

# Taiwan's Potential as an Important Trading Partner for Wood Products with B.C.

Kenny Cheng

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# Abstract

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This report analyzes Taiwan as a potential trading partner with Canada for wood products. It takes a look at Taiwan's economic conditions to see if Canada can establish a partnership with Taiwan. It contains information on Taiwan's current wood market and determines if there are any Canadian wood organizations in Taiwan. An outline is given to guide Canadian organizations on starting a partnership with these Taiwanese companies. The outcome of this report has found that there is a market for lumber products in wood frame construction. Factors for this demand in wood frame construction are green architecture, earthquake resistant buildings, demand for natural aesthetics, and tourism development. There is a partnership between Taiwan and some Canadian organizations but there needs to be more initiatives between the two countries.

**KEYWORDS:** Taiwan, Wood Frame Construction, Lumber, Tourism, Earthquake, Green Building

**Table of Contents**

A. Introduction ..... 1  
B. Canada’s Need for a wider market for its Wood Products ..... 1  
C. Choosing Taiwan as a partner in Wood Products ..... 3  
D. Analysis for Wood Markets in Taiwan ..... 4  
E. Factors contributing to growth in Taiwanese Wood Construction..... 7  
F. Setting up a Taiwan-B.C. Wood Trading Program ..... 11  
G. Conclusion..... 14  
H. References ..... 15

**List of Figures**

Figure 1. List of Organizations in Taiwan ..... 3  
Figure 2. Taiwan's Major Disasters Timeline ..... 8  
Figure 3. Examples of Recent Disasters ..... 8  
Figure 4. Examples of Taiwanese City Landscapes ..... 9  
Figure 5. Examples of Taiwanese Tourism..... 10  
Figure 6. Examples of Green Architecture in Taiwan..... 11

**List of Tables**

Table 1. Export Data for Saw Mills and Wood Preservatives Industries..... 1  
Table 2. Export Data for Pulp or Paper Industries ..... 2  
Table 3. Annual Personal Consumption of Asian Countries ..... 4  
Table 4. List of Major Trade Partners of Taiwan..... 5  
Table 5. Table of Canadian Wood Product Export..... 6

## A. Introduction

International trading plays an important role in the wood products sector of Canada. A lot of the Canadian manufacturing companies target large economic markets like the United States or emerging markets like China. Although targeting these countries is a good reason for long term profits, Canada is not the only country trying to obtain a chunk of this big market. Sometimes, it may be beneficial for Canadian wood manufacturers to target small countries, such as Taiwan, who have the potential for market growth. This report looks into the economic markets for the wood industries in both Taiwan and Canada. It answers the question on why Canada and Taiwan should be trading partners in wood products. Based on this answer, this report will make a recommendation on how to set up a B.C. Taiwan wood trading program. The objectives of this report are:

1. Investigate factors contributing to Taiwan's needs for importing overseas wood products.
2. Assess the potential and suitability of B.C. as Taiwan's major exporter for wood products.
3. Create an outline on how to set up a B.C. Taiwan wood trading program.

## B. Canada's Need for a wider market for its Wood Products

Because of an economic downturn, a lot of activity between Canada's major trading partners has decreased in the recent years. Below are two tables displaying export revenue data for Canada's two major wood products, timber and pulp:

Canada Saw Mills and Wood Preservatives Export to Major Trading Partners (Value in millions of Canadian Dollars)					
Country	2005	2006	2007	2008	2009
United States	9,325.00	8,031.00	6,249.00	4,181.00	2,852.00
Japan	1,063.85	1,067.15	817.08	795.66	611.32
China	80.92	93.14	135.47	201.25	338.40
United Kingdom	93.65	101.79	159.40	100.02	71.01
Germany	59.27	61.56	49.69	41.50	29.59

Table 1 Export Data for Saw Mills and Wood Preservatives Industries

Source: (Industry Canada, 2009)

