



## KOREA MARKET PROFILE

### KOREA: FOREST PROFILE<sup>1</sup>

Korea is a heavily forested country, with 65% (6.5M hectares) of its total area covered with forest. Despite this, Korea is not yet self-sufficient in wood. To large extent, this is because of a lack of mature timber. The Korean government has initiated a forest policy which will result in a well stocked forest. As part of this policy, and in an effort to reduce abusive harvests, there are now restrictions on cutting that apply to forest product companies and individuals. As a result of the new forest policies, the total standing volume increased to 257 mill. cbm in 1984, 70 % higher than 10 years ago (152M m<sup>3</sup>). Korean forests were badly degraded through the first half of the 20th Century, due to: logging under Japanese occupation; intense demands for fuelwood; and war damage during the Korean conflict. Between 1961 and 1995, however, stocked forest land increased from 4M hectares to 6.3M hectares, as a result of a large-scale reforestation.

### KOREA'S FOREST DISTRIBUTION

Coniferous forests predominate, comprising almost half the forest area. The remaining forests are almost evenly divided between deciduous forest and mixed species forest. The predominant coniferous species are Japanese Larch (*Larix leptolepis*), Pitch pine (*Pinus rigida*) and Korean pine (*Pinus koraiensis*). A high proportion of the South Korea's forests are the result of large-scale reforestation programmes.

	Forest Cover 2000	Distribution of land cover/use % (1999)		
	'000 ha	Forest	Other Wooded Land	Other land
Korea	6,248	63.3	.0	36.7
Asia	547,791	17.8	4.6	78.3
World	3,869,453	29.4	11.2	58.6

Broad-leaved forests include species such as oak, and occupy 28% of the total forest area. The other 27% is covered with mixed forest. By age class, young trees less than 20 years old amount 35% of the growing stock, while trees between the ages of 21 and represent 40%, and trees more than 31 years old are 25%. Harvestable standing volume is 65M m<sup>3</sup>. Average volume per hectare increased 3.7%, from 39.78 m<sup>3</sup> to 38.36 m<sup>3</sup> in the late 1970s. This is roughly equivalent to 4 times the volume (11.3m<sup>3</sup>/ha) in the 1970's when the government embarked on its current forest policy.

### POLICIES/ISSUES

The goal of the current silvicultural treatments that are being applied is the logical and efficient management of Korea's forest resource. As part of this objective, the government has realized the importance of mechanization in forest practice and has initiated forest road construction in most regions.

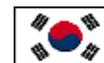
Ownership of the forest is divided into two types: national forest, and other. National forest is mainly controlled by government organizations and institutes (such as the Forestry Administration) This area represents 1.4M ha, or 21.4% of the total forest area. Other forest ownership can be also separated into two groups by owner: public or private. Between these two types, the majority is private (71.0%). Regardless of forest type all management of forests in mountainous regions are controlled by government policy.

### PRODUCTS AND TRADE

Korea depends on timber imports from Indonesia, Malaysia, the US, New Zealand, Chile and other countries to supply its domestic market and industries. Until now, because Korea has depended on imports for timber, most raw forest products, such as logs, lumber, plywood, and bamboo, are imported and manufactured into secondary products such as plywood, hardboard, particle board, medium density fiberboard, paper, and pulp. Most of these primary products are also consumed by the domestic market, and will continue to be until the forest is in better condition than at present.

The vast majority of Korea's industrial logs is imported, with significant quantities of wood pulp also imported. Korea has an extensive wood processing industry based largely on imported wood. The main products from forests in Korea are non-wood forest products, such as chestnuts and mushrooms, which are major exports.

<sup>1</sup> Source: World Forest Institute. <http://www.worldforestry.org/wfi/world-forests.htm>



# SOUTH KOREA MARKET PROFILE

## SOUTH KOREA TRADE OVERVIEW

### South Korea Export Stats

Commodity: Wood Products (44)  
Value: \$1,000,000

Partner Country	2003	SHARE	1YR Δ	5YR Δ
World	1,351.4	100.0%	-4.8%	22.1%
Indonesia	235.1	17.4%	-7.1%	5.6%
Malaysia	212.6	15.7%	-2.4%	27.0%
China	208.7	15.4%	-1.4%	65.9%
New Zealand	193.9	14.3%	0.2%	15.7%
United States	139.6	10.3%	4.0%	-11.7%
Russia	76.1	5.6%	1.5%	64.0%
Canada	60.5	4.5%	53.9%	168.5%
Australia	42.3	3.1%	-13.7%	24.8%
Thailand	25.3	1.9%	-21.8%	-19.2%
Germany	20.2	1.5%	-29.8%	112.6%

### South Korea Import Stats

Commodity: Wood Products (44)  
Value: \$1,000,000

Partner Country	2003	SHARE	1YR Δ	5YR Δ
World	1,769.7	100.0%	-3.1%	26.0%
New Zealand	295.6	16.7%	3.0%	37.4%
Indonesia	290.5	16.4%	-5.7%	11.7%
Malaysia	243.9	13.8%	-3.3%	28.5%
China	225.7	12.8%	-1.6%	60.3%
United States	147.8	8.4%	-2.3%	-16.3%
Russia	111.7	6.3%	2.0%	49.5%
Canada	89.1	5.0%	32.7%	193.9%
Australia	69.3	3.9%	-18.0%	41.9%
Thailand	30.2	1.7%	-24.0%	-12.3%
Papua N. Guinea	24.0	1.4%	-0.6%	-47.5%

