

Trends and Prospects
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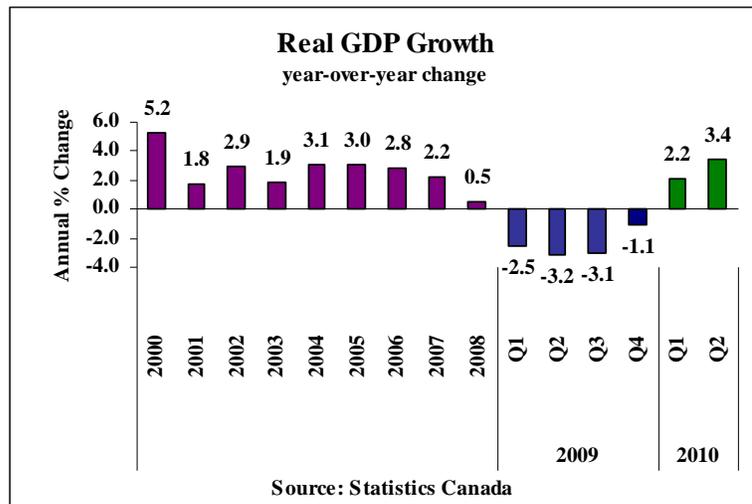
September 2010

CANADA

I. An Economic Overview

General Economic Conditions

In 2010, the Canadian economy showed signs of renewed strength, growing 2.2% in the first quarter and 3.4% in the second quarter. This is partly due to a stronger US economy that has resulted in greater demand for Canadian products. That said, the Canadian economy's improved performance is not unsurprising when weighed against last year's first quarter performance. In 2009, real GDP declined by 2.5%. This is in contrast to the period from 2004 through 2007 when Canada's real GDP grew at an average rate of 2.9%.



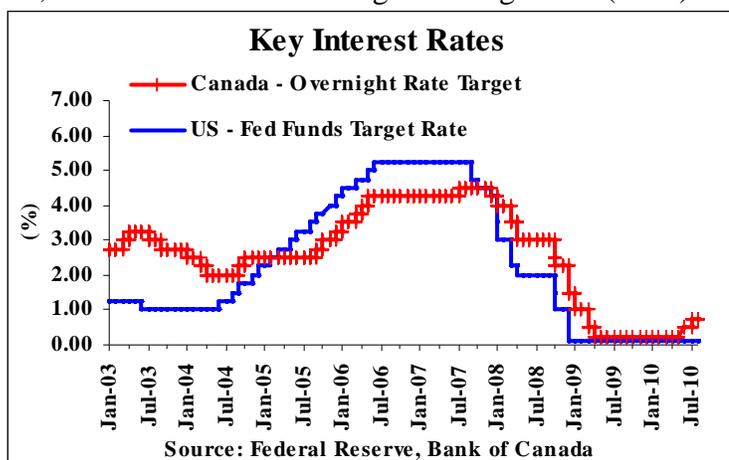
In 2009, Canadian housing starts plummeted by 29.6% compared to 2008.

By the first half of 2010, they had improved by 52.8% compared to the same period in 2009. Having come out of a recession last year, a stronger Canadian economy has translated into an improved Canadian housing market this year.



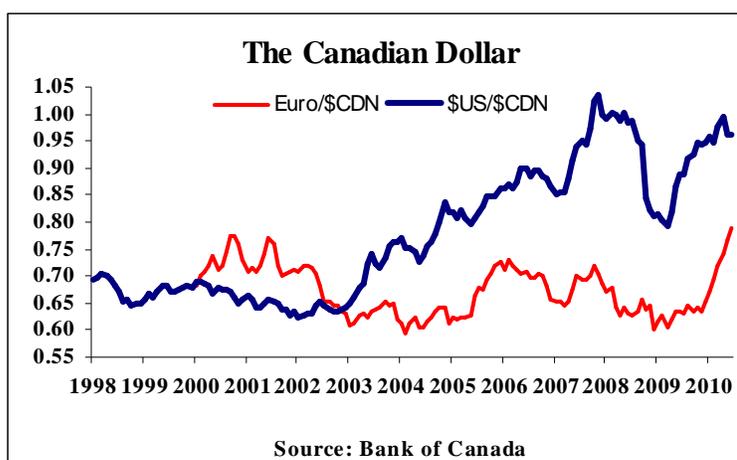
Increasingly tight credit restrictions in the U.S. mortgage market since 2007 has transpired into more stringent capital and credit access conditions in the greater global economy, impacting Canada as well. It is expected that as the US economy improves the Canadian economy will benefit and this should bode well for the Canadian housing market.

From mid 2007 until the beginning of 2009, the Bank of Canada's target overnight rate (ORT) was dramatically lowered as the nation's economy weakened, largely due to the impact of a global economic downturn. Unsurprisingly, by December 2008, with a recession in full swing, the ORT had fallen to just under 2.0% while by May 2009, the ORT had slid further, to 0.25%. The ORT remained at this level until fairly recently, in June 2010, when it was raised to 0.50%. The ORT has continued to rise since then and as of August 2010 it had increased to



