

# Non-tariff barriers to New Zealand forest products trade

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## Disclaimer

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## ACRONYMS

AF&PA	American Forest and Paper Association	MFN	Most favoured nations
APEC	Asia-Pacific Economic Cooperation	MOFCOM	Ministry of Commerce
APFSOS	(FAO) Asia-Pacific Forestry Sector Outlook Study	MPI	(NZ) Ministry of Primary Industries
BC	British Colombia	MSME	Micro-small- and medium-enterprise
BCD	Basic customs duty	NDRC	National Development and Reform Commission
BIS	Bureau of Indian Standards	nes	Not elsewhere stated
CORFO	Production Development Corporation, Chile	NRCan	Natural Resources Canada
CPPIB	Canada Pension Plan Investment Board	NTM	Non-tariff measure
CST	Central sales tax	pa	Per annum
CVD	Countervailing duty	PAPGTP	Pulp and Paper Green Transformation Program
CMHC	Canada Mortgage and Housing Corporation	PFDP	Private Forest Development Program
CONAF	National Forest Corporation (Chile)	PGP	Primary growth partnership
DL	Decree-law	R&D	Research and development
ETS	Emissions Trading Scheme	REDD	Reducing emissions from deforestation and forest degradation
EC	European Commission	RMA	(NZ) Resource Management Act
EU	European Union	SLA	Softwood Lumber Agreement
FAO	Food and Agricultural Organization of the United Nations	SME	Small- and medium-sized enterprises
FIIP	Forestry Innovation Investment Program	SSI	Small-scale industry
fob	Free-on-board	SFA	(China) State Forestry Administration
FSC	Forest Stewardship Council	t/a	Tonnes/annum
FERIC	Forest Engineering Research Institute of Canada	TPP	Trans-Pacific Partnership
FTA	Free trade agreement	TRAINS	Trade Analysis Information System
GFPM	Global Forest Products Model	TTP	Transformative Technology Program
GHG	Greenhouse gases	TTB	Technical trade barrier
GOC	Government of Canada	UAE	United Arab Emirates
GATT	General Agreement on Tariffs and Trade	UK	United Kingdom
GST	Goods and services tax	UN	United Nations
ha	hectares	UNCTAD	United Nations Conference on Trade and Development
HTS	Harmonised tariff schedule	USDA	United States Department of Agriculture
IFIT	Forest Industry Transformation Program	USITC	United States International Trade Commission
INACAP	Universidad Tecnológica De Chile	USTR	United States Trade Representatives
INFOR	Instituto Forestal de Chile	VAT	Value-added tax
ITTO	International Tropical Timber Organization	WDP	Western Diversification Program
KD	Kiln dried	WTO	World Trade Organization
MDF	Medium-density fibreboard		
MFAT	(NZ) Ministry of Foreign Affairs and Trade		

## Introduction

Woodco's Strategic Action Plan vision is that annual export earnings of the New Zealand forest and wood products industry will more than double to \$12 billion by 2022<sup>1</sup>. This ambitious target will not only require growth in the volume of forest-based exports but also significantly higher levels of value-added processed products in the export product mix. Trade barriers, particularly non-tariff trade barriers, present a potential impediment to growth in New Zealand's value-added wood product exports. The New Zealand government's claims that GDP will rise by NZ\$2.7 billion annually following full implementation of the Trans-Pacific Partnership (TPP)<sup>2</sup> are based predominantly on reductions in non-tariff trade measures. This study's aim is to understand and assess their effects on the New Zealand industry's potential to achieve Woodco's stated goal of becoming a \$12 billion export industry within less than 10 years.

## Background

Most of the official efforts in eliminating barriers to trade have focused on the reduction or elimination of tariff barriers, which are transparent and their impacts well understood. Non-tariff measures (NTMs) are less appreciated, in part because they are not as directly visible and clearly targeted as tariff barriers, and also because they are difficult to define, evaluate and quantify. As tariff levels have been reduced, NTMs have assumed a more central role in the trade agenda. The New Zealand government's modeling of the impacts of the TPP estimates that 62% of the claimed gains from this agreement will be the result of assumed reductions to NTM's (9% from reducing NTMs associated with trade in services and 53% from reducing NTMs associated with trade in goods). For forestry, the claimed TPP tariff reduction benefits are only NZ\$9 million for forestry exports (to TPP countries) of NZ\$1.5 billion. Most of the global research to-date supports concerns that NTMs negatively affect forest products trade and production<sup>3</sup>.

Non-tariff measures are defined as government laws, regulations, policies and/or practices, other than tariffs, that distort international trade by either protecting domestically produced products from the full weight of foreign competition or by artificially stimulating exports of particular domestic products<sup>4</sup>. They may include quantitative restrictions, administrative procedures, phytosanitary and technical regulations and standards, price control measures, assistant domestic policies/subsidies, forest management certification and product labelling, and illegal activities. A full description of the scope of NTMs is provided in Appendix 1.

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<sup>1</sup> [http://woodco.org.nz/images/stories/pdfs/ForestWood\\_Strategic\\_Action\\_Plan.pdf](http://woodco.org.nz/images/stories/pdfs/ForestWood_Strategic_Action_Plan.pdf)

<sup>2</sup> Strutt, A., Minor P. and Rae, A (2015). "A Dynamic Computable General Equilibrium (CGE) Analysis of the Trans-Pacific Partnership Agreement: Potential Impacts on the New Zealand Economy", 28 September 2015. Available at: <http://www.tpp.mfat.govt.nz/assets/docs/TPP%20-%20CGE%20Analysis%20of%20Impact%20on%20New%20Zealand,%20explanatory%20cover%20note.pdf> <sup>3</sup>

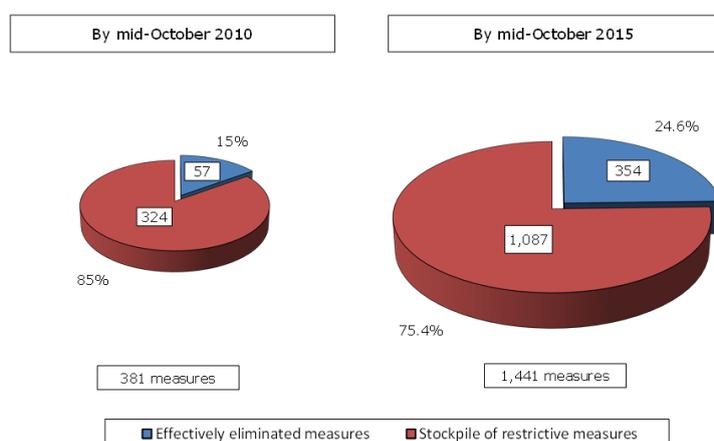
Sun et al. (2010) "The role of tariff and non-tariff trade barriers in the global forest products trade: A Canadian perspective". Canadian Forest Service Pacific Forestry Centre Information Report BC-X-424.

<sup>4</sup> NTMs are well-defined in APEC (1999) "Study of Non-tariff Measures in the Forest Products Sector". Available at: [http://publications.apec.org/publication-detail.php?pub\\_id=669](http://publications.apec.org/publication-detail.php?pub_id=669)

NTMs tend to be less transparent than tariffs but have increasingly become the primary policy tool through which governments affect trade (Malouche et al, 2013)<sup>5</sup>. Many NTMs are imposed for non-trade reasons, such as in response to rising public demand for traceability and protection against health and environmental hazards. Although their justification may be valid, they may have unintended impacts on trade. Some measures are also imposed more for trade protectionist than other reasons, in response to self-interested industry groups and in oversupply situations. NTMs which are unnecessary, complicated, or poorly designed can impact negatively on the quantity of goods traded, affect prices and harm competitiveness. At the same time they may also be serving legitimate policy objectives. The diversity and complexity of NTMs make them the “new frontier” of trade policy - as important in their content as in their manner of implementation<sup>6</sup>.

Because NTMs encompass any non-tariff policy measure that has with an impact on trade, their impact and trade restrictiveness is not well-monitored. The World Trade Organisation (WTO) has monitored and reported on G20<sup>7</sup> trade measures since 2009.

Figure 1: Stockpile of trade-restrictive measures reported by WTO, 2010 and 2015



Source: WTO, 2015<sup>8</sup>.

The latest trade monitoring report was released on 2 November 2015<sup>9</sup>. While not indicating any change to the propensity of G20 economies to apply new trade-restrictive measures (or to speed up removal of existing measures), the report shows the stockpile of measures affecting trade continues to grow and continues to negatively impact on international trade.

<sup>5</sup> Malouche, M., Reyes, J. and A. Fouad (2013). “Making Trade Policy More Transparent: A New Database of Non-Tariff Measures”. Economic Premise No 128. 7p. The World Bank. Available at: [www.worldbank.org/economicpremise](http://www.worldbank.org/economicpremise)

<sup>6</sup> Cadot, O. and Malouche, M. (2012). “Non-Tariff Measures: A Fresh Look at Trade Policy’s New Frontier”. Washington, DC: World Bank/Centre for Economic Policy Research.

<sup>7</sup> The G-20 members are: Argentina; Australia; Brazil; Canada; The People’s Republic of China; France; European Union; Germany; India; Indonesia; Italy; Japan; the Republic of Korea; Mexico; the Russian Federation; the Kingdom of Saudi Arabia; South Africa; Turkey; the United Kingdom; and the United States.

<sup>8</sup> [https://www.wto.org/english/news\\_e/news15\\_e/trdev\\_02nov15\\_e.htm](https://www.wto.org/english/news_e/news15_e/trdev_02nov15_e.htm)

<sup>9</sup> Ibid.

Restrictive measures, once introduced, are typically removed slowly which means that even studies of NTMs done some time ago (e.g., APEC, 1999<sup>10</sup>) can provide a good starting point for launching into the issue of NTMs.

At the macro level, various recent OCED<sup>11</sup> and WTO studies point to the significant impact even apparently trivial measures may have. Dealing specifically with forestry, a Canadian study<sup>12</sup> quantified NTMs as providing (typically) two to three times the protection of tariff measures (9% compared with for the world as a whole), with trade protection differing by product and country/region. That study estimates that elimination of NTMs would result in an increase of over 7 million m<sup>3</sup>/annum of global industrial wood production. However, the increase in trade arising from eliminating NTMs was almost 24 million m<sup>3</sup> (RWE). In the modelling component of this study, eliminating tariff barriers resulted in a less than 3.5 million m<sup>3</sup> boost to industrial wood production, less than half that associated with removal of NTMs. The modelling also showed the increase in international trade from eliminating tariff barriers as being less than 8% of the increase associated with eliminating NTMs.

## Study Objectives

The objectives of this study were to:

- Determine New Zealand exporters' perceptions of the extent and impact of trade measures and policies in their export markets and the effect of those measures on their export strategies.
- Using a case study approach, determine the extent and impact of trade measures imposed in two important New Zealand export markets (China and India) and two competitor supplying countries (Canada and Chile) on New Zealand exporters' competitiveness.
- Provide an overall assessment of the risks to New Zealand wood products exporters, and Woodco's vision, of trade measures imposed in export markets and by competitor countries.
- Identify priority trade barrier issues for Woodco and New Zealand government officials for consideration in international trade negotiations.

## New Zealand forest product exporters' perceptions of trade barriers

New Zealand forest product exporters were interviewed during October-November 2015 to assess their perceptions of the range and effects of trade barriers which have been affecting their company's export operations. Other relevant stakeholders (trading agents, trade analysts, government experts) were also interviewed with regard to trade barrier issues of relevance to their expertise. The interviewees were determined in consultation with Woodco and included representatives of the range of New Zealand wood products exported (logs, sawntimber, pulp and paper, MDF) organisational structure (small and large enterprises) and market destinations. A

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<sup>10</sup> APEC (1999). "Study of Non-Tariff Measures in the Forest products Sector". New Zealand Forest Research institute Ltd. 134p ". Available at: [http://publications.apec.org/publication-detail.php?pub\\_id=669](http://publications.apec.org/publication-detail.php?pub_id=669)

<sup>11</sup> Stone, S., Messent, J., and Flaig D. (2015). "Emerging Policy Issues: Localisation Barriers to Trade". OECD Trade Policy Papers, No. 180, OECD Publishing, Paris. Available at: <http://dx.doi.org/10.1787/5js1m6v5qd5j-en>

<sup>12</sup> Sun, L., Bogdanski, B., Stennes, B., and G. Cornelis van Kooten (2010). "The role of tariff and non-tariff trade barriers in the global forest products trade: A Canadian perspective". Natural Resources Canada, Canadian Forest Service Pacific Forestry Centre Information Report BC-X-424. Available at: <http://www.researchgate.net/publication/264040396>

detailed summary of the results of the interviews is given in Appendix 2<sup>13</sup>. The major findings are as follows:

*Perceptions differed according to company size:*

- Large organisations were more concerned about the implications of wider trade issues such as illegal logging and timber smuggling, and development of building codes and product standards which favour NZ radiata pine and wood products generally.
- Large sawn timber exporters have been targeting China but the import value-added-tax (VAT) differential between logs and sawnwood was considered a significant impediment to competitiveness.
- Small organisations are exporting a more restricted range of products to other (than China, India) markets – notably Australia, USA, Thailand, Philippines, Vietnam.
- Small sawn timber exporters reported that unfavourable exchange rates and volatile freight rates were more important determinants of their export competitiveness.
- A frequent strategy employed by small enterprises to minimise the effects of currency fluctuations has been to reduce exports and focus on the domestic market.
- Small log exporters were considered to be less exposed to trade barriers, although ultimately the hidden costs of trade barriers were passed to smaller operators through their export agents.

*Perceptions differed according to the types of products exported:*

- The primary concern for log exporters was India's phytosanitary requirement for logs to be treated with methyl bromide even if debarked, and a logistical requirement for logs exported on the deck of ships to China to be treated with methyl bromide. Exporters are concerned about the new New Zealand restrictions on the use of methyl bromide effective in 2020, the current lack of economically viable alternative solutions, and the time which will be required to negotiate with China/India officials if an alternative was found.
- Sawntimber exporters were not targeting the India market because of very restrictive import tariffs on sawntimber and a perception that they were not competing on a level playing field with India's sawmilling industry. Similarly, in the China market, the import VAT differential between logs and sawnwood created a cost advantage to Chinese sawmills processing imported New Zealand radiata pine logs.
- Exporters of higher grade radiata pine sawnwood were unable to compete with Chinese domestic manufacturers of sawnwood using imported radiata pine logs.
- Pulp and paper exporters were disadvantaged by unfair competition from subsidised Chinese manufacturers.

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<sup>13</sup> Note that these are the opinions of the people interviewed and have not been amended for accuracy. Due to confidentiality, the detailed appendix has restricted access.

### *Exporters required more proactive involvement from government and Woodco on strategic trade issues:*

While MPI's work on biosecurity and customs assurance systems, and MFAT's work in negotiating free trade agreements, was acknowledged and appreciated, exporters required more proactive involvement from government and industry associations in strategic trade issues affecting the sector, including international and bilateral negotiations regarding building codes and product standards (to ensure that NZ radiata pine is included in new codes and standards), generic marketing of higher value NZ wood products as high quality products supported by excellent technical knowledge, and promoting awareness of the range of higher quality radiata pine products available from NZ suppliers. Exporters from competitor countries, particularly Canada, had benefitted from considerable (and highly visible) government support at this level.

New Zealand's high standards for phytosanitary practices were considered both a high compliance cost for small operators because of bureaucratic processes, but were also generally considered to be trade enabling and exporters were accepting of the process.

### *The major trade barriers for New Zealand wood products exports to China were:*

- China's manufacturers of sawntimber from imported New Zealand radiata pine logs have an unfair advantage over New Zealand exporters of sawntimber to China because of the differential in China's import VAT for logs (13%) compared with sawntimber (17%). This adds to the cost of sawnwood products and encourages domestic processing. New Zealand producers compete in China and third markets with Chinese-manufactured radiata pine products.
- China's 5% import VAT on pulp and paper provides an advantage for Chinese producers of pulp and paper who are not required to pay the tax. With an economic slowdown in China, Chinese producers are lobbying for further increases in import VAT to protect domestic processors.
- China's pulp and paper manufacturers are subject to less stringent (than New Zealand) environmental and health and safety regulations which lowers their production costs compared with New Zealand manufacturers who have higher compliance costs. In the New Zealand market, NZ manufacturers of packaging products compete with China-manufactured products. New Zealand products using China-manufactured packaging are exported with its "clean green" image but do not have to comply with NZ packaging's more stringent compliance regulations.
- Corrupt tax officials have reportedly imposed incorrect tariffs, which increases trading costs and distorts prices.
- Inconsistent application of phytosanitary rules and customs clearance procedures which increases import costs.
- Regional subsidies/refunds on log costs to local producers. Chinese authorities are efficient in collecting VAT on imports but not in refunding VAT for exports or collecting the full VAT payable by domestic producers. This supports domestic processing.
- China state-owned enterprises continue to have easy access to credit, while private enterprises are subject to inconsistent monetary exchange practices and limitations on exchanges of currency, causing difficulties in obtaining letters of credit which creates monopolistic buying practices and discourages imports.

- China's regional government assistance in infrastructural developments (ports, transport networks, wood processing clusters) to encourage rapid development of domestic manufacturing using imported logs. Some ports are unofficially duty free to attract raw material imports and encourage investment. This encourages raw material imports and supports domestic processing. Systems are more efficient at the port than inland.
- New Zealand's likely inability (by 2020) to find a technically and economically feasible alternative to methyl bromide fumigation for export logs stored on the ship's deck -although phosphine is an acceptable treatment for logs stored in the hold it is not an acceptable process for logs stored on the deck of the ship - and concern that negotiation on an acceptable solution with the Chinese authorities will be difficult and lengthy. North American suppliers have negotiated an allowance for fumigation at the China port for material north of the 47<sup>th</sup> parallel.

*The major trade barriers for New Zealand wood products exports to India were:*

- Significant import tariff on sawntimber imports (26%) compared with logs (5%) disadvantages NZ suppliers of sawntimber, adding to the cost of imported radiata pine sawntimber and protecting domestic processors. India was perceived by sawn timber exporters as a low value market with low returns and which has little appreciation of the attributes of higher-quality radiata pine sawnwood products.
- Bureaucratic business practices and inconsistent and at times perceived corrupt application of port entry regulations adds to the cost of imported radiata pine products, e.g. querying of load weights, implying heavier loads than declared. Port delays increase delivered costs, including the risk of demurrage fees.
- Requirement for methyl bromide fumigation of logs, even if debarked, increases export log costs (compared with phosphine fumigation, a cheaper fumigant, which is acceptable in China); the requirement to negotiate an alternative treatment with the Indian authorities before 2020 (as with China) has created uncertainty for NZ log exporters.
- Legislation protects small enterprises, effectively restricting the size of sawmills which are relatively low-tech. Large foreign enterprises are unable to invest in Indian sawmilling. Restrictive import tariffs restrict the range of exports to logs. This affects the economic sawing for grade and the technical reputation of radiata pine, as Indian sawmilling is low-tech.

*The major trade barriers for New Zealand wood product exports to other markets were:*

- Uncertainty regarding New Zealand exporters' obligations under the Australian Illegal Logging Prohibition Act and the resultant costs of compliance.
- Inefficiencies and high costs at Australian ports, and unreasonable payment terms for NZ exporters, may protect Australian producers.
- USA customs and entry paperwork is bureaucratic and increases the costs of imported products.
- Canadian government support for development of new building and fire codes in China and India ensured that the codes were written to support Canadian wood products, rather than generic codes which provide access for products from all sources.

- Some business practices and customs and entry procedures were perceived as being corrupt in markets where governance is relatively poor – notably Vietnam, Indonesia, Thailand and the Philippines – which increases the cost of doing business.

#### *Markets avoided:*

- Generally there were no markets which were being avoided because of trade barriers, with the exception of sawn timber to India (high import tariffs) and higher-grade sawn timber to China (VAT differential, competition from China-manufactured radiata pine sawn timber).
- Sawn timber exporters were not actively exploring new export markets because the size of existing markets was larger than companies' ability to supply; small sawn timber exporters were supply constrained.
- Markets were avoided which are perceived to have corrupt business practices, and barriers to accessing credit e.g. Middle East

#### *Other (non-tariff trade barrier) trade issues of importance to exporters were:*

- Unfavourable exchange rates and variability in shipping rates
- Increased raw material costs in New Zealand
- The challenge of managing high levels of export market volatility (particularly for smaller operators)
- Incentives/subsidies provided to competitor countries such as Canada and more favourable trading conditions for domestic suppliers.
- Insufficient New Zealand government assistance (e.g. provision of market intelligence to export markets) to exporters; there is a need to protect radiata pine's reputation in export markets by ensuring that it is used appropriately.