## TOP IMPORTED PRODUCTS

### S. KOREA IMPORT STATISTICS FROM WORLD

UNITS: \$1,000

TYPE	HS	DESCRIPTION	2001	2002	2003	1YR Δ	5YR Δ	% Share
ALL	44+94	Wood + Furniture	1,721,971	2,064,858	2,068,362	0.2%	37.4%	100.0%
ALL	44	ALL WOOD PRODUCTS (EX-FURNITURE)	1,570,942	1,826,477	1,769,728	-3.1%	26.0%	85.6%
TOTAL PRIMARY			1,453,036	1,684,026	1,629,418	-3.2%	24.6%	78.8%
PRIMARY	4403	Logs	536,326	597,473	610,394	2.2%	17.2%	29.5%
PRIMARY	4412	Plywood & Panels	311,991	382,799	417,201	9.0%	60.3%	20.2%
PRIMARY	4407	Lumber	223,743	233,322	205,468	-11.9%	-21.3%	9.9%
PRIMARY	4411	Fiberboard	94,923	146,326	109,044	-25.5%	161.6%	5.3%
PRIMARY	4408	Veneers Sheets	93,096	112,166	99,406	-11.4%	91.0%	4.8%
PRIMARY	4410	Particle Board	77,593	110,242	78,067	-29.2%	42.6%	3.8%
PRIMARY	4401	Fuel Wood & Wood Chips	80,853	64,588	73,904	14.4%	-19.1%	3.6%
PRIMARY	4402	Wood Charcoal	30,531	33,201	31,621	-4.8%	46.6%	1.5%
PRIMARY	4413	Densified Wood Shapes	2,757	2,600	3,069	18.1%	4.5%	0.1%
PRIMARY	4405	Wood Wool or Flour	1,088	1,210	1,144	-5.4%	21.7%	0.1%
PRIMARY	4404	Hoopwood, Poles, Pickets, Stakes	131	72	90	25.1%	-53.6%	0.0%
PRIMARY	4406	RR Ties	3	28	9	-65.9%	-92.4%	0.0%
TOTAL SECONDARY			268,935	380,832	438,944	15.3%	122.3%	21.2%
SECONDARY	94	ALL WOOD FURNITURE	151,029	238,381	298,634	25.3%	196.5%	14.4%
SECONDARY	4409	Wood, Continuously Shaped	33,828	33,983	38,373	12.9%	36.0%	1.9%
SECONDARY	4418	Builders' Carpentry	31,610	44,329	36,032	-18.7%	11.7%	1.7%
SECONDARY	4421	Articles Of Wood, Nesoi	18,420	21,445	21,392	-0.2%	76.3%	1.0%
SECONDARY	4419	Wood Tableware & Kitchenware	16,933	21,600	19,826	-8.2%	58.4%	1.0%
SECONDARY	4420	Wood Marquetry Etc.	3,822	7,124	8,313	16.7%	159.5%	0.4%
SECONDARY	4415	Wood Packing Material	6,377	5,720	7,715	34.9%	75.4%	0.4%
SECONDARY	4414	Wood Frames Etc.	4,404	5,782	5,837	1.0%	174.1%	0.3%
SECONDARY	4417	Tool & Broom Bodies	2,428	2,400	2,401	0.0%	36.5%	0.1%
SECONDARY	4416	Cooperage Products	84	68	421	520.5%	164.5%	0.0%



## IMPORT OVERVIEW

Korea imported \$2.07Bn in forestry products in 2003, making it one of the top importers in the world. Imports have increased by over 37.0% since 1999, with trade dominated by Asian and Pacific Rim partners. Top suppliers to the Korean market in 2003 were: New Zealand (16.7%), Indonesia (16.4%), Malaysia (13.8%), China (12.8%), and the U.S. (8.4%). Korean imports of Canadian forest products saw the largest percentage gain, rising 193.9% over the period analyzed. The U.S. has seen marginal declines in export values over the period, with market share given up to the aforementioned competitors. Primary imports account for 78.8% of total demand, while secondary imports retained the rest (21.2%).

## PRIMARY PRODUCTS IMPORTS

### LOGS

SOUTH KOREA IMPORTS: PRIMARY				
UNITS: \$1,000				
PRODUCT	2003	% Share	1 YR AGR	5 YR AGR
TOTAL PRIMARY	1,629,418	78.8%	-3.2%	24.6%
SW Logs	514,348	24.9%	2.8%	38.9%
HW Plywood	395,451	19.1%	10.9%	64.8%
HW Lumber	143,241	6.9%	-15.7%	-25.9%
MDF	97,890	4.7%	-21.3%	248.9%
HW Veneers	97,835	4.7%	-10.7%	118.7%
HW Logs	95,582	4.6%	-1.8%	-36.4%
HW Chips	73,304	3.5%	14.2%	-17.9%
SW Lumber	62,227	3.0%	-1.9%	-7.9%
Particleboard	46,318	2.2%	-12.6%	9.7%
Other Panel Products	28,726	1.4%	-39.7%	32.7%
OSB-WB	24,652	1.2%	-37.8%	448.8%
Hardboard	19,170	0.9%	20.5%	42.7%
SW Plywood	4,062	0.2%	-36.8%	-55.6%
SW Veneers	1,571	0.1%	-40.9%	-78.5%
SW Chips	39	0.0%	107.9%	-96.6%
Poles	9	0.0%	-65.9%	-92.4%

Korean imports of logs saw moderate growth of 17.2% over the 5-yr period, reaching \$610Bn in total value. Logs represent just over 29% of total wood products demand with Softwood logs being the dominant category. SW Log imports accounted for 84% of the import market for all logs. Major suppliers of the Korean log market were: New Zealand (45.2%), Russia (17.0%), the U.S. (15.5%), and Australia (5.8%). Imports of U.S. logs saw significant growth of 37.5%, nearly double the average, for the period. Top performing countries were New Zealand, Russia, and Canada. Canadian logs rose by over 600% from 1999 levels making Canada the 5<sup>th</sup> larger supplier of logs to Korea.