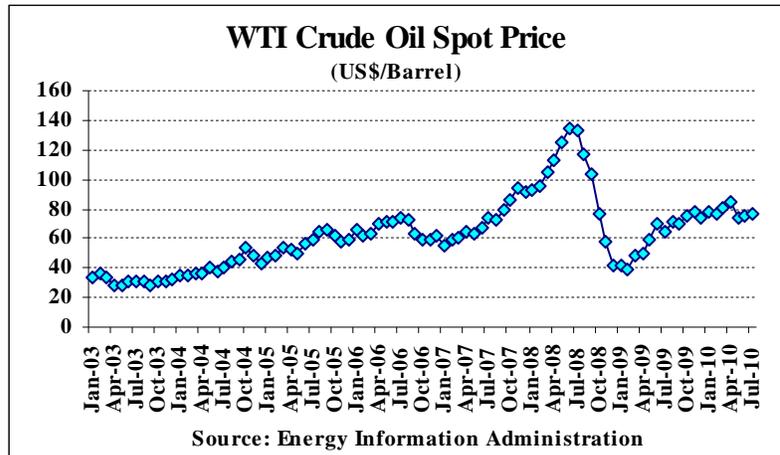
0.75%. With the Canadian economy slowly improving the ORT is expected to rise further although the possible negative impact of a future weakening in the US economy may prompt the Bank of Canada to be cautious before considering further increases in the ORT. At its inception, the main factor behind the Canadian recession was weakness in Canada's largest export market, the United States. In fact, the US economy experienced a significant slowdown over the previous two years, stemming from frailty in the U.S. housing market, which ultimately adversely affected other sectors of the U.S. economy, not to mention the rest of the world. During this period, conditions for receiving available credit tightened noticeably throughout the Canadian economy and as a result, the Canadian economy plunged into a downturn just as it had south of the border. The course for the U.S. Federal Funds Target Rate (FFTR) has followed a similar path as the ORT, trending downwards during periods of weakness in the US economy. However, unlike the Bank of Canada, the Federal Reserve Board has been cautious about pushing increases in its target interest rate, in fact leaving the FFTR unchanged even as the ORT has risen. With the Federal Reserve Board being wary of a possible double dip recession hitting the US economy, the Board has been apprehensive about implementing increases in the FFTR until robustness in the US economy can be more comprehensively assured.

In 2008, the Canadian dollar appreciated marginally against the U.S. dollar, by 0.8% – the sixth consecutive year the Canadian dollar has risen against the U.S. currency. Although the Canadian dollar peaked at a daily rate of nearly US \$1.10 in November 2007, the dollar fell, hovering around US \$0.95 for the next ten months before tumbling in October 2008 when the global financial crisis intensified. The value of the



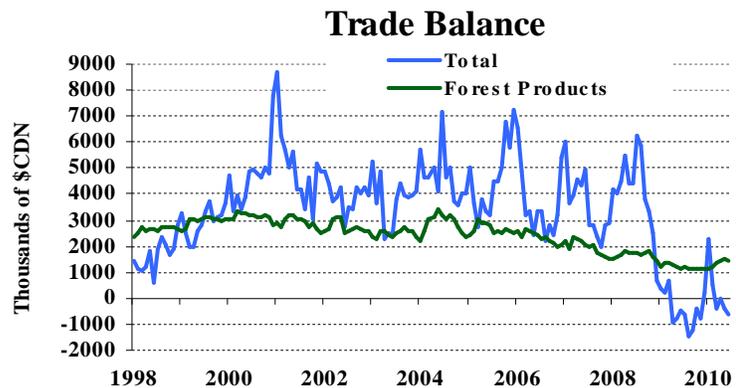
Canadian dollar continued to gradually fall thereafter, reaching a monthly low of US \$0.79 in March 2009 before rebounding once again. As of October 2009, the monthly rate reached US \$0.95 and it remains close to that level, most recently measured at US \$0.96 as of August 2010.

Appreciation in the Canadian dollar was driven by several factors, one of the most important being fluctuating prices of exported Canadian commodities, namely crude oil and metals. Canada's largest export market for crude oil is the U.S. while for numerous metals it is China. In the case of crude oil, the West Texas Intermediate (WTI) monthly crude oil price spiked at US \$133.88 in June 2008 before embarking on a dramatic slide that ended with the WTI hitting US \$ 41.12 in December 2008. It has since recovered, peaking in 2010 during the month of April at US \$84.29.



In recent years, a lack of confidence in the U.S. dollar has induced interested investors to shift their funds into non-U.S. dollar accounts such as the Canadian dollar. This has provided a significant boost to the valuation of the Canadian dollar although the shift away from the U.S. dollar has also spawned interest in other leading world currencies such as the Euro. For the Euro, EU-area export growth and steady European Central Bank rate hikes have provided steady support to the currency since the end of 2005. In comparison, the Canadian dollar has fallen relative to the Euro in 2008 and 2009. However, since then, with strengthening in key commodity prices and a weakening in EU-area economies, the Canadian dollar has recovered somewhat.

Canada's annual forest products trade balance declined steadily from 2000 to 2003 before improving in 2004. Thereafter, another steady descent followed with Canada's forest products trade balance hitting \$14.4 billion in 2009, representing a 28.0% decline compared to 2008. However, in the first half of 2010, Canada's forest products trade balance grew 8.6%, in part due to an improved US and global economy, which boosted



Canadian forest product exports abroad. Historically, forest product exports have represented the largest component of Canada's positive trade balance. However, from 2001 to the present, forest product exports have consistently been the second largest component, after oil/fuel exports. The

largest contributors to the forest products trade balance in the first half of 2010 were lumber, chemical wood pulp, newsprint and uncoated freesheet paper with net exports of \$2.3 billion, \$2.3 billion, \$1.3 billion and \$1.0 billion, respectively.