Note: These are exports revenues to the industry not the product quantity

Canada Pulp or Paper Export to Major Trading Partners (Value in millions of Canadian Dollars)						
Country	2005	2006	2007	2008	2009	Notes
United States	10,033.00	9,287.00	8,014.00	8,021.00	6,644.00	Paper
Japan	444.13	505.86	452.48	415.32	292.28	Pulp
China	835.10	1,074.12	1,427.67	1,334.24	1,331.24	Pulp
United Kingdom	231.62	155.63	250.38	205.88	196.17	Paper
Mexico	60.41	67.26	81.33	78.77	47.77	Paper
Germany	233.19	140.22	120.37	74.97	45.02	Pulp

Table 2 Export Data for Pulp or Paper Industries

Source: (Industry Canada, 2009)

Note: These are export revenues to the industry not the product quantity

These two tables show that out of the major countries, the United States is Canada's largest trading partner. In the export data for sawmill and preservatives, the second largest partner is Japan; however, it only makes up a quarter of what Canada exports to the United States. These two tables show a trend in the slow decrease of exports from Canada to the United States over the last two years. On the other hand, export to China has been growing rapidly for the past five years. The Chinese demand for Canadian timber has been increasing a lot during the last year.

The data shows that most of Canada's exports rely heavily on the United States. However, this reliance may be short lived because there have been many issues in trading that has strained Canadian-American relations such as the softwood trade agreement (Mapleleafweb, 2007). In addition, the United States enacting its Buy American act on construction goods will heavily affect the export of Canadian lumber to the United States (Horibe, 2009). This means that Canada needs to diversify its wood product trading network to more countries to make up for its decline in United States export.

The table above shows China as a very attractive partner for the Canadian wood industry. However, there are some factors that need to be considered before Canada completely relies on China as a major trading partner. Canada is not the only country to notice China's potential as a trading partner. There are many other countries with larger economies, like the United States, who have noticed this market. China has recently earned international recognition through its Beijing Olympics (Golondongo, 2010). In addition, Russia may be a competitive threat as a lumber trading partner due to its close proximity to China, high abundance of forests, and good political relationship (The Trumpet, 2009). There is also a fear of a bubble burst in the housing industry in China with its high priced homes, low income families, and high vacancy rate (35%) (Olive, 2010). This can affect Canadian lumber sales to China, despite Canada's recent work to build demand for wooden housing in China (GC, 2009).

What does this mean for Canada and its wood products market? If trade between Canada and its main partners have been decreasing, then Canada needs to find new markets from other countries. Canada should explore as many options as possible in choosing a trading partner. One of the trading partners Canada can consider is Taiwan.

### C. Choosing Taiwan as a partner in Wood Products

Taiwan, known as Formosa, is a small island of 35,980 sq km but has a large population of 22,974,347 people (CIA Factbook, 2010). Due to laws on forest cutting, Taiwan does not produce logs and relies mostly on imports for log consumption (Chen, 2008). The Taiwanese counties that specialize in wood manufacturing are Taichung and Chiayi. Taichung has several manufacturing facilities that make wood tools and machines such as CNC (Taichung, 2010). Some of the species of wood that is used in Taiwan’s interior design are Taiwan Red Cypress, Japanese Cedar, China Fir, Taiwania, and Red Oak (Wang & Tsai, ).

