# BC Trend Analysis – Secondary Markets

## Philippines Trend 1: Proposed log ban may open up opportunities for wood exports

After days of heavy rainstorms in January 2017, several provinces on the Visayas and Mindanao Islands experienced flash floods. The severe weather conditions displaced over 178,000 people[47] and damaged thousands of properties. Local experts pointed to the logging and mining sectors for the degradation of nearby forests. In response, President Duterte created a tripartite committee to examine the financial and environmental impacts of expanding the current logging ban in natural and residual forests to include a complete ban on logging, including plantation forests.

In December 2017, back-to-back typhoons brought on destructive flooding and landslides to parts of the Philippines. During a survey of the devastated areas, President Duterte reacted[48] to reports of forest harvesting leading to mudslides and flash floods. As a result, the Philippines Government enforced a logging ban[49] in the Zamboanga Peninsula.

Philippines' value-added wood products industry, a US$5 billion sector, is a vital part of the economy. The Philippine Wood Producers Association has expressed concern that the enforcement of a total log ban will have a negative impact on the wood industry. Based on estimates[50], the industry requires about 5.3 million $m^3$ of fibre annually. Having only 1 million $m^3$ of production capacity, the remaining volume is met via imports.

## Philippines Trend 2: "Build-Build-Build" initiative will boost infrastructure development while foreign investment restrictions are set to be lifted

Aiming at transforming the country's infrastructure system, the Philippine government announced the "Build-Build-Build" initiative with a total budget of US$36 billion spread over 75 flagship projects. The BBB Program has become one of the most ambitious initiatives under President Duterte's administration. According to the Department of Finance, the total infrastructure spending over the next five years is estimated to be US$158 billion, accounting for 7.3% of GDP by the end of the current president's term[51].

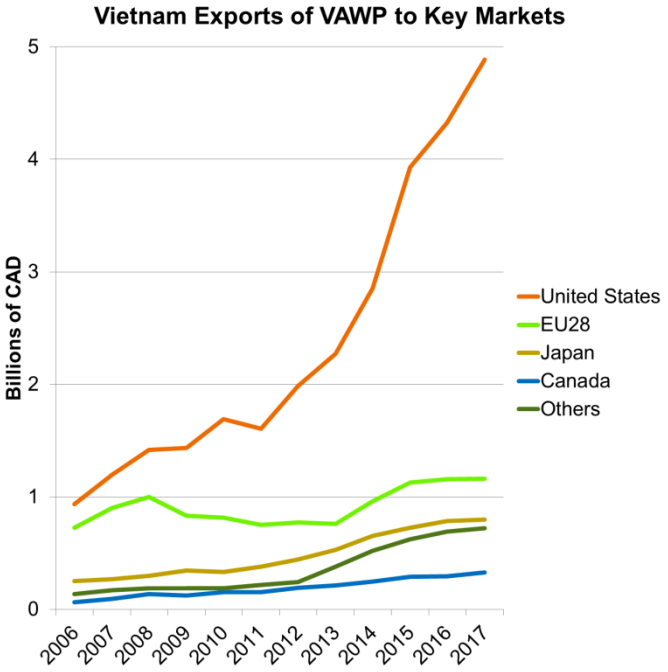
The priority of the BBB Program is to build ports, airports and transportation infrastructure. The Department of Transportation has planned to start with building 900 kilometres of railway in two to three years, connecting Manila to Clark, Clark to Subic, and then Clark to Calamba. In comparison, the existing railway system is less than 70 kilometres long. Driven by the BBB initiative, it is estimated that the total distance of railways across the country will be close to 1,800 kilometres[52].

