

Facts & Figures

2016/17

NEW ZEALAND PLANTATION
FOREST INDUSTRY





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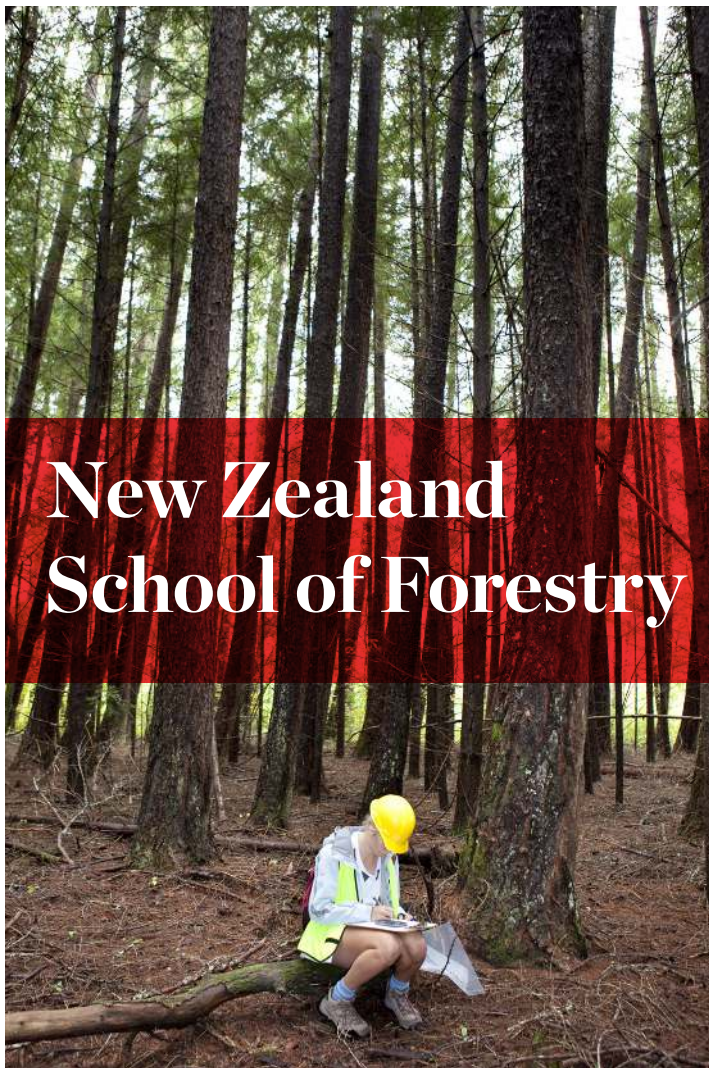
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SECTION 1

New Zealand Planted Forestry Highlights



New Zealand Planted Forestry Highlights

1,704,747 ha is the estimated net stocked plantation forest area at 1 April 2016. This is a reduction in the plantation area of 12,968 ha from 1 April 2015.

1



A RECORD

30.7 million m³ OF TIMBER WAS HARVESTED IN 2016, AN INCREASE OF 6.4% ON 2015, WITH 31.4 MILLION M³ EXPECTED TO BE HARVESTED IN 2018, ASSUMING LOG PRICES REMAIN STRONG.

2

\$5.47 billion was the export value of forest product exports to June 2017, comprising \$2.69b of logs and \$2.8b of non-log forest products.

3

\$3.55 billion is the total contribution of the forest industry to New Zealand's GDP; \$1.39b from forestry and logging and \$2.16b from downstream activity.

4

Source Box 1 NEFD 2016
Source Box 2 & 3 SOPI December 2017
Source Box 4 NZIER March 2017

New Zealand Planted Forestry in Summary

Area and standing volume statistics	1 April '14	1 April '15	1 April '16
Net stocked forest area (ha)			
Total estimated area	1,733,400	1,717,700	1,704,747
Growth characteristics			
Standing volume (000 m ³)	488,603	501,716	501,460
Average standing volume (m ³ /ha)	282	292	294
Area-weighted average age (years)	16.8	17.1	17.08
Area by species (ha)			
<i>Pinus radiata</i>	1,559,100	1,544,500	1,532,734
Douglas-fir	105,100	105,000	104,173
Cypress species	9,900	10,100	10,140
Other exotic softwoods	23,000	22,400	22,743
Eucalyptus species	23,800	23,300	23,182
Other exotic hardwoods	12,500	12,500	11,775
Planting statistics			
	Year ended 31 Dec '13	Year ended 31 Dec '14	Year ended 31 Dec '15
New planting (ha)			
Total estimated new planting	3,500	2,500	3,000
Restocking	40,867	41,533	39,948
Harvested area awaiting restocking	44,642	53,903	50,491
Harvesting statistics			
	Year ended 31 Mar '14	Year ended 31 Mar '15	Year ended 31 Mar '16
Harvesting (ha)			
Area clear felled (ha)	46,001	49,896	45,342
Volume clear felled (TRVIB ¹ ,000 m ³)	23,437	26,492	25,008
Volume production thinned (TRVIB ¹ ,000 m ³)	244	325	419
Total volume removed (TRVIB ¹ ,000 m ³)	23,681	26,818	25,427
Average clear fell yield (m ³ /ha)	515	537	552
Area-weighted average clear fell age for <i>Pinus radiata</i> (years)	28.9	28.4	29.1
Estimated planted forest roundwood removal (000m ³) ²	30,258	29,602	28,794

Notes

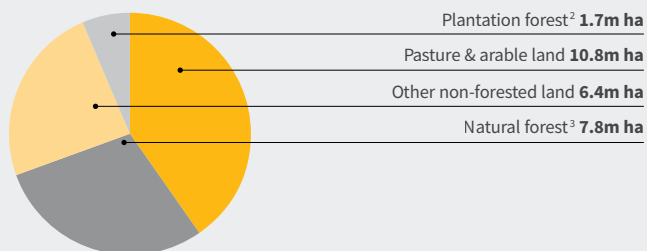
¹ TRVIB is an abbreviation for Total Recoverable Volume Inside Bark.

² This is an indirect estimate based on the application of conversion factors to the various forest products.

Source New Zealand Planted Forestry in Summary NEFD 2014, 2015 & 2016

Land Use and Returns

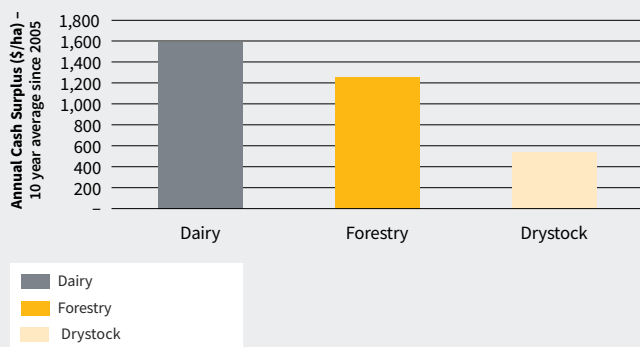
New Zealand Land Use¹



Export Value Comparisons

Product	Area farmed ⁴ pasture only (hectares)	Export earnings (fob) average 2011-15	Export earnings per hectare
Red meat + Wool & hides ⁵	5,397,855	\$7,933,000,000	\$1,470
Dairy Products	2,110,569	\$13,356,000,000	\$6,328
Forestry	1,684,209	\$4,747,000,000 ¹	\$2,819

Annual Cash Surplus⁶



Notes

- Some data has not been revised since 2013.
- Plantation forest excludes harvest area awaiting replanting.
- This figure now includes regenerating natural forest as well as established natural forest.
- Farmed areas from Statistics NZ website, using "pastureland" only for beef, sheep and deer farms and excluding other land categories, notably mature and regenerating native bush. Forestry areas are based on plantations of exotic trees and harvested areas awaiting restocking including such land on various farm types, but again excluding mature and regenerating native bush. These areas are dated 30th June 2012.
- These figures are the average for 2014 and 2015 only.
- Dairy and Forestry is 10 year averages since 2005. Drystock is for East Coast hill country. Beef & Lamb NZ data.

Source **New Zealand Land Use** Various
 Source **Export Value Comparisons** Statistics NZ
 Source **Annual Cash Surplus** Scion Nov 2015

Comparative Export Earnings and Predictions

MPI anticipates that in the year to June 2018 export returns from New Zealand forest product exports will

be **\$5.66 billion**, which is ahead of horticulture returns.

1

MPI Predictions for Primary Industry Sector Export Values 2021 (\$billions)



MPI Predictions for Primary Industry In-sector Export Values 2021 (\$billions)

Export	Billions \$
Whole milk powder	\$6.63
Butter, AMF & cream	\$3.83
Non-log forestry	\$3.14
Logs	\$3.13
Sheepmeat	\$3.02
Beef	\$2.86
Kiwifruit	\$2.22
Wine	\$1.87
Wild capture seafood	\$1.53
Skim milk & butter milk powder	\$1.52
Apples & pears	\$1.01
Wool & wool products	\$0.91
Honey	\$0.37

Source **Box 1** SOPI December 2017

Source **MPI predictions for Primary Industry In-sector & Sector Export Values 2021** SOPI June 2017

Contribution of the Main Plant Species to New Zealand GDP

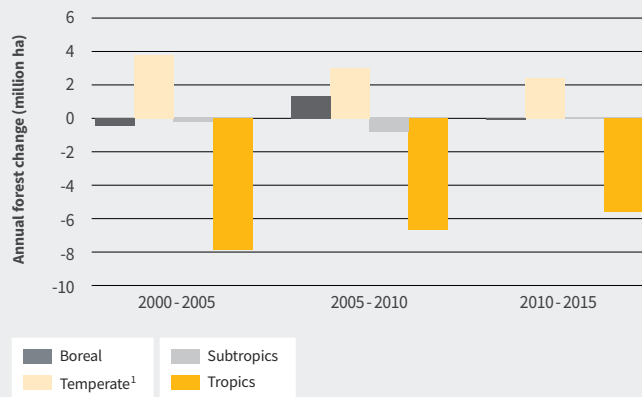
Plant	Total impact on GDP in 2012	Ranking #
Ryegrass	\$14,537,000,000	1
<i>Pinus radiata</i>	\$4,454,000,000	2
Clover	\$2,334,000,000	3
Kiwifruit	\$807,000,000	4
Douglas-fir	\$200,000,000	12
Eucalyptus	\$41,000,000	23
Cypress	\$17,000,000	32