Why should Canada choose Taiwan? There are not many English sources about this developed country but there are many reasons why Taiwan is an attractive partner for Canada. For an Asian country Taiwan has a strong and stable economy. There are signs of Taiwan’s good economic development in its many infrastructures such as its bullet train lines, shift towards a service based industry, more recreational areas, and increase in universities (Her, 2002; Taiwan Tourist Bureau, 2010; THSRC, 2009). It has a very strong electronic and information technology industry, with international companies such as High Tech Corporation (HTC) handheld devices and Acer computers (Taiwan.com.au, 2002). Although, Taiwan is currently in an economic slump with the rest of the world, it is expected to rebound during 2010 (Engbarth, 2009)



Figure 1 List of Organizations in Taiwan

**Top Left:** HTC logo **Bottom Left:** Acer logo **Center:** Taiwan Tourism Bureau logo **Right:** Taiwan High Speed Rail logo

**Source:** (Androidgreece, 2010; CCRC, 2010; ecommercecenter, 2010; THSRC, 2009)

Taiwan has a high Purchasing Power Parity GDP, ranked number 20 in the world (CIA Factbook, 2010). Purchasing Power Parity GDP helps determine the domestic purchasing power of a country (Mcguigan, 2010). Compared with other Asian families, the average Taiwanese family spend a lot of money in personal consumption (World Salaries, 2006). In addition, Taiwan has a low poverty line of 0.95% when compared with China’s 2.8% (CIA Factbook, 2010). Taiwan was experiencing a high growth rate of 5.7% in GDP in 2007 before the economic downturn (CIA Factbook, 2010).

Annual Personal Consumption Expenditure in Constant International Dollars for Asian Countries	
Country	Annual Consumption Expenditure
Taiwan	10,727
Japan	9,632
Hong Kong	9,057
Korea	8,927
Singapore	8,001
Thailand	2,565
China	2,292
Philippines	2,130

Table 3 Annual Personal Consumptions of Asian Countries

Source: (World Salaries, 2006)

Note: International Dollars is a hypothetical unit of currency that has the same purchasing power as the USD

It should be noted that even if Taiwan has a good economy it doesn’t mean that Canada should trade with Taiwan. There needs to be a Taiwanese demand for wood products. One possible market is housing and infrastructure development, where wood can be used as a construction material instead of steel and concrete. Taiwan has been hit by many earthquakes in the last 10 years. The most recent earthquake to hit Taiwan was a 6.4 magnitude quake that affected Kaohsiung County (Enav, 2010). Furthermore, Taiwan is not experiencing a housing bubble like the United States (T. Yang, 2010). Another market is Taiwan’s interior wood products for personal households such as floorings and composite materials.

**D. Analysis for Wood Markets in Taiwan**

Wood is part of a very important culture in Taiwan through wood carvings, art, and religious sculptures (ICTB, 2009). Taiwan’s wood culture was partially developed by the Japanese demand for Taiwanese wooden sculptures during Japan’s occupation of Taiwan (ICTB, 2009). There are several counties in Taiwan that specialize in wooden sculptures such as Miaoli and Taitung (ICTB, 2009; Turton, 2004). In terms of industry, the four main types of wood products used in Taiwan are (C.C. Liu, 2001):

1. **Logs:** Round unprocessed wood. Log imports have been declining due to export limitations and protection policies set by supplying countries.
2. **Lumber:** Processed wood for building materials. Used for a variety of domestic uses such as furniture, flooring, crating and interior products.
3. **Veneer:** A thin slice of wood used for furniture construction. The demand for this product fluctuates in Taiwan.
4. **Plywood:** Used in a lot of interior, architectural designs as well as furniture and decorative purposes. There is a high domestic demand for this product.

Taiwan is Canada’s fourth largest partner in Asia (CTOT, 2009b). Nevertheless, worldwide Canada isn’t among Taiwan’s top five trading partners. The five main destinations of exports for Taiwan are China, Hong Kong, the United States, the European Union (EU), and Japan (WTO, 2009). Taiwan mostly imports from Japan, China, the United States, The European Union, and Saudi Arabia (WTO, 2009). In the past, Taiwan used the imported wood products to manufacture furniture for export (C.C. Liu, 2001). Taiwanese furniture have been sold in the North American market such as the United States, Canada, and Mexico as either assembled furniture or Do it Yourself (DIY) furniture (Frank Wu, 2007). The Canadian distribution channels for Taiwanese made furniture have usually been in department stores, mega furniture store chains, name brand specialty stores, and web site supply and demand centers (Frank Wu, 2007).