#### *Issues for government/Woodco to work on at an international level:*

- Streamlining of government export compliance procedures to improve cost efficiency for exporters.
- Provide generic market intelligence to export markets on the technical capability of radiata pine and increase awareness of the range of higher quality products available from New Zealand suppliers and the good reputation of higher quality radiata pine products (e.g. MDF).
- Proactive involvement in negotiating the development of building codes and product standards in export markets to facilitate the acceptance and expanded use of New Zealand radiata pine in higher end uses in China, India and Korea.
- Active involvement in ensuring that international treaties on illegal logging and timber smuggling are being honoured by export markets (e.g. China)
- Provide continued (and urgent) support in the development and negotiation of viable alternatives to methyl bromide fumigation with China and Indian authorities.

## **Case studies of trade barriers in New Zealand export markets and competitor countries**

Case studies of four markets/competitor countries – Canada, Chile, China and India - have been undertaken to understand the barriers which impede imports, including measures which protect

domestic industries, and the barriers which artificially stimulate competitors' export competitiveness, including afforestation and processing subsidies. Detailed information on the measures employed in case study countries is provided in Appendices 3.1 to 3.4. A similar analysis was carried out for New Zealand and is detailed in Appendix 3.5.

## Canada

There are numerous well documented non-tariff measures that currently clearly affect forest products trade, the more prominent measures including:

- Export log policies. Provincial governments and the Federal government employ a wide range of policies which restrict the export of logs. Although log exports are permitted, the process involved is complex and, in many cases, potentially costly for log owners and producers. Due to the restrictions that the policies effectively impose on log exports the domestic log price is significantly lower than would otherwise be the case and logs sell for substantially less on the domestic market than when exported.
- Funding of export promotion schemes through a variety of export market development programmes.
- Technical and research support to develop new processes/products and the required processing plant.
- Programmes which promote domestic use of wood (wood first) as well as exports. Funding typically goes towards research, product development, marketing and skills training with industry associations, universities and research institutes typically receiving funding to carry out aims of the programme

Depending on the outcomes of environmental promises of the newly elected Liberal Party government, there could be significant, if unintended, increases to non-tariff measures with potential forestry trade effects. The matters of concern relate to the intended investment of C\$6 billion in green infrastructure over the next four years and C\$2 billion in a low-carbon economy trust - a trust with the purpose of funding projects to cut carbon emissions<sup>14</sup>.

## Chile

Chile, like Canada and New Zealand, is a net exporter and there is some support for afforestation. However, government programmes encouraging processing investment and research and development also help shape the choice of export products. Co-ordination between public and private sectors is also possibly facilitated by the structure of Chile's vertically integrated forestry sector.

In summary the main influences with Chile are:

- Incentives for afforestation, investment and promotion.
- Accelerated depreciation for new processing investment.
- Research & Development tax credits.
- Public sector policy co-ordination with the private sector.

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<sup>14</sup> <https://www.liberal.ca/realchange/climate-change/>

## China

China, the world's largest country importer of wood-based products, has limited barriers to trade in unprocessed wood products but provides significant assistance to its domestic wood processing industries. Specific non-tariff measures affecting forest products trade with China are:

- Industrial policies that limit market access for imported goods and foreign manufacturers, while offering substantial government guidance, resources, and regulatory support to Chinese industries.
- Manipulation of value-added-tax rebates to reinforce central government objectives and protect domestic industries, including the assistance of wood products exporters to remain competitive during global economic downturns, by raising or lowering the value-added-tax rebate available upon export.
- Government economic reform and infrastructure spending to lower cost structures and improve competitiveness of domestic industries.
- Tax exemptions for infrastructure projects involving ports and wharves and other infrastructures to support export-oriented businesses by reducing their logistical costs.
- Central and local government investment and incentives to develop fast-growing, high-yield plantations including: discounted loans and loan interest subsidies, preferential tax policies for companies owning forests; incentives for public and farmer initiatives in afforestation; tax preferences and exemptions for forestry incomes.
- Central and local government incentives and support to wood processing subsidies.
- Significant subsidies and loans for Chinese paper producers, including subsidies for energy, pulp, wastepaper, loan interest subsidies for technology renovation and preferential tax policies for Chinese enterprises with foreign investment.
- Central government and provincial subsidies for the development of industrial clusters including infrastructure spending, provision of inexpensive land, tax reductions and exemptions, access to credit and loans, technology, skills and innovation support.
- Poor enforcement of domestic environmental product standards which reduces manufacturing costs for domestic producers.
- Government and provincial procurement policies which favour domestically manufactured products.
- Continued illegal timber trade which depresses prices and makes it difficult to predict the Chinese wood products market.
- Building codes and standards which favour North American wood products imports.

## India

Specific non-tariff measures affecting forest products trade are:

- High tariffs on imported processed and value-added wood products favours imports of unprocessed logs and protects less efficient domestic wood processors from international competition.
- Complex tariff and fees systems and a lack of transparency in determining duties and charges, in addition to state and local taxes and charges, increases the cost of imported wood products.

- Lengthy and bureaucratic customs and entry procedures and inconsistent application of customs valuation criteria increase the costs of imported wood products.
- Measures for protecting small-scale domestic industries, including: investment limits on small-scale enterprises and reservation of products for exclusive manufacture in the small-scale sector, including wooden furniture; tax incentives and other subsidies for small-scale industries; and government procurement preferences to small enterprises. Reduces production costs of inefficient domestic wood processors.
- Wood product export subsidies, including exemptions from customs duties and internal taxes.
- Mandatory methyl bromide fumigation for imported logs (or heat treatment if debarked); lack of approval for alternative treatment methods.
- Reputation of radiata pine as a low value species; poor reputation in higher end uses arising from improper use of untreated and unseasoned products ; supply chain stakeholders unaware and disinterested in technical requirements of radiata pine.
- Illegal logging and timber smuggling incentivised by the large “informal” wood products sector. Reduces production costs of domestic suppliers.

## New Zealand

The four case studies have focused on NTMs from the perspective of New Zealand exporters. New Zealand also employs measures which may be perceived by competitors as having effects on wood products trade. Specific New Zealand measures would include:

- The Afforestation Grant Scheme<sup>15</sup>
- Bans/restrictions covering indigenous forest harvest and requirements for local processing associated with amendments to the Forest Act relating to Indigenous forestry.
- The forestry provisions of the NZ Emissions Trading System (ETS)
- Costs of compliance with the RMA (1991).
- Research and development grants/support, perhaps most notably PGP funding
- Local Government rules/regulations promoting ‘sustainability’ but couched in such highly prescriptive terms that they risk undesired and unintended effects while also possibly failing to achieve their intended purpose.
- Phytosanitary rules and requirements.

A comparison of some of the major NTMs impacting forest products trade in the case study countries is shown in Table 1.

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<sup>15</sup> MPI (2015). “Funding and Programmes”. Available at: <https://mpi.govt.nz/funding-and-programmes/forestry/afforestation-grant-scheme/>

*Table 1: Comparison of major non-tariff trade barriers prevalent in New Zealand, Canada, Chile, China and India*

	New Zealand	Canada	Chile	China	India
<b>Afforestation subsidies</b>	Yes, although relatively limited (NZ\$19.5 million grants over 5 years)	Yes, many Federal and Provincial programmes assisting forest re-establishment	Yes, limited	Yes, very significant. Many state and provincial programmes assisting afforestation.	Yes
<b>Industry subsidies</b>	Minimal	Significant, including: softwood marketing subsidies; industry transformation; C\$1 billion for environmental upgrades of the pulp and paper industry; export restrictions to promote further processing in Canada; tax breaks and loan assistance.	Yes, accelerated depreciation of assets.	Yes, very significant, including: protections for domestic industries; preferential tax policies; VAT exemptions; subsidies for raw materials, power and infrastructure; loan interest subsidies.	Yes, to support SMEs; tax incentives, loan subsidies, promotional schemes, restriction on size of wooden furniture manufacturers.
<b>Export subsidies</b>	No	Yes, including: funding of export promotion schemes, including softwood market development programmes.	Yes, duty drawback for non-trade exports, VAT exemptions.	Yes, substantial; VAT export rebates; substantial government assistance in developing new markets; export credit insurance for SMEs.	Yes; tax exemptions and duty drawback programmes; custom duty and tax exemptions based on export performance; preferential shipment financing for exporters.
<b>R&amp;D subsidies</b>	Yes, support of forestry R&D recently estimated at NZ\$35 million pa.	Yes, at least an order of magnitude greater than the NZ figure.	Yes, including R&D tax credits; support for start-ups, innovation and tech. transfer.	Yes, significant; government support for R&D for wood processing, furniture and pulp and paper totalling NZ\$3.3 billion in 2013; tax deductions and preferential tax rates for R&D activities.	Yes
<b>Tariff differentials for raw/processed products</b>	No	No	No	Yes	Yes and greater than China
<b>Illegal logging and timber smuggling</b>	No	No	No	Yes, significant trade with “high risk” countries.	Yes, significant informal timber processing sector.

## Impacts of non-tariff barriers on the New Zealand forestry sector

### *Achievement of the Woodco vision implies new markets, products and trade barriers:*

Achieving the goals of the Woodco vision requires a significant increase in the percentage of harvest exported as processed product and (to a lesser extent) an increase in the average price of those processed exports. This implies changes in the range of export products and markets and the question of what NTMs may be encountered in those markets. For example, barriers to export of surplus packaging timbers as an adjunct to a strategy of producing structural product for the domestic market are minimal and may be a viable option for an individual processor. From a sector perspective, however, the economic viability of this option depends on structural timber production not increasing to a level (relative to NZ domestic demand) which will depress prices. Based on the current wood harvest and local demand for structural timbers, there are reasons to doubt that this particular option is consistent with the WoodCo Vision.

### *Phytosanitary issues dominate log exporters' concerns:*

Log exporters considered phytosanitary issues to be the major potential trade barrier, particularly (1) the requirement for methyl bromide fumigation in New Zealand for logs exported to India (and for logs stored on the ship's deck for exports to China) and (2) the uncertainty about negotiating acceptable alternative treatments by 2020, particularly solutions which are economically feasible. Concerns with technical barriers to trade (TBT), in particular sanitary/phytosanitary issues, make up the vast majority of the recorded WTO disputes, so it is expected that they would be mentioned by some forestry exporters.

### *Building codes and standards are a barrier to New Zealand exports in some markets:*

Although New Zealand exporters are not targeting structural product applications in China and India, trade barriers have been presented by the absence of effective building codes and standards in India, and the development of codes and standards in China which have been heavily influenced by North American regulations. Prescriptive building codes, which specify particular timber species, sizes and grades, affect the competitive position of wood products suppliers. Fire regulations often discriminate against wood products generally because they are combustible, and are usually based on cultural expectations or experience rather than scientific data. Previous studies<sup>16,17</sup> have identified situations that may unnecessarily restrict the use of wood in building materials and systems including: building codes which prescribe against the use of wood; prescriptive product standards which unnecessarily inhibit particular suppliers of forest products (e.g. by species, grade, glue, treatment); absence of building codes for forest products, which restricts the use of wood in buildings and; unnecessarily restrictive cost of approval/compliance to another country's codes and

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<sup>16</sup> Forest Research (2002) "Economic impact of prescriptive building codes in APEC economies". Report prepared for the APEC Business Advisory Council.

<sup>17</sup> APEC (1999) "Study of non-tariff measures in the forest products sector". Asia-Pacific Economic Cooperation. Committee on Trade and Investment. Forest Research, Rotorua.

standards. Exploration of new markets will require information on country codes and standards and proactive involvement in negotiating radiata pine's position in those standards.

***“Temporary” import trade barriers are declining for the forestry sector:***

Although the trade literature notes that a general reduction in tariffs has been accompanied by a proliferation in the number and frequency of temporary trade barriers (import barriers)<sup>18,19</sup>, the World Bank's TTB database shows that relatively few temporary measures are employed on forestry issues. Moreover, the increasing frequency of imposition of such measures (i.e., measures that behave like tariffs), in a world where tariff levels are reducing, does not appear to be an issue as far as forestry is concerned.

***Illegal trade is known to have an impact on global production, trade and prices:***

Most New Zealand exporters did not reveal concerns about the impact of illegal trade on either price or New Zealand's export mix but were more concerned about the impact of possible future demands for 'proof' that New Zealand product was in fact legal. However, the case studies noted a continued illegal trade in wood products, particularly in China, despite considerable international efforts to crack down on the trade. Many of China's log imports have been regarded as from "suspicious" sources and other wood product imports have been suspected of including illegal content. Robbins and Perez Garcia (2012)<sup>20</sup>, for example, estimated potential flows of illegally harvested products into China alone may have constituted 12-29% of log imports, 6-13% of lumber imports, and 5-6% of plywood imports. Global modelling suggests that the supply of illegal material both materially affects international wood product production, trade and prices<sup>21,22,23</sup>.

New Zealand exporters were also unaware of the possible implications of efforts to reduce GHG emissions from deforestation and forest degradation, despite the literature indicating that the rules regarding both REDD+ initiatives and illegal logging could be profound. This suggests that there is a case for monitoring any mooted changes to REDD+ or to definitions of what is legal/illegal in markets such as India and China and assessing what these might mean for New Zealand.

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<sup>18</sup> Basu, S.R., Kuwahi, H and Dumesnil, F. (2012). "Evolution of Non-Tariff Measures: Emerging Cases for Selected Developing Countries". Policy Issues in International Trade and Commodities Study Series No. 52. UNCTAD, Geneva, 39p

<sup>19</sup> Brown, C. (2014). "Temporary Trade Barriers Database". The World Bank. Available at: <http://econ.worldbank.org/ttbd/>.

<sup>20</sup> Robbins, A. and Perez Garcia, J. (2012). "Impacts of illegal Logging restrictions on China's Forest Products Trade". Paper presented at China and the World Economy, March 16-18, 2012, Seattle

<sup>21</sup> Li, R., Buongiorno, J., Turner, J.A., Zhu, S., and Prestemon, J. (2008). "Long-term Effects of Eliminating Illegal Logging on the World Forest Industries". Trade and Markets. Forest Policy & Economics Vol. 10 pp 480-490. Available at: [http://www.researchgate.net/publication/222542925\\_Long-term\\_effects\\_of\\_eliminating\\_illegal\\_logging\\_on\\_the\\_world\\_forest\\_industries\\_trade\\_and\\_inventory](http://www.researchgate.net/publication/222542925_Long-term_effects_of_eliminating_illegal_logging_on_the_world_forest_industries_trade_and_inventory)

<sup>22</sup> Turner, J., Katz, A., and Buongiorno, B. (2008). "The economic implications of illegal logging for the New Zealand forest Sector". NZ JI of Forestry Vol., 53(2), pp 20-25. Available at: [http://www.nzjf.org/free\\_issues/NZJF53\\_2\\_2008/FF59BAEC-28F9-41ca-BB2C-BEBF728DD453.pdf](http://www.nzjf.org/free_issues/NZJF53_2_2008/FF59BAEC-28F9-41ca-BB2C-BEBF728DD453.pdf)

<sup>23</sup> Maplesden, F., Phengsopha, K., Whiteman, A. (2013). "The Potential Impacts of Forest Product Legality Regulations and REDD+ on Forest Products Production and Trade in the Asia-Pacific Region". FAO Working Paper No. APFSOS II/ WP/ 2013/ 37. Available at: [http://www.fao.org/fileadmin/templates/rap/files/NRE/Forestry\\_Group/Working\\_Paper\\_No.\\_APFSOS\\_II\\_WP\\_2013\\_37.pdf](http://www.fao.org/fileadmin/templates/rap/files/NRE/Forestry_Group/Working_Paper_No._APFSOS_II_WP_2013_37.pdf)

### ***Definitions/proof of legality for New Zealand exporters may be critical for future trade access:***

The issues regarding timber legality in the context of exports to Australia and requirements for sustainable design in the context of Auckland housing (see Appendix 3.5) highlights how NTM's imposed for legitimate reasons may have unintended impacts on trade. Legality, sustainability and the climate impacts of different consumer choices are growing international concerns that are being increasingly reflected in the regulations and legislation of a growing number of our export markets. The interpretation of such rules/legislation may present barriers to trade if definitions are unclear. This requires international agreement on acceptable definitions and methods of demonstrating timber legality, sustainability or "greenness". The New Zealand forestry sector also needs to be aware of what legislation is being drafted by trading partners to reflect these concerns and ensure that exporters can appropriately demonstrate any product exported to that partner country meets the requirements demanded by those rules and regulations.

### ***Growing subsidies have contributed to growth in afforestation in all case study countries, including New Zealand***

In all case study countries, including New Zealand, governments have, at various stages, assumed the costs of afforestation or reforestation, or have provided financial aids to private investors through low-interest loans and tax preferences and exemptions. Many afforestation subsidies have been instigated with the stated objective of domestic self-sufficiency but have successfully created a new export-oriented industry as the legacy of previous subsidies. Currently, government afforestation subsidies in Canada, China and India are significantly higher than those provided in New Zealand and Chile, thereby lowering their roundwood production costs and providing subsidised raw material to domestic industries.

### ***Processing subsidies in our log import markets and in competitor countries, are considerable:***

New Zealand's major log markets – China and India - receive considerable direct and indirect government assistance to protect their domestic wood processing industries. There is also evidence that previous subsidy programmes often result in on-going and lasting changes which positively influence some industries' competitiveness.

China's paper industry, for example, receives a myriad of direct and indirect subsidies, including substantial government guidance, resources and regulatory support through five-year development plans for the pulp and paper sector, which is considered an integrated industry. The paper industry was estimated to have received over US\$33.1 billion between 2002 and 2009 from power, raw material, company income and loan-interest subsidies (for plantations or renovations in paper-mill technology)<sup>24</sup>. The list of indirect subsidies available to China's wood processing sector is exhaustive (see Appendix 3.3) and includes (among others): tax preferences to enterprises that use particular wood residues; variable VAT rebates (depending on the prevailing government policy) for particular wood product exports, including products which use residue materials and small diameter logs; government and state infrastructure support and facilitation of industrial clusters; various VAT, enterprise income tax and import duty exemptions; R&D government spending on wood processing, wood furniture and pulp and paper which totalled NZ\$3.28 billion in 2013; preferential tax policies

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<sup>24</sup> Haley U. (2010). "No paper tiger. Subsidies to China's paper industry from 2002-2009". Economic Policy Institute Briefing Paper 264. Available at: <http://www.epi.org/files/page/-/pdf/bp264.pdf>

for SMEs (which are prevalent in the solidwood processing sector) and; support for enterprises wanting to explore emerging markets and for investments in wood processing facilities offshore. These measures protect China's domestic wood processing industries by reducing their production costs and improving their competitiveness in both domestic and export markets.

Canada's Federal and Provincial authorities employ a number of policies which restrict exports of logs, thereby subsidizing the supply of raw material to domestic wood processors. In addition, there are a variety of tax breaks that apply to the sector, measures which support the ongoing modernisation and refurbishment of the processing sector, government support for R&D, product development, and marketing and promotion of Canadian wood products both domestically and in export markets.

Canada's wood supply policies have been well-studied and their impacts have been quantified. Canada's policies ensure a lower level of log exports than would be likely with a free market, that domestic processors get priority in accessing raw material and that the cost of raw material to those processors is likely to be lower than international prices. Wood's (2014) analysis<sup>25</sup> indicates that current policies result in local (British Columbia) processors obtaining logs for a price that is 6% lower than the likely free market price. The Canadian log sales policies are clearly an NTM and as part of leveling the playing field with Canadian processors, a case to eliminate these rules could be mounted. However, because of a specific exemption for Canada to the TPP rules, these rules will continue to apply and are not available for negotiation<sup>26</sup>.

***NTMs are difficult to quantify: econometric modelling lacks consistent and accurate data:***

Non-tariff measures of concern to the New Zealand forestry sector are difficult to quantify in terms of their impacts. NTMs are measures that depress prices by boosting the supply of product from competitor countries or, in importing nations, shift local demand away from specific products (e.g., processed products) towards others e.g., logs. The importance of measures of these types is demonstrated in the findings from the four case study countries considered (see Appendices 3.1 to 3.4).

Efforts to employ econometric modelling of the impacts of NTMs are limited by the complex nature of NTMs (refer to the definition given in Appendix 1), the question of whether they apply equally to domestic production or only to imports, and importantly, the need to estimate *ad valorem* equivalents of the NTM's trade restrictiveness. Although the UN TRAINS database tracks over 50 categories of trade barriers at the HTS-6 digit tariff level, some of the trade barriers identified in this study are not part of the current TRAINS database. They are also not likely to be a complete list of measures.

