

2016 Top Markets Report Building Products and Sustainable Construction Country Case Study

Japan

Japan's ranking of fourth as a 2018 export market for the building products sector is driven in large part by strong performance and future prospects for U.S. wood products exports. Japan is a top 10 market for five of the seven building product subsectors. But the presence of world-leading, domestic Japanese manufacturers of HVACR, plumbing, glass and other building products constrains Japan's import demand. For U.S. wood product exports, Japan continues to be a promising market.

HVACR	Lighting	Plumbing Products
9	7	11
Insulation,	Windows & Doors	Glass
8	8	24
	9 Insulation.	9 7 Insulation. Windows & Doors

Japan is the second largest construction market outside the United States. It is a stable, advanced market that is strongly receptive to the high quality building products in which U.S. manufacturers are competitive. Japan's population, and particularly its senior population, has high disposable income, a commitment to energy efficiency and resource conservation and a strong interest in new technologies to achieve greater environmental friendliness in the built environment. The Japanese market includes dense urban centers and extensive existing building stock in need of renovation. Seismic resilience is a long-standing requirement in Japan.

The Japanese construction industry is projected to grow at a rate of 1.2 percent annually through 2019,¹ with civil engineering works showing a slightly higher rate of expansion than buildings. The current hot topic in the Japanese construction industry is the Tokyo Olympic Games in 2020. Many public projects are expected in the coming years in athletic facilities and associated infrastructure. In addition, because of the rapid increase in the number of foreign tourists for the last few years, many new hotel projects are expected. At the same time, as Japan's aging population grows, demand is increasing for suitable healthcare and elderly living facilities. Japanese government estimates see people aged 65 and above as 40 percent of the nation's population by 2060. In 2013, there were 1.1 million more elderly in Japan than the previous year. The current labor shortage in the construction industry may place some constraints on expansion in the building market.

Japan's wooden housing market is the largest in the world outside the United States, and the residential housing sector accounts for an estimated 40 percent of wood use in Japan.² It is unsurprising that wood is a huge driver of Japan's 2018 ranking as a U.S.

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This case study is part of a larger Top Markets Report. For additional content, please visit <u>www.trade.gov/topmarkets</u>. U.S. Department of Commerce | International Trade Administration | **Industry & Analysis** export market for the building products sector. Wood products are the leading subsector, claiming the majority of building product exports to Japan in 2015 and presenting the greatest projected growth through 2018.

Green Building in Japan

The Japanese government recognizes that housing and other buildings account for 30 percent of total energy consumption in Japan, with significant increases in energy use by buildings in the past two decades compared with sectors such as transportation and industrial use.³ Accordingly, buildings have been the target of a series of regulations, guidelines and incentives to improve energy conservation reaching as far back as the Energy Saving Act of 1979. Since 2012, the Japanese government has embarked on a focused roadmap to roll out a series of building energy efficiency policies, including programs to:

- promote the construction of houses and buildings with higher energy efficiency performance (via labeling and energy efficiency information provision, promoting construction of zero energy homes in which the total amount of energy used is roughly equal to the renewable energy created on site, promoting use of advanced carbon dioxide reduction technologies and use of certification programs);
- assure minimum energy efficiency performance of houses and buildings via revised Energy Efficiency Standards for large, medium and small buildings (earliest mandatory compliance from 2017);
- improve energy efficiency of existing houses and buildings (via promotion of renovations, improvement of building materials and equipment, and considering evaluation and labeling system for energy efficiency); and
- increase capabilities of individuals and organizations (trainings, evaluations, improving quality of building materials and equipment).

Provisions pertaining to fundamental "green" areas, such as energy efficiency, indoor air quality and water efficiency, are included in Japan's Building Standard Law (BSL). On the market-based "pull" side of the equation, the Japan Green Building Council maintains the building rating system known as the Comprehensive Assessment System for Built Environment Efficiency (CASBEE). Criteria for this voluntary rating system include energy (thermal load, natural energy, building system efficiency), water efficiency, and indoor environment (sonic, thermal, illumination, air quality), among other rating categories.

Challenges & Barriers to Sector Exports

Highly competitive market environment

As noted above, Japan has a strong base of domestic manufacturers producing building products at a global leadership level. In Japan's import market, U.S. sector exporters also must compete against other leading global manufacturers renowned for product quality and innovation. Winning sales requires regular direct engagement with buyers to establish familiarity and confidence and to distinguish specific product performance versus that of competitors.

<u>Tariffs</u>

U.S. products compete well in Japan in the current WTO tariff environment, but tariffs place a burden on U.S. exporters all the same. Additionally, in Japan –and in priority realms, such as wood products trade – tariffs escalate, meaning they increase with the level of technical sophistication or processing inherent in the product's manufacture.