List of Main Export/Import Countries for Taiwan			
Export	Export	Import	Import
Country	Export%	Country	Import%
China	26.10%	Japan	19.40%
Hong Kong	12.80%	China	13.10%
United States	12.10%	United States	11.00%
EU	11.00%	EU	8.20%
Japan	6.90%	Saudi Arabia	6.30%

**Table 4 List of Major Trade Partners of Taiwan**

**Source:** (WTO, 2009)

For wood products, Taiwan is Canada’s seventh largest wood export market and fifth largest softwood market (Chen, 2008). The current wood product trade between Canada and Taiwan has declined last year. This can be attributed to Taiwan moving its economy away from wood furniture manufacturing to electronics manufacturing (Buehlmann & Schuler, 2009). Taiwan is now importing wood for domestic use rather for manufacturing and exporting operations (Chen, 2008). This shift in manufacturing can be seen when Taiwan dropped from being the number five importer of American hardwood lumber in 1995 to number twenty in 2007 (Buehlmann.U). This means that Canada can target sectors in Taiwan that focuses on house building, recreational and infrastructure development and personal remodelling of apartment or homes. Shown below is a table of Canada’s wood product exports to Taiwan (Industry Canada, 2009).

Table of Canadian Wood Product Exports to Taiwan (Value in thousands of Canadian Dollars)					
Wood Industry	2005	2006	2007	2008	2009
Pulp Mills	142,821	213,366	222,028	197,126	121,287
Paper Mills	82,430	77,534	55,746	78,141	45,171
Saw mills & Wood Preservation	44,740	42,553	59,393	36,501	32,263

Table 5 Table of Canadian Wood Product Export

Source: (Industry Canada, 2009)

There are facilities set up that promote wood product trade between Taiwan and Canada. Organizations such as Canada Wood and the Canadian Organization for Forest Innovation (COFI) aim to improve the market opportunities for Canadian wood products in Taiwan (Chen, 2008; COFI, 2005). COFI has worked with Taiwan to establish a wood frame building code and now wish to implement a builder registration system (COFI, 2005). In addition, there is a Canadian trading office established in Taipei that facilitates wood trade between the two countries (CTOT, 2009a; CTOT, 2010). There are universities in Taiwan that specialize in wood science and design such as the National Pingtung University of Science and Technology and the University of Chiayi (NPUST, 2008).

To connect some of the points mentioned in the report, here is a breakdown of the wood subsectors in Taiwan:

1. **Wood Timber Frame Construction:** Shows a promising area of growth but depends on how the developers and investors view wood as a profitable material for construction (Chen, 2008). With the building code for wood established, wood has the potential to be used more in construction projects. Some of the targets for wood frame construction would be the many private tourist projects that are set up in Taiwan and the pre fabricated housing sectors (Chen, 2008). There are a variety of locations in Taiwan geared for tourists such as vacation resorts, spa hotels, and cultural parks.
2. **Public Infrastructures:** With increased funding in public and recreational infrastructures, governments have started to use more treated softwoods and engineered woods instead of concrete and steel (Chen, 2008).
3. **Interior Wood:** There is a strong demand for home renovation due to reasonably good economic conditions, increase in family incomes and apartment re-sales (Chen, 2008).
4. **Furniture, cabinetry and value added products:** Taiwan is using imported wood more for domestic use rather than manufacture to export use, which means that the furniture industry in Taiwan is on a decline. Only a couple of medium to high end furniture makers are left in Taiwan (Chen, 2008). However, there are Taiwanese investments in Chinese and Vietnamese factories; and the purchasing decisions for panels and solid wood are decided by these investors (Chen, 2008).
5. **Packing Material:** Use of softwood as a packing material for Taiwanese products is still strong (Chen, 2008). However, the demand is dependent on Taiwan's economy and trade partners (Chen, 2008).