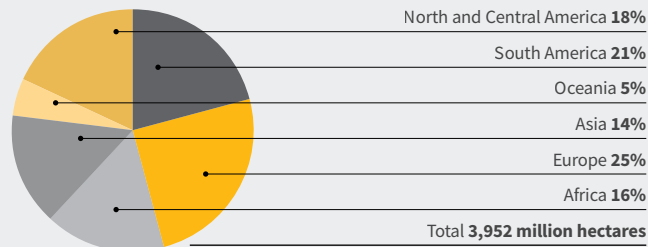
Source Contribution of the Main Plant Species to New Zealand GDP NZIER July 2016

Global Forests

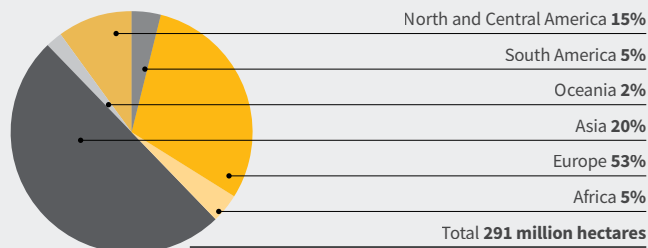
Net Annual Average Forest Area Change, by Climatic Domain (million ha per year)



Global Forest Areas



Global Planted Forest Areas



Notes

¹ New Zealand = Temperate.

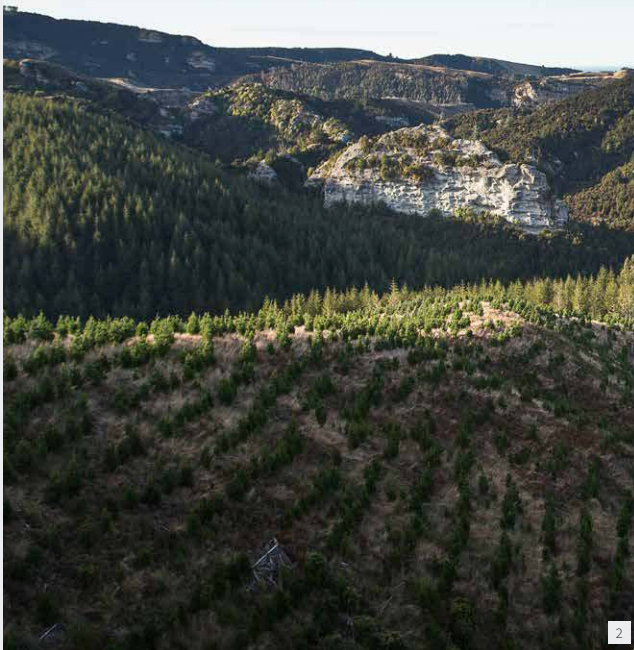
Source Net Annual Average Forest Area Change FAO State of the World's Forests 2016

Source Global Forest Areas & Planted Forest Areas FAO Global Forest Resources Assessment 2015

46% *Pinus* spp. makes up approximately 46% of the estimated 53.4 million hectares of planted production forest worldwide, with Eucalypts the next largest at 26%.

1

ACCORDING TO THE FAO “AFFORESTATION IS THE ACT OF ESTABLISHING FORESTS THROUGH PLANTING AND/OR DELIBERATE SEEDING ON LAND THAT IS NOT CLASSIFIED AS FOREST, WHILE REFORESTATION REFERS TO THE RE-ESTABLISHMENT OF FOREST THROUGH PLANTING AND/OR DELIBERATE SEEDING ON LAND CLASSIFIED AS FOREST, FOR INSTANCE AFTER A FIRE, STORM OR FOLLOWING CLEARFELLING.”



2

Source **Box 1** FSC Strategic Review on the Future of Forest Plantations 2012
Source **Box 2** FAO Global Forest Resource Assessment 2010

SECTION 2

New Zealand Planted Forestry



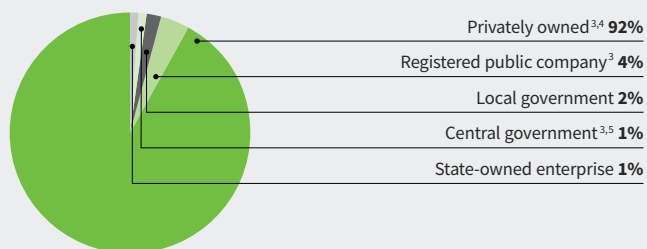
Planted Forest Mix and Ownership

The trees in **90%** of all New Zealand planted forests are *Pinus radiata*, with most of the rest growing in the South Island.

1

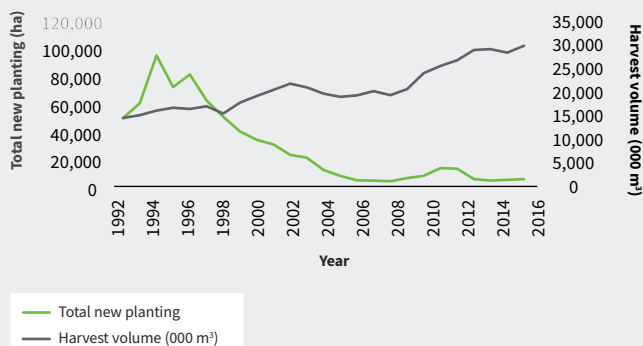
Planted Forest Ownership^{1,2,6}

As at 1 April 2016



Forestry Plantings and Harvest Volumes

Year ended December 1992–2016



Notes

¹ Ownership is based solely on the ownership of the forest irrespective of the ownership of the land.

² Net stocked planted production forest area.

³ Note that significant changes in forest ownership occurred during 2003 resulting in large areas of forest previously owned by public companies now being privately owned.

⁴ "Privately owned" includes all privately owned forests. The legal entities included in this category are private companies, partnerships, individuals and trusts, which include Māori trusts and incorporations.

⁵ "Central Government" forests are predominantly Crown owned forests on Māori leasehold land. These forests are managed by the Ministry for Primary Industries.

⁶ Individual entries may not sum to totals shown due to rounding.

Source **Box 1 & Planted Forest Ownership** NEFD 2016

Source **Forestry Plantings and Harvest Volumes** Statistics NZ & MPI

Commercial Planted Forest Ownership and Management¹

Forest Owner/Manager	Net stocked forest area (ha)			
	2012 As at 1 April	2014 As at 31 Dec	2015 As at 31 Dec	2016 As at 31 Dec
Hancock Natural Resource Group	235,000	225,000	219,000	189,084
Kaingaroa Timberlands	174,000	175,000	175,740	176,152
Rayonier/Matariki Forests	121,000	118,060	115,287	121,112
PF Olsen Ltd	71,000	109,182	115,766	115,766
Global Forest Partners LP	84,000	84,960	73,191	73,191
Ernslaw One	109,000	113,159	105,644	106,002
Crown Forestry (MPI)	46,000	19,000	17,081	12,772
Juken New Zealand	31,000	32,100	32,299	22,993
Pan Pac Forest Products	34,000	35,200	34,436	34,230
GMO Renewable Resources	26,000	19,000	19,990	19,250
Hikurangi Forest Farms	25,000	25,000	26,581	24,757
Wenita	25,000	27,570	25,210	24,020
Roger Dickie NZ	26,000	26,576	26,576	27,000
Port Blakely NZ Ltd	23,000	23,222	24,837	25,324
Forest Enterprises	21,000	21,000	20,000	19,727
City Forests	16,000	16,300	16,469	16,795
Lake Taupo Forest Trust	16,000	17,795	18,726	21,109
Summit Forests NZ Ltd	–	23,700	24,622	27,783
Ngāi Tahu Forest Estates Ltd	–	25,950	25,950	27,250
Others (under 10,000 ha)	629,000	629,556	644,150	644,150
Total Plantation Forest Area	1,712,000	1,767,330	1,761,555	1,728,467

Notes for page 13 and 14:

¹ Where available, figures, from 2016 have been used – otherwise figures are from 2015.

• Kaingaroa Timberlands is managed by Timberlands Ltd.

• GMO Renewable Resources is a shareholder in Wenita.

• Roger Dickie NZ Forests are managed by Forest Management NZ LTD.

• Lake Taupo Forest Trust is managed by New Zealand Forest Managers.

• Others (under 10,000 ha) are estimated numbers only.

• Crown land includes land leased under Crown Forest Licence.

• Kaingaroa Timberlands is 42% owned by the NZ Superannuation Fund.

Source **FOA**

Ownership of Forest Land¹

Firm/Entity	Underlying Land Status (Productive area (ha))				Total
	Freehold	Leasehold			
		Crown	Māori Inc.	Other	
Hancock Natural Resource Group	89,507	8,028	71,025	31,730	200,290
Kaingaroa Timberlands	1,393	-	181,869	1	183,263
Rayonier / Matariki Forests	54,544	30,893	28,961	5,800	120,198
Global Forest Partners LP	43,687	-	49,053	925	93,665
Ernslaw One	57,334	43,818	9,542	-	110,694
Crown Forestry (MPI)	1,522	-	10,404	2,368	14,294
Juken New Zealand	9,947	12,000	9,881	1,111	32,939
Pan Pac Forest Products	4,809	15,736	15,020	81	35,646
GMO Renewable Resources	17,850	-	1,460	340	32,939
Hikurangi Forest Farms	25,570	-	2,218	296	28,084
Wenita	5,620	-	-	19,590	25,210
Roger Dickie NZ	26,576	-	-	-	26,576
Port Blakely NZ Ltd	23,688	-	-	1,149	24,837
Forest Enterprises	20,410	-	-	-	20,410
City Forests	15,219	-	-	1,250	16,469
Lake Taupo Forest Trust	21,109	-	1,007	579	22,695
Summit Forests NZ Ltd	1,319	19,255	2,947	1,101	24,622
Ngāi Tahu Forest Estates Ltd	25,700	-	-	250	25,950
Totals	445,804	129,730	383,387	66,571	1,038,781

Notes:

¹ Where available, figures, from 2016 have been used – otherwise figures are from 2015.