Trans-Pacific Partnership (TPP)

Japan is a party to the to the Trans Pacific Partnership (TPP) Agreement, a free trade agreement among the United States and 11 other countries that, when it enters into force, will reduce tariffs and provide other important market access benefits to U.S. exporters. Information about TPP benefits to U.S. building product exporters and other information on how TPP will make it easier to sell made-in-America products can be found at http://trade.gov/fta/tpp/industries/building.asp.

Incentives to prefer local content

Certain regulations in Japan have served to incentivize use of local Japanese products over imports of building products. One recent example of this in the leading sector segment of wood products is the Wood Use Point Program, which concluded in 2014. The program gave financial incentives for the use of Japanese wood species. While U.S. wood product exporters succeeded in gaining an exemption for Douglas Fir (i.e. obtained classification for Douglas Fir as a local species for purposes of the

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program), it stands as an example of governmentdriven practices that must be monitored to ensure a level playing field.

Standards and conformity assessment

Standards and conformity assessment requirements are oft-cited non-tariff trade barriers for building product exporters. U.S. suppliers must be aware of the Japanese standard and make sure to have proof of conformance. In Japan, there are cases in which a standard or conformity assessment may not be mandatory but may be required for market acceptance. The full suite of USG tools that can be brought to bear in assisting exporters with standards and conformance issues is detailed in the Executive Summary and Findings section of this report.

Know Your Buyer

For building product exports, the importance of specific sales channels and buyer categories varies depending on the target export market. In Japan, the most important relationship for a U.S. building products exporter is the one with Japanese agents/distributors. There are no other government or private sector entities that can heavily impact a U.S. exporters' success in Japan.

These agents/distributors fulfill not only that role but also serve as important business partners that can provide market information, such as Japanese regulations and customers' needs. It is sometimes necessary for U.S. companies to work with their agents/distributors to modify or develop products for the Japanese market. It may be also important to develop marketing strategies with Japanese agents/distributors.

Overall, ITA's experience supporting U.S. building products exporters in Japan indicates the following assignment of priority among relevant sales channels:

Figure 1:		Priority	
Sales Channels	Low	Medium	High
Government entities	Х		
Architects		Х	
Design and build companies		Х	
Trade contractors	х		
Building facility managers	Х		

Opportunities for U.S. Companies

For the sector as a whole, the United States is currently the second largest source of Japan's imports, claiming eight percent of the Japanese import market after China's dominant 32 percent market share position. A look at each of the subsectors provides a more informed perspective on the U.S. competitive position.

Figure 2: Japan's Import Market

Sector	Imports (2014, USD)	U.S. Rank as Import Source	U.S. Import Market Share
HVACR	\$7.7 billion	3	9.1%
Lighting	\$1.5 billion	5	4.3%
Plumbing	\$776 mil.	9	2.5%
Wood products	\$10.9 billion	5	8.4%
Insulation	\$161 million	2	18.8%
Windows & Doors	\$795 million	4	2.9%
Glass	\$196 million	5	12.5%

HVACR

Japanese firms are among the leading global HVACR manufacturers, setting a high competitive bar for entry for higher quality imported products, such as those from the United States. During 2009 through2014, Japan's imports of HVACR grew at a compound annual growth rate of 8.9 percent. Over half of these imports came from China, but we note that Japanese manufactures make their products for the Japanese market in China and other Asian countries. Most, if not all, of these products sourced in China may be Japanese brand products.

While subsector imports from the United States grew at a rate of 8.4 percent during the same period, these products saw a slight loss in import market share to 8.4 percent in 2014 from 9.1 percent in

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2009. The differences between U.S. and Japanese air-conditioning systems make it difficult for U.S. companies to enter certain segments of the Japanese market. In the U.S., central air-conditioning is common, while in Japan, room-by-room airconditioning is common.

Top Import Sources and Market Share:

- 1. China (52.9%)
- 2. Thailand (11.3%)
- 3. United States (9.1%)
- 4. Germany (4.9%)
- 5. Korea (4.2%)

Lighting

Japan's imports of lighting from the world grew at 9.1 percent annually during 2009 through 2014, while its imports of lighting from the U.S. fell, achieving a -0.33 compound annual growth rate. U.S. lighting imports currently hold a 4.3 percent share of Japan's lighting import market, down from 6.7 percent in 2009. Products from China dominate nearly two thirds of Japan's lighting import market, but many of these products may be Japanese brand products produced at Japanese factories or subcontractors located elsewhere in Asia.