6. **Construction Industry Consumables:** These are low-end wood products such as plywood being used as temporary structures (Chen, 2008). The demand is cyclical and depends on the government's decision to build more infrastructures (Chen, 2008). For example, the bullet train line and Kaohsiung's subway line requires plywood to make temporary concrete forms. But once the projects were completed, the demand for plywood went down (Chen, 2008). It should be noted that there may be a need for consumables again because in Taichung, a city subway line is being built. The line is currently under development, and is scheduled to be completed in 2015 (HSR, 2009).

## **E. Factors contributing to growth in Taiwanese Wood Construction**

Despite the decline in some of the wood products exported to Taiwan, the building sector shows some promising growth. The remainder of this report will focus on wood frame construction. The reason for this focus is that this sector promotes lumber usage, which is one of Canada's main exports - there is potential growth for this construction in the Taiwanese domestic markets. This section will be about the factors that led to the need of more wooden construction in Taiwanese buildings. Although wood plays an important role in Taiwan through art and religion, a lot of Taiwanese designers do not know how to construct buildings properly with wood. Nevertheless, there are several factors on why Taiwan should consider using wood for residential construction. These factors include the growing personal income of family households, the need for earthquake resistant structures, the desire for a more natural looking environment, and the awareness of using green building materials.

In Taiwan, there have been many earthquakes and monsoon related disaster in the last decade. Every time an earthquake hits Taiwan a lot of the concrete and steel buildings are destroyed and damaged. The first major known earthquake to hit Taiwan was the Chi-Chi earthquake, which caused more than 2000 deaths and greater than 51,000 building damages, of which over half completely collapsed (Hwang, 1999). The officials found that these collapsed buildings were built out of shoddy materials and arrested the designers and architects responsible for the design (Her, 1999). It was at this time when the Taiwanese public realized that it needed more earthquake resistant material but lacked the expertise on how to build these houses (Her, 1999). Progress on restoring these buildings, destroyed by the Chi-Chi earthquake, to more current standards has been slow with only 5,410 homes out of the original 51,000 being rebuilt or renovated (Sue-feng, 2009).

Taiwan Major Disaster Timeline							
<div style="display: flex; justify-content: space-around; align-items: center;"> <div style="background-color: yellow; width: 15%; height: 100px; transform: rotate(-45deg);"></div> <div style="background-color: #f08080; width: 85%; height: 100px; transform: rotate(-45deg);"></div> </div>							
	Chi-Chi Earthquake	Nantou Earthquake	Hualien/Yilan/Nantou Earthquake	Hualien Earthquake	Hengchun Earthquake	Typhoon Morakot	Kaohsiung Earthquake
1999	2000	2002	2004	2006	2009	2010	
September 21, 1999 7.3 Magnitude	May 17, 2000 5.3 Magnitude June 11, 2000 6.7 Magnitude	March 31, 2002 6.8 Magnitude May 15, 2002 6.2 Magnitude	May 1, 2004 5.8 Magnitude	December 26, 2006 7.0 Magnitude 2 waves	August 7, 2009 Building Damages and buried an entire village	March 4, 2010 6.4 Magnitude	

Figure 2 Taiwan's Major Disasters Timeline

Source: (CWB, ; CWB, ; Enav, 2010; IFRC, 2009)

Recent disasters, such as the Morakot Typhoon and the Kaohsiung Earthquake have shown that there are still challenges with home constructions (Li & Chiung-fang, 2009). After the Morakot Typhoon hit Taiwan there were plans to build 1,800 pre fabricated houses and 1,600 permanent residential housing for the victims and the aboriginal residents (China Times, 2009; Taiwan Government Information Office, 2009). With the recent case of the Kaohsiung earthquake, there are some doubts raised over the quality of the homes built after the Morakot Typhoon because of signs of damage occurring in the buildings of churches and temples (TCN, ).