Plantation Forest Management Statistics¹

Firm/Entity	Forest Management (ha)	
	Investment Management (TIMO) ²	Property Management ³
Hancock Natural Resource Group	189,084	-
Hancock Forest Management	-	157,011
Kaingaroa Timberlands	-	183,263
Rayonier/Matariki Forests	-	-
PF Olsen Ltd	2,567	154,539
Global Forest Partners LP	10,215	73,191
Ernslaw One	-	-
Crown Forestry (MPI)	-	-
Juken New Zealand	-	-
Pan Pac Forest Products	-	35,624
GMO Renewable Resources	19,650	-
Hikurangi Forest Farms	-	-
Wenita	29,668	35,568
Roger Dickie NZ	27,000	-
Port Blakely NZ Ltd	-	-
Forest Enterprises	20,265	-
City Forests	-	-
Lake Taupo Forest Trust	-	-
Summit Forests NZ Ltd	29,047	29,047
NZ Forest Managers	-	88,500
Totals	268,468	732,769

Notes:

¹ Where available, figures, from 2016 have been used – otherwise figures are from 2015.

This table is designed to identify who **manages** NZ forests.

Within "management" there are 2 main categories:

² Timberland Investment Management (commonly referred to as a TIMO).

These organisations do not own any forest. Greenplan, Roger Dickie and Forest Enterprises are TIMOs, along with GMO RR, Hancock Natural Resource Group, New Forests, GFP etc. The forests are owned by retail investors or institutional funds.

³ Property Management.

Planning and managing field operations, mapping and maintaining records.

Some entities carry out both functions within the same organisation, others carry out both for some parts of a forest estate and not others.

Source FOA

Environmental Certification¹

Company	Forest Management area (ha)	
	FSC	PEFC
Hancock Natural Resource Group	184,228	156,332
Hancock Forest Management	156,332	156,332
Kaingaroa Timberlands	183,263	183,263
Rayonier/Matariki Forests	159,379	-
PF Olsen Ltd	52,446	5,273
Global Forest Partners LP	-	-
Ernslaw One	142,922	-
Crown Forestry (MPI)	-	-
Juken New Zealand	40,869	-
Pan Pac Forest Products	34,230	-
GMO Renewable Resources	13,630	-
Hikurangi Forest Farms	35,013	-
Wenita	32,311	-
Roger Dickie NZ	-	-
FMNZ	-	-
Port Blakely NZ Ltd	34,342	-
Forest Enterprises	-	-
City Forests	20,860	-
Lake Taupo Forest Trust	21,109	-
Summit Forests NZ Ltd	29,047	-
Ngāi Tahu Forest Estates Ltd	26,150	-
NZ Forest Managers	57,000	-
Others (under 10,000 ha)	-	-

As of August 2016, there were

1,240,724 ha of New Zealand forests certified by the Forest Stewardship Council.

Notes:

¹ Where available, figures, from 2016 have been used – otherwise figures are from 2015.
^{*} From pg 5, Nsa 1,771,618 + area awaiting restocking 53,903 = 1,825,521

Source FOA

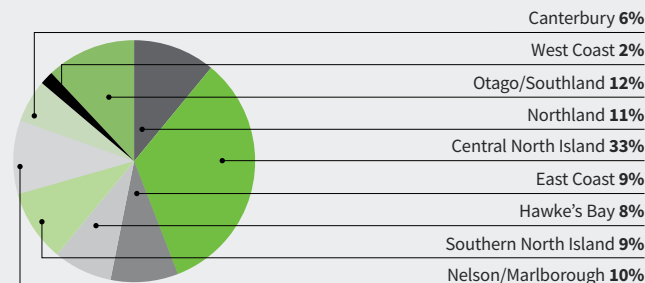
Planted Forests by Location

As at 1 April 2016

Estimated Total Forest Area^{1,2}

Region	Estimated Total Forest Area (HA)		
	2014	2015	2016
Northland	191,512	188,416	185,939
Central North Island	573,966	569,297	567,781
East Coast	156,432	155,079	156,099
Hawke's Bay	133,324	134,841	133,746
Southern North Island	162,779	164,748	159,977
Nelson/Marlborough	168,421	169,783	166,798
West Coast	31,775	31,205	31,422
Canterbury	108,371	98,223	96,860
Otago/Southland	206,885	206,123	206,126
Total	1,733,465	1,717,715	1,704,747

Plantation Forests 2016^{1,2}



Notes:

¹ Net stocked planted production forest area.

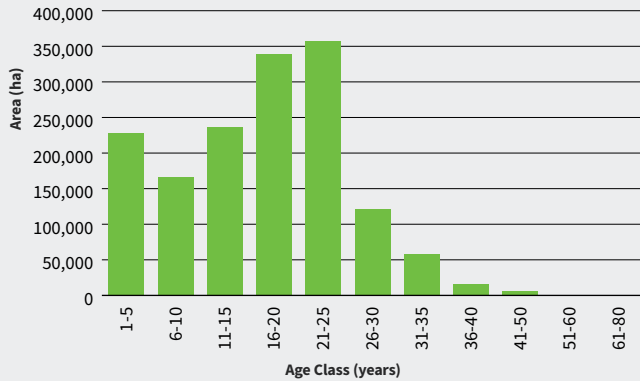
² Individual entries may not add to totals due to recording.

Source Estimated Total Forest Area & Plantation Forests 2016 NEFD 2016

Net Stocked Area of *Pinus radiata*

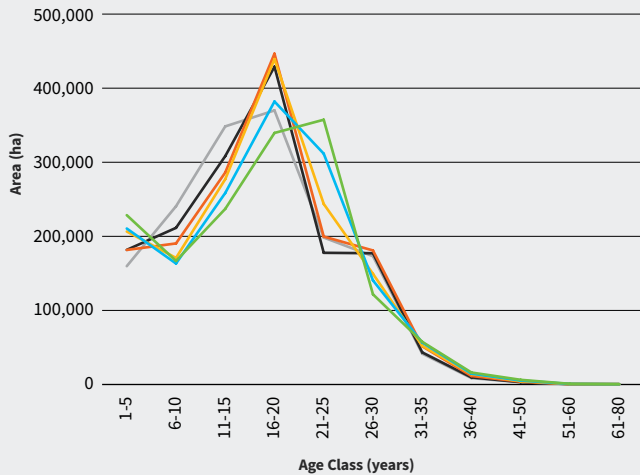
By Age Class as at 1 April 2016

Forest Area 2016 by Annual Age Class¹



Forest area *Pinus radiata*

Age Class Over Time 2011-2016¹



2016
2015
2014
2013
2012
2011

Notes

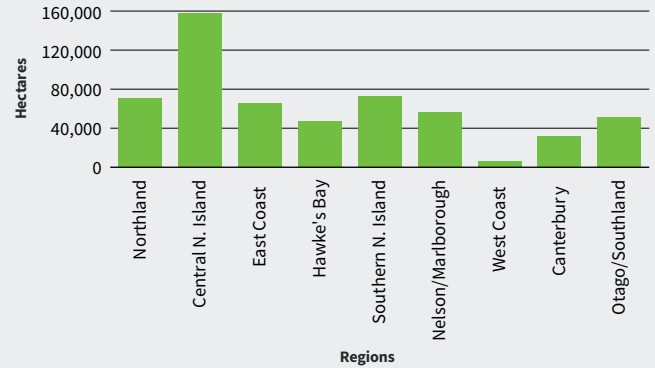
¹ The area is shown for each age in single years up to 35 years. After this, age classes are aggregated.

Source Forest Area by Annual Age Class & Age Class Over Time NEFD 2016

Harvestable *Pinus radiata*

Forest Area Planted in *Pinus radiata*

Of Harvestable Age (21+) Per Region (ha)



Harvestable *Pinus radiata*

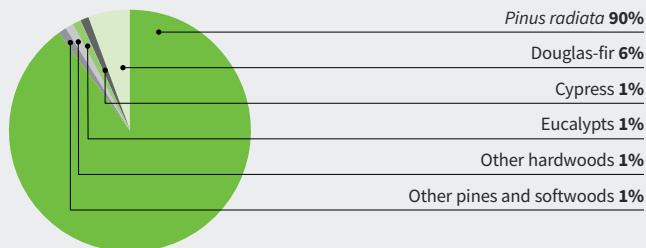


Source Forest Area Planted in Radiata Pine NEFD 2016

Plantation Species (ha)

As at 1 April 2016

Species Distribution - 2016¹



Minor plantation species

Other pines; *P. nigra*, *P. muricata*, *P. ponderosa*

Other softwoods; *Redwoods*, *Larch*, *Cryptomeria*

Indigenous species; *Kauri*, *Totara*

Other hardwoods; *Poplars*, *Acacia*, *Willows*, *Black Walnut*, *Paulownia*, *Oaks*

Eucalypts; *E. obliqua*, *E. fastigata*, *E. regnans*, *E. nitens*, *E. saligna*, *E. botryoides*, *E. pilularis*, *E. muelleriana*, *E. globoidea*.