A study<sup>27</sup> which modelled the benefits of the estimated effects of the TPP on the New Zealand economy estimated the gains due to reductions in non-tariff barriers to be considerable relative to

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<sup>25</sup> Wood, J. (2014): "Log Export Policy for British Columbia". Fraser Institute. <http://www.fraserinstitute.org>

<sup>26</sup> See Chapter 2 of the TPP 'National Treatment and Market Access for Goods' and Canada's specific exemptions to Articles 2.3 and 2.11. <http://www.tpp.mfat.govt.nz/text>

<sup>27</sup> Source: Strutt, A., Minor P. and Rae, A. (2015). "A Dynamic Computable General Equilibrium (CGE) Analysis of the Trans-Pacific Partnership Agreement: Potential Impacts on the New Zealand Economy", 28 September 2015. Available at: <http://www.tpp.mfat.govt.nz/assets/docs/TPP%20-%20CGE%20Analysis%20of%20Impact%20on%20New%20Zealand,%20explanatory%20cover%20note.pdf>

tariff reductions, in the order of NZ\$99 million for non-tariff reductions compared with only 9 million for tariff reductions in the forestry sector. New Zealand forest products exports to TPP countries currently represent about one-third by value of exports to all countries. At a more detailed level, the study estimated the impacts of improved customs clearance arising from the TPP agreement, translating estimates of improvement in the time taken in customs procedures into an *ad valorem* (tariff) equivalent value. For 'Natural Resources' for exports this was 0.6% for a one day reduction in delay. A number of case study NTM's, most notably for India, involve bureaucratic delays in clearing product. Delay is costly and this result provides a basis for quantifying that cost and for looking at ways that such delays might be reduced.

Although we are unable to provide a tariff equivalent measure of the NTMs covered in the case studies others, most notably Sun et al (2010), have attempted the task of producing *ad valorem* equivalent estimates for a set of well-defined non-tariff trade barriers and tariffs in the forest industry for a number of countries - including four of the five that are included in this study.

Table 2 provides these estimates along with an estimate for the world as a whole.

Table 2: Trade Protection Across Countries

Country	Non-tariff protection	Tariff Protection
<b>Canada</b>	9 percent	0 percent
<b>Chile</b>	13 percent	7 percent
<b>New Zealand</b>	6 percent	1 percent
<b>China</b>	22 percent	7 percent
<b>WORLD</b>	9 percent	5 percent

Source: Sun et al (2010)<sup>28</sup>

The numbers in the table even if “the best available” should be treated with caution. India is not included in the above but from the case study in this report (see Appendix 3.4), and other work such as that of Kee et al (2009)<sup>29</sup>, the expectation would be that both tariff and non-tariff protection would be greater than for China. For India the identified non-tariff measures affecting forest products trade are very much focused on taxes, complexity and delays within systems and measures taken to protect small-scale domestic processors. The results, however, do support the conclusions from our qualitative case study assessments that non-tariff protection for the forestry sector in our major market – China – is considerable, while two of our major softwood competitor countries – Canada and Chile – also afford higher non-tariff protections than that in New Zealand.

## Conclusions

Non-tariff measures are prevalent in the forestry trade and many are easily identifiable, as shown in our case studies. However, their quantification, and assessment of the impacts employed by one country on another's trade, is a great deal more difficult. Equally challenging is assessing what

<sup>28</sup> Sun, L., Bogdanski, B., Stennes, B., and van Kooten, G. (2010). “The role of tariff and non-tariff trade barriers in the global forest products trade: A Canadian perspective” Natural Resources Canada, Canadian Forest Service Pacific Forestry Centre Information Report BC-X-424. Available at: <http://www.researchgate.net/publication/264040396>

<sup>29</sup> Kee, H., Nicita, A., and Olarreaga, M. (2009). “Estimating Trade Restrictiveness Indices”. The Economic Journal 199 pp 172-199.

removal of existing measures might mean for a particular exporting country. From a global perspective, free trade is the most desirable policy but, as analysis of the BC log export policy has shown<sup>30</sup>, it may not be optimal from a particular region's perspective. However, it is clear that simply removing tariff measures does not create free trade and that NTMs are a significant impediment to trade.

This study clearly shows that even when tariffs are low/non-existent the barriers to trade can be significant. This study points to evidence that these have and will continue to distort trade both in terms of choice of markets and products produced for those markets. Despite tariff barriers to trade in forestry products being low or non-existent, New Zealand exporters do not face a level playing field in export markets.

Given the findings of this study the following recommendations are made for Woodco and the New Zealand government to consider in order to minimise the effects and future risks of non-tariff measures on the New Zealand forestry sector:

- Regular and sustained market intelligence and monitoring of trade barriers in key markets, providing tariff equivalent estimates for the forestry sector. Update and enhance the database on a regular basis. Consider regular trade modeling using a spatial equilibrium model such as the Global Forest Products Model<sup>31,32</sup> (GFPM). Rather than a one-off exercise, the first generation model would be improved with continued improvement in data, etc.
- Government agencies to prioritise trade negotiations with China to level the playing field with regard to China's imported wood products from New Zealand, particularly paper and processed wood products. New Zealand exporters are operating at very low margins in a price conscious market and any issue that influences price, such as differentials in value-added-tax paid by NZ versus domestic manufacturers, will impact their competitiveness.
- Clarify international definitions and requirements for legal products. Address concerns regarding the risk that Australian importers will require proof of legality for wood products imported from New Zealand. Engage with appropriate New Zealand agencies to provide clarity to the industry about the requirements and process of acquiring acceptable evidence of legality.
- Provide leadership in determining a solution to the uncertainty in negotiating acceptable alternative treatments to methyl bromide by 2020 for log exports. Identify the basis for the concerns, appropriate mitigating responses and commit to doing whatever is necessary to ensure that appropriate responses could be deployed in a timely manner.
- Government agencies to provide pro-active involvement in negotiating the development of building codes and product standards to facilitate the acceptance and expanded use of

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<sup>30</sup> Wood, J. (2014). "Log Export Policy for British Columbia". Fraser Institute. Available at: <http://www.fraserinstitute.org>

<sup>31</sup> Buongiorno, J., Zhu, S., Zhang, D., Turner, J.A., and Tomberlin, D. 2003. "The Global Forest Products Model: Structure, Estimation and Applications". Academic Press, San Diego.

<sup>32</sup> The GFPM is an economic model of the global forest sector, which integrates the four major components of the sector; wood supply, wood processing, product demand, and trade. Forest products are interrelated by supply and demand equations, and manufacturing input-output coefficients and costs. Countries are linked by trade.

radiata pine in higher end uses, particularly in new markets. Provide technical expertise and guidance by staying ahead of the issues to effect timely intervention.

- Increase New Zealand's international involvement in combatting illegal logging and trade.
- Improve awareness of the prevalence and impacts of NTMs on the NZ forestry sector by making information on non-tariff measures and their impacts known to major players in forest industry, government agencies and policy makers, on a regular basis.
- The New Zealand government needs to be aware of the very high comparative levels of R&D support provided to the forestry sectors of New Zealand's competitor countries, and explore and address options for improving R&D support to the New Zealand forestry sector.
- In the negotiation of future bilateral and multilateral trade agreements, New Zealand trade negotiators need to take cognisance of the impacts of NTMs on the NZ forestry sector; their removal will potentially have higher gains for the New Zealand economy than the removal of tariff barriers.

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## APPENDIX 1

### DEFINITION OF NON-TARIFF MEASURES IN FOREST PRODUCTS TRADE

#### Introduction

For the purposes of this project, non-tariff measures can be defined as government laws, regulations, policies and/or practices that either protect domestically produced products from the full weight of foreign competition or which artificially stimulate exports of particular domestic products.

Non-tariff measures are categorised under three broad headings, representing motivations for the measure/barrier: social/political; health and safety and environmental. Illegal activities, although not generally considered to be non-tariff measures, have implications for the wood products trade.

#### Social/political measures

##### Para-tariff measures

Non-tariff measures which behave like tariffs, e.g. customs surcharges, import taxes and license fees.

##### Government interventions

Direct procurement policies; trading regulations e.g. monopolistic measures such as single desk buying and selling; complex and lengthy customs and entry procedures.

##### Local content requirements

Requirements to purchase domestically-manufactured goods or domestically-supplied services. These include:

- Subsidies or other preferences that are only received if producers use local goods, locally-owned service providers, or domestically-owned or developed IP, or IP that is first registered in that country;
- Requirements to provide services using local facilities or infrastructure;
- Requirements to comply with country- or region-specific or design-based standards that create unnecessary obstacles to trade
- Unjustified requirements to conduct or carry out duplicative conformity assessment procedures in-country.

##### Other government interventions

Measures which affect the price relativity of imported goods compared to domestic goods by either lowering the real cost of domestically produced goods or increasing the cost of imported goods.

##### Growing subsidies

Provision of loan money to make forestry more attractive commercially; afforestation grants and tax concessions to forest growers; free government advice and extension services for forest growers.

##### Processing subsidies

Raw material subsidies; accelerated depreciation allowances; tax holidays; transportation and energy subsidies.

##### Export subsidies

Export-encouragement schemes; exporter subsidies

## Other price manipulations

There are a number of measures that will increase the price of imported goods. These include:

- Mandated minimum/maximum price limits for imports
- Voluntary export price restraints (exporters agree to keep prices above a set level)
- Variable import charges based on the cost of the import (lower valued imports attracting higher charges)
- (Threat of) anti-dumping investigations and duties
- (Threat of) countervailing investigations and duties
- Restricted access to foreign exchange at the official rate; use of multiple exchange rates or different rates for different classes of goods and importers and/or exporters
- Mandated delays between delivery and settlements
- Legislated requirements for importers to increase minimum deposits for costs of goods, duties etc. before a transaction may be entered into
- Entry procedures – customs surcharges

## Quantity controls

- Export bans, partial bans or embargoes for political or other reasons
- Discretionary licenses
- Import/export license restrictions
- Import quotas

## Health and Safety measures

### Phytosanitary

- Prohibitions (bans) for phytosanitary reasons
- Phytosanitary restrictions imposed without a formal risk assessment to justify them
- Restrictions based on risk assessments (other than WTO approved)
- Quarantine requirements e.g. insufficient information on requirements; unnecessary administrative delays

### Building codes and standards

- Generic building codes (e.g. fire codes) which favour non-wood products
- Prescriptive, conservative building codes and product standards
- Testing and inspection requirements (e.g. non-transparent approval systems; non-acceptance of foreign testing methods; non-transparent approval systems for the approval of new wood products)

## Environmental measures

- Costly and lengthy processes to achieve forest management certification
- Discriminatory requirements for forest certification
- Requirements for product labelling at regional levels which are in excess of national requirements
- Restrictions on timber preservation processes and materials without a sufficient evidential basis for the requirement.

### Illegal activities

- Illegal logging and timber smuggling which lowers demand for legally imported wood products and impacts on market prices
- Bribery and corruption e.g. corrupt customs and border controls

**APPENDIX 2:**

**SUMMARY OF INTERVIEWS WITH NEW ZEALAND EXPORTERS AND  
OTHER STAKEHOLDERS**

**Commercial Information**

**RESTRICTED ACCESS**

## APPENDIX 3.1

### CASE STUDY – CANADA

#### Summary

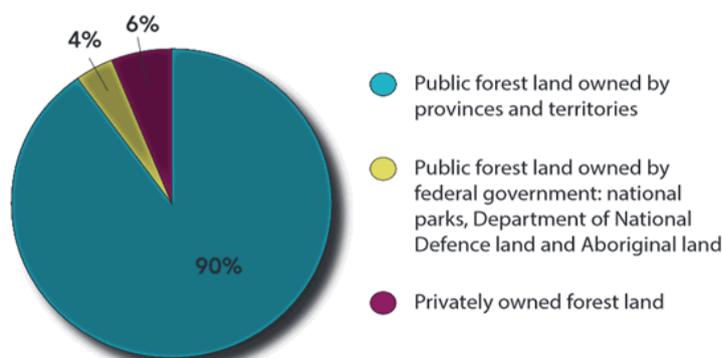
Specific non-tariff measures that affect forest products trade are:

- Export log policies. Provincial governments and the Federal government employ a wide range of policies which restrict the export of logs. Log exports are allowed. However, the process involved is complex and, in many cases, potentially costly for log owners and producers. Due to the restrictions that the policies effectively impose on log exports the domestic log price is significantly lower than would otherwise be the case and logs sell for substantially less on the domestic market than when exported.
- Funding of export promotion schemes through a variety of export market development programmes.
- Technical and research support to develop new processes/products and the required processing plant.
- Programmes which promote domestic use of wood (wood first) as well as exports. Funding typically goes towards research, product development, marketing and skills training with industry associations, universities and research institutes typically receiving funding to carry out aims of the programme

#### Background on production and trade

The majority of Canada's forest land, approximately 94%, is publicly owned and managed by provincial, territorial and federal governments. Only 6% of Canada's forest lands are privately owned.

Figure 3.1.1 Overview of forest land ownership in Canada



Source Natural Resources Canada (2015)<sup>33</sup>

<sup>33</sup> <http://www.nrcan.gc.ca/forests/canada/ownership/17495>

The land ownership structure means that all those jurisdictions – provincial, territorial and federal – together have the ability to create and enforce the laws, regulations and policies required to meet Canada’s commitment to sustainable forest management across the country.

For the 90% of Canada’s forests owned by provinces and territories, their responsibilities and powers include:

- developing and enforcing forest laws;
- setting up a licence or timber supply agreement with forest companies that want to harvest timber in publicly owned forests;
- specifying the responsibilities of the forest companies that are given access to public forests;
- monitoring the activities of those forest companies to ensure that laws, lease agreements and forest management plans etc., are complied with;
- collecting royalties from forest companies for the timber they harvest from public forests; and
- managing designated protected areas, such as provincial parks and conservation areas.

The 4% of Canada’s forests owned by the Federal government are mainly in national parks, on lands owned by the Department of National Defense, on lands held in reserve for, or otherwise controlled by, Aboriginal Peoples. They are not a significant part of the wood supply.

Canada’s privately owned forests however, do make a substantive contribution to the country’s wood products sector. The 6% of forests in this category produce approximately one-tenth of all timber harvested. The privately owned forest category includes a number of large forests owned by forest companies, notably in the provinces of New Brunswick, Nova Scotia, Ontario, Quebec and British Columbia. The balance of the category is in the form of small family-owned forests and woodlots.

## Canada’s Forest Industry:

Forests are a major source of wealth for Canadians, providing a wide range of economic, social and environmental benefits. In 2013, the Canadian forest industry directly employed 261,500 people. Another 350,000 people were indirectly employed by the sector, in related areas such as construction, engineering and transportation.

In 2013 forest sector production contributed C\$19.8 billion—or 1.25%—to Canada’s real gross domestic product (GDP) and, in a global context, Canada has the world’s largest forest product trade balance—C\$19.3 billion (2013). Although other countries may produce more of one product or another than Canada, no nation derives more net benefit from trade in forest products than Canada. The gap between Canada and the second largest net trader (Sweden) has been continuously growing since 2009.

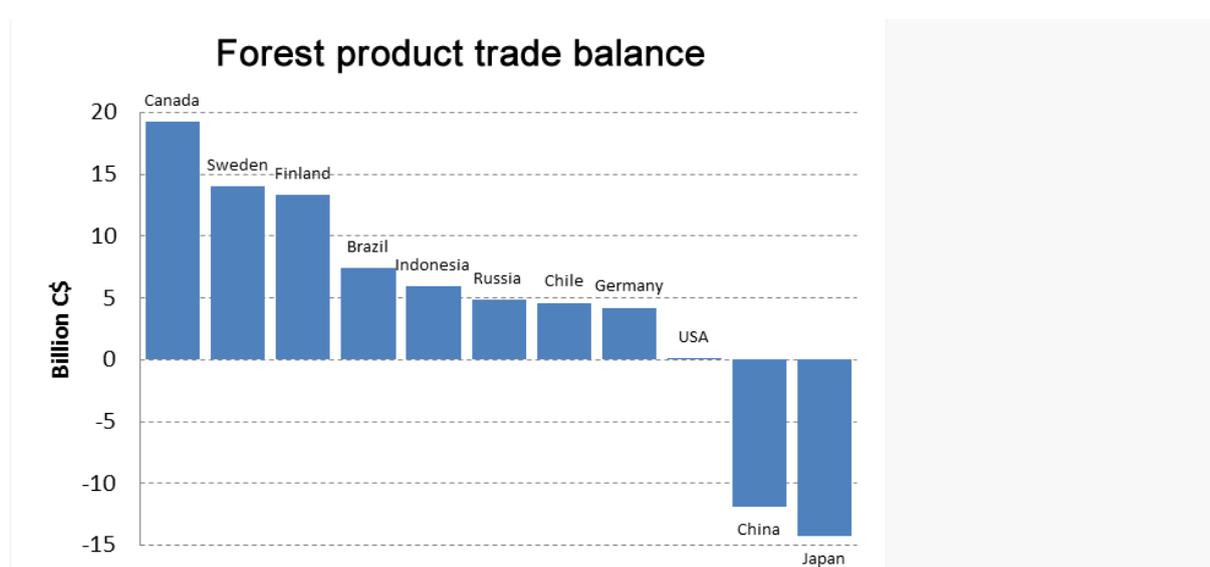
There are three main forest industry subsectors:

- *Solid wood product manufacturing* – Firms in this area engage in both primary (such as softwood lumber and structural panels) and secondary (such as millwork and engineered

wood products) manufacturing for domestic consumption and export. This subsector accounted for approximately 44% of the forest sector’s contribution to the Canadian economy (as measured by real GDP) in 2013.

- *Pulp and paper product manufacturing* – Companies in this area produce a wide range of products, covering everything from newsprint and household tissues to dissolving pulp for rayon production. This subsector accounted for approximately 36% of the contribution of the forest sector to the Canadian economy in 2013.
- *Forestry and logging* – Firms in this area are responsible for field operations and harvesting of timber, including felling and hauling it to the mill. In 2013, this sector accounted for 20% of the forest sector’s contribution to the Canadian economy.

Figure 3.1.2: Forest products trade balance



Source: <http://www.nrcan.gc.ca/forests/industry/overview/13311>

## Social/political measures

### Log export restrictions:

Provincial and Federal governments employ a wide range of policies that restrict the export of logs – the supply of logs from British Columbia (BC) forests being particularly relevant to New Zealand. Although log exports are allowed, the export process is complex and unduly costly for log owners and producers. Due to the restrictions, logs sell for substantially less on the domestic market than when exported.

Log exports from the BC Coastal region in most cases require the producer to secure a federal export permit if the area logged is under federal jurisdiction or, if the logging is under provincial jurisdiction, both federal and provincial permits. To obtain a permit, a log must be harvested and then offered first to domestic buyers on the Vancouver Log Market. A government-appointed committee then applies a ‘Surplus Test’ to determine whether that particular log is deemed surplus to domestic needs and it then judges whether any domestic offers of purchase are “fair”. The provincial

government also imposes additional prohibitions on the export of certain species (e.g., red cedar) and the highest grades of logs for timber that falls under provincial jurisdiction<sup>34</sup>.

Because of the various restrictions on exports, logs sell for substantially less to domestic buyers on the Vancouver Log Market than to foreign buyers. In 2011, the average price of logs sold domestically on the Vancouver Log Market was \$74.28 per m<sup>3</sup>, while the average price of logs exported was \$108.35 per m<sup>3</sup>. Furthermore, the export approval process, and the Surplus Test in particular, adds significant delays and uncertainty into the operations of logging companies. The current log export process prevents log owners from securing long-term contracts with foreign buyers to shelter from price volatility; it prevents log owners from sorting logs per customer request, and it imposes delays that increase log-handling costs and ties up capital

*“British Columbia has log export restrictions rather than outright prohibitions. There, logs can be exported if they are deemed “surplus” to domestic requirements. The effectiveness and desirability of these policies have been frequently examined with Dumont and Wright (2006) and Wood (2014) being two recent examples”* (Stone, M. 2015)<sup>35</sup>. The first of the papers mentioned in the Stone quote (Dumont & Wright (2006))<sup>36</sup> is a review of log export policies while Wood (2014) has already been cited.

Wood’s (2014) analysis focuses on the BC Coastal region where the overwhelming majority of log exports originate. The graphical and numerical analysis of this paper was adapted from Van Kooten (2014)<sup>37</sup> and suggests that a quota policy which restricts log exports provides net benefits to BC compared to the alternative policies of either completely prohibiting exports or allowing free trade in logs.

In dollar terms the Van Kooten paper suggests that the various restrictions raise the export log price by 27% over the likely free trade price - \$110/m<sup>3</sup> (compared with an estimated \$78.83). However, the domestic log price (due to the restrictions) is 6% lower (\$74.38 compared with \$78.83) than would be the case with free trade. So, in terms of an NTM giving a boost to domestic processing the export log rules lower the price of raw material to BC processors by something like C\$4/m<sup>3</sup>.

Support for industry via lower log prices appears to be widespread. “Subsidies” identified by the United States in the 2015 softwood lumber subsidies report<sup>38</sup> included Provincial Stumpage Programs (provision of lumber for less than adequate remuneration) in Alberta, British Columbia, Manitoba, Ontario, Quebec and Saskatchewan.