Figure 3 Examples of Recent Disasters

Top Left: Effect of the 1999 Chi Chi Earthquake Source: (Machiken, 2002)

Bottom Left: Hot Spring Hotel in Taitung tipping into the river after 2009 Morakot Typhoon Source: (BBC, 2009)

Right: Textile building collapses after 2010 Kaohsiung Earthquake Source: (Enav, 2010)

The Taiwanese public should use wood construction to protect their homes from earthquakes because wood framing offers the following advantages: (CWC, 2002)

1. It is a strong but lightweight material which means less force is exerted on the design of the building.
2. There are members and connections that absorb the forces.
3. Nail connections can successfully dissipate earthquake energy.

The Taiwanese public need to be educated on the advantages on wood frame construction and how to build it.

Many Taiwanese people are enjoying their lives more, and want a better quality of life. There are some Taiwanese families that are tired of the city life and are moving out to more rural and natural areas in Taiwan (Chiung-fang, 2001). They are moving to areas in Hualien and Taitung and building these beautiful natural homes with wooden structures and gardens (Chiung-fang, 2001). However, even in the cities there is a change in culture and aesthetics in the environment as the area becomes more urbanized (Wen-ting, 2004). In the past, the buildings in Taiwan were very plain and industrialized, and many of the rivers in the cities were polluted. As Taiwan got richer, though, the cities got cleaner and the people wanted to incorporate some of Taiwan's natural environment into their cities (Wen-ting, 2004). This raised a cultural movement for more beautiful landscaping (Wen-ting, 2004). Since wood is a natural product, it can be incorporated into the landscaping or the building constructions of these cities.



Figure 4 Examples of Taiwanese City Landscapes

**Top Left Picture:** Taichung City Area (2008)

**Top Right Picture:** Love River Kaohsiung City (2008)

**Bottom Picture:** Bed & Breakfast House outside of Yilan City (2008)

Tourism is another part of Taiwan that is rapidly growing over the years. Since there is more disposable income in the average Taiwanese family, a lot of Taiwanese citizens are taking trips around Taiwan to visit local islands and hot springs. There is another trend of tourism called ecotourism, which combines recreation and environmental protection (C. Lee, 2004). This type of tourism helps educate tourists on Taiwan's natural surroundings and tribal cultures (C. Lee, 2004). This promotes the usage of more natural construction. In the construction of both of these tourist industries, wood can be used in both structural and interior work to give resorts a high end or natural look, depending on how the wood is processed.



**Figure 5 Examples of Taiwanese Tourism**

**Left:** Resort in Sunmoon Lake, Nantou County (2008)

**Right:** Development of a forest research center into an Eco-Tourist recreation center, Nantou County (2008).

In addition, Taiwan is exploring the idea of green building in its homes, and there are projects that involve building solar panels on the rooftops and reducing Green House Gases (GHG) (S. Yang, 2004). There are also hopes to integrate energy conservation and carbon reduction in the permanent housing built after the Morakot Typhoon (Taiwan Government Information Office, 2009). Taiwan has a hot climate all year round, and a good building design that provides shade can reduce the air conditioning costs (S. Yang, 2004). Taiwan has been looking into the Clean Development Mechanism (CDM) to reduce its total GHG emissions (S. Yang, 2004). Wood is a renewable resource and a great insulator so the energy needed to heat or cool homes is reduced (NAHB, ). In addition, wood is found to be less energy intensive as cement and steel which can reduce the amount of CO<sup>2</sup> emissions (FPInnovations, 2008). Through Life Cycle Analysis (LCA), analysis of a product's environmental impact throughout its lifecycle from manufacture to disposal, scientists have found wood to produce less pollution, require less energy throughout their lifecycle, and generate less CO<sup>2</sup> emissions when compared with other building alternatives (FPInnovations, 2008).