II. Policy Measures in Canada Impacting Forest Management and Forest Product Trade

1. A Vision for Canada's Forest: 2008 and Beyond

In December 2008, the Canadian Council of Forest Ministers (CCFM) released *A Vision for Canada's Forests: 2008 and Beyond*. The *Vision* was developed under the leadership of the CCFM and it conveys Canada's ongoing commitment to sustainable forest management. It aims to stimulate ideas and encourage action through fourteen desired outcomes related to two converging priorities: forest sector transformation and climate change. The *Vision* recognizes that both of these priorities require long-term solutions that are national in scope, with the potential to influence every aspect of Canada's forests and forest sector. The priorities are also intertwined: climate change is a catalyst for transformation, while transformation can help the sector deal with climate change. In both cases, innovation is essential to create the new ideas, products, markets and processes that will carry the forest sector forward.

For more information on *A Vision for Canada's Forests: 2008 and Beyond*, see the Canadian Council of Forest Minister's website at www.ccfm.org.

2. Competitiveness Initiatives

Canada's forestry sector is facing significant challenges from declining demand in the residential construction markets in the United States and increasing competition from emerging economies. In recent years, a number of initiatives have been implemented to help secure a more sustainable forest industry by helping the sector develop new products and processes, and take action on new opportunities in the international market place.

Innovation

The severe global recession has markedly increased the importance of research and innovation in better ensuring the future international competitiveness of the Canadian forest sector. The emphasis on research and innovation is particularly critical in the pulp and paper sector given the growing importance of electronic media and competition from new hardwood kraft mills in the southern hemisphere using fast rotation, plantation wood fibre. With so many communities and forest industry suppliers dependent on a viable forest sector, in 2007 the federal government helped restructure and consolidate the three forest research institutes (FERIC, Forintek and Paprican) into FPInnovations, which is linked to Natural Resources Canada's Canadian Wood Fibre Centre (CWFC). Consequently, FPInnovations is now the world's largest public private partnership for forest-related research. The focus of its research is the development of emerging and breakthrough technologies related to forest biomass utilization, nanotechnology and next generation forest products.

The restructuring of Canada's forest innovation system also requires improved integration of the efforts by academia. The Natural Sciences and Engineering Research Council (NSERC) in partnership with Natural Resources Canada and FPInnovations has created Forest Sector R&D Initiative, a \$34 million, five-year initiative to identify commercially relevant research programs that will create new market opportunities for the Canadian forest sector. The goal is for all researchers – not just those working in disciplines traditionally associated with the forest sector – to participate in this initiative to develop new products and enhanced production processes that will benefit the Canadian forest sector.

The Government of Canada and provinces working with industry have continued to support research at FPInnovations in partnership with major universities. One of the more significant federal support programs as reflected in Canada's Economic Action Plan 2009 is the Transformative Technologies Program (TTP). This program received \$80 million over two years to provide for pre-competitive non-proprietary research to address the development and adaptation of emerging technologies such as forest biomass, forest biotechnology and nanotechnology. Also as part of Canada's Economic Action Plan, funding of \$40 million was established for the Transformative Technologies Pilot Scale Demonstration (TT-PSD) program which is delivered in collaboration with provinces, universities and forest products manufacturers. It focuses on the development of pilot – scale demonstration of novel forest products and processes through the adoption of emerging and breakthrough technologies related to forest biomass harvesting and conversion, nanotechnology and next generation forest products. By working with partners in governments and industry, the TT-PSD is focused on supporting the transformation of the forest industry by moving mature research conducted under the TTP to pilot scale demonstration in industrial settings.

An example of new technologies receiving significant priority is the use of wood in non-residential applications and in mid-rise residential construction. With the support of TTP, FPInnovations is cooperating internationally and particularly with Japan and other partners to study and test the structural and other properties of 6-storey light wood frame construction for this and other Asian markets. Recent work under the TTP has contributed significantly to the ground-breaking construction of new 6 and 8 storey wood and wood-concrete hybrid residential buildings in Canada.

Ultimately, with support from the federal government, the integrated and coordinated R&D and innovation system of the Canadian forestry sector will see the sector emerge from this period of unprecedented crisis operationally lean and efficient and ready to embrace new and transformative products and market opportunities.

Markets

Budget 2009 provided Natural Resources Canada with \$40 million over two years for the Canada Wood, Value to Wood, and North America Wood First programs to help the forest sector market innovative products internationally. An additional \$10 million was provided to support large-scale demonstrations of Canadian-style use of wood for construction in targeted off-shore markets, and non-traditional uses of wood in domestic markets.

Value to Wood

The Value to Wood program provides funding for research related to the development of new and modified value-added wood products, such as floors, kitchen cabinets and finger-joined lumber. As well, it provides technical assistance to small and medium-sized companies wanting to adopt new technologies. The research is conducted by five leading wood research organizations across Canada, which includes universities and the world's largest forest research organization, FPInnovations. Technical assistance to value-added wood products companies is provided by a network of industry advisers located across the country. These advisers have specialized technical and markets expertise.

Canada Wood Export Program

Established in 2002, Canada Wood funds activities that help Canadian wood producers diversify and expand offshore export opportunities for their products in traditional and emerging markets through its Canada Wood Offices in Shanghai, Beijing, Tokyo, Seoul and London. Since its inception, Canada Wood has raised the profile of Canadian wood products, influenced the development of residential construction codes and standards, assisted in the establishment of foreign marketing agents for a number of major Canadian wood producers and stimulated exports. In fact, since 2002, Canadian exports of wood products have increased by more than 540% to China and 55% to South Korea. Canada Wood will continue to build on its initial accomplishments and will expand its activities through the support of exploratory missions and trade shows in areas such as Mexico, Vietnam and the Middle East where demand for wood products have been on the rise in recent years.