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<sup>34</sup> Wood, J. (2014). “Log Export Policy for British Columbia”. Fraser Institute. Available at: <http://www.fraserinstitute.org>.

<sup>35</sup> Stone, M. (2015). “What does the differential between export and domestic log prices tell us? New Zealand provides some answers” (in preparation – pers comm.).

<sup>36</sup> Dumont, B. and Wright, D. (2006). “Generating More Wealth from British Columbia’s Timber: A Review of British Columbia’s Log Export Policies”. A report for the British Columbia Minister of Forests and Range. December 2006. Available at: <https://www.for.gov.bc.ca/ftp/het/external/!publish/web/exports/generating-more-wealth.pdf>

<sup>37</sup> Van Kooten, G. (2014). “Is Free Trade the End All Be All? The Case of Log Exports”. REPA Working Paper 2014-01. Resource Economics & Policy Analysis Research Group, Department of Economics, University of Victoria (BC), Canada.

<sup>38</sup> Anon, (2015). “Softwood Lumber Subsidies”. Report to the Congress U.S. Department of Commerce June 2015. Available at: <http://enforcement.trade.gov/sla2008/reports/Softwood-Lumber-Subsidies-Report-2015-06-16.pdf>

## Industry subsidies

In addition to the stumpage programmes the US Commerce Department (*ibid*) lists the following federally administered programmes as conferring subsidies:

The Western Economic Diversification Program (WDP):

Introduced in 1987, the Western Economic Diversification Program (WDP) is administered by the Government of Canada's (GOC's) Department of Western Economic Diversification headquartered in Edmonton, Alberta. The jurisdiction encompasses the four western provinces of Alberta, British Columbia, Manitoba, and Saskatchewan. The program supports commercial and non-commercial projects that promote economic development and diversification in the region.

Natural Resources Canada (NRCan) Softwood Marketing Subsidies

The NRII is a two-year program that provides salary support to three national research institutes: the Forest Engineering Research Institute of Canada (FERIC), Forintek, and the Pulp & Paper Research Institute of Canada. In the 2003-2004 administrative review, the [US] Department found that research undertaken by FERIC constitutes a government financial contribution to commercial users of Canada's forests.

The Commerce Department found that FERIC's research covers harvesting, processing, and transportation of forest products, silviculture operations, and small-scale operations and thus, the Department determined that government-funded R&D by FERIC benefits, *in te alia*, producers of softwood lumber. Similarly, the Department found that Forintek's operations, done in collaboration with the GOC under NRII, which pertain to resource utilization, tree and wood quality, and wood physics also constitute a government financial contribution. The Department also reconfirmed its earlier determination that because grants offered under the NRII are limited to Forintek and FERIC, institutions that conducted research related to the forestry and logging industry, the wood products manufacturing industry, and the paper manufacturing industry, the program is specific to that industry. The NRII is periodically reinstated and is currently in effect.

The US Commerce Department also singles out the following programmes administered by the Government of British Columbia.

1) Forestry Innovation Investment Program (FIIP)

*The Forestry Innovation Investment Program came into effect on April 1, 2002. On March 31, 2003, FIIP was incorporated as Forestry Innovation Investment Ltd. (FII). FII funds are used to support the activities of universities, research and educational organizations, and industry associations producing a wide range of wood products FII's strategic objectives are implemented through three sub-programs addressing: research, product development and international marketing.*

*The Department reconfirmed its earlier finding that the FII grants are provided to support product development and international marketing for Canadian softwood lumber producers.*

## 2) British Columbia Private Forest Property Tax Program

*British Columbia's property tax system has two classes of private forest land - Class 3, "unmanaged forest land," and Class 7, "managed forest land" - that incurred different tax rates from the 1990s through the 2003-2004 period of review. In the second administrative review, the Department reaffirmed its earlier finding that property tax rates for Class 7 were generally lower than for Class 3 land at all levels of tax authority for most, though not all, taxes. The Department further reaffirmed its finding that the various municipal and district (a.k.a. regional) level authorities imposed generally lower rates for Class 7 than for Class 3 land. The tax program is codified in several laws, of which the most salient is the 1996 Assessment Act (and subsequent amendments). Section 24(1) of the Assessment Act contains forest land classification language expressly requiring that, inter alia, Class 7 land be "used for the production and harvesting of timber." Additionally, Section 24(3) or 24(4) of the Assessment Act, depending on the edition of the statute, requires the assessor to declassify all or part of Class 7 land if "the assessor is not satisfied. . . that the land meets all requirements" for managed forest land classification. Amendments to the provision, enacted from 1996 through 2003, retained the same language stating these two conditions. Thus, the law as published during the 2003-2004 period of review*

And for Quebec :

### 1) Private Forest Development Program

*The Private Forest Development Program (PFDP) involves the provision of certain grants to private forest landowners. These grants provide incentives to private land owners to grow more trees, which increases the supply of wood available to softwood lumber producers. In addition, some of the sawmill operators also own private land and receive these incentives. The system is set up so that every holder of a wood processing plant operating permit in Quebec must pay the Government of Quebec a fee of C\$1.20 for every cubic meter of timber acquired from a private forest. These fees fund, in part, the PFDP.*

*Canada reported in recent WTO notifications that the PFDP program was created in 1995 to protect and enhance registered forest land and that it remains an ongoing program<sup>39</sup>. Canada reported that the assistance is limited to 80 percent of the costs of eligible initiatives, but the aggregate value of assistance and identity of beneficiaries are not provided in the notification<sup>40</sup>.*

Additional subsidies information from Canadian WTO notifications which are included in the 2015 Softwood Lumber Subsidies Report are:

### 1) The Pulp and Paper Green Transformation Program

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<sup>39</sup> See New & Full Notification Pursuant to Article XVI:1 of the GATT 1994 and Article 25 of the Agreement on Subsidies and Countervailing Measures, G/SCM/N/220/CAN (7/14/11) (Canada N220), at 44; and New & Full Notification Pursuant to Article XVI:1 of the GATT 1994 and Article 25 of the Agreement on Subsidies and Countervailing Measures, G/SCM/N/253/CAN (7/19/13) (Canada N253), at 48.

<sup>40</sup> See Canada N220 at page 44 and Canada N253 at page 48

*On June 17, 2009, Canada announced a \$1 billion Pulp and Paper Green Transformation Program (PAPGTP) to support its pulp and paper producers. The stated purpose of the program was to improve energy efficiency and renewable energy production technologies. Canada reported in its WTO Notification that the program provided contribution funding, capped at CAD \$1 billion, to pulp and paper companies for environmental upgrades to Canadian facilities, based on a credits system. As of March 31, 2012, when the program ended, 38 pulp and paper mills across Canada, representing 24 companies, generated credits under the PAPGTP based on their 2009 production levels of black liquor. The GOC confirmed on its website that the program ended on this date<sup>41</sup>.*

This programme, similar to afforestation subsidies, may potentially imply ongoing and lasting changes beyond its completion. Tree planting subsidies create a larger resource for future supply. In this case there are now 38 pulp and paper facilities spread across Canada whose ability to compete may have been enhanced because of this C\$1 billion programme - even though it ended three years ago.

## 2) Value to Wood (VWP)

*This is one of three softwood marketing subsidy programs administered by NRCan. Canada reported in its WTO Notification that the VWP funded pre-competitive research and technology transfer activities in support of secondary wood products manufacturers. Canada reported that the VWP expired in March 2011<sup>42</sup>.*

Again, as with the Pulp and Paper Green Transformation Program, this now defunct programme has had an enduring influence on the competitive ability of some secondary wood products manufacturers.

## 3) Investments in Forest Industry Transformation Program (IFIT)

*Launched in August 2010, the IFIT provides targeted investments for projects that implement new technologies leading to non-traditional high-value forest products and renewable energies. Eligible recipients are companies that produce forest products and own at least one existing forest product manufacturing facility located in Canada. Projects were selected for funding through a competitive process. The program is funded under the Department of Natural Resources Act and the Energy Efficiency Act<sup>43</sup>. In 2014, the program was continued with new funding in the amount of CAD \$90.4 million over the next four years<sup>44</sup>.*

## 4) Transformative Technology Program (TTP)

*The TTP provides funding under the Department of Natural Resources Act and the Forestry Act in the form of contributions for pre-competitive, non-proprietary R&D. The program was created in April 2007. Funded research focuses on the development of breakthrough technologies related to forest biomass utilization, nanotechnology, and next-generation*

<sup>41</sup> <http://cfs.nrcan.gc.ca/pages/231>.

<sup>42</sup> See Canada N220 at page 27 and Canada N253 at page 27.

<sup>43</sup> See Canada N253 at page 25.

<sup>44</sup> See Trade Policy Review of Canada, Report by the Secretariat, WT/TPR/S/314, dated April 27, 2015, Section 1, p.16, para.1.7. (Canada TPR314).

*forest products, as well as addressing on-going productivity challenges facing the industry. The program is funded under Canada's Forest Innovation Program<sup>45</sup>.*

5) Export Restrictions to Promote Further Processing in Canada

*Information in Canada TPR314 indicates that under the Export and Import Permits Act, Canada imposes export controls on logs, pulpwood and red cedar products to promote further processing in Canada<sup>46</sup>.*

6) Quebec Forestry Financing Program

*Ongoing since 2004, under the Québec Ministère des Ressources Naturelles et de la Faune, the program supports certified forest producers in acquiring forest plots, with assistance provided in the form of loan guarantees for loans of up to \$750,000<sup>47</sup>.*

7) Ontario Tax Credit for Manufacturing and Processing

*Canada reported in its WTO Notification that this program provides a tax credit under the Ontario Taxation Act 2007 against Ontario taxable income for eligible Canadian profits from manufacturing and processing, farming, fishing, logging, mining, the generation of electrical energy for sale, or the production of steam for sale. Canada did not report the amount or rate of the credit<sup>48</sup>.*

8) Quebec Private Forest Property Tax Refund

*Canada reported in its WTO Notification that this program provides refunds of up to 85 percent of property taxes for certified forest producers that log in privately-owned forests. The program was created in 1998 to encourage producers to undertake projects to increase the value of their privately owned forests and remains an ongoing program<sup>49</sup>.*

A number of other support programmes are identified in connection with the Softwood Lumber Agreement between the USA and Canada. That agreement, which has been the subject of bitter disagreements between the two countries, came to an end on 12 October 2015<sup>50</sup>. With no agreement there is likely to be future disputes over subsidization of exports of Canadian timber to the USA. Some of the programmes mentioned in association with the SLA, or viewed as 'successors' to the agreement, are therefore likely to attract renewed attention. These programmes include:

- 1) Ontario Forest Sector Loan Guarantee Program. (Announced in 2005 to make available C\$350 million in loan guarantees over five years to stimulate and leverage investment in the forest industry. These loan guarantees could be for a term of two to five years and range from C\$500,000 to C\$25 million).
- 2) Ontario Forest Sector Prosperity Fund (Provide grants to the forest sector to support and leverage new capital investment programs).

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<sup>45</sup> See Canada N253 at page 26.

<sup>46</sup> See Canada TPR314, Section 3.2.3, p.75, paras.3.99 and 3.100, Table 3.11

<sup>47</sup> See Canada N253 at page 48

<sup>48</sup> See Canada N220 at page 41

<sup>49</sup> See Canada N220 at page 44 and Canada N253 at page 49

<sup>50</sup> USTR 2015: National Trade Estimates Report on Foreign Trade Barriers.

- 3) Forest Industry Support Program (A 2006 programme that made C\$425 million available to foster investment and modernization projects to improve the productivity and competitiveness of Quebec's forest products industry).
- 4) 15% Capital Tax Credit (Announced in 2006 to provide a 15% tax credit to Quebec's forest products industry on investments in manufacturing and processing equipment through 2009).
- 5) Quebec's Road Tax Credit. (Another 2006 programme which allowed the Government of Quebec to incur costs previously borne by the forest products industry. The program includes C\$100 million for a refundable tax credit of 40% for the construction of and major repairs to access roads and bridges).
- 6) British Columbia Sales of Grade 4 Timber. This is an issue that arose because of the mountain pine beetle problem. Since 2007, British Columbia has sold increasing amounts of publicly-owned timber in its interior for salvage rates providing, the US Commerce Department argues, a benefit to softwood.

Other programmes identified in connection with the Softwood Lumber Agreement (SLA) as having at least some subsidy element include: Ontario's 'Wood Promotion Program'; the 'North Ontario Grow Bonds Program'; the Forest Industry Long-Term Competitiveness Initiative; the Ontario Forest Access Road Construction and Maintenance Program; and Quebec's Reductions in Operational and Silvicultural Costs program.

## Discussion:

There is significant evidence of on-going and sustained support from both Federal and Provincial Canadian agencies for forestry and wood processing from a number of different programmes. Examples of assistance are not difficult to find. UTSR (2015), for example, makes specific mention of the Port Hawkesbury Paper mill and the assistance provided by Nova Scotia's provincial government following a bankruptcy settlement which saw the mill sold to a Canadian firm. It was also claimed that *"in addition to provincial support, the mill also allegedly receives preferential power rates from Nova Scotia Power Inc."* It then goes on to state that the Port Hawkesbury mill *"produces supercalendared paper which is an uncoated printing paper used to produce a variety of printed materials including magazines, catalogs, retail inserts, direct mail materials, corporate brochures, flyers, directories, and other high-run publications and advertising. On March 19, 2015, as a result of a petition filed by the domestic industry, the Department of Commerce announced the initiation of a CVD investigation of imports of supercalendered paper from Canada"*.

In a similar vein and as further evidence of the support to ensure competitiveness of Canadian sourced product, it has been reported<sup>51</sup> that *"the government of British Columbia, Canada, is investing US\$2.2 million in its Wood First programme. The programme promotes the domestic use of wood from British Columbia as well as exports. The funding goes towards research, product development, marketing and skills training. Industry associations, universities and research institutes will receive the funding to carry out the programme. The forest industry will contribute additional funds"*.

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<sup>51</sup>ITTO Tropical Timber Market Report 1-15 October 2015.

While Canada does not appear to have significant barriers against wood product imports, Federal and Provincial authorities employ a number of policies which restrict exports of logs, ensuring the supply of material to local wood processing is greater and the price lower than would be the case in a free market. In addition, there are a variety of tax breaks that apply to the sector, measures which support the ongoing modernisation and refurbishment of the processing sector, programmes funding research, product development, marketing of Canadian product and which promote wood both domestically and in export markets

## APPENDIX 3.2

### CASE STUDY – CHILE

#### Summary

Specific non-tariff measures affecting forest products trade are:

- Incentives for afforestation, investment and promotion
- Accelerated depreciation for new processing investment.
- Research and development tax credits.
- Public sector policy co-ordination with the private sector

#### Background on production and trade

Chile has approximately 2.45 million hectares of forest plantations of which 60% is in radiata pine and 30% *Eucalyptus*, with the balance in other species but mainly in softwoods. Total roundwood production in 2014 has been estimated at 42.3 million m<sup>3</sup>, of which more than 99% was consumed domestically. The forest industries produced 4.9 million tonnes of chemical pulp, 5.4 million tonnes of wood chips, 8.0 million m<sup>3</sup> of sawn timber and 2.9 million m<sup>3</sup> of panels, of which and 1.1 million m<sup>3</sup> were plywood and 1.9 million m<sup>3</sup> reconstituted wood<sup>52</sup>.

The forestry sector accounted for 8.1% of Chile's exports, which was valued at US\$ 6.09 billion in 2014 in fob terms. Almost half (47%) was chemical pulp, 12% sawn wood, 15% remanufactured wood products, 9.5% panels, and 5.0% wood chips. The balance 11.2% was mainly paper and paperboard.<sup>53</sup>

Chile developed most of its plantation resource with the assistance of grower subsidies. These subsidies (under decree law DL 701) expired 31 December 2012<sup>54</sup>. The President has lent her support to extend this program, but to date this policy has not managed to pass through both houses of Parliament as it faces significant opposition from indigenous and environmental groups. But if implemented, it will provide financial support for new forestry projects initiated between 1 January 2016 and 31 December 2018<sup>55</sup>.

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<sup>52</sup> INFOR (2015). "Chilean Statistical Yearbook of Forestry". Instituto Forestal, Statistical Bulletin No. 150.

<sup>53</sup> Ibid.

<sup>54</sup> CONAF (2015) "DL 701 y sus Reglamentos". Available at: <http://www.conaf.cl/nuestros-bosques/plantaciones-forestales/dl-701-y-sus-reglamentos/>

<sup>55</sup> La Tercera (2015) "DL 701: En 40 años 70% de aportes fueron a grandes forestales". Available at: <http://www.latercera.com/noticia/negocios/2015/07/655-639180-9-dl-701-en-40-anos-70-de-aportes-fueron-a-grandes-forestales.shtml>

## Social/political measures

### Trade Agreements

Chile has always viewed international trade as a cornerstone to the development of its economy. As a result it has pursued a range of bilateral and multilateral agreements with various trading blocs. A full member of APEC, it is also part of the Pacific Alliance (includes Chile, Colombia, Mexico, and Peru, with Costa Rica in process of joining), is an associate member of the Andean Community (Bolivia, Colombia, Ecuador and Peru) and of Mercosur (Argentina, Bolivia, Brazil, Paraguay, Uruguay and Venezuela). Chile also has a wide network of preferential and free trade agreements including China, India, the United States, and the EU. Chile is also a participant in the Trans-Pacific Partnership (TPP) negotiations.

Most of Chile's forest product exports are to countries to which it has some form of trade agreement. In 2014 this included China (23.6%), India (1%), the US (13.5%), other APEC countries (32.3%), the EU (14.4%) and the Pacific Alliance (11.9%)<sup>56</sup>.

### Export subsidies

Chile currently provides a simplified duty drawback program for non-traditional exports (investments, services, and information technology), as provided for by decree law DL 18.480. The program reimburses the firm up to 3% the value of the exported good if that good consists of imported raw materials<sup>57,58</sup>. Another export promotion measure allows all exporters to defer import duties for up to seven years on imported capital equipment or receive an equivalent government subsidy for domestically produced capital goods. (Under the FTA with the US, Chile has had to phase out this support by 2015 on any good exported to the US<sup>59</sup>).

Exporters can recoup all import duties and VAT they have paid when purchasing goods and services intended for exporting activities as per decree law DL 825 and DL 348<sup>60,61</sup>.

### Government Support for New Investment

The Chilean government supports private investment in the form of instant and accelerated depreciation of assets. Large businesses are able to depreciate assets over one third of the life of the asset, i.e. 300% acceleration (New Zealand does not provide accelerated depreciation). In addition instant depreciation is available for small to medium-sized businesses. The rate is based on a sliding scale depending on size of business. Micro- and small-sized businesses can depreciate immediately the full value of asset, while medium-sized businesses are on a sliding scale depending on size. In

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<sup>56</sup> Compiled from INFOR (2015). "Chilean Statistical Yearbook of Forestry". Instituto Forestal, Statistical Bulletin No. 150.

<sup>57</sup> Rincon del Vago (2015). Available at: <http://html.rincondelvago.com/exportacion-en-chile.html>

<sup>58</sup> Chile Atiende (2015). "Solicitar la devolución de dineros por pagos excesivos o indebidos de tributación aduanera" Available at: <http://www.chileatiende.cl/fichas/ver/4207>

<sup>59</sup> Office of the US Trade Representative (2015). "Free Trade Agreements: Chile". Available at: <https://ustr.gov/trade-agreements/free-trade-agreements/chile-fta>

<sup>60</sup> Rincon del Vago (2015). Chile Exports". Available at: <http://html.rincondelvago.com/exportacion-en-chile.html>

<sup>61</sup> Anon. (2015). "Servicios de Impuestos Internos – Chile" Decreto de Ley No 825. Available at: [www.sii.cl/pagina/jurisprudencia/legislacion/basica/dl825.doc](http://www.sii.cl/pagina/jurisprudencia/legislacion/basica/dl825.doc)

2014 support was extended to allow depreciation credits to be used by any related business to increase the financial resources available to a company.<sup>6263</sup>

## Subsidies for Research and Development

Chile has put in place policies aimed at promoting private investment in research and development. According to Decree Law DL 20241<sup>64</sup>, a company can obtain tax credits equivalent to 35% of R&D spending, thus effectively subsidizing some of its R&D costs. The remaining 65% of R&D costs can be deducted directly from taxable income<sup>65</sup>.

Government, through CORFO and INACAP, also provides funding for innovation and technology transfer by training, assisting with capacitation, providing seed capital and co-financing of projects. Table 3.2.1 shows examples of funding that was available to Chilean business in 2012<sup>66</sup>.