### LUMBER

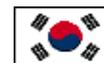
Lumber imports, in terms of total value, were down -21% over the 5-yr period reaching \$205M in 2003. Hardwood lumber accounted for the lion's share of demand at \$143M, while SW lumber saw significantly less "bleeding" than its counterpart. Top suppliers to the Korean lumber market were: Indonesia (29.7%), Malaysia (14.0%), the U.S. (12.4%), China (12.1%), and Canada (11.9%).

### PANEL PRODUCTS: PLYWOOD, VENEERS, FIBERBOARD, AND PARTICLEBOARD

Plywood, at \$417M, was the second most imported primary product in Korea in 2003, accounting for 20.2% of the entire market. HW Plywood represented 94% of total Plywood imports making it the dominant category. Indonesia, Malaysia, and China were the largest suppliers to Korea, with a combined market share of 89.9%. The U.S. ranked a distant 8<sup>th</sup> with only .3% of the market, giving evidence to a highly concentrated supply chain for Plywood.

Veneer imports nearly doubled over the 5-yr period, ending at 166M kg or \$99.4M in value. Growth from 1999 to 2003 reached 91% with preference given to New Zealand, Malaysian, and Chinese sourced veneers. New Zealand, with several years of underperformance, ramped up exports to 1.8M kg in 2003. The U.S. reached a 2.7% market share in Korea on modest growth of 29.3% over the period, ending at 4.4M kg shipped. In terms of total value of products, the U.S. ranked 3<sup>rd</sup> with 12.8% of the total value of Korean veneer imports.

Fiberboard reached 407M kg in 2003, up almost 150% from 1999 volumes, but down -27.9% from 2002. Total value of fiberboard imports reached \$109M, with Medium Density Fiberboard being the preferred category at \$98M in 2003. MDF was up almost 250% over 1999 levels. Top suppliers of Fiberboard to Korea were: Australia (18.6%), Indonesia (13.4%), Malaysia (11.2%), and New Zealand (10.4%) once



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again. Imports of U.S. manufactured fiberboard dropped 94% over the period, ending at 711,000 kg shipped. The U.S. had almost 8% of the market in 1999. Strong gains were made by Malaysia and Australia at the top to take up the lost market share of U.S. underperformance.

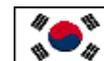
Particleboard imports reached highs of 650M kg in 2002, dropping back off to 442M kg in 2003. Still, imports of particleboard showed significant improvement over 1999 volumes with growth of 56.4% over the period. Imports of particleboard yielded \$78M in sales in 2003, up 42.6%. The largest supplier to the Korean market was Belgium at 19.6%, followed closely by Thailand at 18.1%. Again, OSB/Waferboard showed marked growth at almost 360% from 1999-2003, reaching a value of \$24.6M.

### SECONDARY PRODUCTS IMPORTS

SOUTH KOREA IMPORTS: SECONDARY		UNITS: \$1,000		
PRODUCT	2003	% Share	1 YR AGR	5 YR AGR
TOTAL SECONDARY	438,944	21.2%	15.3%	122.3%
Wood Framed Seats	126,525	6.1%	26.0%	189.2%
Wood Furniture Parts	67,411	3.3%	22.9%	261.2%
Kitchen Furniture	67,411	3.3%	22.9%	261.2%
Builders Carpentry	34,830	1.7%	-20.2%	9.8%
HW Flooring, Molding, Siding	29,740	1.4%	-1.7%	10.5%
Household/Bedroom Furniture	21,147	1.0%	45.3%	209.1%
Pencil Slats	18,633	0.9%	-2.4%	76.8%
Office Furniture	10,637	0.5%	22.4%	228.9%
SW Flooring, Molding, Siding	9,835	0.5%	121.1%	437.4%
Packing Material	7,715	0.4%	34.9%	75.4%
Cooperage Products	421	0.0%	520.5%	164.5%

market at \$29.7M in 2003.

Korean imports of secondary products reached \$439M, increasing by 122% from 1999 totals. This growth came on the back of huge increases in imports of Wood Furniture, gaining 196% over the period. As evidenced by the adjacent chart, Wood Furniture dominates the Korean import market, with significant growth in all major sub-categories. Sub-categories dominating secondary imports were Wood Framed Seats, Wood Furniture Parts, Kitchen Furniture, and Builders Carpentry. HW FMS also held a sizeable amount of the secondary



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### U.S. EXPORT OVERVIEW

South Korea is the 8<sup>th</sup> largest trading partner with the U.S. for forestry products. In 2003, the U.S. exported over \$160M to South Korea, down from \$164 million in 1999. This change represents an 5yr loss of -2.1%. Top products exported to South Korea are Softwood Logs, Hardwood Lumber, Hardwood Logs, and Hardwood Veneers. Currently, the U.S. has captured 8.4% of the entire South Korean market. However, exports are down marginally, and Korea's imports have been steadily rising since 1999. Top competitors in the Korean market are New Zealand, Indonesia, Malaysia, China, and Russia. Canada, China, Russia, and New Zealand have all seen marked improvements since 1999, and are steadily taking market share away from the U.S. Top categories exported to Korea in 2003 included: Logs, Lumber, Wood Furniture, Veneer Sheets, Fuel Wood/Wood Chips, and Builders' Carpentry; in order of total value.