North American Wood First Initiative

Established in 2007, Wood First funds activities that promote the use of wood in non-residential construction (schools, health care facilities, retail establishments, etc.) throughout Canada and targeted regions of the U.S., namely California, the Southeast (Georgia, North and South Carolina), and the North Central (Minnesota, Wisconsin, Illinois). Market studies conducted in advance of the initiative's establishment indicated that these U.S. regions had the highest levels of construction activity and the best potential for significant success in growing the non-residential market for wood. Examples of activities undertaken by the wood products associations are market research and benchmarking studies, technical support, technology transfer and training projects, outreach to colleges and universities and the development of communications tools.

Demonstration Projects

Between 2009 and 2011, the federal government is supporting large-scale demonstrations of Canadian-style use of wood for construction in targeted offshore markets and non-traditional uses of wood in domestic markets. The projects in offshore markets such as China and South Korea build on the activities delivered under the Canada Wood Export Program and focus on the Canadian style of using wood for construction. In domestic markets, these demonstration

projects showcase the innovative use of wood in non-residential applications, building on activities undertaken under the North American Wood First Initiative. These demonstration projects also emphasize the environmental benefits of wood use, which helps to develop and expand markets that are increasingly sensitive to environmental considerations.

Community Adjustment Fund

The Community Adjustment Fund (CAF) was announced as part of Canada's Economic Action Plan in January 2009, to provide \$1 billion over two years to address the short-term economic needs of Canadian communities impacted by the global recession. The national fund provides an economic stimulus by supporting projects that create jobs and maintain employment in and around communities that have experienced significant job losses and lack alternative employment opportunities. The Fund is having positive impacts on various resource-based communities (including forestry). By the end of its first year (March 31, 2010), it has supported over \$200 million in projects that are helping to mitigate the short-term impacts of restructuring in these communities.

Pulp and Paper Green Transformation Program

Announced in June 2009, the \$1 billion Pulp and Paper Green Transformation Program (PPGTP) is laying the groundwork for a greener, more sustainable future for Canada's pulp and paper sector by supporting innovation and environmentally friendly investments in areas such as energy efficiency and renewable energy production. The PPGTP will allow pulp and paper mills in Canada to further reduce their greenhouse gas emissions while helping to position them as leaders in the production of renewable energy from forest biomass.

The PPGTP calculated a maximum funding envelope for companies based on a \$0.16 per litre credit for black liquor produced by their mills between January and May 2009 (when the Program cap of \$1 billion was reached). In October 2009, the PPGTP allocated credits to 24 pulp and paper companies, based on their black liquor production. Firms now have until March 31, 2012 to draw on this funding to finance approved capital projects that offer demonstrable environmental benefits, such as improvements to their energy efficiency or their capacity to produce alternative energy.

Investments in Forest Industry Transformation

The Investments in Forest Industry Transformation (IFIT) Program, launched in August 2010, will help expand opportunities for Canada's forest sector by investing in innovative technologies that support a more diversified, higher-value product mix in the forest sector. These products include bioenergy, biomaterials, biochemicals, and next generation building products. Over the long term, these investments will improve the forest sector's economic viability and

environmental sustainability, helping to secure a more prosperous future for Canada's forestry industry and forest-dependent communities.

The \$100 million, four-year program was announced in Budget 2010, with funding provided through *Canada's Economic Action Plan* – Canada's response to the global economic recession.

3. Climate Change

The attention paid to the impacts of climate change on Canada's forest and forest sector has increased substantially in recent years. Adaptation will require increasing Canada's resilience to climate change, by first raising awareness and understanding, and then assessing and implementing appropriate responses. In 2009, two new synthesis reports discussed adaptation in Canada's forest sector. Natural Resources Canada (Canadian Forest Service) released *The importance of forest sector adaptation to climate change*, a report intended for forest scientists interested in understanding the degree to which climate might change, possible impacts, and why adaptation is needed (see http://bookstore.cfs.nrcan.gc.ca/detail_e.php?recid=12588568). In a separate report, the aspects of forestry that were initially addressed in the 2007 Government of Canada report, *From Impacts to Adaptation: Canada in a Changing Climate* were expanded upon. The report, *Climate change and Canada's forests: from impacts to adaptation*, was published by Natural Resources Canada (Canadian Forest Service) and the Sustainable Forest Management Network Centre of Excellence hosted by the University of Alberta (http://bookstore.cfs.nrcan.gc.ca/detail_e.php?recid=12589030). It draws on a combination of scientific and technical expertise to provide an in-depth assessment of current and future biophysical impacts, regional vulnerabilities, forest sector impacts and implications for adaptation.

The Canadian Council of Forest Ministers (CCFM) is undertaking work to understand specific impacts of climate change and how to respond. In 2009, the CCFM published the report "*Vulnerability of Canada's tree species to climate change and management options for adaptation: an overview for policy makers and practitioners.*" The study provides policy makers and forest managers with the latest knowledge about the vulnerability of Canada's major commercial tree species and potential adaptation options. Building on this work, the CCFM will continue to undertake analyses to assess the impacts of climate change on Canada's forest ecosystems, and potential adaptation activities.