Approximate Harvest Age Over the Past Five Years

Species	Harvest Age
<i>Pinus radiata</i>	29 years
Douglas-fir	40 years
Cypress	34 years
Eucalypts	21 years

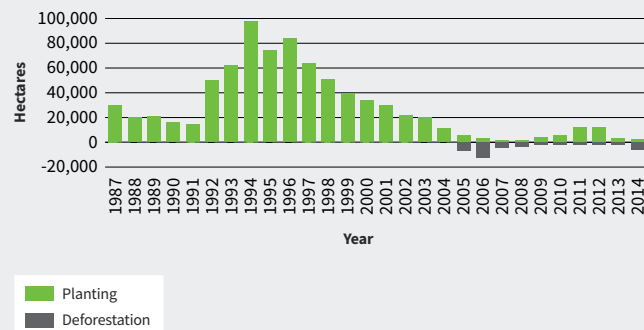


Source Species Distribution - 2016 NEFD 2016

Source Approximate Harvest Age Over the Past Five Years SOPI June 2017

New Forest Planting and Deforestation

New Forest Planting (1987) and Deforestation (since 2005)^{1,2}



Tree Stock Sales from 2009 to 2016

	Tress Stock Sales in Millions							
	2009	2010	2011	2012	2013	2014	2015	2016 ^p
<i>Pinus radiata</i>	37.7	46.4	58.9	64.6	48.5	47.2	45.8	49.3
Total	43.2	53.2	67.6	72.5	54.11	50.8	49.51	52.7

p,Provisional

Notes

¹ These estimates do not include immature forest cleared for other land uses.

² 2011 Deforestation figure: www.maf.govt.nz/news-resources/statistics-forecasting/statistical-publications/national-exotic-forest-description

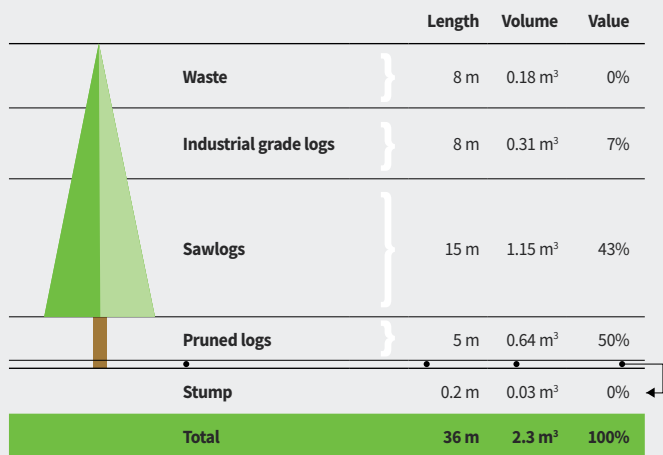
Source New Forest Planting (1987) and Deforestation (since 2005) & Box 1 NEFD 2016

Source Tree Stock Sales from 2009 to 2016 MPI, Tree Stock Sales and Forest Planting in 2016

Typical Log Out-turn

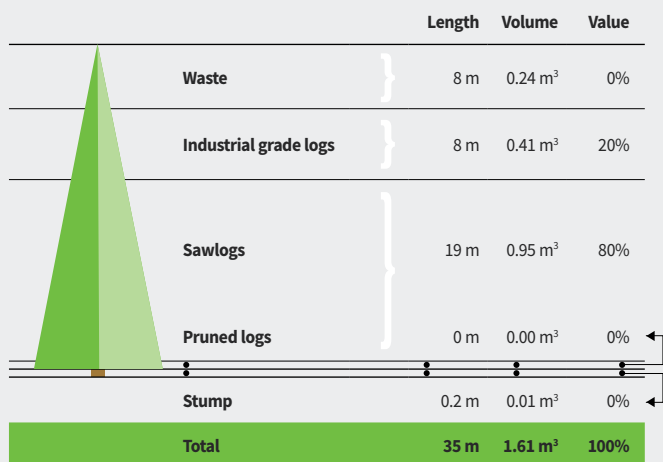
Direct Sawlog Regime

Pruned and thinned. Final Crop Stocking 228 stems per hectare.



Structural Regime

Pruned and thinned. Final Crop Stocking 487 stems per hectare.



Notes

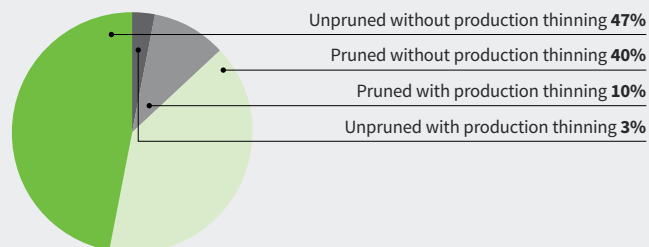
¹ Average site (Site Index 29 m, 300 Index 23 m³/ha/yr). Clearfelled at 28 years.

Source Direct Sawlog Regime & Structural Regime Scion

Forest Management Trends

For Year Ended 31 Dec 2016

Pinus radiata by Tending Regime - 2016

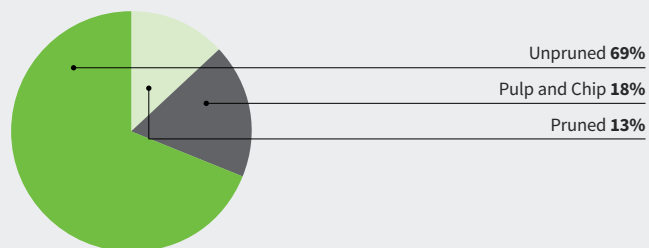


	%	2014 Hectares ¹	%	2015 Hectares ¹	%	2016 Hectares ¹
Unpruned without production thinning	41%	689,800	45%	700,00	47%	715,100
Pruned without production thinning	44%	651,000	41%	637,600	40%	619,700
Pruned with production thinning	13%	183,700	11%	173,500	10%	158,200
Unpruned with production thinning	2%	35,000	2%	33,300	3%	39,700

The area under an unpruned management regime continues to grow, to now about **50%** of the *Pinus radiata* forest estate. The area of production thinned *radiata* forest is also decreasing, now to about 13%.

1

Pinus radiata Harvest Volume by Log Type



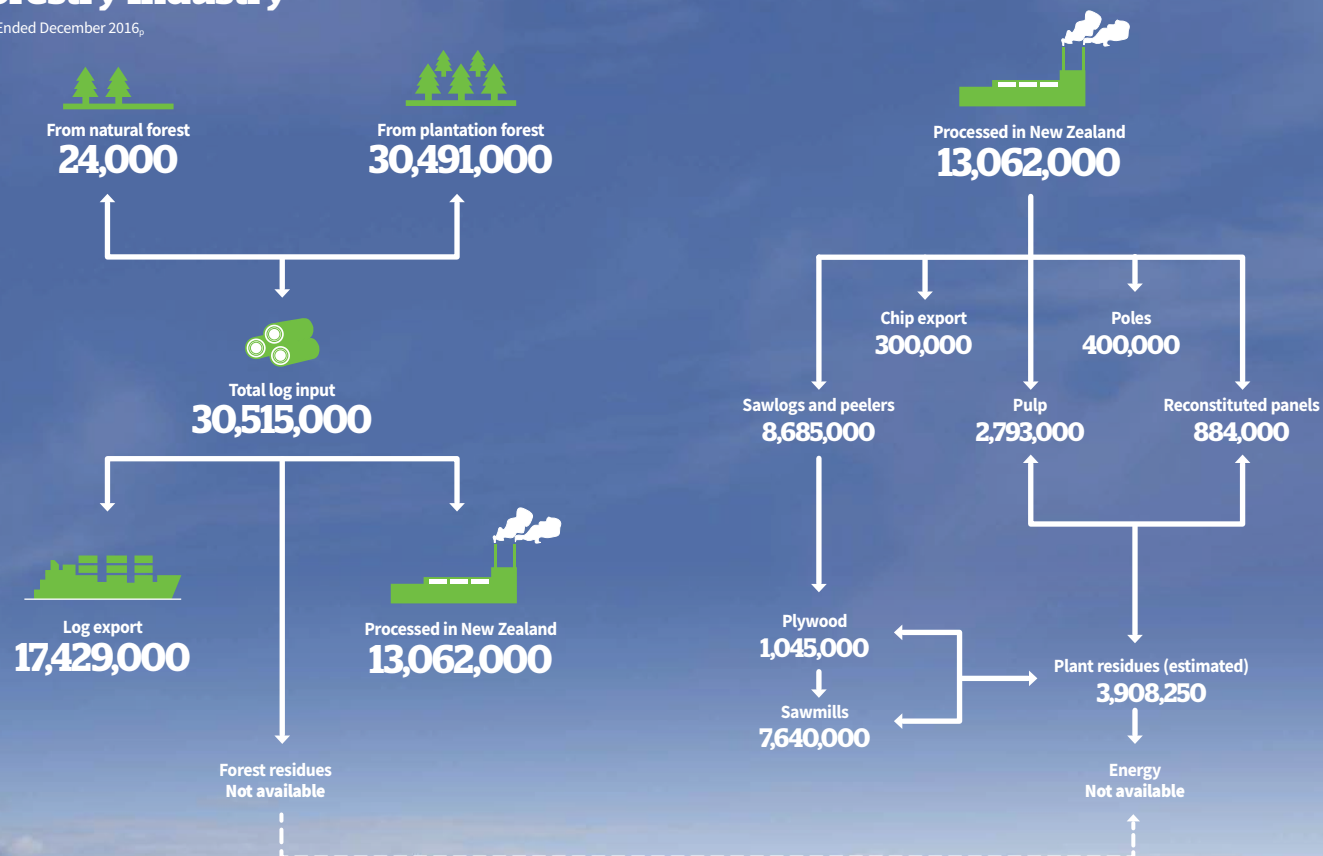
Notes

¹ Hectares rounded to nearest hundred thousand.