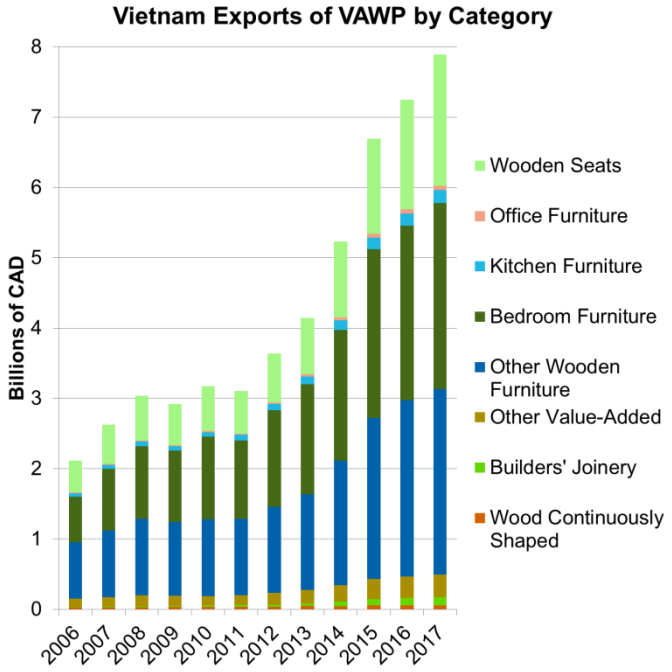
Concurrently, the Philippines is also attracting overseas funding for infrastructure development. China has pledged US$24 billion through the Belt and Road Initiative (BRI); US$15 billion will be direct investment and the remaining US$9 billion will be in the form of loans[53]. The funded projects include schools, industrial, and infrastructure construction. Given that the Philippines is experiencing an infrastructure construction boom, it is likely that country will have a growing demand for building materials, including wood products.

[47] Davies, Richard. *178,000 Remain Displaced by Floods in* Mindanao. http://floodlist.com/asia/philippines-mindanao-floods-january-february-2017
[48] Mendez, Christina, The Phillipine Star. *President Duterte shuts down logging firms*. https://www.philstar.com/headlines/2018/01/10/1776385/president-duterte-shuts-down-logging-firms
[49] Cabico, Gaea Katreena. *Timeline: Logging bans from Cory to Rody*. https://www.philstar.com/headlines/2018/03/15/1797166/timeline-logging-bans-cory-rody
[50] Mayuga, Jonathan. *Log ban in PHL: Total or selective*. https://businessmirror.com.ph/log-ban-in-phl-total-or-selective/
[51] Department of Finance ((DOF) https://www.dof.gov.ph/taxreform/index.php/2018/01/23/build-build-build-roll-75-projects-worth-35-5-b/
[52] Madelaine B. Miraflor, Manila Bulletin, *'Build' program may yield results in 3 years* https://business.mb.com.ph/2017/06/22/build-program-may-yield-results-in-3-years/
[53] Knight Frank Research. *New Frontiers - Prospects for real estate along the belt and road initiative.* http://content.knightfrank.com/research/1438/documents/en/new-frontiers-the-2018-report-2018-5216.pdf

## Vietnam Trend 1: Growing demand in domestic and export markets leads to further material shortage

Vietnam has recently become a major producer of value-added wood products (VAWP) with its exports[54] growing from $3 billion in 2011 to $8 billion in 2017. Wood products have become the sixth-ranking export item for the country. In 2017, Vietnam's wood exports ranked second in Asia (behind China) but first in the ASEAN group of countries.




Although domestic consumption is lower than export markets, the demand for wooden furniture has been growing due to the rapid development of the construction market. In 2017, domestic sales of VAWP were reported at $1.47 billion. Currently wooden furniture demand from the new apartment segment accounts for 40% of total domestic demand[55].

While the demand is growing domestically and abroad, Vietnam is struggling with a lack of raw material supply to meet the industry's target - $11.5 billion target in total product value in 2019.[56] In addition, the low utilization rate of wood in the industry adversely affects the material shortage issue. Currently, there are about 4,000 wood manufacturing factories. About half of these facilities are using simple equipment for preliminary processing of raw materials.

According to the Ministry of Industry and Trade, the total annual demand for raw material for domestic and export markets is about 40 million $m^3$. To meet this demand, about 25 million $m^3$ was sourced from domestic plantations and the remaining 13-15 million $m^3$ was imported[57]. With the growing demand for domestic and exports consumption, Vietnam will become more dependent on raw material imports, which potentially opens up opportunities for Canadian wood suppliers.