The Government of Canada continues to address the goals of reducing Canada's total greenhouse gas emissions, relative to 2005 levels, by 17 percent by 2020. Canada continues to support the G8 partners' goal of reducing global emissions by at least 50% by 2050, as well as the goal of developed countries reducing emissions of greenhouse gases in aggregate by 80% or more by 2050.

The Government of Canada also continues to work constructively to implement the Copenhagen Accord and to complete the negotiations under the UNFCCC for a comprehensive, legally binding post-2012 agreement. Canada is promoting new international forest carbon accounting

rules that would 1) provide improved incentives for mitigation efforts involving forest carbon, 2) more accurately reflect what happens to forest carbon including carbon in harvested wood products, and 3) not penalize countries for natural disturbances (e.g. wildfires, insect infestations), which they do not control, but instead focus on the direct impacts of human activity, including forest management activities. The role of Canada's forests, forest products and wood-based bioenergy in helping to mitigate climate change is the subject of on-going assessment. In 2010, Canada endorsed the global Partnership in Reducing Emissions from Deforestation and Forest Degradation, and enhancing sustainable forest management (REDD+ Partnership) as it aligns with priorities in the Copenhagen Accord.

Regarding domestic actions, the Government of Canada has announced that it will only adopt a cap-and-trade regime if the U.S. signals that it will do the same. Canada has already completed much of the extensive analysis and consultation work required to prepare for a cap-and-trade system that could include forest carbon offset credits. In 2008, Provincial and Territorial Premiers requested that the CCFM develop a forest carbon management offset system quantification protocol for all jurisdictions in Canada to use. In 2009, the CCFM published “*A framework for forest management offset protocols.*” The report identifies the technical issues fundamental to quantification of forest carbon offsets and evaluates options to address these key technical issues. The framework is intended to contribute to the development of forest management quantification protocols for use in a federal Offset System.

4. Mountain Pine Beetle Infestation in Western Canada

The Mountain Pine Beetle infestation has caused widespread timber losses in British Columbia and is now established in Alberta. According to scientific assessments, there is a risk that the beetle may spread into Canada's boreal forest, further impacting Canada's forest industries and the well-being of forest-dependent communities located in affected areas.

Because of the vital role the forest industry plays in Canada's economy as a whole, and the growing threat the beetle poses to forests throughout Western Canada, the Government of Canada has identified the infestation as an issue of national importance and is working closely with the Provinces of British Columbia and Alberta and other provinces and territories to deliver an effective response to the beetle infestation.

Between 2007 and 2010 the Federal Government provided \$200 million through the Mountain Pine Beetle Program in measures to address both the short-term and long-term impacts of the beetle infestation. In particular, the program supported efforts to control the spread of the beetle, recover as much economic value as possible from timber destroyed by the beetle, and protect forests and communities from the risk of wildfire.

Also, an additional \$216M was provided over a three year period (2009-11) for British Columbia and Alberta through the Community Adjustment Fund to support economic restructuring in communities including in those affected by the beetle outbreak.

Recognizing the impacts of the beetle will be felt for many years, these investments will help diversify the economic foundation of forest-dependent communities and contribute to their long-term stability.

5. Trade Policy

In addition to the Softwood Lumber Agreement with the United States, and the North America Free Trade Agreement, Canada has free trade agreements with Panama (2010), Jordan (2009), Colombia (2008), Peru (2009), Costa Rica (2002), Chile (1997) and Israel (1997). Canada also signed an agreement with the European Free Trade Association (2009).

Currently, negotiations are underway or are being explored with the European Union for a Comprehensive Economic and Trade Agreement, as well as with Morocco, Korea, the Andean Community, Caribbean Community, Dominican Republic, Central America Four, India, Singapore, Ukraine and Turkey for economic or free trade agreements.

6. Phytosanitary Measures

Canada has demonstrated leadership in the area of phytosanitary measures through the development of a national heat treatment certification program for solid wood products, which signifies that its wood packaging materials for export satisfies the requirement of ISPM-15.

Canada has pursued its efforts on advancing its implementation of a national heat treatment standard for solid wood products. Canadian efforts have also been devoted to improving the scientific basis behind the treatment options, as well as on the significance of bark on wood packaging material in service. The Canadian Food Inspection Agency (CFIA) recognizes the Canadian Lumber Standards Accreditation Board (CLSAB) as the accrediting agency for this domestic program.

Canadian experts continue to take an active role in international fora related to phytosanitary measures, including North American Plant Protection Organization (NAPPO), International Plant Protection Convention (IPPC) and International Union of Forest Research Organizations (IUFRO) activities.

7. Public Procurement Policy

The Government of Canada has a Policy on Green Procurement that came into effect April 1, 2006 for federal government departments and agencies. This is to ensure that the government is cost effective in its procurement, operates and disposes of its assets in a manner that protects the environment and supports sustainable development objectives. This policy is intended to make the government a global leader in integrating environmental considerations into all aspects of our procurement system.

While the policy does not explicitly mention criteria for the purchase of wood and paper products, these products are covered by the policy. The Government continues to incorporate green criteria into the broader procurement process, including consideration of various criteria for sourcing forest products such as forest certification, recycled content, emissions reductions and energy usage. A government-wide training course is available on-line for government departments and agencies.

8. Corporate Social Responsibility

Corporate Social Responsibility (CSR) is defined as the way companies integrate social, environmental, and economic concerns into their values and operations in a transparent and accountable manner. The Government of Canada expects and encourages Canadian companies operating abroad to respect all applicable laws and internationally-agreed principles of responsible business conduct. As part of this Strategy, the government also take steps to ensure that government services align with high standards of corporate social responsibility, as appropriate.