Table 3.2.1– Examples of funding available from Government for innovation and technology transfer

Funding type	Period	Maximum of total cost	Maximum funds available per project (pesos)
Seed capital	24 months	75%	40 million
Direct co financing	6 years	65%	220 million annually
Co-financing of Angel Investments	6 years	70%	80 million first year, decreasing at 10 million per year
Technology transfer and capacitation	24 months	80%	140 million

Source: Innovacion.cl

## Corporate income tax

Chile supports business by levying a lower rate of income tax compared to salary and wage earners. Top tax rates for individuals exceeds 40%, while corporate income tax is currently 21% increasing to 25% by 2017<sup>67</sup>. This is still more favourable than New Zealand’s rate of 28%<sup>68</sup>.

<sup>62</sup> Ministerio de Hacienda (2015) Ministro de Hacienda: “Esta es una reforma tributaria consistente con los objetivos de recuperar la senda del crecimiento”. Available at: <http://www.hacienda.gov.cl/sala-de-prensa/noticias/historico/ministro-de-hacienda-esta-es-una.html>

<sup>63</sup> La Tercera (2015). “Depreciacion Acelerada e Instantanea” Available at: <http://diario.latercera.com/2014/04/14/01/contenido/negocios/10-162218-9-depreciacion-acelerada-e-instantanea.shtml>

<sup>64</sup> Biblioteca de Congreso Nacional de Chile (2015). Ley 20241. “Establece un Incentivo Tributario a la Inversion Privada en Investigacion y Desarrollo”. Available at: <http://www.leychile.cl/Navegar?idNorma=268637>

<sup>65</sup> CORFO. (2015). “Incentivo Tributario a la Inversión privada en Investigación y Desarrollo”. Available at: <http://www.corfo.cl/programas-y-concursos/programas/incentivo-tributario-a-la-inversion-privada-en-investigacion-y-desarrollo>

<sup>66</sup> INACAP (2015). “Fuentes de Financiamiento para Proyectos de Innovación. Viccerectoria de Innovacion y Postgrado” Available at: <http://www.inacap.cl/tportalvp/innovacion-postgrado/dpi/contenido-dpi/fuentes-de-financiamiento-para-proyectos-de-innovacion>

<sup>67</sup> Deloitte (2014). “Chile Tax Alert”. Available at: <http://www2.deloitte.com/content/dam/Deloitte/global/Documents/Tax/dttl-tax-alert-chile-230814.pdf>

<sup>68</sup> Inland Revenue (2015). “Find out about companies”. Available at: <http://www.ird.govt.nz/how-to/taxrates-codes/bit-taxrates-companytax.html>

Table 3.2.2: Summary of Chile non-tariff barriers

Type	NTM Description	Products affected	Level of assistance	Significance of NTM
<b>Social/political</b>	The original afforestation incentives (DL No. 701/74) expired on 31 December 2012. Congress is currently discussing a new 3 year extension.	All	National	If extension implemented will lower Chilean raw material costs and disadvantage competitors
<b>Social/Political/ Economic</b>	Automatic duty drawback system for exports of non-traditional goods – set at 3% of value of good	Services, investments and information technology	National	Lowers cost of exports, disadvantaging competitors
<b>Social/Political/ Economic</b>	Exporters, providers of transportation services, port operators and port concessionaires can claim back VAT on imported goods and services procured or purchased in line with their exporting activities. Decree Law DL 825 (2010 amendments) Paragraph 8, Article 36.	All	National	Lowers cost of exports. Disadvantages competing producers in international markets.
<b>Economic</b>	Instant and accelerated depreciation of assets.	All	National	Increases funding available reducing manufacturing costs. Disadvantages competitors
<b>Economic</b>	Support for start-ups, innovation and technology transfer	All	National	Lowers cost of development and production. Disadvantages competing producers in international markets.
<b>Economic</b>	Tax incentives for R&D. A company can obtain tax credits equivalent to 35% of R&D spending. Remaining costs can be deducted from income tax. Decree Law DL 20241	All	National	Lowers cost of development and production. Disadvantages competing producers in international markets.
<b>Economic</b>	FCIT – First Category (Corporate) income tax is currently 21% increasing to 25% by 2017	All	National	Low tax rates allows for more money to be available for investment, thereby increasing production efficiency and reducing manufacturing costs. Disadvantages competitors in international markets

## APPENDIX 3.3

### CASE STUDY – PEOPLE’S REPUBLIC OF CHINA

#### Summary

Specific non-tariff measures affecting forest products trade with China are:

- Industrial policies that limit market access for imported goods and foreign manufacturers, while offering substantial government guidance, resources, and regulatory support to Chinese industries. The principal beneficiaries of these policies are state-owned enterprises, as well as other favoured domestic companies attempting to move up the economic value chain.
- Manipulation of value-added-tax rebates to reinforce central government objectives, including the assistance of wood products exporters to remain competitive during global economic downturns, by raising or lowering the value-added-tax rebate available upon export.
- Government economic reform and infrastructure spending to lower cost structures and improve competitiveness of domestic industries.
- Tax exemptions for infrastructure projects involving ports and wharves and other infrastructures to support export-oriented businesses by reducing their logistical costs.
- Central and local government investment and incentives to develop fast-growing, high-yield plantations including: discounted loans and loan interest subsidies, preferential tax policies for companies owning forests; incentives for public and farmer initiatives in afforestation; tax preferences and exemptions for forestry incomes.
- Central and local government incentives and support to wood processing subsidies.
- Significant subsidies and loans for Chinese paper producers, including subsidies for energy, pulp, wastepaper, loan interest subsidies for technology renovation and preferential tax policies for Chinese enterprises with foreign investment.
- Central government and provincial subsidies for the development of industrial clusters including infrastructure spending, provision of inexpensive land, tax reductions and exemptions, access to credit and loans, technology, skills and innovation support.
- Poor enforcement of domestic environmental product standards which reduces manufacturing costs for domestic producers
- Government and provincial procurement policies which favour domestically manufactured products.
- Continued illegal timber trade which depresses prices and makes it difficult to predict the Chinese wood products market.
- Building codes and standards which favour North American wood products imports.

#### Background on trade

China is the largest importer country of logs, including softwood logs, and a major importer of sawn softwoods and wastepaper. China is the world’s largest wooden furniture manufacturer and exporter, and the largest producer of paper and paper products and coniferous plywood. In 2014,

New Zealand's exports of forest products to China (predominantly logs and poles) accounted for 40% of the total value of New Zealand's forest product exports and were valued at nearly \$NZ 2 billion.

Significant industry upgrading and restructuring has occurred recently in China's wood panels, furniture and paper industries, with a focus on industry consolidation in favour of larger enterprises, improvements in distribution channels particularly for domestic markets, moving up the value chain, geographic changes in industry location to lower production costs, and development of industry clusters. These developments have improved the sector's competitiveness, giving Chinese manufacturers a comparative advantage compared with other producing countries that have not been able to provide significant, targeted, manufacturing and export assistance measures. In 2014 and 2015, the sector has been challenged by rising labour and manufacturing costs and slowing of GDP growth.

## Social political measures

### Para Tariff measures

In addition to customs duties, China imposes a value-added-tax (VAT) on imported goods which applies to all wood products to be consumed in China. The VAT, levied on the estimated value of each shipment, is 13% for logs and squares and 17% for sawntimber and processed wood products. Application of VAT can be selective and is based on policies to develop specific industries, products and regions, using various exemptions and rebates. This allows the state government to stimulate targeted domestic industries by providing lower cost raw materials for production of value-added products. Some special economic zones/provinces may be free of customs charges and have VAT exemptions if products from the imported raw materials are re-exported. Rules may vary according to the district (see below).

China retains an active VAT rebate programme for its own exports of value-added wood products and has encouraged furniture exports by continuing to provide VAT rebates on imported wood that is used to produce furniture for export. During the global economic crisis in 2008-2009, VAT rebates for exports of wood-based products were increased, which reduced the domestic industry's production costs and increased their cost competitiveness in international markets. On 1 December 2008, the government of China raised the VAT rebates for designated exports including processed wood products - wood-based panels, carpentry and joinery, articles of wood and wooden furniture - specifically HS codes: 4416; 4411; 4412; 4413; 4414; 4415; 4418; 419; 4420; 4421; 9401; 9403; 9404. Exporters of the benefiting products may recuperate up to 80 percent of the VAT included in intermediate products. By comparison, the general VAT in China is equal to 17 percent..

Effective on 1 July 2015, China increased the export tax rebate on products manufactured from agricultural and forestry residues, defective and small diameter logs, fuelwood residues and straw. The new regulations raised the tax rebate to 70% for fiberboard, particleboard, blockboard and certain carbon products made from the specified list of raw materials, most of which are residues.

Adjustments to the VAT favour goods bound for exporting industries over those destined for the domestic market.

## Government interventions

### Inconsistent application of laws and regulations

Although laws and regulations are established by the central government, operationally, local offices of the State Forestry Administration and local governments interpret the central government's laws, as well as overseeing and negotiating forest usage and logging concessions. To expedite projects, Beijing's development policies have relegated approval of new investments to local governments, who are able to provide subsidies for water and electricity, decide tax rates, tax holidays, and fee waivers.

The Province of Hubei, for example, openly advertises preferential tax policies for enterprises with foreign investment<sup>69</sup>, which include preferential enterprise income tax rates (including forestry projects), enterprise income tax reductions or exemptions for export-oriented enterprises with foreign investment, and import tariff and VAT exemption on imported equipment, in addition to exemptions and reductions in land use fees.

Tax incentives for certain types of enterprises and certain types of business activities in the province of Guangdong were introduced on 28 April 2011. Favourable tax treatments of relevance to the forestry sector included<sup>70</sup>:

- Enterprises engaged in forestry projects are entitled to Enterprise Income Taxation exemption or levied at a deducted rate.
- Enterprises engaged in public infrastructure projects with key support from the nation are entitled to enterprise income taxation exemption or a reduced tax rate.
- Favourable tax treatment for "Going Abroad" enterprises; local favourable taxation policies.

Haley (2010) noted that in practice, local governments have exceeded the central government's directives for development aid, including tax, financing, and trade measures, to shore up investment in their regions. Local governments have also strongly supported local companies in applying to the central government for preferential subsidies (e.g., the central government's loan-interest subsidies for paper companies investing in plantations). It was suggested that governmental decentralization has enhanced paper companies' needs for "facilitation payments" with local governments<sup>71</sup>.

In December 2014, the government recognised that (1) local governments hand out substantial amounts of grants to local companies and that (2) the political intentions behind these payments are not always conforming to national strategies devised by the central government<sup>72</sup>. To compensate for this the government issued a directive against the use of local government subsidies, including preferential tax policies, banning any form of preferential tax policy without approval by the State

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<sup>69</sup> <http://en.hubei.gov.cn/business/policies/>

<sup>70</sup> ITTO Market Information Service

<sup>71</sup> Haley U. (2010). "No paper tiger. Subsidies to China's paper industry from 2002-2009". Economic Policy Institute Briefing Paper 264. Available at: <http://www.epi.org/files/page/-/pdf/bp264.pdf>

<sup>72</sup> ThinkDesk China Research and Consulting (2015). "Assessment of the normative and policy framework governing the Chinese economy and its impact on international competition". Prepared for AEGIS Europe. Available at: [http://static1.squarespace.com/static/5537b2f4b0e49a1e30c01c/t/558ba747e4b004a9529395ae/1435215687902/MES+China+Study\\_Taube\\_Full+Version-25June15\\_F.pdf](http://static1.squarespace.com/static/5537b2f4b0e49a1e30c01c/t/558ba747e4b004a9529395ae/1435215687902/MES+China+Study_Taube_Full+Version-25June15_F.pdf)

Council, and demanding higher standards for managing non-tax revenues from selling land, state-owned assets and illegal exemption from compulsory fees. However, following massive resistance from the provinces across China who feared a reduction in investments, the State Council eventually amended the controversial policy, leaving most existing support measures untouched. It has been suggested that “the recent withdrawal of restrictions in the face of local resistance underscores the importance of subsidies and other forms of investment incentives for maintaining growth”<sup>73</sup>.

### General government investment subsidies

On June 24, 2013, the National Development and Reform Commission (NDRC) released *Measures for Management of Central Budgetary Investment Subsidy and Interest Discount Project*. Qualified governmental or private investment projects receive investment subsidies and loan interest discounts which focus on economic and social areas where the government presumes market failures occur. Qualified projects of relevance to the forestry sector include:

- Public welfare and public infrastructure investment projects;
- Environmental protection and improvement projects;
- Investment projects that promote the economic and social development of under-developed regions;
- Investment projects that promote technological development and high-tech industrialization.

### Afforestation subsidies

Since the late 1990s, the State Forestry Administration’s policies have focused on rapid expansion of plantations for erosion control, forest conservation and for economic security (to bridge the significant gap between China’s growing wood demand and limited supply). As a result of these policies the plantation area now covers 69.33 million ha with a standing volume of 2,483 million m<sup>3</sup>, accounting for 17% of the forest stock volume. Six provinces (autonomous regions) including Guangxi, Guangdong, Hunan, Sichuan, Yunnan and Fujian have relatively large areas of plantations<sup>74</sup>. The area planted in 2013 alone covered 6.1 million ha with 17% of these newly-developed plantations destined for industrial harvest. Their ability to provide dramatic increases in harvestable resources has been questioned because they are considered to be of inconsistent quality. The development of fast-growing and high-yielding plantations has been a major programme in previous years, with the emphasis now shifting to conservation and sustainable forest management. The major afforestation programmes in 2012 included:

- natural forest resources conservation;
- conversion of slope farmland to forest;
- sandification control for areas in the vicinity of Beijing and Tianjin;
- key shelterbelt development in the Three-North region, the Yangtze River Basin and other river basins; and
- integrated control of stony land desertification.

The massive afforestation programme to-date has been subsidised by extensive government investment and a number of incentive-driven mechanisms to mobilise public, particularly farmers’,

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<sup>73</sup> Ibid.

<sup>74</sup> State Forestry Administration (2014). “Forest Resources in China”. The 8<sup>th</sup> National Forest Inventory. State Forestry Administration of the People’s Republic of China. Information Services.

initiatives in afforestation investment. In the “Programme for conversion of slope farmland to forest”, for example, nearly NZ\$2 billion in grain subsidies and NZ\$850 million in living subsidies were granted in 2012 for participating rural households.

In August 2007, seven state ministries and commissions jointly issued a forest industry policy which outlined the subsidies and other support that the government was offering listed paper companies owning forests such as Yueyang Paper, Huatai Stock, and Chenming Paper. Government subsidies included 1) using preferential tax policies to exempt forest-project income from total corporate income, 2) expanding loans to forestry through policy-oriented banks such as China Development Bank, 3) extending the life of existing loans from 12 to 20 years for construction projects to plant timber and to expand forests for industrial raw materials, 4) actively transferring forest rights to companies for industrial production, and 5) increasing discounted loans and loan-interest subsidies to the forestry industry and backward-integrated paper companies. On October 31, 2007, the National Development and Reform Commission (NDRC) also released the “Industrial Policy of China Paper Making Industry” to accelerate the movement of paper production from the north to the area south of the Yangtze River, and to increase forest-pulp-paper integration. The policy addressed industrial development and layout, energy usage, environmental protection, and market entry. The afforestation programme appears to be set to continue at an aggressive pace, with the central government reinforcing in its guidelines that it will “launch an aggressive tree-planting program and every citizen is encouraged to participate in it”<sup>75</sup>

The State Forestry Administration noted in 2013 that the Chinese government was allowing more loans for the forest sector<sup>76</sup>. Policy was instigated to reform forest tenure of the collective forests, with all 26 provinces developing a benefit compensation system. The government also offered reduced forest right mortgage loans and subsidised forest insurance premiums as well as fiscal policy to reform state-owned forest farms, subsidising social insurance systems for workers<sup>77</sup>. There are now 130 million ha. with confirmed property rights and 90.8 million ha with certificates of property rights, accounting for 71.3% and 53.7% of the total area of collective forest land respectively. Tax preferences and exemptions are also available for forestry incomes. Company earnings from forest businesses are entitled to reduction of, and exemption from, Enterprise Income Tax. Products which are produced from forest residues have been targeted under the government’s levy-and-refunds policy towards VAT.

In 2013, China’s total investment of funds in forestry projects amounted to 380.0 billion yuan (NZ\$89.9 billion). A considerable proportion (90%) was (directly or indirectly) obtained from State-funding sources, including the State budget (172.6 billion yuan), domestic loans (38.6 billion yuan),

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<sup>75</sup> State Forestry Administration (2014). “Policies and Regulations”. Available at: <http://english.forestry.gov.cn/index.php/policies-regulations/>

<sup>76</sup> State Forestry Administration (2014). “China Forestry Development Report 2013”. Available at: <http://english.forestry.gov.cn/index.php/information-services/latest-publication/1-china-forestry-development-report-2013>

<sup>77</sup> Ibid.

and self-raising funds (131.6 billion yuan). Other sources were: foreign investment (5.1 billion yuan), and “other” funds (25.2 billion yuan)<sup>78</sup>.

Of the total investment, nearly 50% was used for ecological improvements and conservation projects (nearly 60% of which was for afforestation projects), 28% for development of the commercial forest industry (including afforestation and wood processing), 6% for forestry support and the remainder for other projects.

The state provides special funds for natural forest protection and converting farmland to forests. The “Forests Ecological Benefits compensation system” and an “Ecological Efficiency compensation fund” has been established. From 2010, the central government has provided benefits for state-level public welfare forest and for collective-owned forest. The government also offers benefits to investment by the public in terms of tree-planting, cultivation, protection and management. Since 2009, the central government has provided subsidies for forest tending, improving species varieties, tree-planting and forestry machinery. The central government also provides special funds for forestry science and technology promotion, forest pest prevention, and the construction of public welfare forests and major forestry infrastructure.

In 2004, AF&PA<sup>79</sup> noted that the provinces had implemented forest policy economic reforms slowly and unevenly because of ad hoc approaches to implementing policy reforms. However, in the intervening period (to 2014), the reform of land ownership rights has been prioritised and the scale of afforestation has accelerated. Although a significant proportion of state funding for afforestation projects is primarily focused on forest ecosystem restoration and soil stabilisation projects, the programme also increases China’s production capability, the scale of the plantings creating a significant (and heavily subsidised), future fibre resource.

### Wood processing subsidies

China’s roundwood harvest has increased over the past ten years, except for a decline of 13% in 2009, having expanded from 52 million m<sup>3</sup> in 1983 to 84.3 million m<sup>3</sup> in 2013.

China’s growth in its wood processing industry over the last decade has been remarkable and has followed growth in the overall economy. However, this growth has been achieved through considerable direct and indirect government assistance and state directives for industry development and restructuring, which have guided and incentivised the adoption of central government policies.

*Table 3.3.1: China – Growth rate of value-added industry by sector*

	Wood processing*	Furniture	Pulp and paper
Period (year ended)	<i>(Accumulated % increase over same period in previous year)</i>		
September 2015	7.5	8.5	5.0
December 2014	9.5	8.7	6.5

<sup>78</sup> National Bureau of Statistics of China. (2014). “China Statistical Yearbook”. Available at: <http://www.stats.gov.cn/tjsj/ndsj/2014/indexeh.htm>

<sup>79</sup> American Forest and Paper Association (2004). “China’s subsidisation of its forest products industry”. AF&PA, Washington. Unpublished report.

<b>December 2013</b>	11.7	10.2	8.4
<b>December 2012</b>	12.4	11.2	8.8
<b>December 2011</b>	21.0	15.2	14.4
<b>December 2010</b>	22.4	19.7	16.2
<b>December 2009</b>	17.7	8.8	10.7
<b>December 2008</b>	21.5	13.5	12.4
<b>December 2007</b>	28.8	20.9	17.6

*\*Processing of timber, manufacture of wood, bamboo, rattan, palm and straw products.*

*Source: National Bureau of Statistics of China<sup>80</sup>.*

China's wood processing industry, for example, was negatively affected by the decline in demand for China's wood product exports in 2008 and 2009, with numerous reports of bankruptcies and closures among China's small and medium-sized enterprises. However, production growth continued over the period, suggesting a massive shift in industry structure. This was achieved through a government plan for revitalization of the forest industry to support the industry through the crisis, with industry upgrading and restructuring considered critical for a sustained recovery from the downturn in international demand. The plan aimed to raise the output value of the forestry sector and to maintain growth of around 12% annually with focus on supporting 100 national leading enterprises and 10 large wood industry clusters<sup>81</sup>. Government incentives focused on enterprises that owned a certain area of quality forestland resources, had a large wood processing capacity, and had the capacity for further value-added processing. Forest industry policies have focused on moving up the value chain, shifting from resource-oriented to technology-oriented industry structures. Primary wood processing is considered to be a low value-added, low technology and high resource consumption industry and as such has been excluded from domestic banks' priority lending list.

Some of the specific state directives in terms of forestry industry development have been:

- market restructuring with emphasis on developing domestic emerging markets, particularly in small cities, townships, rural areas and the western region;
- product restructuring with the focus on brand development and after-sale service improvements;
- capital structure optimisation, for lowering capital risks and establishing strategic union;
- raising enterprises' capacity for R&D and technology upgrades;
- increasing environment protection awareness, with emphasis on national and international certification and market access opportunities;
- production customisation to meet different customer needs; and
- encouraging innovation to increase the core competitiveness of enterprises.