Source *Pinus radiata* by Tending Regime & Radiata Pine Harvest Volume by Log Type NEFD 2016

Log Flow in the New Zealand Forestry Industry

Year Ended December 2016,



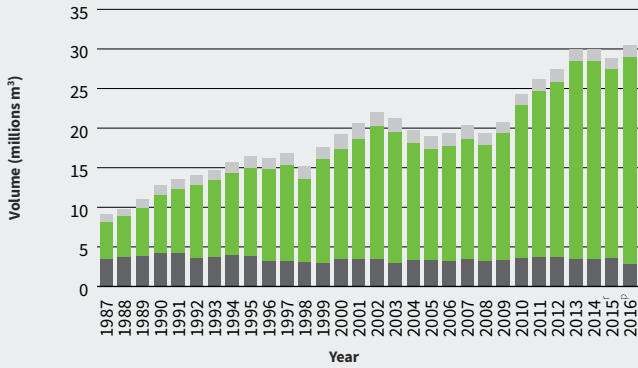
Notes

p Provisional

Source Log Flow in the New Zealand Forestry Industry MPI

Plantation Forest Harvest

for Year Ended 31 Dec 2016



- Pulp logs
- Quality logs
- Other roundwood

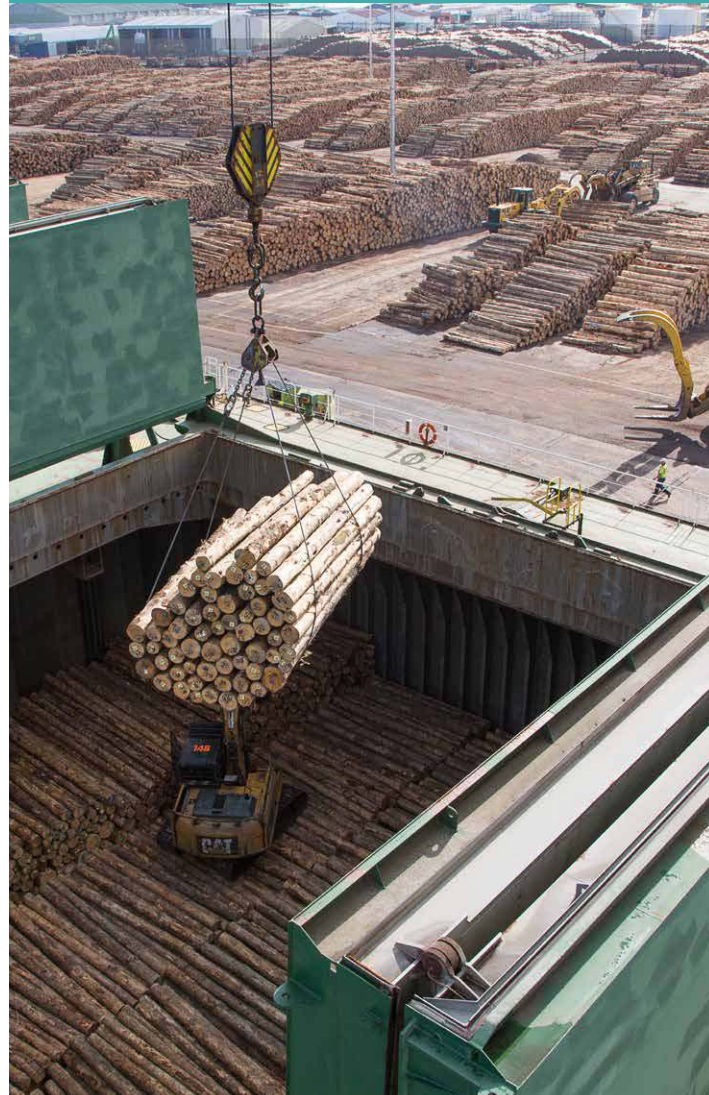
^r Revised ^p Provisional



Source Plantation Forest Harvest MPI, MAF

SECTION 3

Export and Production



Top Export Destinations*

For Year Ended 31 Dec 2016



1. China (People's Republic of) \$NZ 2,222,935

Logs and poles	81.55%
Sawn timber/sleepers	5.71%
Wood pulp	9.27%
Paper and paperboard	2.15%
Panel products	1.14%
All other	0.19%

2. Australia \$NZ 597,300

Logs and poles	21.49%
Sawn timber/sleepers	21.49%
Wood pulp	14.71%
Paper and paperboard	23.67%
Panel products	21.57%
All other	18.16%

3. Korea (Republic of) \$NZ 482,794

Logs and poles	77.85%
Sawn timber/sleepers	6.89%
Wood pulp	10.96%
Paper and paperboard	3.84%
Panel products	0.46%
All other	0.00%

4. Japan \$NZ 429,214

Logs and poles	15.09%
Sawn timber/sleepers	6.81%
Wood pulp	12.85%
Paper and paperboard	0.05%
Panel products	46.55%
All other	18.64%

5. India \$NZ 287,920

Logs and poles	84.57%
Sawn timber/sleepers	1.88%
Wood pulp	8.97%
Paper and paperboard	3.11%
Panel products	1.40%
All other	0.07%

6. USA \$NZ 242,201

Logs and poles	0.20%
Sawn timber/sleepers	79.07%
Wood pulp	0.00%
Paper and paperboard	1.51%
Panel products	15.12%
All other	4.10%

7. Indonesia \$NZ 117,366

Logs and poles	0.00%
Sawn timber/sleepers	25.49%
Wood pulp	50.90%
Paper and paperboard	2.12%
Panel products	21.47%
All other	0.01%

8. Philippines \$NZ 90,816

Logs and poles	0.01%
Sawn timber/sleepers	24.97%
Wood pulp	5.63%
Paper and paperboard	33.93%
Panel products	34.52%
All other	0.94%

9. Taiwan \$NZ 88,999

Logs and poles	22.25%
Sawn timber/sleepers	36.26%
Wood pulp	17.55%
Paper and paperboard	12.37%
Panel products	11.57%
All other	0.01%

10. Viet Nam \$NZ 82,734

Logs and poles	7.02%
Sawn timber/sleepers	65.87%
Wood pulp	1.38%
Paper and paperboard	9.73%
Panel products	15.59%
All other	0.42%

11. Thailand \$NZ 74,938

Logs and poles	2.60%
Sawn timber/sleepers	41.77%
Wood pulp	28.83%
Paper and paperboard	24.97%
Panel products	1.47%
All other	0.35%

12. Malaysia \$NZ 58,183

Logs and poles	0.30%
Sawn timber/sleepers	13.83%
Wood pulp	24.74%
Paper and paperboard	42.60%
Panel products	18.53%
All other	0.00%

13. Singapore \$NZ 39,891

Logs and poles	3.55%
Sawn timber/sleepers	11.96%
Wood pulp	80.48%
Paper and paperboard	1.35%
Panel products	1.50%
All other	1.16%

14. South Africa \$NZ 37,306

Logs and poles	0.00%
Sawn timber/sleepers	0.00%
Wood pulp	98.26%
Paper and paperboard	0.00%
Panel products	0.00%
All other	1.74%

15. Netherlands \$NZ 33,477

Logs and poles	0.00%
Sawn timber/sleepers	98.40%
Wood pulp	0.70%
Paper and paperboard	0.08%
Panel products	0.00%
All other	0.82%

Notes

* Values are NZ\$000 f.o.b. and may include items, e.g. some plywood items, for which no quantities are given. Paper and paperboard includes Newsprint for June 2011yr. All other forestry products include chips, mouldings, manufactures of paper and paperboard, furniture and miscellaneous forestry products. Other countries are all other countries to which New Zealand has exported forest products during the year.

Source Top Export Destinations Statistics NZ and FOA

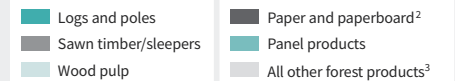
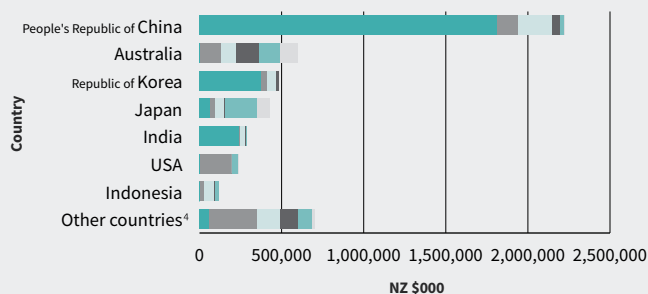
Export Value by Destination and Product¹

for Year Ended 31 Dec 2016

Total Export Value by Main Countries of Destination

Country of Destination	Total Export Value (NZD\$ '000)		
	2014	2015	2016
China (People's Republic of)	1,963,694	1,826,407	2,222,935
Australia	693,027	711,693	597,300
Korea (Republic of)	466,159	462,460	482,794
Japan	434,767	405,312	429,214
India	268,110	254,383	287,920
United States of America	173,398	224,286	242,201
Indonesia	145,542	150,097	117,366
Philippines	66,923	74,927	90,816
Taiwan	80,408	98,875	88,999
Viet Nam	66,923	74,927	82,734
Thailand	67,716	76,780	74,938
Malaysia	63,849	70,671	58,183
Singapore	n/a	n/a	39,891
South Africa	60,118	61,076	37,306
Netherlands	19,983	21,096	33,477
Other countries ⁴	197,472	216,916	196,347
Total	4,798,263	4,748,708	5,082,419

Exports of Forestry Products by Main Countries of Destination



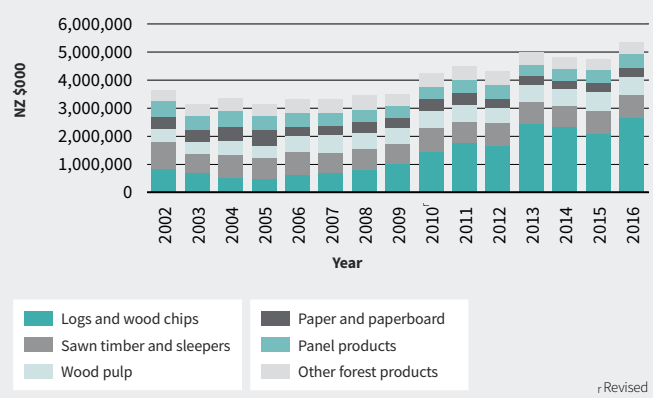
Notes
¹ Values are NZ\$000 f.o.b. and may include items, e.g. some plywood items, for which no quantities are given.
² Paper and paperboard includes Newsprint for June 2011 yr.
³ All other forestry products include chips, mouldings, manufactures of paper and paperboard, furniture and miscellaneous forestry products.
⁴ Other countries are all other countries to which New Zealand has exported forest products during the year.