[54] Selected key markets include the US, EU28, Japan, Canada, South Korea, China, New Zealand, Taiwan, Mexico, Chile, Russia, Hong Kong, India, Philippines, Brazil and Thailand.
[55] Vietnam News, http://vietnamnews.vn/economy/talking-shop/421015/future-bright-for-vns-woodworking-industry.html#oc8b002Ki1x4kfi5.97
[56] Vietnam Investment Review, http://www.vir.com.vn/wood-industry-sets-10-billion-export-value-target-56720.html
[57] Vietnam Import-Export Report 2017, http://wtocenter.vn/publication/vietnam-import-export-report-2017

## Vietnam Trend 2: Furniture producers begin targeting the domestic high-end market

Due to design options and quality issues, Vietnam's upper class has long preferred imported wood furniture over ones produced domestically. Vietnam's wood producers have taken note and are now beginning to focus their attention on the high-end domestic market. As technology becomes more affordable, some of these domestic factories are beginning to import foreign machineries and technologies in hopes to regain share in the high-end market[58].

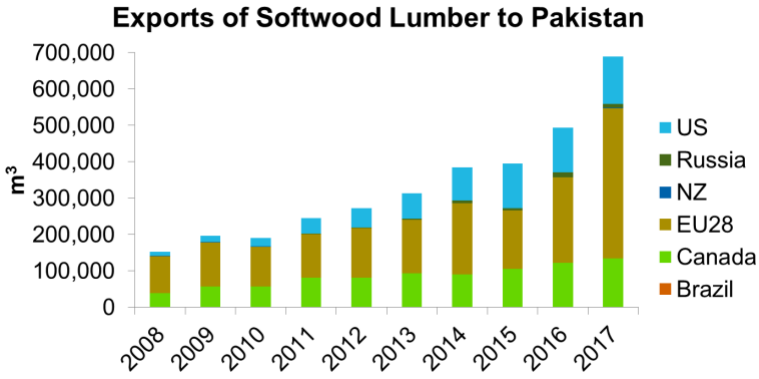
In December 2017, Japan's *Sumitomo Forestry* and Vietnam's *An Cường Wood Working Joint Stock Company* announced a strategic partnership[59]. In addition to establishing a supply chain for the high-end market in Vietnam, *Sumitomo* will also assist the firm in producing wood products that meets international standards. Established in 1994, *An Cường Wood Working's* product line includes furniture, flooring and decorative panelling.

## Pakistan Trend 1: Softwood lumber imports tripled since 2011

Pakistan has seen sustained growth in softwood lumber imports. Since 2010, imports have grown by 250% to a record level of almost 700,000 $m^3$. From 2016 to 2017, that growth saw the largest year-over-year increase of 40%.

The EU28 has been the greatest beneficiary of this growth, with exports increasing more than 75% over 10 years, while exports from the United States and Canada have grown at a slower rate.

According to Statistics Canada, BC lumber continues to make up the majority (75-80%) of the Canadian shipments (120,951 $m^3$).




## Pakistan Trend 2: Trade mission to China may bring opportunities for joint ventures in Pakistan's furniture sector

A delegation of the Pakistan Furniture Council (PFC) visited China as participants in the Canton Fair 2018. During the event, furniture manufacturers from Guangzhou and PFC representatives discussed the feasibility and potential advantages of further investments in joint ventures in Pakistan and establishing Pakistani furniture outlets in Guangzhou to expand bilateral trade in furniture sectors[60]. The goals of the joint ventures include enhancing the quality of furniture produced in Pakistan, sharing technology, and accessing Chinese equipment on a leased basis.

According to the Chief Executive of PFC, Mian Kashif Ashfaq, Pakistan's furniture exports are currently worth US$8 million to US$12 million annually, but he believes the current level of exports does not reflect the potential of the industry, especially in the category of high-quality furniture[61]. The PFC believes that by seeking and cooperating with new partners overseas both in Asia and Europe it will facilitate further trade and investment in the Pakistan furniture industry. Given that Pakistan does not have a large domestic supply of timber, further growth in the furniture industry should provide opportunities for Canadian lumber.