US EXPORT STATS:		SOUTH KOREA			UNITS: \$1,000			
TYPE	HS	DESCRIPTION	2001	2002	2003	1YR Δ	5YR Δ	SHARE
TOTAL	44+94	Total Wood Products + Furniture	127,060	158,154	160,782	1.7%	-2.1%	100.0%
TOTAL	44	Total Wood Products	118,385	134,224	139,619	4.0%	-11.7%	86.8%
TOTAL PRIMARY		Total Primary	110,507	124,450	124,357	-0.1%	-16.1%	77.3%
PRIMARY	4403	Logs	62,058	72,406	81,878	13.1%	24.9%	50.9%
PRIMARY	4407	Lumber	23,398	29,781	22,995	-22.8%	-51.7%	14.3%
PRIMARY	4408	Veneer Sheets	10,441	14,521	9,587	-34.0%	5.5%	6.0%
PRIMARY	4401	Fuel Wood & Wood Chips	11,336	5,040	7,650	51.8%	-54.6%	4.8%
PRIMARY	4410	Particleboard	796	681	918	34.6%	-47.5%	0.6%
PRIMARY	4412	Plywood & Panels	830	299	703	135.4%	-61.9%	0.4%
PRIMARY	4411	Fiberboard	1,452	1,579	523	-66.9%	-90.1%	0.3%
PRIMARY	4413	Densified Wood Shapes	39	76	54	-29.2%	-48.4%	0.0%
PRIMARY	4402	Wood Charcoal	36	10	26	161.7%	#DIV/0!	0.0%
PRIMARY	4405	Wood Wool	70	40	19	-53.1%	-36.0%	0.0%
PRIMARY	4404	Hoopwood, Poles, Pickets, Stakes	50	16	6	-66.5%	-86.9%	0.0%
PRIMARY	4406	RR Ties	-	-	-		-100.0%	0.0%
TOTAL SECONDARY		Total Secondary	16,553	33,704	36,426	8.1%	128.6%	22.7%
SECONDARY	94	All Wood Furniture	8,675	23,929	21,163	-11.6%	245.9%	13.2%
SECONDARY	4418	Builders' Carpentry	3,267	5,552	6,426	15.7%	12.9%	4.0%
SECONDARY	4416	Cooperage Products	34	1,238	3,749	202.9%	#DIV/0!	2.3%
SECONDARY	4421	Articles Of Wood, Nesoi	2,540	518	2,127	310.4%	3.2%	1.3%
SECONDARY	4409	Wood, Continously Shaped	782	675	1,233	82.5%	13.3%	0.8%
SECONDARY	4417	Tool & Broom Bodies	160	510	818	60.5%	314.9%	0.5%
SECONDARY	4420	Wood Marquetry Etc.	83	282	386	36.8%	-9.6%	0.2%
SECONDARY	4415	Wood Packing Material	820	893	333	-62.7%	248.0%	0.2%
SECONDARY	4414	Wood Frames Etc.	65	78	128	63.0%	130.1%	0.1%
SECONDARY	4419	Wood Tableware & Kitchenware	127	29	64	122.2%	-69.0%	0.0%

### U.S. EXPORTS- PRIMARY

U.S. PRIMARY EXPORTS:	S. KOREA	FACTOR:	VALUE (\$000)		MARKET SHARE
			2003	5YR Δ	
SW LOGS, WESTERN HEMLOCK	\$31,201	21.8%	29.6%		20.5%
SW LOGS, SPRUCE	\$27,437	39.1%	49.6%		18.0%
HW LUMBER, ASH	\$8,311	320.4%	69.5%		5.5%
HW VENEERS	\$7,824	4.3%	-40.2%		5.1%
HW CHIPS	\$7,495	-51.1%	50.2%		4.9%
SW LOGS, DOUGLAS-FIR	\$4,280	-11.2%	-41.9%		2.8%
HW LOGS, MAPLE	\$3,647	-5.2%	-13.9%		2.4%
HW LUMBER, MAPLE	\$3,347	-75.1%	-35.0%		2.2%
HW LOGS, WALNUT	\$3,317	363.9%	7.0%		2.2%

U.S. exports of primary products represent around 77% of the total value of U.S. forestry exports, and have lost around \$22M in market share since 1999. This aggregate loss represents -16% annualized. As stated before, SW Logs (43.3%) dominated export sales with a market value of \$65.0M in 2003. HW Logs brought in an estimated \$13.6M and saw modest growth over the period. HW Lumber represented around 13% of the total market at \$20.3M, while SW Lumber represented

a much smaller market at \$2.6M in 2003. Of the SW Logs category the following species made up the bulk of export sales: Western Hemlock (20.5%), Spruce (18.0%), and Douglas-Fir (2.8%). Dominant HW categories and species are Ash Lumber (5.5%), HW Veneers (5.1%), and HW Chips (4.9%). Maple Logs & Lumber and Walnut logs round out the top ten primary products sold to the Korean market. Exports of panel products such as Particleboard, Plywood, and Fiberboard were extremely weak, as the Korean industry is a large-scale producer of each of these products. Primary raw materials demand drove growth

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in U.S. exports over the period. However, as noted below, there were some exceptions to this demand trend.

Although primary product exports to Korea were down modestly over the period, a few categories experienced strong growth. U.S. exports of HW Logs, SW Logs, and SW Plywood all showed strong growth. Within specific sub-categories, the highest performing export to the Korean market was SW Plywood (1892%), albeit at lower volumes of product. HW Log species recording strong 5-yr gains were: Walnut logs (364%), Ash Lumber (320%), and Other Temperate Logs (216%). The two largest SW Log species also performed well in the Korean market: Spruce Logs (\$27M, 39.1%) and Western Hemlock (\$31M, 21.8%). These products represent good opportunities for forest products companies, with volume and growth. SW Veneers showed strong growth from 2002-2003, but were up marginally over the entire 5-yr period. Pine species for Logs and Lumber did not register significant export sales to Korea over the period.

