to:

1. High input factor costs:
 - a. Long haul distances and costs to access fibre of suitable quality;
 - b. High and increasing energy costs over the long term due to a high exposure to bunker C and waste oil fossil fuel cost trends, and the inability to access lower-cost natural gas due to a lack of infrastructure;
 - c. Lack of scale which means that fixed costs (labour, salary, other overheads, etc) are high on a unit cost basis; and
 - d. Inability to access premium prices for marginal self-generated power that displaces power purchased, unlike incremental power generation opportunities in other jurisdictions.
2. High freight costs due to location and sub-optimal infrastructure:
 - a. Distances to market and fibre sources; and
 - b. Infrastructure issues with rail and highways limiting capacity.

In the paper business increasing costs have limited ability to be passed on to customers so margins are under pressure with increasing costs.

The above-noted challenges are offset by relatively few competitive advantages associated with the Manitoba location and hosting conditions. If power prices continue to rise at the proposed 3.95% annual rate increases, the loss of competitiveness accelerates for Tolko's Manitoba operations.