The forest sector in Canada, particularly the members of the Forest Products Association of Canada, have endorsed a formal commitment statement regarding sustainability. Their members are committed to being global leaders in the production of sustainable products and in environmental performance. Their practices are aligned with five sustainability priorities for responsible forest products: harvest legally; regenerate promptly; reduce waste and promote paper recovery and recycling; reduce greenhouse gas emissions; and be open to public scrutiny.

III. Market Drivers

The Canadian forest sector is undergoing a slow recovery from what has been a significant period of restructuring and change. This recovery has been spurred in part by the gradual rebound of the U.S. economy and housing market. As economic conditions improve and industrial activity increases, it is anticipated that demand for forest products will recover.

Demand for paperboard and printing papers should strengthen as economic activity picks up while opportunities in the wood products sector should improve as housing starts begin to bounce back in the U.S.

Canada's forest sector still faces numerous challenges; among them are rising energy costs, a strong dollar and increasingly aggressive foreign competition. This has led to the sector taking steps to adapt to these changes such as through consolidation, rationalization of high cost production and actively developing new markets and products.

Emerging Opportunities

While many traditional markets for Canadian forest products are mature there are still opportunities for expansion. They include greater use of wood in non-residential applications and expanding offshore export opportunities for Canadian wood products in emerging markets. Climate change considerations and a greater recognition of the environmental benefits of wood are also opening up opportunities for wood products; including bio-energy and next generation bio-fuels.

Global Competition

Aggressive foreign competitors have emerged, driven by technological advancements, cheaper wood, faster-growing trees, lower labour costs, and lighter regulatory burdens. These competitors have weakened the Canadian forest product export position in many markets, and in some cases, aided by the strong Canadian dollar have managed to penetrate the North American market.

Energy Prices

Wide fluctuations in the price of oil, peaking at \$133.88 in July 2008 and averaging around US\$77 at the time of publication (August 2010) are certainly bringing uncertainties to the Canadian forest industry. Over the years, the pulp and paper industry has been particularly impacted by higher energy costs. In addition, Canada's increasing oil and energy exports have contributed to the appreciation of the Canadian dollar, further weakening the Canadian forest industry's global competitive position. However, the volatility of the price of oil is providing opportunities for the industry in bio-energy and bio-fuel production.

US Housing Market

The US housing market is the primary driver behind softwood lumber and wood panel markets in North America. U.S. residential investment has contracted by over 50% between 2004 and 2009. The average annual housing starts for the period between 1995 to 2007 was 1.65 million but large declines occurred in 2008 and 2009 when starts fell to 905,500 and 553,900 respectively. So far, for the first half of 2010, housing starts have totalled around 305,000 units. While 2010 will likely be a better year than the one previous, it will still be a far cry from a few years ago when starts were over 1 million units per year.

As a consequence, U.S. demand for softwood lumber has decreased by 46% between 2004 and 2009. As a result, Canadian exports to the U.S. have dropped by approximately 60% during the same period. A slight recovery is anticipated for 2010 but a full recovery is not expected for another few years.

Shifting Global Demand for Paper

The pulp and paper sector is anticipated to experience a gradual recovery as economic conditions improve. The Conference Board of Canada has indicated that the pulp and paper industry is expected to return to profitability in 2011 after eight consecutive years of losses. Margins however, are expected to remain weak. Increased demand for paperboard boxes and communication papers are forecasted. In addition, supply disruptions in Finland and Chile coupled with strong demand in Asia have temporarily increased pulp prices which have provided some relief towards industry profitability and production. Growth in the sector will be driven primarily by exports to foreign markets such as China and India. The sector's near-term performance will be linked to the recovery in the U.S. economy since roughly half of production is exported to the U.S. market.

The sector faces some ongoing challenges that pose a risk towards its long term outlook. These challenges include:

- Appreciation of the Canadian dollar
- Increasing competition from Asian and South American producers
- Stagnating demand in North America
- Rising energy prices
- Structural shift from print media towards electronic media

Exchange Rates

Exchange rates will continue to play a driving role in determining the prosperity of the forest industry, as most Canadian forest products are exported and sold in US-dollar terms while the sector pays most of its costs in Canadian dollars. The Canadian dollar averaged \$0.96 to the US dollar in July 2010, and this strength will continue to be a key determinant of the profitability of Canadian forest products firms in the near term.

IV. Developments in Forest Products Markets Sectors

1. Wood Energy Policy

Canada has a proven record of sustainable forest management, with about 6% of Canada's total secondary energy use now coming from forest biomass. The Canadian forest sector already makes widespread use of forest biomass for the cogeneration of heat and electricity - particularly the pulp and paper industry, which derives around 52% of its energy needs from forest biomass. A number of Canadian companies are also looking at emerging technologies to make liquid fuels from wood.

Canada's forests have a strong role to play in the production of bio-fuels from residues and opportunity wood. Studies have shown that mill residues are in short supply in some Canadian regions to a point where residue users are competing for the remaining supplies from traditional sources. However, non-traditional biomass sources, such as solid waste, represent a large potential source of wood-based bio-energy.

There is also a potentially large forest biomass resource currently underutilized from forestry operations, sawmills and salvage possibilities from trees impacted by the Mountain Pine Beetle in British Columbia. Wood-based transportation fuels, such as cellulosic ethanol, are currently in development, and they are expected to become commercial over the next decade. Right now, we need further research and development and pilot testing of technologies to reduce production costs of bio-fuels and process co-products so that the resulting bio-fuels are cost-competitive when compared with fossil fuels.