Figure 6 Example of Green Architecture in Taiwan

Source: (S. Yang, 2004)

## F. Setting up a Taiwan-B.C. Wood Trading Program

This section will provide a brief outline on how to establish a Canadian-Taiwanese trade relation for Canadian wood products. This section will cover the basic marketing principle of identifying a target market and establishing a product, price, place, and promotion. The best way to start is to begin with a province like British Columbia (B.C.). B.C. is Canada's largest exporter of wood products roughly earning 73 percent of Canada's softwood lumber exports in 2009 *see notes* (Industry Canada, 2008). Being next to the Pacific Ocean, B.C. is also the closest province in Canada to Taiwan; it also has one of the largest Taiwanese communities in Canada. According to the 2006 Canadian census there are about 321,565 Chinese living in Vancouver (StatCan, 2006).

*Note: According to Industry Canada Total Export of Softwood Lumber for B.C. 2009 is \$2,752,469,000 and Total Export of Softwood Lumber for Canada 2009 is \$3,765,000,000. Therefore B.C. Total Softwood Lumber Export/Canada Total Softwood Lumber Export\*100=% of Softwood Export for B.C in Canada.*

### Target Markets

Here is a breakdown of the target markets that a firm should pursue:

- Recreational Developers: These are private builders who are developing tourist attractions in Taiwan.
- Property Developers: Government or private developers who are involved in building properties.
- Architects and Builders: The people who are involved in the designing and building of the buildings.

## **Product Strategy**

- Ensure that the lumber dimensions are in the metric system. Instructions and documents should be written in Traditional Chinese Characters rather than Simplified Chinese Characters. Traditional Characters is Taiwan's main writing system.
- The lumber should be advertised as ecologically friendly. A market for FSC certified lumber in Taiwan is possible.
- Use softwood lumber and engineered wood for construction and hardwood for high end interior.
- Try to market the lumber as earthquake resistant. This is an important factor because of the numerous earthquakes damaging the buildings in Taiwan. There can be a market for Machine Stress Rated (MSR) Lumber, grade stamp that indicates its design bending stress and stiffness (Griffin, Gromala, Rogers, & Theilen, ).
- Hire service representatives who are fluent in Mandarin. Although the majority of Taiwanese people know some form of English, their knowledge level may not be proficient enough to understand technical or business details. Representatives who also know how to speak Hokkienese is an asset because some developers prefer to do business in this language.

## **Pricing Strategy**

- The pricing of wood products should depend on the type of product as well as its certification (FSC, MSR, etc.). It should be noted that the product should be priced between medium to high because of the demand for quality products.
- Pricing should be fair and standard according to international laws and taxes
- Canadian government can work with Taiwan to establish a tax exemption on Canadian wood products. The United States tried to set an agreement with Taiwan to end tariffs and duties on American wood products (Taiwan to end most duties on wood items by 2002.1998). Currently Taiwan is a member of the World Trade Organization (WTO) and the Asia-Pacific Economic Cooperation (APEC) (CTOT, 2009a).

## **Distribution Strategy**

- As mentioned above, B.C. is an ideal place to start a partnership with Taiwan due to its geographical advantage, large Taiwanese community, and large wood production capability.
- Transportation by boat and containers is preferable and can be combined with deliveries going to Japan or China.
- E-business is a potential way to do business with Taiwanese firms but may be too difficult to set up. Some of the business in selling Taiwanese wooden furniture to Canada is done by internet sales (Frank Wu, 2007).
- Most of the trade should be done in Business to Business. Trade Discounts are possible with large Taiwanese development firms.