U.S. EXPORTS BY GROWTH: KOREA PRIMARY			
VALUES IN \$1000			
PRODUCT	2003	5YR Δ	1YR Δ
SW PLYWOOD	\$279	1892.9%	-4.1%
HW LOGS, WALNUT	\$3,317	363.9%	7.0%
HW LUMBER, ASH	\$8,311	320.4%	69.5%
HW LOGS, OTHER TEMPERATE	\$1,425	216.0%	32.1%
HW LOGS, WHITE OAK	\$1,148	80.5%	5.4%
HW LOGS, CHERRY	\$3,168	41.6%	-46.2%
SW LOGS, SPRUCE	\$27,437	39.1%	49.6%
HW LOGS, YELLOW POPLAR	\$56	33.3%	180.0%
SW LUMBER, PONDEROSA PINE	\$21	23.5%	
SW LOGS, WESTERN HEMLOCK	\$31,201	21.8%	29.6%
SW LUMBER, HEM-FIR MIX	\$148	15.6%	
SW VENEERS	\$1,822	15.2%	27.1%

## U.S. EXPORTS- SECONDARY

U.S. SECONDARY EXPORTS:	S. KOREA	FACTOR:	VALUE (\$000)	MARKET
PRODUCT	2003	5YR Δ	1YR Δ	SHARE
WOOD HOUSEHOLD FURNITURE	\$11,890	204.2%	-15.5%	7.5%
WOOD OR WOOD FRAME SEATS	\$5,886	781.4%	61.5%	3.7%
COOPERAGE PRODUCTS	\$3,749		202.8%	2.3%
WOOD DOORS AND FRAMES	\$2,676	92.7%	-4.5%	1.7%
WOOD FURNITURE PARTS	\$2,608	3767.8%	-35.4%	1.6%
WOOD WINDOWS AND FRAMES	\$2,057	246.9%	200.7%	1.3%
OTHER BUILDERS CARPENTRY	\$992	-70.7%	-34.8%	0.6%
HW FLOORING	\$840	29.8%	60.0%	0.5%
PREFABRICATED BUILDINGS	\$774	-67.7%	-46.8%	0.5%
FSWM	\$682	111.8%	25.4%	0.4%

U.S. exports of secondary forest products have seen significant growth from 1999-2003, with a growth rate of 128.6% minimal fluctuations. In 2003, the U.S. exported over \$33.7M to the Korean market, representing almost 23% of total export sales. Major product categories represented in the top export figures were Wood Furniture (13.2%), Builder's Carpentry (4.0%), and Cooperage Products (2.3%). The largest secondary

products exported to Korea were Wood Household Furniture (\$11.9M), Wood Framed Seats (\$5.8M), and Cooperage Products (all) (\$3.7M). The Cooperage Products category consisted mainly of Vats & Tubs, nesoi. Within the Builders' Carpentry category, major products were: Doors & Frames, Windows & Frames, and other BC (nesoi).

Wood Furniture showed monstrous growth of almost 250% over the period. Within the category top performers were: Wood Furniture Parts (753.6%), Wood Framed Seats (156.3%), and Wood Household Furniture. Wood Windows and Frames (49.4%) saw a two-fold increase over 2002 numbers to \$2.6M. Builders Carpentry was one of the leading categories for U.S. exports, on the back of growth in Wood Windows and Wood Doors. HW Flooring also saw impressive 2002-2003 growth of nearly 60% to reach \$840,000. Wood Household Furniture showed impressive growth over the 5-yr period, but exports were down -15.5% from 2002-2003. The strong growth in the Korean economy has led to increased demand for secondary products in the housing and building products sectors, as evidenced by above-average performance by products in these categories.

U.S. EXPORTS BY GROWTH: KOREA SECONDARY			
VALUES IN \$1000			
PRODUCT	2003	5YR Δ	1YR Δ
WOOD FURNITURE PARTS	\$2,608	3767.8%	-35.4%
WOOD OR WOOD FRAME SEATS	\$5,886	781.4%	61.5%
WOOD WINDOWS AND FRAMES	\$2,057	246.9%	200.7%
WOOD HOUSEHOLD FURNITURE	\$11,890	204.2%	-15.5%
FABRICATED STRUCTURAL WOOD MEMBERS	\$682	111.8%	25.4%
SW MOLDING	\$31	93.8%	14.8%
WOOD DOORS AND FRAMES	\$2,676	92.7%	-4.5%
WOODEN OFFICE FURNITURE	\$359	73.7%	-17.2%
HW FLOORING	\$840	29.8%	60.0%

# SOUTH KOREA MARKET PROFILE



## SOUTH CAROLINA EXPORTS

HTS	SC EXPORTS TO KOREA Description	TOTAL VALUE			US 5YR	% SHARE	SC RANK	% SC SHARE
		2003	SC 1YR	SC 5YR				
44+94	Wood + Furniture	1,342,016	43.3%	33.0%	-2.6%	100.0%		
44	Wood	531,507	-18.5%	-47.3%	-11.7%	39.6%	25	0.38%
	All Wood Furniture	810,509	185.2%		290%	60.4%		
4407	Lumber > 6Mm Thick	372,822	-31.2%	-62.0%	-51.7%	27.8%	16	1.62%
4417	Tool/TL+Broom Body/Et	153,265	72.6%		314.9%	11.4%	2	18.74%
4403	Rough/Not Sapwood	5,420	-74.9%		24.9%	0.4%	29	0.01%
4408	Veneer Sheet	0			5.5%	0.0%		0.00%
4415	Pack/Etc;Pallet/Collr	0			248.0%	0.0%		0.00%
4411	Fibrbrd Of Wd/Ot Lign	0			-90.1%	0.0%		0.00%
4401	Fuel In Log;Chips/Etc	0			-54.6%	0.0%		0.00%
4404	Hoopwood;Pickets/Etc	0			-86.9%	0.0%		0.00%

South Korea is the one of the smaller markets for South Carolina exports in the top 15 countries. For non-furniture exports, Korea ranked 16th overall with \$531,000 in 2003. Korea followed some notable countries that are not specifically included in this report: Taiwan, Portugal, Australia, Malaysia, Belgium, and Australia. For forest products, Korea owned less than 1.0% of the SC export market. However, when wood furniture is included in the analysis, Korea becomes the 13th largest export market for SC, with \$1.3M in 2003. This aggregate number represents 2.1% of the total export market for SC. Also, the Korean market has seen moderate growth in demand for SC exports with a 33% increase in exports over the period analyzed. Gains from 2002-2003 reached a 43.4% increase, on strong gains from the furniture sector. As evidenced the U.S. export data, no SW timber products were export to South Korea over the period analyzed. HW Lumber exports, which dropped dramatically (-62%), accounted for 100% of Lumber exports to South Korea. Within this category, were Oak and Other HW exports. Oak exports lost almost 80% over the period, offsetting the strong gains made by other species of HW (177.2%). State level data does not allow for any further specification in the trade data analysis.