Through Canada's Economic Action Plan, NRCan introduced the \$1 billion Clean Energy Fund, which is designed to provide funding for, among other initiatives, innovative systems to provide power and heat for communities using geothermal or waste heat sources, including waste forest biomass.

2. Certified Wood Products

The different levels of government, and the various forestry and wood products associations, have various programs and policies in place that promote the sustainable use of wood both domestically and internationally, whether at the harvesting, manufacturing or consumption level. For example, many provincial governments have policies and guidelines requiring that the pulp and paper sector use existing wood fiber, available through primary manufacturing plants such as sawmills and other wood processing mills, before being granted a tenure license. Such a procedure ensures that existing fiber is used efficiently before new harvesting areas are opened up.

Environmental issues are, more than ever, a growing concern in the marketplace, and demand for certified forest products continues to increase. Recognizing the growing global interest in certified forest products, the Canadian forest products industry has implemented forest certification as a way of improving its forest management practices and demonstrating its commitment to sustainable forest management. Canada now has the largest certified area of sustainably managed forests in the world. As of mid-year 2010, 145.31 million hectares have been certified under one of the three forest-specific certification systems available in Canada. The distribution under the three systems is as follows — Canadian Standards Association (CSA) 65.31 million ha, Sustainable Forestry Initiative (SFI) 49.80 million ha, and Forest Stewardship Council (FSC) 35.77 million ha¹.

¹ If a forest area has been certified to more than one standard (ISO, CSA, FSC, SFI), the area is only counted once, hence the grand total of certifications may be less than the sum of the individual totals.

3. Value-Added Wood Products

In the Canadian context, the value-added wood products group includes wood windows and doors, factory-built homes, millwork and joinery products, shingles and shakes, containers and pallets, engineered wood products (EWPs) such as I-beams and roof trusses, and other structural products.

Market acceptance of EWPs, the shift from larger dimension lumber to EWPs and the shift from stick-built homes to factory-built homes, all contributed to the significant growth of this segment which begun in the mid-1990s. However, that growth has since slowed considerably, with revenues hovering at just under \$11 billion since 2004.

In 2009, approximately \$1.4B in value-added products were exported, almost exclusively to the US market (92%). In 2009, the value of total exports of value-added wood products continued to decrease from previous years, with a decline of 26.6% over 2008. Between 2008 and 2009, imports of value-added wood products decreased by 18.6 to \$1.17 billion.

The value-added sector has been affected by the U.S. housing market, which reduced demand for Canadian wood products, and the continued strength of the Canadian dollar, which has eroded Canadian-denominated revenues from U.S. markets. Furthermore, though Canada has developed some special niche markets within this product group, Canada faces increased competition from Asia.

4. Sawn Softwood

Between 2005 and 2009, Canadian sawn softwood production decreased by 45.2% to 44.4 million cubic metres. Weakness in the U.S and Canadian housing sectors was the main factor behind this decline. Similar weakness could also be found in the Japanese housing market which saw housing starts decline by 36% during the same period. Softness in the U.S. housing market is attributable to the net effect weak economic conditions and large volumes of unsold U.S. home inventory. During this period, North American sawn softwood prices fell by 42.6% while the volume of Canadian sawn softwood exports to the U.S. dropped by 71%.

The Canadian sawn softwood industry is heavily reliant on the U.S. market. When it was in effect, U.S. duties on Canadian sawn softwood and more recently, the appreciation of the Canadian dollar, weakened the competitive position of Canadian producers and made it possible for competitors to further penetrate the U.S. market. However, with a seven year Canada-U.S. softwood lumber agreement now in place, Canadian producers are hoping for stable U.S. market access under a predictable tariff regime.

The demand for sawn softwood will likely remain poor through 2010, but with the U.S. housing market expected to make a gradual recovery as inventory levels shrink, the demand for sawn softwood should improve.

5. Oriented Strand Board

OSB comprises the lion's share of Canada's total structural panel exports, most of which is destined for the U.S. market. In 2006, OSB comprised over 80% of Canada's total structural panel production volume. Since then, OSB's share of the production of structural panel has slid noticeably, now sitting at 74%. It is expected that as the U.S. housing market strengthens over time, OSB's share of Canada's total structural panel production will also rise.

The impacts of the global recession can be seen in the decline in demand for Canadian OSB. Between 2007 and 2009, total exports of OSB dropped by more than 55%. This weakness in OSB demand was reflected in lower North American OSB prices, down 5.4% in 2009 compared to 2008.

6. Paper and Paperboard

With demand continuing to fall for newsprint and printing and writing papers, exports of these products continued to decline, by 34% and 13.5% respectively in 2009 compared to 2008. Although this decline can be traced in part to the global economic recession, which has catalyzed the financial stress felt by many companies in the industry – including the world's largest newsprint producer, AbitibiBowater, long-term structural factors have also affected the industry. For instance, most export markets for Canadian producers in North America are already quite mature, with few growth opportunities available. Furthermore, given the advent of online media sources, which have successfully competed against newsprint-based media sources while significantly eroding its market share, future prospects in these and similarly affected paper and paperboard industries are likely quite poor. Additional challenges to the industry such as high fibre and energy costs as well as the strong Canadian dollar create further strain on the financial bottom line of many producers and with the U.S. and global economies unlikely to fully recover for at least another couple of years, the future short term outlook for the industry is bleak.