Source Export Value by Destination and Product Statistics NZ and FOA

Product Export Earners

for Year Ended 31 Dec 2016

Major Export Earners^{1,2}



r Revised

In 2016, **70%+** of New Zealand's log exports went to China. China has reduced domestic plantation harvesting and banned cutting natural forests, while the high pace of housing construction continues. However New Zealand sawn timber exports to China fell 16% in 2016.



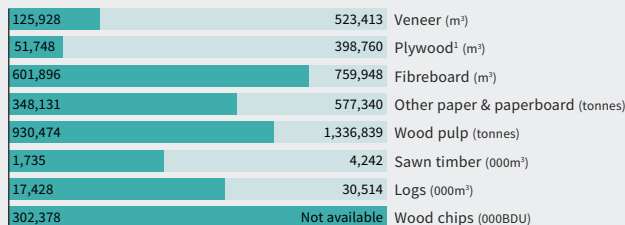
Notes
¹ Paper and paperboard includes Newsprint data, therefore differs from Statistics NZ data
² Excludes re-exports. Newsprint data 12 months ending June 2010.

Source Major Export Earners Statistics NZ and FOA
Source Box 1 & 2 SOPI June 2017

Exports of Forest Products

for Year Ended 31 Dec 2016

Production and Exports of Selected Forestry Products



Quantity exported²
Total production



MPI EXPECTS TIMBER EXPORTS TO GROW

4.8%

FROM \$868 MILLION IN THE YEAR TO JUNE 2017, TO \$910 MILLION IN 2018.

1

MPI expects pulp exports to rise to **\$680 million** in the year to June 2018, up 3.8% from the 2017 year, with the main demand from China and emerging markets.

2

Notes

¹ Plywood includes laminated veneer lumber.

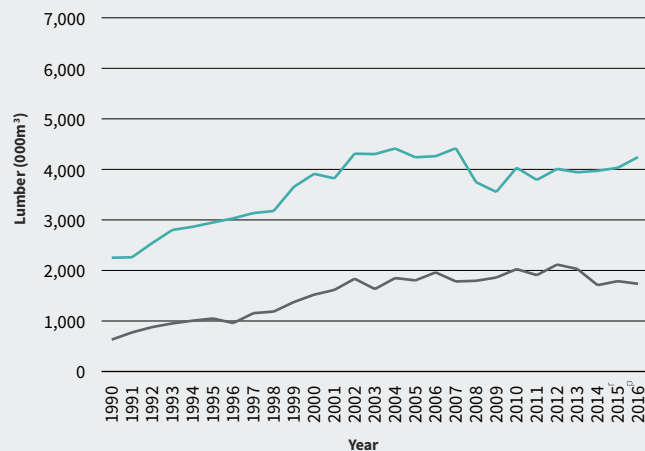
² Exports excluded re-exports.

Source **Production and Exports of Selected Forestry Products** MPI, Statistics NZ and FOA
Source **Box 1 & 2** SOPI December 2017

Lumber and Log Production and Exports

for Year Ended 31 Dec 2016

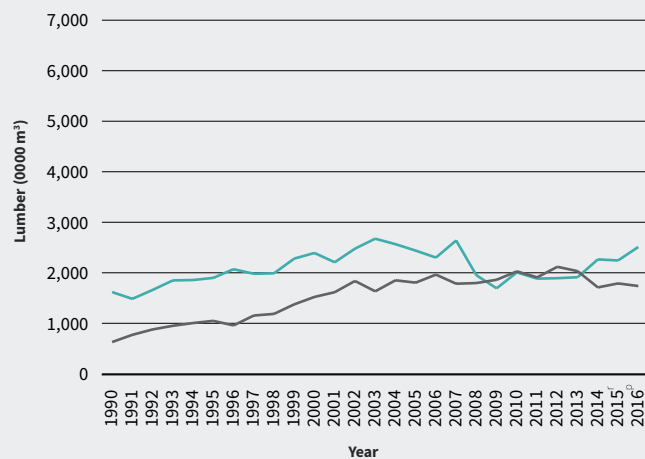
Lumber Production and New Zealand Lumber Exports



Lumber production
New Zealand lumber exports

r Revised p Provisional

Domestic vs International Log Consumption



New Zealand domestic consumption
New Zealand lumber exports

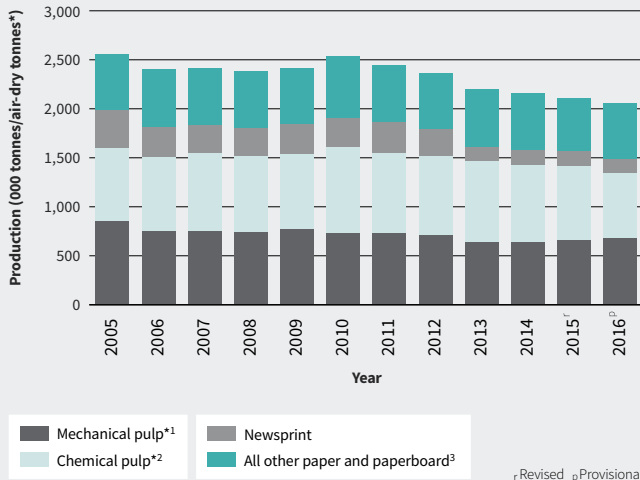
r Revised p Provisional

Source **Lumber Production and Exports** MPI

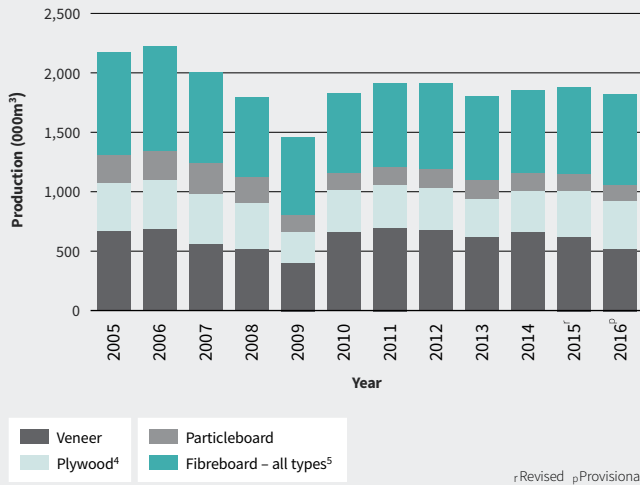
Paper, Pulp and Panel Products Production

for Year Ended 31 Dec 2016

Paper and Pulp Production



Panel Products Production



Notes

- Mechanical Pulp is those export items in HS item grouping 4701. Values are in NZ\$ free on board (f.o.b).
- Chemical Pulp is those export items in HS groupings 4702, 4703, 4704 and 4705. Values are NZ\$ free on board (f.o.b).
- All other paper and paperboard includes printing and writing paper, other paper and paperboard.
- Plywood includes laminated veneer lumber.
- Fibreboard includes MDF, hardboard & softboard.

Source Paper, Pulp and Panel Products Production MPI

The export value of panel exports is expected to decline 3.4% to **\$460 million** in 2018. Japan takes 40% of New Zealand panel exports and its construction industry is shrinking.

1



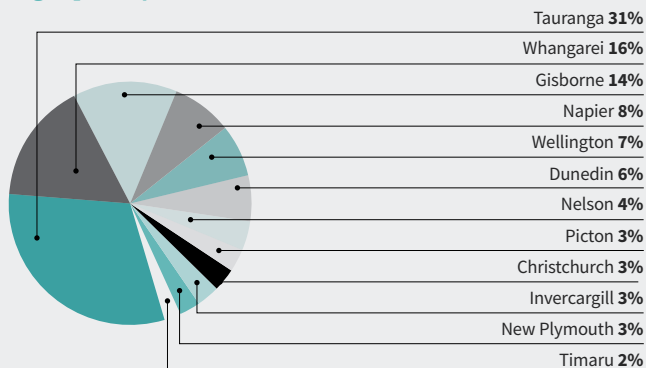
Source Box 1 SOPI December 2017

Exports by Port

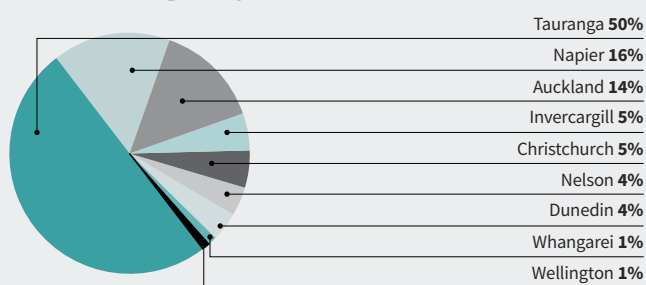
For Year Ended 31 Dec 2016

Port of Loading	Logs m ³	Sawn Timber m ³	Total m ³
Tauranga	5,328,417	788,158	6,116,575
Whangarei	2,875,604	34,109	2,909,713
Gisborne	2,401,019	-	2,401,019
Napier	1,291,638	299,332	1,590,970
Wellington	1,230,195	9,831	1,240,026
Dunedin	964,790	93,811	1,058,601
Nelson	750,879	73,886	824,765
Picton	653,314	3,077	656,391
Christchurch	543,874	96,548	640,422
Invercargill	531,816	98,330	630,146
New Plymouth	409,183	-	409,183
Timaru	403,160	837	403,997
Auckland	63,313	236,617	299,930
Total	17,447,202	1,734,536	19,181,738

Log Exports by Port¹



Sawn Timber Exports by Port¹



Notes

¹ Ports with <1% not included.