Local governments also increased incentives to encourage development of industrial structures. Export policies have been focused on a "low carbon economy", with export restrictions imposed for resource intensive industries and export tax rebates being gradually cancelled. Other incentives included a neutral policy on labour intensive industries; and significant export incentives for technology intensive industries.

<sup>80</sup> National Bureau of Statistics China. Available at: [www.stats.gov.cn](http://www.stats.gov.cn)

<sup>81</sup>ITTO Market Information Service 16-30 November 2009

The provision of support for the establishment of “brand names” on the international markets is administered discretionarily by local governments, which can employ grants, preferential loans, or other measures in order to achieve their goals.

While forest industries in the eastern provinces have benefitted from government support in encouraging foreign investment, government policies have also been directed to expanding industrial development in the less-developed western provinces, to improve industry competitiveness by lowering labour and raw material costs and to expand the consumption base to reduce reliance on exports, a major economic growth strategy following the export demand downturn in 2009. A number of support policies to shift some of the industrial base to the west have been implemented by the state, including tax, finance and investment incentives; land use and a number of other incentives such as building infrastructure to improve logistical costs. It has been suggested that wooden furniture industry, for example, may form a new cluster in midwest regions, e.g. Henan or Sichuan provinces<sup>82</sup>.

### Wooden furniture industry subsidies

The Chinese wooden furniture industry has become a huge integrated sector which has been built on the rapid development of the domestic economy, high levels of foreign investment, a comparative advantage in skilled labour and raw material costs compared with other manufacturing countries, and rapid growth in exports<sup>83</sup>. In the wake of the global recession, a downsizing of production facilities in North America and the EU corresponded to an expansion of production plants in China<sup>84</sup>.

Wooden furniture production in China is resource-based, labour-intensive and has low entry barriers in trade. The industry is fragmented with few large firms and numerous small manufacturers although the number of large scale enterprises has grown. At least 90 percent of enterprises are not state-owned. China’s furniture industry is mainly distributed in three large economically developed industrial clusters – the Pearl River Delta (Guangdong), the Yangtze River Delta (Zhejiang) and Bohai Rim region (Shandong).

The furniture industry has benefitted from government support and facilitation of industrial clusters to promote economic development through the development of industrial parks and export-processing zones. The formation of industrial clusters, which have integrated production, sales, training, R&D and services, has benefitted from a number of incentives from state and provincial governments (infrastructural developments, inexpensive land, tax reductions and exemptions, access to credit and loans; technology, skills and innovation support) to encourage the clusters. A

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<sup>82</sup> Hongqiang Y., Chunyi J., Ying N. and Yinxing H. (2012). “China’s wood furniture manufacturing industry: Industrial cluster and export competitiveness”. *Forest Products Journal* 62(3): 214-221.

<sup>83</sup> Maplesden F., Attah A., Tomaselli I., Wong N. (2013). “Riding Out the Storm: Improving resilience of the tropical timber sector to the impacts of global and regional economic and financial crises”. ITTO Technical Series #41. International Tropical Timber Organization, Yokohama. 148pp. Available at: [http://www.itto.int/technical\\_report/](http://www.itto.int/technical_report/)

<sup>84</sup> EC (2014). “The EU furniture market situation and a possible furniture products initiative”. CEPS, Economisti Associati, CSIL and Demetra for DG Enterprise and Industry (authors). European Commission, Brussels. Available at: [http://ec.europa.eu/enterprise/newsroom/cf/itemdetail.cfm?item\\_id=7918&lang=en&title=Study-on-the-EU-furniture-market-situation-and-a-possible-furniture-products-initiative-](http://ec.europa.eu/enterprise/newsroom/cf/itemdetail.cfm?item_id=7918&lang=en&title=Study-on-the-EU-furniture-market-situation-and-a-possible-furniture-products-initiative-)

number of measures have been used to encourage foreign investment in the initial stages, including: concessionary tax rates, breaks and exemptions; free or low rent business accommodation; preferential land policies; depreciation allowances; and favourable arrangements pertaining to project duration, size, location and ownership<sup>85</sup>.

The formation of industrial parks and centres consolidated the wood products industry throughout China. However, it has been noted that in contrast to developed countries, where industry clusters are the result of spontaneous market processing, industrial clusters in China are mostly based on regional advantages, policy incentives and government support<sup>86</sup>. Regional incentives have been reigned in more recently with the Government of China announcing in December 2014 that local governments were to reduce their regional tax incentives and preferential land policies for foreign companies<sup>87</sup>.

The Chinese furniture industry had undergone significant restructuring following a significant slowing of growth in export value in 2009. Some of the major developments were: industry consolidation in favour of larger enterprises and development of domestic oriented companies with own-brands and distribution channels; improvements in distribution channels, particularly for domestic markets, which have helped to grow the domestic market and lower distribution costs; processing cost reductions and productivity improvements; movement up the value chain and (as discussed previously); and establishment of furniture “clusters” (now totalling 24) within the major industrial zones. Many of these developments were achieved through direct and indirect government support.

Wooden furniture manufacture in China is not regarded as a high technology sector although China’s policies are focusing on assistance in moving sectors up the value chain. More recently, rising costs of labour, raw materials, freight and other factors have been pushing up costs of furniture manufacturing in China and producers have been refocusing on the domestic market in response to steady growth in incomes and government policy measures to boost domestic consumption’s share of the economy. Despite rising costs of labour, some analysts consider that the price of labour continues to be below its “fair” value due to an expressed low wage policy by the Chinese government. However, the recent initiative to boost domestic consumption has created a highly immature wage bargaining processes and the household registration system (hukou) effectively prevents the constitution of a unified national labour market by effectively discriminating against labour originating in rural areas<sup>88</sup>.

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<sup>85</sup> Zheng D. (2011). “How do special economic zones and industrial clusters drive China’s rapid development”. The World Bank Policy Research Working Paper 5583.

<sup>86</sup> Liefner I., Wei Y. (2014). “Innovation and regional development in China”. Routledge. Taylor and Francis Group.

<sup>87</sup> State Council (2014). “China to regulate preferential tax policies”. The State Council of the People’s Republic of China. Available at: [http://english.gov.cn/policies/latest\\_releases/2014/12/10/content\\_281475021854674.htm](http://english.gov.cn/policies/latest_releases/2014/12/10/content_281475021854674.htm)

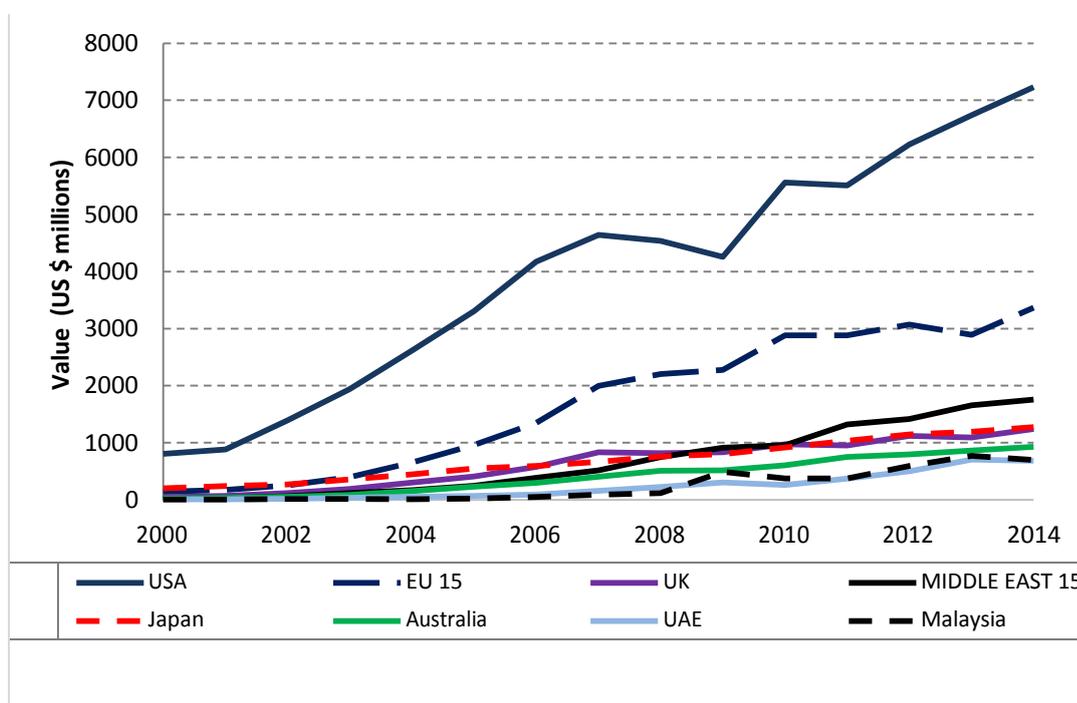
<sup>88</sup> ThinkDesk China Research and Consulting (2015). “Assessment of the normative and policy framework governing the Chinese economy and its impact on international competition”. Prepared for AEGIS Europe. Available at: [http://static1.squarespace.com/static/5537b2f8e4b0e49a1e30c01c/t/558ba747e4b004a9529395ae/1435215687902/MES+China+Study\\_Taube\\_Full+Version-25June15\\_F.pdf](http://static1.squarespace.com/static/5537b2f8e4b0e49a1e30c01c/t/558ba747e4b004a9529395ae/1435215687902/MES+China+Study_Taube_Full+Version-25June15_F.pdf)

## Wooden furniture export subsidies

Wooden furniture, particularly wooden bedroom furniture, is China's largest wood product export item, accounting for 30% of China's wood product exports and more than two-thirds of secondary-processed solidwood product exports by value. Despite the weak demand conditions during the worst period of the global economic downturn, particularly in the major market for wooden furniture (the USA), exports (by value) continued to rise when the global financial and economic crisis reached its peak in 2009, while all other major exporters had experienced declining values in exports during the period.

From June 2009, the industry benefited from value-added-tax (VAT) rebates for export items with the rebate for furniture products increasing from 11% to 13%. Exports to the United States, the major market, declined in 2008 and 2009 in response to reduced consumer spending and plummeting housing starts. The industry had also been affected by antidumping duties imposed on wooden bedroom furniture from China in 2004. These were extended in December 2010, with pressure from US manufacturers who had been affected by the constrained market. In response, China's furniture industry diverted some of its production to items which are not subject to anti-dumping measures, such as seats with wooden frames. China's furniture industry was also challenged by environmental legislation in the USA and the EU which posed more severe restrictions on China's wooden furniture and parts.

Figure 3.3.1: Value of China exports of wooden furniture, by major importing country and selected regions, 2000-2014



Source: World Trade Atlas, cites China Customs.

"Wooden furniture" is defined in this analysis to include the following trade classifications in the Harmonized System of international commodity trade classification (HS96/02/07/12): 940161 Seats with wooden frames, upholstered nes; 940169 Seats with wooden frames, nes; 940330 Office furniture, wooden, nes; 940340 Kitchen furniture, wooden, nes; 940350 Bedroom furniture, wooden, nes; 940360 Furniture, wooden, nes.

With this background, furniture exporting enterprises were being encouraged to explore emerging markets, especially in the Middle East, facilitated by government strategy to increase its economic presence in emerging markets. In 2013, although the USA remained the largest importer of China's wooden furniture and parts, its share had decreased from 48 percent in 2008 to 35 percent in 2013, while exports to ASEAN countries (assisted by the China-ASEAN Free Trade Agreement) and the Middle East (especially Saudi Arabia and United Arab Emirates) had risen considerably. China also continued to expand its exports to a number of new emerging markets such as Russia, South Africa and Brazil.

### Wood panel industry subsidies

China's production of wood-based panels rose from 25% of the world's total in 2005 to nearly 50% in 2014<sup>89</sup>. About 10% of China's wood-based panels are exported directly, while 30% are exported indirectly following re-manufacture into furniture, flooring and other secondary processed wood products. The competitiveness of China's flooring and furniture industries (as discussed previously) has an impact on demand for wood-based panels. New Zealand radiata pine MDF competes with Chinese MDF in domestic and third markets and imported New Zealand radiata pine logs are used in China's plywood industry.

China is expected to account for 51% of world MDF production by 2017, with an increased emphasis on domestic consumption, although production is expected to grow more rapidly than consumption, thereby dampening prices<sup>90</sup>. China manufactured 68% of the world's plywood and 72% of the world's coniferous plywood (about 86 million m<sup>3</sup>) in 2014<sup>91</sup>. Wood-based panels are the dominant material used in the wooden flooring industry, with China being the world's largest producer of wooden flooring. The industry, which comprised a high number of low-tech SMEs, was significantly affected by the global economic crisis and by January 2009, almost 50% of plywood enterprises had either stopped or partially stopped production, and about 20% of wood flooring enterprises were in difficult positions financially. Export-oriented product enterprises were reportedly more severely affected than enterprises catering to the domestic market<sup>92</sup>.

In response to the crisis the government had provided VAT tax rebates for forest industry enterprises, including rebates for products produced with timber residues and small diameter logs, which has favoured the wood panels industry. The government also provided reduced interest rate lending to forest industries with the reduced interest being paid by the State budget. The export tax rebate rates for most wood products were increased in response to the crisis, which effectively reduced the production costs of plywood and other wood-based panels. In response, the industry recovered and exceeded pre-crisis production and export levels. More recently, domestic consumption has been positively influenced by government incentives to increase domestic consumption. MDF exports have been assisted by export tax rebates for products which use forest residue materials and small diameter logs.

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<sup>89</sup> FAOSTAT database (2015). Available at: [http://faostat3.fao.org/browse/F/\\*/E](http://faostat3.fao.org/browse/F/*/E)

<sup>90</sup> Wood Based Panels International (2014). "Global prospects for MDF and particleboard". Available at: <http://www.wbpionline.com/features/global-prospects-for-mdf-and-particleboard-4376280/>

<sup>91</sup> ITTO Statistics Database.

<sup>92</sup> ITTO Market Information Service 1-15 January 2009.

China's exports of plywood (mainly hardwood plywood) have been subject to antidumping and countervailing duties in a number of its export markets, the most high profile case being in the US, where the US International Trade Commission began investigating antidumping duties imposed on imports of plywood from China in November 2012. The investigation resulted in a ruling that the US industry had not been materially injured by imports of hardwood plywood from China that had been subsidized and sold in the United States at less than fair value<sup>93</sup>.

### **Pulp and paper industry subsidies**

China is the world's largest producer of paper and paper products, producing over 108.7 million tonnes, 27% of the world's total, in 2014<sup>94</sup>. Production has nearly doubled since 2005, but has expanded more than consumption, and exports have also doubled during the period to 7.4 million tonnes.

Government policies on forestry place high importance on the Chinese paper industry which has been the recipient of extensive government subsidies, leading to massive capacity expansion, and more recently, export-led development. Integrated paper companies have benefitted from favourable policies, including government rebates of forest user charges, lower tax rates and local governments' favourable policies and subsidies. Some paper companies are recognised as high and new technology enterprises and as such receive major support benefits from the state.

Subsidies to China's paper industry have been researched by a number of analysts/organisations who have been concerned about the implications of subsidised paper exports from China to the US and its effect on the US paper industry<sup>95,96,97</sup>.

The most recent analysis<sup>98</sup> concluded that Chinese government subsidies and loans had fuelled China's paper industry growth, excess capacity and low prices. Despite comparable cost structures, high efficiencies and plentiful natural resources, US paper companies had failed to compete globally or nationally on price against much cheaper Chinese imports. The authors have conservatively estimated that over the period 2002 to 2009, China's paper industry subsidies amounted to over US\$33.1 billion, including subsidies for electricity amounting to \$778 million; subsidies for coal \$3 billion; subsidies for pulp \$25 billion (from 2004-2009); subsidies for recycled paper \$1.7 billion (from 2004-2008); subsidy income reported by companies \$442 million; and loan-interest subsidies \$2 billion. Subsidies did, however, fall sharply in 2009 when world prices for all commodities plummeted during the recession.

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<sup>93</sup> USITC (2013). "Hardwood Plywood from China". Investigation Nos. 701-TA-490 and 731-TA-1204 (Final). Publication 4434. Available at: [http://www.usitc.gov/publications/701\\_731/pub4434.pdf](http://www.usitc.gov/publications/701_731/pub4434.pdf)

<sup>94</sup> FAOSTAT

<sup>95</sup> Trade Lawyers Advisory Group (2007). "China's support programs for selected industries: Wood and wood products". US-China Economic Security Review Commission. Available at: <http://origin.www.uscc.gov/sites/default/files/Research/TLAG%20Report%20-%20China's%20Support%20Program%20for%20Wood%20and%20Wood%20Products.pdf>

<sup>96</sup> American Forest and Paper Association (2004). "China's subsidisation of its forest products industry". AF&PA, Washington. Unpublished report.

<sup>97</sup> Haley U. (2010). "No paper tiger. Subsidies to China's paper industry from 2002-2009". Economic Policy Institute Briefing Paper 264. Available at: <http://www.epi.org/files/page/-/pdf/bp264.pdf>

<sup>98</sup> Ibid.

Subsidy income reported by companies is listed in some company annual reports. An update of the subsidies reported by one company – Shandong Chenming Paper Holdings Ltd<sup>99</sup>, one of the largest paper companies in China – shows that in 2014 alone the company received US\$130.6 million in listed subsidies (special subsidy funds, demolition and relocations expenses; and asset-related government grants). The company also received reductions and exemptions in the enterprise income tax rate for some subsidiary companies.

Loan-interest subsidies are special Chinese government funds allocated from the central budget or raised from treasury bonds to finance plantations or renovations in paper-mill technology. These subsidies provide capital reimbursement or the loan-interest amount as start-up capital for qualifying projects. The standard subsidy term is two years. For enterprises on China's "top enterprises" list, the subsidy term is three years. However, exceptions take place and Shandong Chenming received a five-year loan-interest subsidy in 2004. In 2009, the Ministry of Commerce announced that for forestry clients, the maximum term for forestry and agriculture loans would be 10 years. The maximum term for instant forest, ecological construction, and follow-up industrial development would be 20 years and the maximum term for forest paper-processing projects would be 12 years<sup>100</sup>.

Preferential electricity price policies have been imposed by provincial governments for local paper companies; central government provides subsidies for electricity generation which are passed on to consumers, including the paper industry.

Haley (2010)<sup>101</sup> suggested that the study had greatly underestimated subsidies to pulp because it used pulp prices paid by mostly private companies for paper production. *"Large, backward-integrated companies and SOEs get highly discounted pulp through transfer-pricing mechanisms for which data are publicly unavailable... Costs of land take up between 30% and 60% of fast-growing forest costs, which in turn take up about 50% of the costs of domestic pulp. But the Chinese government subsidizes land for integrated producers and those acquiring land in desert areas, reducing the costs of pulp for these companies. For example, Chenming has been acquiring rental land in the Zhanjiang region to establish its own timber supplies. Significant cost advantages accrue to Chenming when using its own timber. On average, the cost per cubic meter of Chenming-owned trees hovers around RMB200 (\$29.2) compared with locally-acquired timber costing about RMB300–400 (about \$43.9–58.5). On the other hand, Meili's land rental is zero because it is using this plantation land for desert forestation"*.

The 12<sup>th</sup> five-year development plan of the paper industry<sup>102</sup> (2011–2015) announced new directives to develop the industry, directing production to grow by 4.6% annually by 2015 and for the industry

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<sup>99</sup> Shandong Chenming Paper Holdings Ltd. (2014). "Annual Report 2014". Available at: <http://www.hkexnews.hk/listedco/listconews/SEHK/2015/0327/LTN20150327043.pdf>

<sup>100</sup> Haley U. (2010). "No paper tiger. Subsidies to China's paper industry from 2002–2009". Economic Policy Institute Briefing Paper 264. Available at: <http://www.epi.org/files/page/-/pdf/bp264.pdf>

<sup>101</sup> Ibid.