7. Wood Pulp

In 2009, the value of Canadian pulp exports decreased by 27% from the year prior. As with paper products, the global economic recession has impacted the Canadian pulp industry negatively. The high value of the Canadian dollar, high energy costs and escalating wood fibre costs have hurt producer margins as well, sparking rationalization activity within the industry and causing numerous capacity reductions of high cost production. While diminished demand for paper in North America has filtered into reduced demand for pulp, reflecting the relative maturity of North American pulp markets, growth of pulp demand on a global scale has shifted away to Asian markets. This is best reflected in the rising share of the value of Canadian exports to China relative to total Canadian exports, from 6% in 2000 to 28% in 2009. This trend has been influenced by a rise in pulp demand for paper production and by a reduction in non-timber pulp supplies due to Chinese mills closures in response to pollution issues. Chinese demand for paper is expected to grow appreciably in the long-term and demand for pulp as an input will likely continue to grow. However, Canadian producers can expect to face stiff competition from an increase in low cost supply from South America and other supplying regions closer to China.

Appendix

Statistics and Prospects

*** Figures for 2010 and 2011 are estimated/forecasted**

Sawn Softwood (000 Cubic Metres)

| | 2008 | 2009 | 2010* | 2011* |
|-----------------------------|-------------|-------------|--------------|--------------|
| Production | 40437 | 32007 | 37214 | 40665 |
| Apparent consumption | 17369 | 14139 | 16145 | 16648 |
| Imports | 666 | 805 | 494 | 504 |
| Exports | 23735 | 18672 | 21564 | 24520 |

Coniferous Veneer and Sawlogs (000 Cubic Metres)

| | 2008 | 2009 |
|-----------------------------|-------------|-------------|
| Imports | 2816 | 2490 |
| Apparent consumption | 100517 | 104661 |
| Exports (Total) | 3306 | 2425 |

Sawn Hardwood (000 Cubic Metres)

| | 2008 | 2009 | 2010* | 2011* |
|-----------------------------|-------------|-------------|--------------|--------------|
| Production | 1111 | 813 | 960 | 1120 |
| Apparent consumption | 1715 | 1362 | 1530 | 1730 |
| Imports | 1088 | 878 | 985 | 1100 |
| Exports (Total) | 484 | 329 | 415 | 490 |

Oriented Strandboard (OSB) (000 Cubic Metres)

| | 2008 | 2009 | 2010* | 2011* |
|-----------------------------|-------------|-------------|--------------|--------------|
| Production | 6218 | 5067 | 5640 | 6280 |
| Apparent consumption | 2811 | 2468 | 2635 | 2840 |
| Imports | 135 | 97 | 115 | 135 |
| Exports (Total) | 3542 | 2696 | 3120 | 3575 |

Plywood (000 Cubic Metres)

| | 2008 | 2009 | 2010* | 2011* |
|-----------------------------|-------------|-------------|--------------|--------------|
| Production | 2225 | 1810 | 2015 | 2250 |
| Apparent consumption | 3791 | 2438 | 3110 | 3830 |
| Imports | 2149 | 933 | 1540 | 2170 |
| Exports (Total) | 583 | 305 | 445 | 590 |

Particleboard (000 Cubic Metres)

| | 2008 | 2009 | 2010* | 2011* |
|-----------------------------|-------------|-------------|--------------|--------------|
| Production | 7976 | 7147 | 7560 | 7755 |
| Apparent consumption | 4309 | 4558 | 4430 | 4055 |
| Imports | 524 | 677 | 600 | 530 |
| Exports (Total) | 4191 | 3266 | 3730 | 4230 |

MDF (000 Cubic Metres)

| | 2008 | 2009 | 2010* | 2011* |
|-----------------------------|-------------|-------------|--------------|--------------|
| Production | 1008 | 843 | 925 | 1020 |
| Apparent consumption | 947 | 793 | 870 | 960 |
| Imports | 305 | 400 | 355 | 310 |
| Exports (Total) | 366 | 450 | 410 | 370 |

Fibreboard (000 Cubic Metres)

| | 2008 | 2009 | 2010* | 2011* |
|-----------------------------|-------------|-------------|--------------|--------------|
| Production | 1519 | 1341 | 1430 | 1530 |
| Apparent consumption | 1462 | 1442 | 1455 | 1470 |
| Imports | 808 | 776 | 795 | 815 |
| Exports (Total) | 865 | 675 | 770 | 875 |

Wood Pulp (000 tonnes)

| | 2008 | 2009 | 2010* | 2011* |
|-----------------------------|-------------|-------------|--------------|--------------|
| Production | 20495 | 17225 | 14985 | 16795 |
| Apparent consumption | 11206 | 9190 | 8990 | 10075 |
| Imports | 316 | 245 | 115 | 130 |
| Exports (Total) | 9605 | 8280 | 6110 | 6850 |

Paper and Paperboard (000 tonnes)

| | 2008 | 2009 | 2010* | 2011* |
|-----------------------------|-------------|-------------|--------------|--------------|
| Production | 15789 | 12842 | 14210 | 13500 |
| Apparent consumption | 6414 | 5962 | 5875 | 5720 |
| Imports | 2914 | 2646 | 2725 | 2725 |
| Exports (Total) | 12289 | 9526 | 11060 | 10505 |

Note: Figures above have been adjusted to reflect actual volumes as opposed to nominal. Figures are consistent with those provided for the *2010 UNECE Timber Committee Forecasts (Forest Products)*.