Furniture exports represented 60.4% of the total export market to Korea at \$810,000 in 2003. Lumber followed 2<sup>nd</sup> with 27.8% of the market at \$372,000. Another notable category, which accounted for 11.4% of the Korean market, was Tools and Broom Handles. This category saw very strong growth in demand, increasing for \$0 in 1999, to over \$150,000 in 2003. SC growth in this category was inline with U.S. exports, which recorded 314.9% growth through the period. SC exports of Wood Furniture were dominated by Miscellaneous Wood Furniture in 2003 (89.4%). Various other furniture products have had success over the period, but with limited continued exports; Office and Bedroom furniture being the two largest categories.

### BEST PROSPECTS

#### BEST PROSPECTS- U.S. PRIMARY

HW LOGS: WALNUT, CHERRY, WHITE OAK, OTHER TEMPERATE  
 SW LOGS: WESTERN HEMLOCK, SPRUCE  
 HW LUMBER: ASH  
 VENEERS: HW (VOLUME), SW (GROWTH)

#### BEST PROSPECTS- U.S. SECONDARY

WOOD FURNITURE: HOUSEHOLD FURNITURE, WOOD FRAMED SEATS, FURNITURE PARTS  
 BUILDERS' CARPENTRY: WOOD DOORS & FRAMES, WOOD WINDOWS & FRAMES  
 WOOD, CONT. SHAPED: HW FLOORING

#### BEST PROSPECTS- SOUTH CAROLINA

LUMBER: OTHER HW  
 WOOD FURNITURE: MISCELLANEOUS FURNITURE  
 OTHER: TOOLS & BROOM BODIES



## ECONOMIC FACTORS (GENERATING DEMAND)

Despite near-term weakness of demand, over the next 3-5 years, the import volume of wood products is expected to increase in tandem with expectations that the Korean economy will continue to expand. One area expected to show particularly good growth is the repair and remodeling market for existing buildings. Regulations to curb the destruction of old apartment complexes will encourage repair and remodeling of old buildings instead of demolition and reconstruction. The Korea Remodeling Association projects the 2004 remodeling market at US\$11.4 billion (equivalent to Korean Won 13.3 trillion), up 7 percent from last year. The repair and remodeling market is expected to continue to grow at roughly 6-8 percent annually through 2010.

### GDP GROWTH

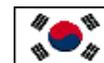
KOREA: INDICATORS	2000	2001	2002	2003
GDP per head (\$ at PPP)	15,194	15,941	17,006	17,580
GDP (% real change pa)	9.26	3.23	6.27	2.7
Government consumption (% of GDP)	10.03	10.33	10.56	10.9
Budget balance (% of GDP)	1.25	1.32	3.8	-0.4
Consumer prices (% change pa; av)	2.26	4.07	2.76	3.51
Public debt (% of GDP)	19.26	18.15	15.5	15.8
Labour costs per hour (USD)*	8.19	7.82	9.16	10.41
Recorded unemployment (%)	4.12	3.75	3.08	3.41
Current-account balance/GDP	2.65	1.93	1.28	2.4
Foreign-exchange reserves (mUS\$)	96,130	102,753	121,345	155,281

Boosted by strong growth in exports, and accommodative monetary and fiscal policies to lift domestic demand, economic growth in the Republic of Korea is expected to recover to 4.8% in 2004 and 5.2% in 2005, according to a major Asian Development Bank (ADB) report released in 2004.

The Asian Development Outlook 2004 (ADO), an annual ADB publication that forecasts economic trends in the region, says a recovery in the world economy will maintain growth in exports, which is likely to stimulate investment. After 7% growth in 2002, economic growth slowed to 3.1% in 2003, when domestic demand slumped due to a decline in private consumption as consumer credit dried up, and investment in machinery and equipment weakened. Growth in private consumption might resume only in the second half of 2004. The ADO warned that the household debt problem needs to be contained so that private consumption growth can resume. Investment is expected to recover in 2004, though the timing and magnitude may be subject to developments in the north of the Korean peninsula and the presidential impeachment. South Korea's gross domestic product (GDP) grew 5.5 per cent in the second quarter, compared with Singapore's 12.5 per cent and 12.1 per cent in Hong Kong, the Bank of Korea (BOK) said. Taiwan's GDP rose 7.7 per cent in the April-June period, while the potentially large economies of India and China gained 7.4 per cent and 9.6 per cent, respectively.