<sup>102</sup> SFA (2011). "Twelfth Five-Year Development Plan of Paper Industry". National Development and Reform Commission. Ministry of Industry and Information Technology. State Forestry Administration. People's Republic of China. Available at: <http://www.slideshare.net/FinproRy/twelfth-fiveyear-development-plan-of-paper-industry>

to be “technology-intensive, energy-saving and environmentally friendly”. The emphasis has been on modernisation of the industry, the elimination of outdated technology and scale (including directives on the minimum scale of new projects and expansion projects), and more stringent environmental policies. By 2015, the industry was “to form more than twenty 1 million t/a and above paper and paperboard production enterprises and three 1 million t/a and above woodpulp production enterprises, boost the proportion of the top 30 enterprises’ paper and paperboard output in the total output and make it rise to 45.0% from 42.3% at the present time”. Key projects focused on forest-paper integrated development to secure a sustainable raw material resource, including the establishment of 4.2 million ha of fast-growing and high-yielding plantations for the pulp industry; clean production and resource utilization engineering; and upgrading and updating of products and independent innovation of equipment to reduce dependence on imported equipment. Policies and measures to achieve the plan included:

- Tax preferences to enterprises that use three wood residues – firewood material, stalk and bagasse – as their raw material.
- Exemption from import duties and value-added tax for imported key components, systems and raw material for equipment, while preferential taxation policy on imports of whole machines were abolished.
- Incentives for enterprises with excellent performance in environmental protection, giving priority to those enterprises in the allocation of emission allowances and the examination and approval of construction processes, etc.
- Preferential policies for the reutilisation of waste paper
- Encourage domestic banks to render credit support for foreign investment in the paper industry by means of export credit, project financing, annexation loans, etc. and provide information services concerning overseas investment, “render conveniences in customs, commercial inspection, entry and exit”
- Boost the scale of commercial bank loans to encourage and guide financial institutions to render great support to the projects and enterprises with strong economic strength and great market potential.

### **Infrastructure subsidies**

Infrastructure projects involving ports and wharves, airports, railways, highways or other infrastructures which are within the scope of key support from the state are 100% exempt from enterprise income tax for the first 3 years, and 50% for the following 3 years starting from the year which the project first generates operating income.

The national “One Belt One Road” strategy, involving the shipping of goods overland from east to west, was conceived to support export-oriented businesses by reducing their logistical costs. The first shipment of wooden furniture has been made overland from Heilongjiang Province to Germany via the Eurasian Land Bridge. The strategy has seen new processing and trading bases for imported wood products being established, with direct and indirect government support. An example is Zhuanghe City, a national level port in the northeast region of China, which is creating an integrated complex for furniture manufacturing and port facilities which will be further developed to specialise in handling imported timber. In order to meet the requirements of local industries, 13 ports have specialised wharves which can handle up to 5 million m<sup>3</sup> of logs annually. To attract enterprises to

take advantage of the port a 4 km<sup>2</sup> wood industry park has been planned. It is anticipated that Zhuanghe will become one of the largest imported timber distribution centres in Northern China<sup>103</sup>.

### Research subsidies

The state provides the major support for R&D in China with only 3.4% of China's total expenditure on R&D being contributed by enterprises. It can be concluded that government support for R&D in the forestry sector is significant.

China's expenditure on R&D in 2013 by forest sector was as follows<sup>104</sup>:

Wood processing*	NZ\$649 million
Furniture	NZ\$537 million
Pulp and paper	NZ\$2,097 million

\*Processing of timber, manufacture of wood, bamboo, rattan, palm and straw products

Chinese tax policies offer a wide range of tax deductions and preferential tax rates for R&D activities although the incentives include requirements for locally owned intellectual property, which favour Chinese companies<sup>105</sup>.

### Preferential tax policies for SMEs

China has recognised the role of SMEs in China's economic expansion and that SMEs have required assistance in resolving capital shortage problems. In response, China has implemented preferential income tax policies in place for small and low-profit enterprises since 2011. In 2015, the policy was expanded to all types of small low-profit enterprises although foreign enterprises are not entitled to the tax breaks<sup>106</sup>. Given the structure of the secondary processed wood processing industries, which comprise a high proportion of SMEs, the policy supports domestic industries by reducing their production costs and increasing their international competitiveness.

### Encouragement/restriction of foreign investment inflows

The government continues to strictly regulate and restrict foreign investment with a key objective to strengthen the international competitiveness of domestic industries. The government limits inflows of foreign investment and directs them to selected regions and sectors to facilitate development of domestic industries. As discussed previously, the central and provincial governments have introduced measures to encourage foreign investment in the forestry sector, with some provincial governments encouraging investment in afforestation projects, preferential enterprise income tax rates (including forestry projects), enterprise income tax reductions or exemptions (for export-oriented enterprises with foreign investment), and import tariff and VAT exemption on imported equipment, in addition to exemptions and reductions in land use fees. Preferential treatment has been extended to foreign investment in the inland provinces and regions.

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<sup>103</sup> ITTO Market Information Service

<sup>104</sup> National Bureau of Statistics of China (2014). "China Statistical Yearbook". Available at: <http://www.stats.gov.cn/tjsj/ndsj/2014/indexeh.htm>

<sup>105</sup> US-China Business Council. (2013). "China's High and New-Technology Enterprise Program". US-China Business Council

<sup>106</sup> China Briefing (2015). "China launches new preferential tax policies for small low-profit enterprises". Available at: <http://www.china-briefing.com/news/2015/05/29/china-launches-new-preferential-tax-policies-for-small-low-profit-enterprises.html>

## Outward foreign direct investment

While previous outbound investment has focused on securing raw materials, in recent years, the pursuit of market access has gained prominence in China's "Going Out" strategy. As important export markets have erected trade defences against dumping and subsidization practices in China, the establishment of local production provides a channel to tap foreign markets<sup>107</sup>.

China's outbound investment in forestry projects was estimated at \$7 billion in 2014, with projects located worldwide. The State Forestry Administration is supporting Chinese companies to invest in primary wood processing facilities offshore.

There has been significant investment by the Government of China in assisting African development, including US\$10 billion in preferential loans and preferential buyer credits for infrastructural and social development projects, loans to support the growth of African SMEs, and cancellation of due debts of loans by heavily indebted African countries. The China-Africa Development Fund has been expanded to US\$3 billion to support Chinese enterprises to expand investment in Africa. These measures could be interpreted as facilitative of the China-African trade in commodities, including the expansion of the African log trade to China which has grown rapidly in recent years<sup>108</sup>.

## Promotion of foreign trade

On 12 September 2012, the State Council of the People's Republic of China announced the adoption of eight policies for the promotion of foreign trade<sup>109</sup>, with the aim of boosting economic development. Policies of relevance to the wood-based industries included measures to:

- Ensure export tax reductions are more timely;
- Support export trade financing for small and micro enterprises and increase loans to qualified export enterprises;
- Widen the scope and coverage of export credit insurance, with special consideration for small and medium-size enterprises. Expand short-term insurance businesses and implement special arrangements for export-financing insurance;
- Concentrate on import trade remedies in order to protect domestic industries;
- Support enterprises that want to explore emerging markets;

These policies facilitate the discrimination against foreign commercial interests and support domestic industries.

## Free Trade Agreements

A China-New Zealand Free Trade Agreement was signed in 2004. For logs, sawn timber and wood pulp, the current tariff is zero<sup>110</sup>. The agreement also secured elimination of tariffs on a limited number of engineered wood products where existing tariffs are either 4% or 7.5%.

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<sup>107</sup> ThinkDesk China Research and Consulting (2015).

<sup>108</sup> ITTO Market Information Service

<sup>109</sup> <http://www.globaltradealert.org/measure/china-policies-promotion-international-trade>

<sup>110</sup> <http://www.chinafta.govt.nz/2-For-businesses/2-Tools-and-resources/3-Tariff-finder/0-step4.php?t=48044100>

Tariffs remain in place for some wood products, including paper and paperboard products and specific types of engineered wood products, including specific types of fibreboard and plywood, where MFN applied rates continue to apply. China will not make tariff reductions under the Free Trade Agreement for these products because, as part of China's accession to the World Trade Organization, it agreed that any preferential commitments on wood and paper products in a free trade agreement must then be offered to all members of the World Trade Organization.

The China-ASEAN Free Trade Agreement has opened up China's access to wooden furniture markets in the ASEAN economies.

China is not a signatory to the Trans-Pacific Partnership agreement, although the implications of the agreement for the wood products trade are still largely unknown.

## **Price manipulations**

### **Currency convertibility**

China maintains a "managed float regime" for determining exchange rates which provides the opportunity for government interference. Western economists consider the Chinese exchange rate system does not transmit correct signals about the respective competitive strengths between China and the global marketplace.

Although reforms of the foreign exchange rate system have advanced, inconsistent and widely fluctuating monetary exchange practices and limitations on the exchanges of currency continue to make business transactions difficult, particularly for Chinese companies securing letters of credit for importing goods.

## **Quantity controls**

### **Export Quotas**

Quotas are applied to exports of raw materials with the objective of encouraging environmental protection.

On 29 October 2009, Ministry of Commerce (MOFCOM) announced that the export quota on sawn wood had increased from 110,000m<sup>3</sup> to 260,000 m<sup>3</sup>.

### **Government procurement**

On 26 May 2009, the National Development and Reform Commission (NDRC) officially announced its implementation of measures to ensure that local content would be prioritized in government contracts. The announcement calls for the use of domestically produced goods in any project that is funded by government investment and that is classified as government procurement, except in those circumstances in which the required goods or services cannot be sourced locally. In situations in which imports must be purchased, the procurement of such goods and services will only be permitted after approval is obtained from the appropriate ministry. It explicitly states that "limiting the use of domestically-produced goods" in favour of the acquisition of imported goods will be investigated and punished by the appropriate authorities.

"Measures for the Promotion of SMEs through Government Procurement" were introduced in December 2011. According to this measure, government entities should reserve at least 60% of

procurement plans for SMEs unless it affects the normal delivery of government activities and services. In the biddings which are not specifically opened to SMEs, the purchaser should allow a preference margin of 6%-10% to bids by SMEs. According to the eligibility criteria the eligible SMEs shall be established in China and subject to different criteria in different sectors. Should foreign representation among SMEs be lower than among non-SMEs in the affected sectors, then this measure effectively curtails the set of public procurement contracts exposed to foreign competition.

Global Trade Alert<sup>111</sup> reported that in some Chinese provinces 'buy local' clauses are often implemented, discriminating against foreign products. There have been reports that a number of eastern coastal provinces in China are giving priority to locally manufactured products and are also requiring companies to source raw materials or equipment locally. Many of these "encouragements" seem to be done through personal contacts rather than communicated through written form. However, such 'provincial' protectionism affects both foreign and domestic companies.

### **Price Manipulations**

A number of countries have made efforts, through anti-dumping and anti-subsidy proceedings, to prevent distortions from Chinese wood processing industries from injuring their own industries.

## **Health and Safety Measures**

### **Building codes and product standards**

China has an extensive system of national and regional building codes and standards<sup>112</sup>.

Provincial and regional jurisdictions enforce mandatory national building codes and standards as minimum requirements. Regional codes cannot set requirements below those required by national codes. Chinese building codes are continuously under review, expanding in coverage and evolving to meet China's housing and construction needs.

Since the introduction of wood structures into the Chinese code system a decade ago, a comprehensive set of codes and standards has been developed specifically for wood construction and wood products. A number of more broadly based national building codes also set minimum requirements for wood construction.

Codes for structural timber have been heavily influenced by North American regulations. The Chinese Timber Structural Design Building Code (GB50005) features a detailed chapter on North American-style wood-frame construction. All major U.S. species and engineered wood products are recognized in Chinese building codes and standards<sup>113</sup>. Canada contributed significantly to the development of the Chinese code, with Forintek Canada Corporation playing a lead role in providing technical input to the Chinese expert committee. The resulting code incorporates requirements similar to those for wood construction in both Part 4 and Part 9 of the National Building Code of Canada. This input was made possible as part of a memorandum of understanding between Canada Mortgage and Housing Corporation (CMHC) and China's MOC, with major funding from Natural

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<sup>111</sup> <http://www.globaltradealert.org/measure/china-interim-measures-promotion-smes-through-government-procurement>

<sup>112</sup> [http://www.canadawood.cn/english/building/key\\_national\\_codes.php](http://www.canadawood.cn/english/building/key_national_codes.php)

<sup>113</sup> <http://www.softwood.org/china.php>

Resources Canada's (NRCan) Canada Wood Export Program and the Province of British Columbia's Forestry Innovation Investment Ltd<sup>114</sup>.

China has also developed extensive regulations, codes, and standards pertaining to green buildings<sup>115</sup>.

### Product health and safety standards

Although China has sustainability standards these are typically poorly enforced, suggesting that product assurance standards are low. A recent report stated that no plywood manufacturer was producing to the domestic standard for formaldehyde free plywood (DB34/T2081-2014) which came into effect in the first half of 2015 because of the associated increases in production costs. A new air pollutant emission standard for wood furniture manufacture has also been released (effective 1 July 2015) which aims to eliminate oil-based coatings, which is the major coating material used in China because it is cheaper and easier to apply<sup>116</sup>.

## Environmental Measures

### Illegal logging and timber smuggling

Despite China's attempts to crack down on the illegal timber trade, timber smuggling along China's frontier region continues to occur, particularly across the Myanmar and Russian Far East borders<sup>117,118</sup>. Many of China's log imports (both tropical hardwood and softwood) have been regarded as from "suspicious" sources, including Malaysia, Papua New Guinea, the Solomon Islands, and a number of African countries. Lumber and plywood exports from Russia, Indonesia and Malaysia have also been categorized as including illegal content<sup>119</sup>. Robbins and Perez Garcia (2012)<sup>120</sup> estimated potential flows of illegally harvested products into China may have constituted 12-29% of log imports, 6-13% of lumber imports, and 5-6% of plywood imports.

A proportion of China's imports of virgin woodpulp and pulpwood are regarded as from certain "high risk" countries (Russia, Indonesia) and cannot be assumed to be from legal and sustainable sources<sup>121</sup>.

As a consequence, illegal activities are reported to depress prices and make it more difficult to predict the China wood products market.

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<sup>114</sup> <http://www.nrc-cnrc.gc.ca/ci-ic/article/v9n2-4>

<sup>115</sup> <http://www3.cec.org/islandora-gb/islandora/object/islandora:1213/datastream/OBJ-EN/view>

<sup>116</sup> ITTO Market Information Service

<sup>117</sup> Forest Trends (2014). "Analysis of the China-Myanmar Timber Trade". Available from: [http://www.forest-trends.org/documents/files/doc\\_4775.pdf](http://www.forest-trends.org/documents/files/doc_4775.pdf)

<sup>118</sup> Forest Trends (2013). "Analysis of the Russian Roundwood Act". Available from: [http://www.forest-trends.org/documents/files/doc\\_4453.pdf](http://www.forest-trends.org/documents/files/doc_4453.pdf)

<sup>119</sup> Robbins, A.S.T. and John Perez Garcia (2012). "Impacts of illegal Logging restrictions on China's Forest Products Trade". Paper presented at China and the World Economy, March 16-18, 2012, Seattle. US.

<sup>120</sup> Ibid.

<sup>121</sup> Williams J. (2014). "Environmental Aspects of China's Papermaking Fiber Supply Update". Forest Trends Report Series. Forest Trade and Finance. Available at: [http://www.forest-trends.org/documents/files/doc\\_4209.pdf](http://www.forest-trends.org/documents/files/doc_4209.pdf)

## APPENDIX 3.4

### CASE STUDY – INDIA

#### Summary

Specific non-tariff measures affecting forest products trade are:

- High tariffs on imported processed and value-added wood products favours imports of unprocessed logs and protects less efficient domestic wood processors from international competition.
- Complex tariff and fees systems and a lack of transparency in determining duties and charges, in addition to state and local taxes and charges, increases the cost of imported wood products.
- Lengthy and bureaucratic customs and entry procedures and inconsistent application of customs valuation criteria increase the costs of imported wood products.
- Measures for protecting small-scale domestic industries, including: investment limits on small-scale enterprises and reservation of products for exclusive manufacture in the small-scale sector, including wooden furniture; tax incentives and other subsidies for small-scale industries; and government procurement preferences to small enterprises. Reduces production costs of inefficient domestic wood processors.
- Wood product export subsidies, including exemptions from customs duties and internal taxes.
- Mandatory methyl bromide fumigation for imported logs (or heat treatment if debarked); lack of approval for alternative treatment methods
- Reputation of radiata pine as a low value species; poor reputation in higher end uses arising from improper use of untreated and unseasoned products ; supply chain stakeholders unaware and disinterested in technical requirements of radiata pine.
- Illegal logging and timber smuggling incentivised by the large “informal” wood products sector. Reduces production costs of domestic suppliers.

#### Background on trade

India’s forest cover is estimated to be around 69 million hectares, with nearly 10 million hectares tree cover outside forests. Development imperatives after independence resulted in large scale diversion of forests for agriculture and other developmental activities; more recently, rapid industrial development and population growth has increased the supply –demand gap for forest products, leading to over-harvesting and degradation of ecosystems.

In 2011, only 3.2 million m<sup>3</sup> of wood were produced from Indian forests, while the vast majority of domestically harvested wood was harvested from “trees outside of forests” such as tree plantations, farms, and private lands. There is no official estimate of the amount of annual production from trees outside of forests, but the estimate of the potential wood that could be harvested was 44 million m<sup>3</sup> in 2011, significantly more than the amount harvested from forests.

Land ceiling laws limit the amount of land that private firms can own for tree plantations and complex transport and cutting permits in forests and local tax laws also complicate the production and movement of forest products, limiting the domestic industry's ability to expand. The ceiling limits vary from state to state and also for different categories of land. However, the ceiling limits on agricultural land holdings for corporate entities are the same as those for individuals. Thus, a company can own and manage only as much agricultural land as is permitted under law for any individual. The wood-based industry is therefore unable to establish large scale and economically viable plantations.

Wood consumption in India reflects a strong bias towards hardwoods, with a tradition of successful use of teak and other domestic hardwood species. Logs, particularly tropical hardwood, dominate imports, even though the share of teak is ceding to other species gradually. In recent years, there has been an increasing import of softwoods, primarily New Zealand radiata pine, which now has a broad acceptance in several low-value applications such as shuttering/scaffolding; packaging and to a lesser extent in the panel industry (as backing or core material).

## **Social political measures**

### **Para Tariff measures**

#### **Government interventions**

##### **Restrictive tariffs and tariff structures**

India has reduced tariffs on wood and wood products since the 1990s to facilitate imports but the rates applying to processed wood products are high compared with unprocessed wood products. India's bound tariff rate (the highest tariff India can apply and still comply with its World Trade Organization commitments) for wood products is set at 40%, while the applied rates of most wood products range from 5 to 15%. India has traditionally kept tariffs low on log imports (5%) relative to processed wood products in an effort to shift value addition (domestically produced lumber from imported logs) to India and reduce harvesting in India.

The structure of India's customs tariff and fees system is complex and characterized by a lack of transparency in determining net effective rates of customs tariffs, excise duties, and other duties and charges. The tariff structure of general application is composed of a basic customs duty (BCD) – the border tariff; Countervailing Duty (CVD) – the equivalent of the Central Excise Duty on equivalent goods manufactured in India, a "special additional duty" (special CVD), and an education assessment ("cess")<sup>122</sup>.

Other non-tariff barriers include state taxes, which can be as high as 18% of the value of imports and various port of entry restrictions which might add up to a large mark-up on imported items. Imports are subject to state level value-added or sales taxes and the Central Sales Tax as well as various local taxes and charges. On top of the "cess", goods shipped to some cities, such as Mumbai, will attract "Octroi" duties, which are a tax payable on demand for goods brought into Mumbai for

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<sup>122</sup> Ace Global Consulting (2011). "Opportunities for Canadian Forest Products in India". Forestry Investment Innovation Ltd. August 2011.

use, consumption, or sale (generally ranging from 2% to 8%). India allows importers to apply for a refund of the special additional duty paid on imports subsequently sold within India and for which the importer has paid state level value-added taxes. Importers report that the refund procedures are cumbersome and time consuming<sup>123</sup>. An impending national goods and services tax (GST) is expected to replace most indirect taxes levied by central and state governments. The introduction of a more unified tax structure is expected to reduce the price margins currently enjoyed by the “unorganised” manufacturing sector<sup>124</sup>.

Table 3.4.1: Tariffs on Wood, Pulp and Paper products

HS Code	Basic Customs Duty (BCD)	Countervailing Duty (CVD)	Special Countervailing duty (Special CVD)	Total Duty (including BCD, CVD, Special CVD & 2% + 1% Education Cess)	Key forest products covered
<b>Group A</b>	5	0	0	<b>5.150%</b>	Wood Charcoal
<b>Group B</b>	5	0	4	<b>9.356%</b>	Fuelwood, Logs (wood in rough)
<b>Group C</b>	10	0	0	<b>10.30%</b>	Newsprint;
<b>Group D</b>	10	0	4	<b>14.712%</b>	Sawnwood; Veneer/Plywood sheets(excl some);
<b>Group E</b>	5	5.15	4	<b>15.149%</b>	Pulp (all varieties)
<b>Group F</b>	10	5.15	0	<b>16.135%</b>	Waste Paper ( <i>however if imported by paper and paperboard manufacturer then the duty is 12.333%, and if imported by newsprint manufacturer duty would be 6.678%</i> )
<b>Group G</b>	10	5.15	4	<b>20.780%</b>	Coated, Uncoated and Corrugated Paper & Paperboard;
<b>Group H</b>	10	10.30	4	<b>26.849%</b>	Sawnwood (Continuously Shaped); Veneer/Plywood Sheets(Excl Some); Plywood, Veneered Panels; Builders' Joinery; Cellulose paper, Toilet Paper, Labels

Source: WTO (2015)<sup>125</sup>; Ace Global Consulting (2011), cites BIG's Easy Reference Customs Tariff 2011-12

Higher tariff rates imposed on imported finished and value-added products protect the less efficient domestic manufacturers from international competition.