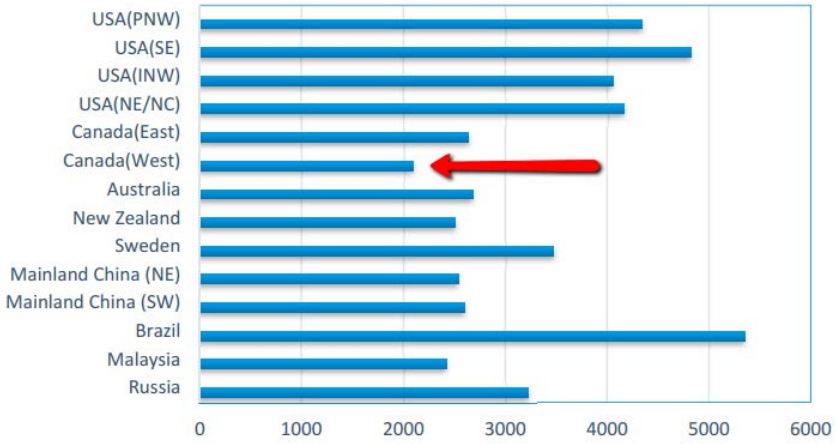
[58] *VietNamNet Bridge,* http://english.vietnamnet.vn/fms/business/190983/vietnam-wooden-furniture-products-now-target-high-end-market.html
[59] Viet Nam News http://vietnamnews.vn/bizhub/418828/vn-wood-firm-to-cooperate-with-japan.html#A3fTyYMrGg7HhOEl.97
[60] Published in The Express Tribune, May 2nd, 2018. *Pakistan Furniture Council: Delegation visits China to find investors*, https://tribune.com.pk/story/1700192/2-pakistan-furniture-council-delegation-visits-china-find-investors/
[61] The Nation, *Chinese furniture manufacturers show keen interest for joint ventures in Pakistan,* https://nation.com.pk/03-May-2018/chinese-furniture-manufacturers-show-keen-interest-for-joint-ventures-in-pakistan

## Taiwan Trend 1: Canada has been identified as one of the most sustainable wood supplying regions

Wood is considered by many countries as a sustainable construction material as it helps combat climate change and sequester carbon. However, many of these countries rely on imported wood[62] as they lack the land resources to meet demand.

In 2017, a group of researchers from Taiwan conducted a comparative study[63] to identify the most sustainable wood supplier from across the globe. Factoring in the energy required for harvesting, manufacturing and transporting the wood to Taiwan, Canada was recognized as one of the greenest supplying regions. Specifically, wood from western Canada has the lowest embodied energy consumption among all studied regions.

*Total embodied energy consumption of imported wood to Taiwan (MJ/m$^3$)*

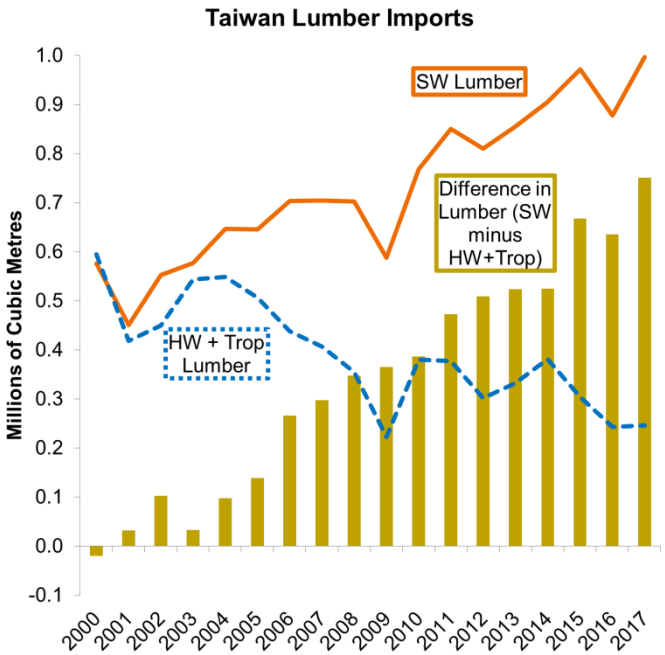



## Taiwan Trend 2: Government infrastructure construction plan boosts construction, including use of wood

In 2017, the Taiwanese Government announced an infrastructure plan called the Forward-looking Infrastructure Development Program[64]. This infrastructure plan has a budget of US$13.9 billion over the next four years and will involve projects in green energy, rail, water, digital, urban and rural, food safety, and human resources infrastructure. US$3.5 billion was committed for the September 2017 to December 2018 budgetary period. It is anticipated that this program will drive additional demand for construction materials.