Even Japan, which seems to be emerging from a decade of stagnation, grew 4.2 per cent. In the first quarter, South Korea's GDP grew 5.3 per cent while most other countries enjoyed higher growth rates ranging from 7.0 per cent to 9.8 per cent. Japan was also higher than South Korea with 5.9 per cent. Growth of the South Korean economy began to slow relative to rival Asian economies from the last quarter in 2003. "South Korea's GDP growth is likely to be lower than other Asian economies due to sagging consumption, weak construction activity and slowing exports," the BOK said.<sup>2</sup>

<sup>2</sup> Source: Asian Development Bank. <http://www.adb.org/Documents/News/2004/nr2004039.asp>



## SOUTH KOREA MARKET PROFILE

### CONSTRUCTION MARKET

South Korea continues to be a country in transition. The residential construction market in South Korea is large... in recent years over 500,000 units have been constructed annually – and the currently strong demand is expected to continue for a number of years. In the 1990s, most residential development in South Korea has consisted of reinforced concrete apartment structures. Very high land costs in urban areas (particularly in greater Seoul, which accommodates some 40 per cent of the South Korean population) have traditionally encouraged such development, with fewer than 10 per cent of recently constructed dwellings being of the single family-type.<sup>3</sup>

#### CONSTRUCTION MARKET

Country: Korea

Report Year: 2004

	Previous Calendar Year	Current Calendar Year	Following Calendar Year
Total Housing Starts (thousand units)	585	350	500
--of which, wood frame (thousand units)	2	2	3
--of which, steel, masonry, other materials (thousand units)	583	348	497
--of total starts, residential (thousand units)	585	350	500
---of residential, single family (thousand units)	42	30	50
---of residential, multi-family (thousand units)	543	320	450
--of total starts, commercial (thousand units)	585	350	500
Total Value of Commercial Construction Market (\$US mil)	85,730	76,000	80,000
Total Value of Repair and Remodeling Market (\$US million)	10,400	11,400	13,000

While Korean domestic construction is expected to increase by 10 per cent to \$69.9 billion in 2004, it will be driven primarily by public sector initiatives relating to investments in South-North cooperation. Infrastructure investment and private sector construction is expected to decrease in 2004.

Though most single-family houses in South Korea are currently constructed of masonry or concrete, there has been a recent upsurge in North American-style single-family wood-frame construction in suburban areas. Moreover, given the size of the South Korean market, there is clear potential to expand the scope of residential construction to include wood-framed multi-unit residential buildings. Research suggests that there is both academic and small builder interest in such forms. On the other hand, the high quality of Korean concrete and masonry housing forms (low-, medium-, and high-rise alike) and the large size and competitiveness of the “designated” industrial conglomerates that deliver most housing in South Korea complicate market entry. Except where new technology and innovative design can improve productivity or performance, or where innovative design can reduce cost or capture market appeal, foreign businesses operate at a real disadvantage.<sup>4</sup>

### HOUSING STARTS

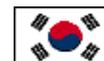
Interest in wood-frame housing construction is on the rise. Single-family homes are of particular interest and residential developments are beginning to pop up near major metropolitan areas. At this time, housing starts are in the range of 350-400,000 annually. While Korea has experienced an economic downturn in recent years, it is expected that this situation will change over the next few years.

A total of 404,715 residential housing units were constructed in 1999, an increase of 32 per cent over 1998. The public sector accounted for 151,000 of these units. Korea’s market for prefabricated homes and building products was \$560 million in 1999. The total value of imports of prefabricated homes during this period was \$5.1 million. In the first 6 months of 2004, Korea imported \$3.2 million in imported homes.<sup>5</sup> Strong government intervention to curb the speculative housing market further discourages Korean

<sup>3</sup>Source: FAS Korea- Solid Wood Products Annual, 2004. <http://www.fas.usda.gov/ffpd/attache-reports.htm>

<sup>4</sup> Source: <http://www.davislangdon.com.au/Publications/Documents/wcro03-04.pdf>

<sup>5</sup> Source: Canadian Mortgage & Housing Corporation. <http://www.cmhc-schl.gc.ca/>



## SOUTH KOREA MARKET PROFILE

economic recovery. In turn, building starts for the first four months in 2004 declined sharply, by 40 percent, to 82,158 units from last year's 136,758 units.

### Housing Starts per Type

Korea: Housing Starts per Type (Unit)					
Year	Total	Apartment	Single Family	Tenement	Row House
1997	596,435	484,949	52,948	19,219	39,319
1998	306,031	262,879	23,773	7,363	12,016
1999	404,715	345,345	33,772	7,640	17,958
2000	433,488	331,579	34,777	10,242	56,890
2001	529,854	267,401	49,454	8,592	204,407
2002	666,541	384,692	53,323	7,963	220,563
2003	585,382	468,763	42,173	6,265	68,181
2004 (Jan-Apr) 1/	82,158	62,500	11,450	1,042	7,166

1/ MOCT sets the CY 2004 goal for new housing starts at 520,000 units

Source: Ministry of Construction and Transportation

## TRADE FACTORS (AFFECTING U.S. EXPORTS)

The government plans to revise regulations for sales of high-rise apartments to facilitate purchase prior to construction. Construction industry representatives caution that the new system could reduce housing supply by placing a greater financial burden on the construction companies.

## TRADE AGREEMENTS

The South Korean Free Trade Agreement (FTA) with Chile, after a long delay, took effect April 1, 2004. The FTA is scheduled to eliminate tariffs on over 10,000 items imported from Chile over the next 10 years. The tariff elimination schedule for wood products will include 237 items in the 4401-4428 HS codes. Among the categories set for immediate tariff elimination will be 138 items, including wood chips, logs and veneer. Tariff elimination after 5 years for another 70 items will include lumber, particleboard and plywood (less than 6mm in thickness), while the remaining 29 items are scheduled for liberalization after 10 years. Among those categories are MDF and plywood (over 6mm).

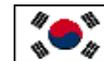
## POLICY<sup>6</sup>

### BANNED IMPORTS

Due to growing concern about Sudden Oak Death and the pinewood nematode, the Korean National Plant Quarantine Service (NPQS) has banned imports of red wood, Douglas fir, big leaf maple and certain species of oak from certain counties in California and Oregon. Due to the pine wood nematode concern, Korea has banned imports of pine and larch products from Canada, China, Japan and Portugal. Due to Sudden Oak Death concerns, Korean authorities banned imports of Big Leaf Maple (*Acer Manzanita* in scientific name). However, shipments of Soft Maple are allowed into Korea if they are accompanied by phyto-sanitary certificates which clearly state the wood is not Big Leaf Maple (*Acer Manzanita*). The NPQS has also strengthened quarantine regulations for pine products requiring a heat treatment certificate. Kiln dried lumber is allowed for the entry in Korea subject to the phyto-sanitary certificate stating that the lumber is kiln dried at 56 degrees Celsius for 30 minutes.