## Promotional Strategy

- Surveys should be done to determine the mindset of the potential Taiwanese customers. This can help Canadian businesses determine how to do business with the Taiwanese and determine their needs. A survey on Taiwanese purchasers show that Taiwanese lumber purchasers will do business with international sellers who understand the international trade regulations, have a good background in wood products, and are proficient in foreign languages (J. Y. Lee & Huang, 2005). In addition, two big criteria of buying foreign lumber for Taiwanese purchasers are the price and quality of the wood (J. Y. Lee & Huang, 2005).
- The Canadian wood industry should try to establish a partnership with the Taiwanese Tourism Bureau. The Tourism Bureau lists all of Taiwan's tourist resorts and they can help a firm access the many Taiwanese recreational areas in development that may need lumber (Taiwan Tourist Bureau, 2010). The recreational developer can also contact the Taiwanese Tourist Bureau and they can be referred to companies that manufacture Canadian wood. They also have a very strong promotional campaign and can give tips on how to promote Canadian lumber in Taiwan.
- Use experiments as promotional media to show architects and builders the advantage of wood structures during an earthquake. There is a recent video showing a Japanese research center that created the world's biggest shake lab to simulate a 7.5 earthquake on a wooden structure (Merolla, 2009). At the end of the test the wooden structure remained standing with little damage to the wood components (Merolla, 2009).
- Work with architects and builders on understanding the Wood Frame Building Code set up by COFI. Architects and designers can use the Guide to Good Practices (GGP) to help them understand the regulations of the Wood Frame Building Codes, but organizations should set up a training program on wood design use (Chen, 2008).
- Start a partnership between Canadian universities and Taiwanese universities to exchange Taiwanese Wood Science/Architectural/Engineering students into some of Canada's Forestry Faculties such as the University of British Columbia's Wood Products Processing program. Although it is a long term project, some of these Taiwanese students will become managers or designers. This exchange can give Taiwanese students an opportunity to work with wood. If they have a firsthand view of some of the Canadian Technology incorporated into the wood products it can help them perceive Canadian wood as a high quality construction material.
- Catalogues, magazines and other media promoting the use of Canadian wood. Like mentioned, briefly architects and builders are still inexperienced when it comes to working and designing with wood. They should be educated on the preservative treatments and design principles to prevent fire and water damage from typhoons (CINTRAFOR, 2001).
- Trade shows are a good way to showcase Canadian Timber. Taipei has hosted some international trade shows such as the Taipei International Furniture Show (TIFS) (Frank Wu, 2007).
- Canada should use some of the experience it has developed in Japan and China when setting up a wood trading partnership with Taiwan. This will allow Canada to reapply successful initiatives and avoid any poorly executed ones. For example, Canada Wood is an organization that promotes the use of Canadian wood internationally (Canada Wood, 2009). They look into factors

of market access such as trade barriers, building codes, education, and environment issues (Canada Wood, 2009). They have specialists in China and Japan that focus on policy, as well as technical, and promotional implementation of Canadian wood products (Canada Wood, 2009).

## **G. Conclusion**

Taiwan shows moderate economic growth and the average income of the Taiwanese family is increasing. Although the furniture industry in Taiwan is in decline, there is potential growth in the wood construction sector. This growth is attributed to more recreational facilities, demand for natural buildings due to urbanization, and demand for earthquake resistant buildings. Not many of Taiwan's major trading countries such as China can provide Taiwan with lumber; therefore, this role can be filled by Canada. This leads to the question, is Taiwan worth pursuing in developing a lumber trade?

The simple answer is yes. Even though Canada already has a lot of trading partners for its lumber such as China and the United States, it would benefit Canada to diversify in other countries. Despite its small scale, there is already a network set up by some Canadian organizations and trade offices to facilitate wood product trading with Taiwan. There is still room for improvement between Canada and Taiwan in the wood products trade. Some of the factors to consider are educating specifiers on wood construction building, developing partnerships with the Taiwanese Tourism Bureau, and convincing the building developers on the earthquake resistant properties of wooden buildings. Learning more about Taiwan's culture and people is one of the first steps in developing a partnership. Educating and convincing the Taiwanese public on the importance of wood is important in maintaining this partnership.

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