Currently, domestic production of hardwood and softwood lumber is flat (estimate at 25,000 m$^3$ in 2016). Hardwood lumber production has been flat since 2014 and softwood lumber production has continued to decline from its high in 2014. Demand, however, has remained strong and is increasingly met with imported softwood lumber. In 2017, total softwood lumber imports to Taiwan increased by 14% to almost 1 million m$^3$. BC shipments to Taiwan grew 12% to 442,227 m$^3$.

As the Forward-looking Infrastructure Development program gains momentum over time and moves from the planning stage to the construction phase, the Taiwanese import market seems poised for further import growth.



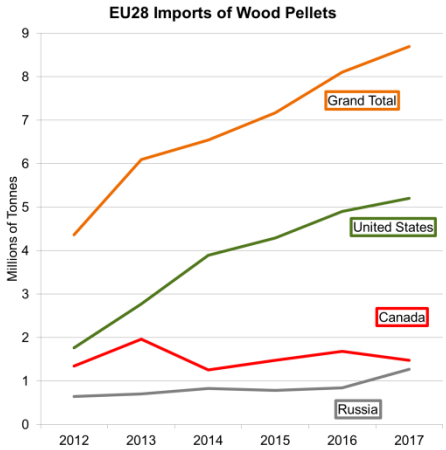

[62] Chung-Feng Jeffrey Kuo, Chieh-Hung Lin, Ming-Wen Hsu, *Analysis of intelligent green building policy and developing status in Taiwan*, Energy Policy Volume 95, August 2016, Pages 291-303 , https://www.sciencedirect.com/science/article/pii/S0301421516302221?via%3Dihub

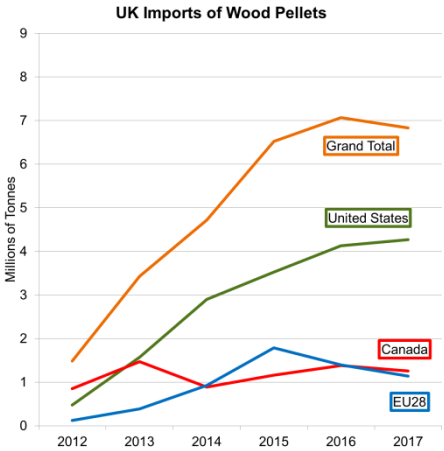
[63] Shenghan Li, Huanyu Wu, Zhikun Ding, *Identifying Sustainable Wood Sources for the Construction Industry: A Case Study, Sustainability 2018.* http://www.mdpi.com/2071-1050/10/1/139

[64] Department of Information Services, Executive Yuan. *Forward-looking infrastructure: Foundation for future growth*. https://english.ey.gov.tw/News_Hot_Topic.aspx?n=25C679A2A240627E&sms=AD98DD3139D04F2E

## EU Trend 1: Wood pellet imports has doubled since 2012

In 2017, EU's wood pellet imports grew 7% to 8.7 million tonnes[65]. Canada held its position as the second largest supplier but saw shipments fall 12%. Russia, the third largest supplier, has seen rapid growth in exports to the EU and could overtake Canada's position in the near future. Russia's pellet exports hit a record level in 2017 at 1.3 million tonnes (+51% from 2016), compared to Canada's shipment at 1.5 million tonnes.

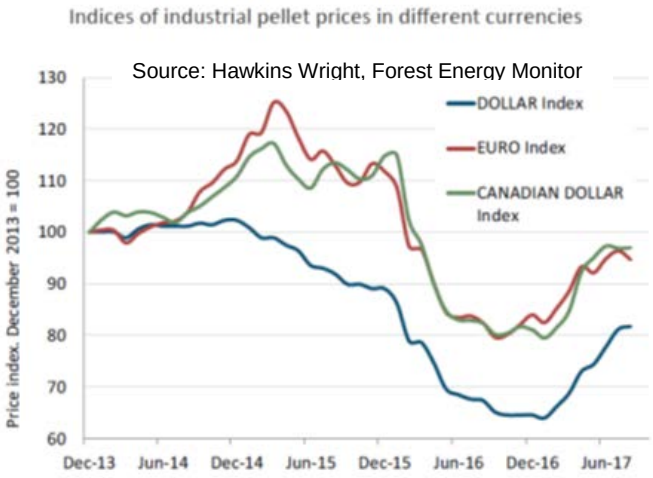



In 2017, UK's wood pellet imports fell 3% to 6.8 million tonnes - the first decline in the last five years. Imports from EU27 dropped 20%, which can be partially explained by the depreciation of British pound against the euro. US pellets into the UK grew 3% compared to a decline in 20% reduction in EU shipments moved Canadian shipments (-9%). The Canada into second place in terms of import market share.