In accordance with the IPPC rules on imported softwood packaging materials (SWPM), the Korean National Plant Quarantine Service (NPQS) announced that it would enforce the quarantine formalities for

<sup>6</sup> Source: FAS Korea- Solid Wood Products Annual, 2004. <http://www.fas.usda.gov/ffpd/attache-reports.htm>



## **SOUTH KOREA MARKET PROFILE**

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solid wood packaging materials (SWPM) imported after June 1, 2004, but decided to delay the effective date to June 2005 at the request of the Korean industries. The products subject to the quarantine include pallets, crates, wooden boxes, etc., which are used for export packaging. After June 1, 2005, the SWPM should be accompanied by a certificate showing heat treatment for more than 30 minutes at 56 Celsius.

For more information on the requirements, refer to the American Lumber Standard Committee website at [www.alsc.org/WPM\\_summary\\_mod.htm](http://www.alsc.org/WPM_summary_mod.htm) and the National Hardwood Lumber Association website at <http://www.natlhardwood.org>. Click on "Heat Treatment"

### **WOOD-FRAME BUILDING STANDARDS**

On August 3, 2004, the Ministry of Construction and Transportation (MOCT) revised the building codes to allow for wood-frame construction up to five stories, an increase from the current three stories. According to MOCT officials, the decision was made due to improvements in the technology of wood-frame construction in Korea and the production of wood construction materials.

### **BUILDING CODES**

After an extended joint effort by the American Forest & Paper Association (AF&PA)/Seoul, FAS/Seoul, the Korean Wood Construction Association (KWCA), the Korea Forest Service (KFS) and the Korea Forest Research Institute (KFRI) to revise the Korean standard for the assemblies of wood frame structures (KSF1611) since 1991, on May 28, 2004 the Ministry of Construction and Transportation (MOCT) announced its "proposal (draft)" to recognize wood assemblies as fire resistant and incorporate that determination into the National Building Code. The comment gathering process for this proposal ended June 17, 2004. After reviewing the comments and undergoing review by other relevant government agencies, the MOCT is expected to publish the final rules in October 2004. The proposed revision to the standard allows wood frame construction in multi-family structure of up to three stories.



## COUNTRY INFORMATION SOURCES

### GOVERNMENT

Korea Trade- Investment Promotion Agency  
300-9, Yomgok-dong, Seocho-gu, Seoul, Korea  
Profile: Promoting international commerce and investment between Korea and its major trading partners  
Phone: (82-2) 3460-7114  
Fax: (82-2) 3460-7777  
Website: <http://www.kotra.or.kr/eng/file/sub7.jsp>

### TRADE ASSOCIATIONS

American Forest & Paper Association (shared)  
AF&PA - Korea  
U.S. Agricultural Trade Office  
Room #303, Leema Building  
146-1, Susong-dong, Chongro-ku  
Seoul 110-140, Korea  
Phone: 011-82-2-722-3685/6  
Fax: 011-82-2-720-1898  
E-mail: [afandpa@unitel.co.kr](mailto:afandpa@unitel.co.kr)

AHEC – Korea (shared)  
c/o American Forest & Paper Association  
Room #303, Leema Building  
146-1, Susong-dong Chongro-ku  
Seoul (110-140), Korea  
Director: Kyoung-ho Ahn  
Phone: (82) 2-722-3685/6  
Fax: (82) 2-720-1898  
Website: <http://www.afpa-korea.org>

Association of Foreign Trading Agents of Korea  
Koima Bldg, Hankangro 2-Ka, Yongsan-Ku, Seoul 140-875, Korea  
Phone: 82-2-792-1581/4  
Fax: 82-2-785-4373  
Email: [aftakol@magiclink.dacom.co.kr](mailto:aftakol@magiclink.dacom.co.kr)  
Website: <http://www.aftak.or.kr>

Korea Federation of Furniture Industry Cooperatives  
#374-2, Changan-dong, Dongdaemun-gu, Seoul, Korea  
Profile: Korean style antique furniture, Teaching implements knockdown-furniture, General furniture

Phone: 215-8838/9  
Fax: 215-9729

Korea Shipbuilding Industry Cooperatives  
#915-14, Bangbae-dong, Seocho-gu, Seoul,  
Phone: 587-3121/3  
Fax: 583-2922

Korea Plywood Industries Association  
Rm. 606, KFSB Bldg., 16-2, Yoido-dong, Yeoungdeungpo-ku, Seoul 150-010  
Phone: 780-3631~2  
Fax: 780-3634  
Email: [Kpia@chollian.net](mailto:Kpia@chollian.net)

Korea Housing Builders Association  
Profile: Promoting building and construction markets in Korea

Korea Housing Center  
15-23 Yoido-dong, Youngdeungpo-ku, Seoul, Korea  
Phone: (82)-(2) 785-0911  
Fax: (82)-(2) 785-3915  
Email: [webmaster@khba.or.kr](mailto:webmaster@khba.or.kr)  
Website: <http://www.khba.or.kr/english/welcome.html#>

Korean International Trade Association  
Profile: Korea's # 1 Business Directory  
Website: [www.kita.org](http://www.kita.org)

### RESEARCH/EDUCATION

None Listed

### INDUSTRY

The Federation of Korea Industrial  
Profile: Industrial Competitiveness, Growth, and Development  
Phone: 82-2-3771-0114  
Fax: 82-2-3771-0110  
Email: [webmaster@fki.or.kr](mailto:webmaster@fki.or.kr)  
Website: <http://www.fki.or.kr/en/about/chron.asp>