Source Log Exports by Port and Sawn Timber Exports by Port Statistics NZ, Overseas Trade

SECTION 4

Health and Safety and Training



TOGETHER TOWARDS ZERO

The Forest Industry Safety Council is a pan-industry initiative to reduce and ultimately eliminate deaths and serious injuries in New Zealand plantation forestry, by;

- Improving leadership of safety
- Providing easy-to-use forest safety resources through www.safetree.nz website
- Sharing better information on what's causing injuries
- Getting companies and workers more competent
- Helping the sector adapt to the Health and Safety at Work Act 2015.

**FOREST
INDUSTRY
SAFETY
COUNCIL**

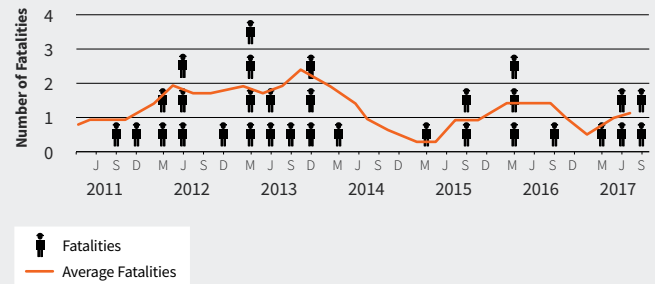
www.fisc.org.nz



safetree[™]
You are the key

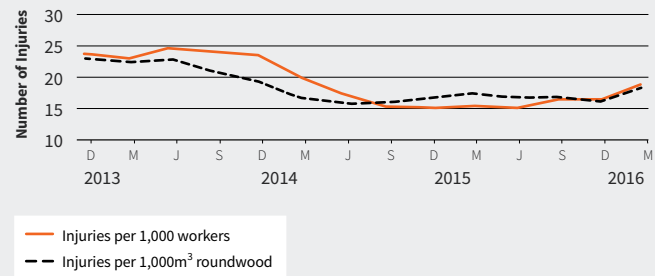
Health and Safety in the Forest Industry

Fatalities¹



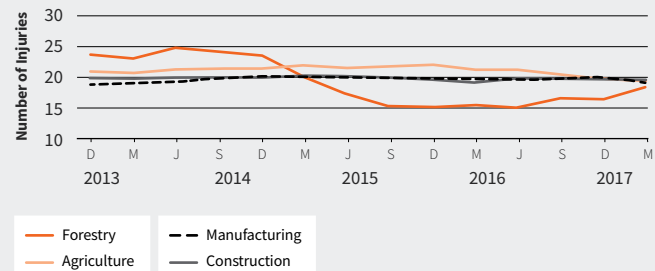
Severe Injuries¹

rate of injuries to workers resulting in more than a week off work



How Do We Compare?²

rate of injuries to workers resulting in more than a week off work



Notes

¹ Rolling average last four quarters.

² Rolling average last four quarters per 1,000 workers.

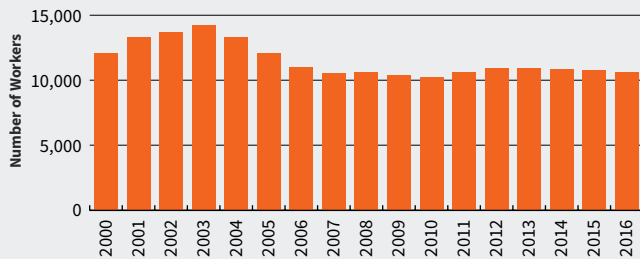
Source Fatalities, Severe Injuries & How do we Compare WorkSafe/MPI/FISC. Severe injury data is based on ACC claims where someone receives a period of weekly compensation within a quarter. Severe injury data lags by 6 months due to claim processing time.

Forest Industry Employment

Occupational Employment

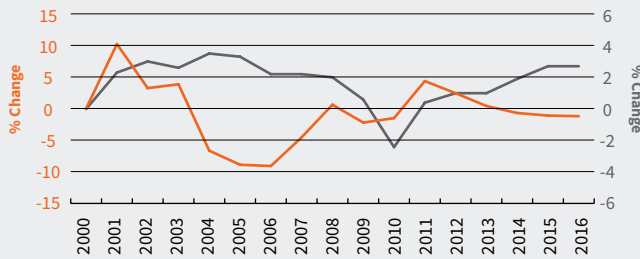
Jobs in top 5 occupations	2016
Forestry Worker	2,867
Logging Assistant	1,241
Production Manager (Forestry)	915
Forest Scientist	618
Logging Plant Operator	395

Forestry Employment



Forestry employment

New Zealand Growth in Employment



Forestry employment
Total economy employment

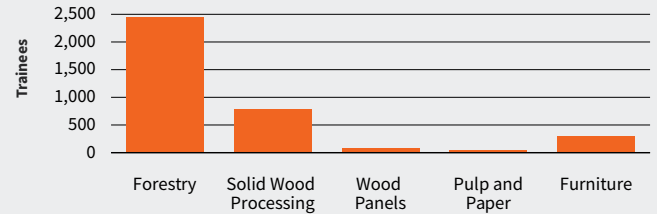
Notes

¹ The data in this report relates specifically to the areas of the sector as defined by Competenz

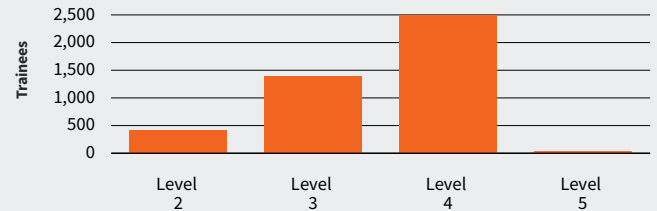
Source Forest Industry Employment Infometrics and Statistics New Zealand

Industry Training 2016

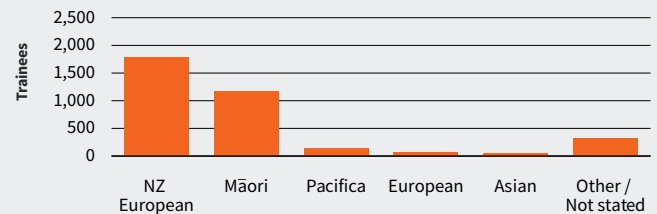
Trainee Count



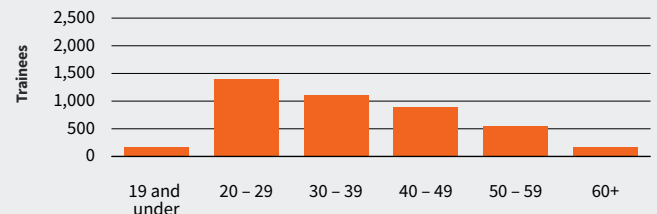
Trainee by Qualification Level



Trainees by Ethnicity



Trainees by Age



Source Competenz

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SECTION 5

Supplementary Information



NZ Wood



Wood is the world's most renewable raw material. For this reason forests and the wood they provide are vital in the fight against climate change. As the effects of global warming impact on our environment, the use of renewable and sustainable building materials has never been so important.

The stages of the wood story – planting and renewal, growth, harvesting and use – are part of a renewable cycle that takes and stores carbon dioxide from the atmosphere, making wood a better-than-carbon-neutral building material.

Wood is the only construction material which has absorbed CO₂ from the atmosphere when produced, not emitted more

During its production, one tonne of:

- Concrete – has released 159 kilos of CO₂ into the atmosphere
- Steel – has released 1.24 tonnes of CO₂ into the atmosphere
- Aluminium – has released 9.3 tonnes of CO₂ into the atmosphere
- Wood, however, has absorbed a net 1.7 tonnes of CO₂ from the atmosphere, over and above the energy expended in growing, harvesting and processing.

The more timber you use in a house, the more CO₂ you remove from the atmosphere

- It takes around 20 trees to build an average house frame
- A steel house frame has added 4.5 tonnes of CO₂ to the atmosphere
- A wooden house frame has absorbed 9.5 tonnes of CO₂ from the atmosphere
- Choosing timber options for an average house can take around 20 tonnes net of CO₂ out of the atmosphere (saving the equivalent of 150 trips Auckland to Wellington, or 7.1 years of car use)
- Using alternative materials (concrete, steel, brick and aluminium) can add 24 tonnes net CO₂ to the atmosphere (costing the equivalent of 180 trips Auckland to Wellington, or 8.6 years of car use).

Using wood is something we can all do to help the environment. By demanding and using more sustainably produced wood, we can ensure that more trees will be planted and more carbon dioxide will be absorbed from the atmosphere.

The result is a better world for ourselves, our families and future generations. It's simple.

Wood. Our most renewable raw material.
www.nzwood.co.nz

Forest Growers Levy Trust



The Harvested Wood Material Levy came into effect on 1 January 2014 with a rate of 27 cents per tonne. The levy generated in the year to 30 June 2016 was \$8,063,955 (ex GST). The proceeds from the levy are overseen by the Forest Growers Levy Trust which has contracted the Forest Owners and Farm Forestry Associations to manage the annual work programme. The annual work programme consists of research and work which will benefit the industry as a whole. More information, including the 2015 Annual Report, can be found at www.fgl.org.nz.



How the FGL is Invested¹

62.7%

RESEARCH SCIENCE & TECHNOLOGY

Sustainable intensification, diverse species/specialty wood products, Phytophthora sciences, Red needle cast, bio-protection, fire research, herbicide rates, riparian margin resilience, site productivity estimation, in-forest debarking, weed research, water quality monitoring and wilding pine management.

13.5%

FOREST HEALTH & BIOSECURITY

Forest biosecurity surveillance and administration costs of the Government Industry Agreement (GIA) sector plan, and work with other sectors on a Nursery Biosecurity Scheme Guideline. Recent initiatives include a pest impact calculator and workshops.