In February 2018, the Wood Pellet Association of Canada organized a trade mission to Italy. With representatives from BC and Ontario[66], the delegation visited wood pellet trading companies in an effort to promote Canadian pellets and to learn about the market in Italy. Currently wood pellets in Italy are mainly used in heating homes. The annual consumption is around 2 million tonnes, of which 90% is imported.

As the demand for wood pellets rise in other European countries[67], it is becoming more difficult for Italy and other non-producers to source pellets from within EU. This rising demand may result in opportunities for Canadian producers[68].




## EU Trend 2: CLT capacity to reach 600,000 m$^3$ in 2019[69]

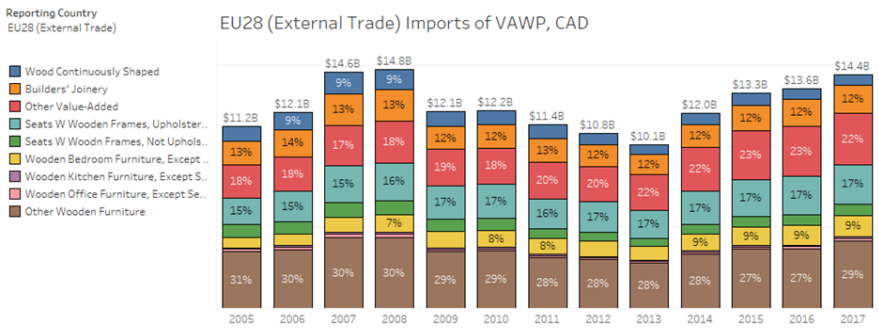
As the adoption of cross laminated timber (CLT) continues to gain momentum in construction markets in Europe (especially in multi-storey residential buildings and off-site construction), there is evidence that capacity additions are entering a new phase in terms of the scale of the facilities being built. In 2017, several companies announced plans for CLT facilities with an annual capacity of 100,000-120,000 m$^3$ in UK, Sweden and Germany. These announcements are almost twice the size of existing facilities. It is estimated that these additions will boost CLT capacity in Europe by to approximately 600,000 m$^3$ annually by the end of 2019. At the same time, Glulam capacity would increase to 1.2-1.3 million m$^3$ per year.

[65] FPInnovations' Wood Pellet Tracker Model
[66] Gord Murray, WPAC executive director, *WPAC promotes Canadian pellets in Italy*, https://www.canadianbiomassmagazine.ca/pellets/wpac-promotes-canadian-pellets-in-italy-6827
[67] Fiona Matthews The global outlook for wood pellet markets, WPAC Annual Conference, September 2017
[68] Thrän et al. 2017. *Global Wood Pellet Industry and Trade Study 2017*. IEA Bioenergy Task 40. June 2017.
[69] EUWID. *CLT capacity in Europe more than doubled by new and expansion investment measures.* 2017 Issue 29, Vol. 91

## EU Trend 3: EU-Vietnam Free Trade Agreement may promote trade expansion in timber markets

Set to be signed in 2018, the EU-Vietnam Free Trade Agreement (EVFTA) has become one of the most ambitious agreements between the EU and one of its leading wood products suppliers, Vietnam. According to the Vietnam Timber and Forest Association, the EVFTA may result in annual sales of close to US$1 billion[70] for the Vietnamese sector in the EU market. In 2017, EU28 imported a total of $14.4B worth of value-added wood products (VAWP).

European industry will also benefit the abolishment of tariffs at customs, transparency in the enforcement of legislation, market access for future investments, and the reduction of technical barriers (e.g. verification of standards or material origins). In addition, it is likely that EU will also be exporting more wood processing machines to Vietnam as customs duties will be removed.




Vietnam has historically had low imports of wood products, however, in the past five years Vietnam has become a significant importer of wood products for conversion into VAWP for export. One of the potential impacts of EVFTA is that Vietnamese enterprises will have a growing demand of wood from the EU, particularly from Germany, Finland, Denmark and Sweden where the wood is of higher quality[71]. Another advantage of using EU wood to manufacture products destined for the EU market is that it will meet the standards of the EU Timber Regulation.