Top Import Sources and Market Share:

- 1. China (62.1%)
- 2. Germany (6.7%)
- 3. Korea (5.4%)
- 4. Indonesia (5.2%)
- 5. United States (4.3%)

Plumbing

Japan's imports of plumbing products are great at a compound annual growth rate of nearly 13 percent during 2009 through 2014, and its imports of subsector products from the United States grew at 7.7 percent during the same period. Plumbing product imports from the United States held a 2.5 percent share of Japan's import market, down from 3.1 percent in 2009. The United States is Japan's ninth largest source of plumbing product imports. Similar to lighting and many other building products, plumbing products imported from Asian countries may be Japanese brand products produced at Japanese company factories located elsewhere in Asia. Top Import Sources and Market Share:

- 1. China (50.6%)
- 2. Thailand (10.8%)
- 3. Vietnam (9.5%)
- 4. Philippines (7.5%)
- 5. Korea (7.3%)

Wood

Japan's imports of wood products grew at a compound annual growth rate of 6 percent during 2009 through 2014, while the nation's imports from the United States achieved nearly 9 percent annual growth during the same period. U.S. market share in Japan's wood import market has been growing, standing at 8.4 percent in 2014, up from 7.4 percent in 2009. The United States is Japan's fifth largest source of wood product imports.

U.S. wood product exporters benefit from the United States being an established historical wood product supplier; proximity to Japan of suppliers on the U.S. west coast; the high quality and consistency of U.S. wood products; perceptions of legal and sustainable sourcing of wood products in the United States; and the Japanese market demand for U.S. wood species. U.S. industry sees particular market opportunity in Japan in high-value market segments, such as traditional post-and-beam style housing, the emergent do-it-yourself segment, and wide-ranging renovation areas.

It is important to note that the ranking below shows imports of all wood products, regardless of end use. These may include wood products ultimately not utilized in the construction of buildings.

Top Import Sources and Market Share:

- 1. China (11.4%)
- 2. Canada (11.1%)
- 3. Malaysia (10.3%)
- 4. Indonesia (9.4%)
- 5. United States (8.4%)

Insulation

U.S.-sourced insulation products claim a healthy 19 percent share of Japan's import market, but occupy a distant second place share of the market compared with from products from China at 34 percent. China's subsector import market dominance grew from 19 percent share in 2009 to current levels. The United States' share has fallen slightly from 22 percent in 2009 to 19 percent in 2014.

Top Import Sources and Market Share:

- 1. China (33.9%)
- 2. United States (18.8%)
- 3. United Kingdom (11.6%)
- 4. Korea (7.3%)
- 5. Germany (4.5%)

Windows and Doors

Japan's imports of windows and doors from the U.S. fell during 2009 through 2014, posting -1.0% compound annual rate of growth. During the same timeframe, its overall subsector import market grew at a 3.5 percent rate. Windows and doors from the United States held a 2.9 percent share of Japan's import market in 2014, down from 3.6 percent in 2009. Windows and doors imported from Asian countries may also be Japanese brand products.

Top Import Sources and Market Share:

- 1. Thailand (2.2%
- 2. China (33.1%)

- 3. Philippines (10.1%)
- 4. United States (2.9%)
- 5. Indonesia (2.9%)

<u>Glass</u>

Japan's imports of glass from the world fell sharply over 2009 to 2014, showing -13.8 percent compound annual growth. During the same period, the nation's imports from the U.S. grew at a rate of 1.1 percent. The United States is Japan's fifth largest source of imported glass for construction, holding a 12.5 percent market share. This reflects growth in the United States position from 5.7 percent import market share in 2009. Three Japanese companies, Asahi Glass, Nippon Sheet Glass and Central Glass, dominate the Japanese flat glass market.

Top Import Sources and Market Share:

- 1. Taiwan (25.2%)
- 2. China (20.0%)
- 3. Korea (17.7%)
- 4. Germany (14.7%)
- 5. United States (12.5%)

Resources for U.S. Exporters

Please visit www.export.gov/japan for information from U.S. Commercial Service (CS) Japan, including

- Market research
- Trade events
- Trade leads
- Services available to U.S. companies
- Contact information for CS offices in Tokyo and the Osaka-Kobe area
- Info on subscribing to regular updates or connecting on social media
- Other information to assist U.S. exporters with Japan export market development

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¹<u>Construction In Japan – Key Trends and Opportunities to 2019</u>, Timetric (2015)

² American Softwood Export Council, Japan

³ Promotion of Green Housing and Building in Japan – Standards, Voluntary Measures and Other Incentives, presentation by Building Research Institute of Japan on behalf of the Ministry of Land, Infrastructure, Transport and Tourism, at APEC Workshop on Sharing Experiences in the Design and Implementation of Green Building Codes, Lima, Peru (March 2013)