### Taxes levied by the state: Value added tax (VAT)/ Central Sales Tax (CST)

Since April 1, 2005 all states in India have progressively replaced local sales tax with VAT which is similar to the local sales tax regime, except that it considers tax on value addition at each level of the

<sup>123</sup> Ibid.

<sup>124</sup> ITTO Market Information Service 1-15 August 2015.

<sup>125</sup> <http://tariffdata.wto.org/ReportersAndProducts.aspx>

distribution network<sup>126</sup>. Overall, there are 2 basic VAT rates of 4% and 12.5%, besides an exempt category of goods. In the state of Uttar Pradesh, for example, VAT on wooden handicrafts and newsprint are exempt, while veneer, woodpulp and printing and writing paper are taxed at 4%. VAT is levied on sale of goods within the state. If the sale is outside the state of origin, CST is levied. The standard rate of CST is 2% if both the seller and buyer are registered dealers; otherwise the rate is as per VAT, as applicable in the state of seller. CST/VAT is neither imposed on import of goods into, nor on export of goods out of India. It likely that the CST will be phased out altogether in the future with the proposed introduction of the Goods and Service Tax (GST).

### Customs procedures

U.S. exporters have raised concerns regarding India's application of customs valuation criteria to import transactions. India's valuation procedures allow Indian customs officials to reject the declared transaction value of an import when a sale is deemed to involve a lower price than the ordinary competitive price, effectively raising the cost of exporting to India beyond applied tariff rates. India does not assess the basic customs duty, additional duty, and special additional duty separately on the customs value of a given imported product. Rather, India assesses each of these duties cumulatively; that is, the additional duty is assessed on the sum of the actual (or transaction) value and the basic customs duty, while the special additional duty is assessed on the sum of the actual (or transaction) value, the basic customs duty, and the additional duty. This raises concerns about the potential for importers paying higher duties than they should be liable for on the basis of the actual value of their imported product. India's customs officials generally require extensive documentation, inhibiting the free flow of trade and leading to frequent and lengthy processing delays. In large part, this is a consequence of India's complex tariff structure, including the provision of multiple exemptions which vary according to product, user, or intended use<sup>127</sup>.

### Investment limits on small-scale enterprises

Micro, Small and Medium Enterprises (MSMEs) constitute an important segment of the Indian economy in terms of their contribution to the country's industrial production, exports, employment and creation of an entrepreneurial base. As per the Micro, Small and Medium Enterprises Development (MSMED) Act, 2006, enterprises are classified into Micro, Small and Medium enterprises based on their investment in plant and machinery.

Reservation of products for exclusive manufacture in the small scale sector in areas where there is techno-economic justification for such an approach; is one of the measures for encouraging growth of micro and small scale industries. Until the late 1990s, more than 900 products were included in the list of reserved items. However, in line with the overall approach of liberalization, the list of reserved items has been reduced to only 20 products, after the latest revision in July 2010, out of which only the following two products are relevant to wood-based products:

- Wooden furniture and fixtures excluding furniture made mainly of solidwood substitutes such as MDF, chipboard and other alternative materials where solidwood does not exceed 30% by weight
- Paper exercise books and registers

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<sup>126</sup> Ace Global Consulting (2011). "Opportunities for Canadian Forest Products in India". Forestry Investment Innovation Ltd. August 2011.

<sup>127</sup> Ibid.

Any industrial undertaking which does not qualify as a micro or small enterprise, can undertake manufacture of these products, only after obtaining an Industrial License with a specific condition to export a minimum of 50% of the annual production of the reserved items, to be achieved within a maximum period of three years. Also, foreign investment in such industrial undertakings is restricted to 24% under the Automatic route.

### **Incentives for small-scale enterprises**

The wood consuming manufacturing industry in India is dominated by small and cottage-scale players (unorganised sector) resulting historically from the government's policy of reserving wood processing exclusively for small scale manufacturers, except for the paper industry where large corporates have dominated. Small scale industries (SSIs) enjoy a number of tax incentives, including excise, sales tax and customs duty concessions, in addition to a number of government promotional schemes, including loan subsidies for technology upgrades, financial assistance for setting up industrial estates, substantial grants for procuring hardware (for industry associations) and grants to state governments to strengthen training infrastructure. Other benefits include the availability of "soft" loans from the Reserve Bank of India.

The plywood, furniture and joinery industries are dominated by the unorganised sector, with only 9% of enterprises being registered in 2006-2007 (the latest data available), compared with 39% in the paper sector<sup>128</sup>. Significant price differentials exist between market prices of products produced by the organised and unorganised sectors<sup>129</sup>. The packaging industry – which uses the bulk of radiata pine imports – is now a more organised industry, driven by standardisation of the logistics industry and calibration/streamlining of packaging sizes as per international standards.

The unorganised sector is associated with very low wage rates, with the sawmilling industry being one of the lowest paid industries in the country. In 2011, for example, the average all India wage in sawmilling and wood working industry was USD 902 per year compared to the national average wage levels of USD 2,547 per year, with large inter-state variations, ranging from USD 602 in Tamil Nadu to USD 2,688 in Delhi. However, wages in the pulp, paper and paperboards industry (USD 2,394) were almost at par with the national average. This is a clear reflection of the level of informality prevalent in the solidwood processing sector and the more organized industrial culture in the paper and pulp sector<sup>130</sup>.

### **Export subsidies**

India maintains several export subsidy programs, including exemptions from taxes for certain export-oriented enterprises and for exporters in Special Economic Zones, as well as duty drawback programs that appear to allow for drawback in excess of duties levied on imported inputs. India also provides pre-shipment and post-shipment financing to exporters at a preferential rate. Numerous sectors, including wood products, receive various forms of subsidies, including exemptions from customs duties and internal taxes, which are tied to export performance.

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<sup>128</sup> Government of India (2015). "Annual Report 2014-2015". Ministry of Micro, Small and Medium Enterprises. Available at: [http://msme.gov.in/WriteReadData/DocumentFile/MSME%20ANNUAL%20REPORT%202014-15\\_English.pdf](http://msme.gov.in/WriteReadData/DocumentFile/MSME%20ANNUAL%20REPORT%202014-15_English.pdf)

<sup>129</sup> Ace Global Consulting (2011). "Opportunities for Canadian Forest Products in India". Forestry Investment Innovation Ltd. August 2011.

<sup>130</sup> Ibid.

India's Foreign Trade Policy 2009-2014 outlines a special initiative to increase agricultural exports, including a scheme called Vishesh Krishi Gram Upaj Yojana (VKGUY – “Special Agriculture Produce Scheme”) aimed at boosting exports of products, including some forest products, and related value-added products. Under the plan, exports of these items qualify for a duty-free credit that is equivalent to 5% of their free-on-board (FOB) export value. The credit is freely transferable and can be used to and can be used to import a variety of inputs and capital goods<sup>131</sup>.

### Government procurement

India lacks an overarching government procurement policy, and as a result, its government procurement practices and procedures vary among the states, between the states and the central government, and among different ministries within the central government. Multiple procurement rules, guidelines, and procedures issued by multiple bodies have resulted in problems with transparency, accountability, competition, and efficiency in public procurement. The government also provides preferences to Indian micro, small and medium enterprises, and to state owned enterprises.

### Free Trade Agreements

India has been negotiating a Canada-India free trade agreement for the last five years.<sup>132</sup> With free trade unlikely in the short-term, Canada has been seeking improved market access on a product-by-product basis, which include India's decision to accept imports of Canadian ash lumber products, and eastern spruce in 2013.

The Canada Pension Plan Investment Board (CPPIB) fund has established an office in Mumbai and has recently announced that they are planning to invest in the housing sector in the country and are considering an initial investment of US\$ 2 billion. The Plan already has significant investments in the country involving infrastructure, real estate and financial services. The new office in Mumbai will allow CPPIB to build important partnerships and access investment opportunities that may not otherwise have been available<sup>133</sup>.

India has a regional trade agreement with ASEAN, which has improved market access for the tropical wood product exporters in ASEAN. Under the agreement, preferential tariff rates applied to ASEAN member countries for wood products; imports from ASEAN countries, particularly Malaysia and Myanmar, increased significantly from 2010, when the agreement came into force. Imports of tropical hardwoods from the ASEAN countries were also assisted by the Indian market's strong traditional preference for teak, which is considered the benchmark against which all other species are evaluated. However, its high price has led to gradual substitution by other hardwood species, particularly substitutes from ASEAN suppliers.

There are a number of other regional trade agreements currently under negotiation<sup>134</sup>

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<sup>131</sup> USTR (2015). “Foreign Trade Barriers”. Available at:

<https://ustr.gov/sites/default/files/2015%20NTE%20Combined.pdf>

<sup>132</sup> <http://www.international.gc.ca/trade-agreements-accords-commerciaux/agr-acc/india-inde/index.aspx?lang=eng>

<sup>133</sup> <http://www.cppib.com/en/public-media/news-releases/2015/cppib-india-office.html>

<sup>134</sup> [http://commerce.nic.in/trade/international\\_ta\\_current.asp](http://commerce.nic.in/trade/international_ta_current.asp)

## Health and safety measures

### Phytosanitary issues

Fumigation is mandatory for imported logs; the equivalence of alternative methods such as kiln drying or phosphine treatment (as in China) are not yet approved for logs.

No consignment of wood or timber can be brought into India unless the consignment fulfils the following conditions:

- The wood with bark shall be fumigated prior to export with methyl bromide at 48 g/m<sup>3</sup> for 24 hrs at 21°C or above or equivalent thereof or any other treatment duly approved by the Plant Protection Adviser and the treatment shall be endorsed on the phytosanitary certificate issued thereof at the country of export; *or*
- The timber or sawn or sized wood (without bark) prior to export shall be either fumigated as above or kiln dried (KD) or heat treated at 56°C for 30 min (core temperature of wood) and appropriately marked as 'KD' or 'HT', as the case may be, and in such instances no Phytosanitary certificate shall be required, but a treatment certificate issued by the approved agency shall be required to be produced before the Plant Protection Adviser.

Although all consignments of timber are required to be inspected on board prior to unloading at the port of arrival, in practice, it has been noted that the inspection of cargo by the customs and Plant Quarantine officers is restricted to checking the phytosanitary certificate, endorsing the treatment, rather than physical inspection or verification of the cargo<sup>135</sup>.

### Building codes and standards

Building regulations and bylaws on housing and construction are more for controlling and regulating the land use, coverage of built-up area as per specified norms and prevention of encroachment etc. rather than laying down the specifications for the construction materials and methods, which are entirely at the discretion of the consumer and building contractor.

However, India's Bureau of Indian Standards (BIS) has a code of specification (National Building Code) for construction and construction methods which also specifies guidelines pertaining to structural timber, structural plywood, wood fence and posts, and the construction of timber ceilings in buildings. Similarly, fire codes have been prepared under the same set of codes. These standards are not mandatory for the private sector, but compulsory for government institutions.

### Poor reputation of radiata pine

An important barrier to the large scale use of softwoods in general is the adverse perception regarding its durability, resistance to fire and technical performance. The substitution by softwoods has been in non-durable applications, mainly a result of the price advantages, critical in lower value applications. Utilisation of radiata pine in higher-end applications has been impeded by adverse perceptions arising from improper use, including the use of untreated and unseasoned products in high value applications. This has arisen from a lack of importers' technical knowledge regarding the end use of wood products, proper handling and treatment of wood during storage and technical suitability for end uses.

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<sup>135</sup> Ace Global Consulting (2011). "Opportunities for Canadian Forest Products in India". Forestry Investment Innovation Ltd. August 2011.

In a price sensitive market, agents are more concerned with price and may divert wood to other customers/applications where the importer may get a better price. Preservation of wood is carried out at the end-user level, i.e. by manufacturers (of plywood and boards, furniture, doors etc.) or by the building contractors at the time of installation. AceGlobal Consulting (2011) noted that supply chain stakeholders are neither knowledgeable about preservation techniques nor interested in taking up the responsibility. Another practical aspect is that distributors, wholesalers and even retailers, may not be aware of the intended use of wood sold by them, and therefore are not in a position to assess the appropriate preservation required.

### **Illegal activities**

The presence of a large informal wood products sector has led to continued illegal harvesting and timber smuggling in some areas of the country, which has been estimated at 11 million m<sup>3</sup> in 2011.

Multiplicity of check posts are a source of corruption and traffic obstruction: Inland transport of logs from the ports is primarily by trucks, with the carriers required to stop at state borders to ensure verification of compliance related to vehicle, driver, certificates and licences (road permit) and goods' origin, destination, value, weight and taxes paid. Non-compliance relating to weight and taxation can lead to detentions and imposition of penalties. A forest goods carrier operator generally obtains clearances for carrying goods or paying charges at the check post from several agencies. These checks are conducted by the respective agencies at separate points, resulting in multiple checkpoints and increasing the total transit time. It is common for truck operators to pay extra amounts to the officials to save time and avoid harassment, and have been estimated to amount to over 20% of the freight costs<sup>136</sup>.

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<sup>136</sup> Ace Global Consulting (2011). "Opportunities for Canadian Forest Products in India". Forestry Investment Innovation Ltd. August 2011.

## APPENDIX 3.5

### NEW ZEALAND

#### Summary

Specific New Zealand measures would include:

- The Afforestation Grant Scheme<sup>137</sup>
- Bans/restrictions covering indigenous forest harvest and requirements for local processing associated with amendments to the Forest Act relating to indigenous forestry.
- The forestry provisions of the NZ Emissions Trading System (ETS)
- Costs of compliance with the RMA (1991).
- Research and development grants/support, most notably PGP funding
- Local Government rules/regulations promoting 'sustainability' but in such highly prescriptive terms that they risk undesired and unintended effects while also possibly failing to achieve their intended purpose.
- Phytosanitary rules and requirements

#### Afforestation subsidies

As with Chile, New Zealand developed a large component of its plantation resource with the assistance of grower subsidies. Until the mid-1980s, around half the estate was a resource established by government - primarily through the New Zealand Forest Service. Moreover, for the preceding 20 years (mid-1960s until mid-1980s), grants and government subsidies accounted for around half the total costs faced by the private sector in expanding its component of the resource. The rules relating to forest investment, which were introduced in 1991 and still apply, allow for immediate deductibility of the costs of establishing and growing the forest against income from any source. These rules may be considered as assistance to forestry.

*The Afforestation Grant Scheme* is a new (2015 Budget) programme intended to help establish some 15,000 ha of new forest plantations between 2015 and 2020. The stated purposes of the scheme are: *"to improve land-use productivity and [promote] regional economic development. It is envisaged that the new forests [established by the scheme] will also give environmental benefits, including reducing soil erosion, storing carbon, and improving water quality<sup>1</sup>, with government estimating there is some 1.1 million ha of land is at serious risk of erosion for which forest cover is the best form erosion control. There is NZ\$19.5 million committed to the scheme and the scheme gives grants of \$1,300/ha to assist in the establishment of approved new forests. Those wishing to be part of the scheme need to apply and have their proposal approved. The minimum area for which a grant may be obtained is 5 ha - with the maximum being 300 ha. For approved grant forests the Crown owns all carbon credits produced during the first 10 years from establishment and the grantee must commit to maintaining the grant forest for at least that period.*

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<sup>137</sup> New Zealand Ministry for Primary Industries (MPI). (2015). "Afforestation Grant Scheme". Available at: <https://mpi.govt.nz/funding-and-programmes/forestry/afforestation-grant-scheme/>

*The forestry provisions of the NZ Emissions Trading System (ETS):* The rules regarding forestry in the ETS seemed to offer (and still potentially do offer) growers of post-1989 forests established on what is classified as ‘non-forest’ land a better return on their investment. Growers who opt into the scheme earn carbon credits based on the assessed annual growth of their tree crop as the forest grows. Growers are free to do what they wish with their credits, including selling them to third parties with obligations under the scheme. However, when the tree crop is eventually harvested, the forest owner incurs a liability and needs to repay/return the bulk of the credits that were earned by their crop while it was growing. (In fact, if a new tree crop is not re-established the repayment obligation will eventually, having allowed for a decay function associated with the carbon stored in the stump, roots and harvest debris, encompass all credits earned while the crop was growing).

With the number of credits earned dependent on the growth of the crop, essentially the scheme can be regarded as giving participating growers immediate access to part of the value of associated with wood and doing so in the year that this wood is produced. Rather than having to wait 5, 10, 20 or possibly 30 or more years to realise that value of that wood only when the crop is eventually harvested the grower can realise some of it by selling the carbon credits gained in the year that the wood was actually produced. Thus, if a cubic metre of wood earns one carbon credit and a carbon credit is worth a constant dollar amount (\$X) the grower has access to \$X for each cubic metre of material produced by the crop in the year in which that material is produced. That, based on a time value of money, has a positive value and should encourage more forestry.

Whether the ETS has in fact encouraged, or precisely just how much extra forest establishment it has encouraged, so far, is somewhat more debatable. Joining and remaining in the scheme is not costless, rules around the scheme have changed and the value of a carbon credit (an NZU) has, over the 7 years that the scheme has been operating, fluctuated from over \$20 per unit to less than \$1 per unit. Given the uncertainty created by rule changes, many investors have decided that the potential benefits of the scheme are not commensurate with the risks. These risks are: concern over possible manipulation of credit values by authorities; the costs of joining and remaining in the scheme; and the risks associated with earning and of possibly earning/selling credits when the carbon price is ‘low’ and then being faced with a requirement to buy credits to refund obligations at harvest when carbon prices may be “high”. While the carbon price is below \$10 per unit the benefits to a forest grower, and the boost the scheme gives to overall longer term wood supply, appears to be relatively small.

Providing encouragement for forestry is not the only way the ETS rules could conceivably impact on the sector – there is also the issue of carbon storage by harvested wood products. For any given log quality any differences between typical local use compared to the use for the same logs in export markets potentially changes its harvested wood product value<sup>138</sup>. If different markets’ use of the same log type result in products deemed to store carbon for significantly different time periods, this

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<sup>138</sup> Smith, N. (2015). “Officials in Asia Amid ETS Rule-Bending”. National Business Review. 6 Nov 2015 p4.

could be significant. Results from an analysis of log export prices<sup>139</sup>, for example, hint that NZ export pulp logs may not in fact be used in pulp production. If carbon storage by harvested wood products is important that potentially has implications for future trade.

### **Local Government rules/regulations promoting ‘sustainability’**

Finally sustainability is a universal concept and a number of local body rules and regulations, particularly rules relating to permitting new buildings, now mandate ‘sustainable design’ as part of their consent process. In some cases the rules are prescriptive with respect to materials, their attributes and the ways in which they may be used, but they potentially risk undesirable and unintended consequences. For example the Sustainable Design proposals of the proposed Auckland Unitary Plan (PAUP)<sup>140</sup> propose that no non-FSC certified tropical hardwoods may be used in structural framing. Apart from the fact that little, if any, tropical timber is currently used structurally in NZ homes this provision could effectively preclude structural use of (some) sustainably produced northern Australian plantation eucalypts while failing to stop use of unsustainably (and possibly illegally) harvested non-structural use of non-FSC certified tropical timber in such things as decking - which currently is possibly the most significant local use of such timber.

At a more general level the above example illustrates a potentially growing source of NTMs not just in New Zealand but in many other jurisdictions. This is sub-national or local regulation targeting specific desired (and desirable) outcomes – regulations which are promoted as fair because they require some form of specified third party certification of products for particular uses. Such specification may indeed be fair and justifiable if the certification required is targeted at just at the features and outcomes wanted by the regulators. However, in many cases the proposed certification will encompass features (and costs) additional to the minimum set necessary to achieve the outcome wanted.

While there is generally an ability to challenge the validity of requiring such certification mounting a challenge costs. Because of this unless the requirements of the local regulation are patently so unfair and/or the affected market of sufficient importance to the supplier a proposed regulation may well escape challenge and become a NTM. It is, for example, difficult to imagine that any possible supplier of tropical hardwood structural material would at this point see a compelling economic case to challenge Auckland Council’s proposal around sustainable design.

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<sup>139</sup> Stone, M. (2015). “What does the differential between export and domestic log prices tell us? New Zealand provides some answers” (in preparation – pers comm.)

<sup>140</sup> Loutit, B. and Hartley, D., (2015). “Closing Remarks on Behalf of Auckland Council in Relation to Topic 077 Sustainable Design”. Proposed Auckland Unitary Plan. Auckland City Council, Auckland, New Zealand

## APPENDIX 4

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