## EU Trend 4: Potential UK labor shortage from Brexit leads to increased interest in off-site construction

There are significant concerns that Britain's withdrawal from the EU will impact the availability of skilled workers in the construction industry, where 12% of the total 2.1 million employers are from other countries, mainly the EU[72]. It is estimated that Brexit may result in the loss of up to 215,000 construction workers cumulatively by 2020[73]. Meanwhile, the UK is experiencing a housing shortage. In the 2017 budget, the government set a target of building 300,000 homes annually until the mid 2020s[74]. In order to address the issue of the labour shortage, construction companies in UK are considering or planning to adopt prefabrication techniques to minimize the dependency on traditional construction workers such as brick layers and carpenters.

As there is a big initial investment to build off-site manufacturing facilities, currently the main investors in prefabricated homes are larger corporations. In 2017, Berkeley Group, one of the leading builders in the UK, built its first prefabricated home. The Berkeley Group has a target of building 10-15% of all its houses using modular construction methods. Another large construction company is Your Housing Group (YHG) which has a focus on affordable housing. YHG has entered into a partnership with China National Building Material and WeLink to make a £2.5 billion investment to establish six prefabrication facilities in UK. YHG estimates the six facilities could manufacture 25,000 modular homes annually[75].

[70] Vietnam News. *Timber exports to EU may hit $1b.* http://vietnamnews.vn/economy/419642/timber-exports-to-eu-may-hit-1b.html#j62rPMAjHcejg3XJ.97
[71] Ha Cong Anh Bao, *The panorama for Vietnam's Timber Industry with Vietnam-EU Free Trade Agreement (EVFTA): Opportunities and challenges*. https://boris.unibe.ch/97937/1/working_paper_no_5_2016_bao.pdf
[72] Esha Vaish, Reuters, *Builders turn to bolt-together homes in Brexit Britain* https://uk.reuters.com/article/uk-britain-eu-construction-insight/builders-turn-to-bolt-together-homes-in-brexit-britain-idUKKBN16G1DC
[73] ARCADIS TALENT SCALE*, The real extent of Britain's construction labour crisis,* commissioned by Arcadis in 2017
[74]Rachel Lacey, *Spring Statement 2018: Further details on plans to tackle UK housing crisis* https://www.moneyobserver.com/news/spring-statement-2018-further-details-plans-to-tackle-uk-housing-crisis
[75] Rhiannon Curry, *Chinese state-owned construction firm signs £2.5bn deal to build modular homes with UK housing association* https://www.telegraph.co.uk/business/2016/12/19/chinese-state-owned-construction-firm-signs-25bn-deal-build/

## Mexico Trend 1: Wood used to build quake-resistant homes

On September 19, 2017, a 7.1 magnitude earthquake struck Central Mexico, causing damages in the Greater Mexico City area as well as the nearby states of Puebla and Morelos. In Mexico City, the quake caused 44 buildings to collapse, leading to a loss of more than 300 lives and injuring more than 6,000 people.

A team of structural engineers from Stanford University[76] discovered that nearly two-thirds of the collapsed buildings were built with a traditional construction technique called flat slab systems. This outdated method, in which floors are supported only by concrete columns, does not utilize beams and girders. As it turns out, this construction method was proposed to be phased out after the 1985 Mexico City earthquake. However, use of flat slab systems was allowed to carry on as officials in Mexico City had not gone forward with the proposal to ban the construction technique.

As part of the reconstruction efforts, officials in Mexico City planned to build 80-150 quake-resistant homes to house those rendered homeless. Made of wood and galvanized steel[77], these lightweight structures can support up to three storeys and are designed to last up to 80 years. These quake-resistant homes are a great showcase for wood construction.

*One of the proposed quake-resistant homes*
Source: Mexico News Daily

[76] The Associated Press. *Engineer group blames Mexico earthquake deaths on poor building codes that led to collapses.* http://www.nydailynews.com/news/world/engineer-group-blames-mexico-quake-deaths-poor-building-codes-article-1.3552424
[77] Mexico News Daily, *CDMX set to build quake-resistant homes*. https://mexiconewsdaily.com/news/cdmx-set-to-build-quake-resistant-homes/