10.3%

PROMOTIONS

NZ Wood, publications, external memberships such as Wood Council of New Zealand, International Council of Forest & Paper Associations, sponsorship, career promotion, and a forestry census and research project to measure the significance of the forest industry to New Zealand.

8.3%

HEALTH SAFETY & TRAINING

This is the joint industry contribution to major health, safety and training issues identified by the Forest Industry Safety Council, WorkSafe NZ and ACC. Publication of the Drug Alcohol Policy and standards development also feature.

2.3%

FIRE

This is a contribution to the Forest Fire Prevention Programme. A major fire risk awareness campaign is to target farmers and tourists, the prime causes of forest fires.

1.7%

SMALL & MEDIUM FOREST ENTERPRISES

This is a forum for owners and managers of small to medium sized forests. It includes communication activities such as field days, publications, website, workshops and newsletters. A new project 'Enhanced Technology Transfer' has been developed.

0.7%

FOREST RESOURCE & ENVIRONMENT

Developing policies on forest growing and environment issues, including forest certification, climate change, water allocation and the Resource Management Act. Projects include an update of the Endangered Species Management Guide, Forestry Information Sheets and a Planted Forest Information Portal.

0.6%

TRANSPORTATION

An annual contribution to the pan-industry Log Truck Safety Council, measuring forest owners' real use of rural roads, as well as research into the effect of electronic road user charges and the Road Safety in Schools (Share the Roads) programme. New projects in 2016 included GIS mapping, a study into the effectiveness of high productivity motor vehicles and the stability of 3-axle trailers.

Notes

¹ The Harvested Wood Material Levy came into effect in January 2014 with a rate of 27c per tonne. The levy generated in the year to May 2017 was \$3,680,366. The levy runs until late 2019. More information is available at www.fgl.org.nz

Source **How the FGL is Invested** Forest Growers Levy Trust Annual Report 2016

NZ Forest Owners Strategic Plan

The Strategic Action Plan provides a pathway to shape a strong forest and wood products sector for the future.

The New Zealand plantation forest and wood products industry is based on wholly renewable resources, producing 100% of its products from plantation forests and recycled waste fibre; is New Zealand's largest biomaterial recycler and has a very low carbon footprint. In the future it will be substantially independent of non-renewable energy inputs apart from transport fuel (and even this could be sourced from New Zealand wood in the long run). The industry already provides greenhouse gas offsets, reducing New Zealand's overall carbon footprint.

Vision for the Plan

The vision target is that in the ten years to 2022 annual export earnings will more than double to \$12 billion from a New Zealand forest and wood products industry that is:

- delivering innovative wood-based solutions from a sustainable resource to meet our customers' needs
- manufacturing a range of high-value, fibre-based products, including new biochemical and biofuel value streams
- recognised as a world-leader in timber-engineered building solutions
- underpinned by forest growing as a valued and profitable land use
- recognised as a key New Zealand growth industry, delivering strong economic and environmental benefits
- connected and collaborative across the value chain, from end-product to seedling
- characterised by industry players that have pride in the wood products industry, with the sector regarded as a preferred career option for our brightest talent



Sector Agreements

New Zealand Climate Change Accord 2007

This is an agreement between FOA/FFA, the Timber Design Society and eight NGOs acknowledging the contribution of indigenous and plantation forests to mitigate climate change through carbon sequestration.

The Accord endorses the principle of polluter pays, that policies must be broad-based and cover all greenhouse gases with all sectors taking responsibility and with time bound targets.

Expansion of both indigenous and plantation forests to achieve a net reduction in these emissions through offsetting is agreed.

Wood is acknowledged as a renewable, reusable and recyclable resource.

Eliminating illegal forest products 2008

The FOA, WPMA and Pine Manufacturers Association join NGOs in calling on the New Zealand government, importers, processors, retailers, New Zealand forest and plantation managers and processors of forest and plantation products, to strongly oppose the importation and use of illegally harvested and traded forest products in New Zealand.

Trading in illegal products contributes to deforestation, biodiversity loss and poverty.

Forest Industry Safety Council 2015

The FOA is participating in FISC as the pan-industry initiative. FISC has an independent cross sector board. FISC's mission is to reduce the rate of serious injury and fatalities in the New Zealand plantation forest sector, with an ultimate goal of eliminating them.

Log Transport Safety Accord 2008

This is an agreement between FOA/FFA, the Road Transport Forum New Zealand and the Log Transport Safety Council.

Issues identified to reduce the incidence of log truck accidents on roads include; regulatory compliance, investment in health and safety, 0800 public reporting, safe speeds, fatigue reduction, driver training, load weights, truck and trailer design, trailer operations, roading infrastructure, accident data recording and driver and public awareness.

Forest Government Industry Agreement for Biosecurity 2015

The FOA has signed a Government Industry Agreement to protect New Zealand forests from introduced pests, weeds and diseases.

Costs and decisions on prevention and responses are shared between the industry and Ministry for Primary Industries.

The Forest Biosecurity Surveillance programme began on 1 July 2016, covering all commercial plantations.

PineNet has also been set up as a forest industry network to respond to a major incursion. FOA has a contingent Memorandum of Understanding withASUREQuality for participation in a National Biosecurity Network.

New Zealand's Greenhouse Gas Inventory

The Carbon Cycle

Planting trees begins a cycle that continuously removes, releases and re-absorbs greenhouse gases such as carbon dioxide. As trees grow, they absorb carbon dioxide through the process of photosynthesis.

The carbon dioxide absorbed by the growing forest remains stored within the wood products used throughout the lifetime of the building structure or product.

When a structure or product reaches the end of its lifetime, the carbon dioxide is released back into the atmosphere as the wood decays or is burnt as fuel.

Wood can be recycled to extend its lifetime and slow down the natural release of carbon dioxide back into the atmosphere. Once the carbon dioxide is released, it is available to be re-absorbed by growing trees.

When wood materials decay or are burnt as fuel they release carbon dioxide that was absorbed during the growth of the trees and are therefore carbon neutral.

New Zealand's Greenhouse Gas Inventory - Key Points

In 2015, New Zealand's total gross emissions were 80.2 million tonnes of carbon dioxide (Mt CO₂-e). In 1990, gross emissions were 64.6 Mt CO₂-e.

In 2015, 23.7 Mt CO₂-e was removed from the atmosphere by the forestry sector, compared with 30.1 Mt CO₂-e in 1990. Forestry sector removals in 2015 reduced total gross emissions to 56.4Mt CO₂-e net.

Agriculture continued to be the largest contributor to New Zealand's Greenhouse Gas Emissions, with 48% of the total at 38.4 Mt CO₂-e, compared with energy at 40%.

Total CH₄ and N₂O emissions in 2015 attributable to dairy cattle, beef cattle, sheep and deer in 2015¹

	Total emissions (million tonnes CO ₂ -e)	2015 Population (millions)	Emissions per animal (tonnes CO ₂ -3)	* Offset area (m) per animal
Sheep	10.13	29.12	0.348	5.5
Deer	0.60	0.90	0.676	10.8
Beef	6.40	3.55	1.803	28.7
Dairy	18.07	6.49	2.786	44.5

Notes

¹ Based on figures from the Agricultural Inventory Model, used in New Zealand's Greenhouse Gas Inventory 1990-2015 report published by MfE

All figures expressed in megatonnes of carbon dioxide equivalent (kt CO₂-e)

* Square metres of new plantation required every year, at 20 years of age, to offset biological emissions of each animal.

Forests Removing Carbon

How is carbon removed from the atmosphere by New Zealand's forests?

Forests act as carbon sinks – a type of reservoir that removes and stores more carbon from the atmosphere than it releases. Trees use carbon dioxide (CO₂) as part of their 'breathing' cycle – taking in CO₂ and storing it within roots, trunks and branches – and releasing oxygen.

The amount of CO₂ a forest removes depends on the species grown and place in its growing cycle. A young forest will remove smaller amounts of CO₂ until the trees establish and enter a growing phase – this is when forests will remove the most carbon. As a forest ages and its growing process slows, it will revert to absorbing less carbon again.

At harvesting, the forest ceases to be a carbon sink but instead of releasing all the carbon it has stored, the harvested wood retains some of it. All wood products store carbon that will eventually be released, however the rate at which that carbon is released depends on the type of product and the type of treatment the wood has undergone. Studies are still being conducted into these release rates.

The amount of carbon removed by New Zealand's forests is therefore dependent on the coverage of forestland, the age and species of the trees and the rate of harvest. Exotic forest biomass carbon was 283 million tonnes in 2015. This was an increase of 150 million tonnes, or 114 percent, since 1990.

If carbon in the exotic forest soil is included, the total forest biomass carbon volume increased to 451 million tonnes in the same period, an increase of 189 million tonnes, or 72 percent.

A large proportion of the exotic forest estate is nearing maturity, and one harvested, the biomass stocks will temporarily reduce.



Source 1990 to 2015 National Greenhouse Gas Inventory

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Reporting a Suspected Pest/Disease

Eucalyptus nitens induced with myrtle rust infection



Photo credit: CSIRO

Don't go down in history as the person who noticed something but didn't tell.

Keep our forests free of new pests and diseases.

Myrtle rust arrived in New Zealand from Australia in early 2017. The rust infects members of the myrtle family, which includes eucalypts, feijoas and guavas as well as native plants such as pōhutakawa, rata and mānuka.

MPI has been attempting to eradicate the disease to prevent it becoming established in New Zealand.

If you believe you've found something that shouldn't be here, phone MPI's hotline on **0800 80 99 66**. They will arrange for whatever photos, samples and site visits are necessary.

Or, email to; **Info@mpi.govt.nz**, with 'Reporting a suspected pest/disease' in the subject line, and make sure to include contact name, phone number and location of the discovery. Photos of the pest and plant damage would be useful.

Terms, Names and Sites

Area and volume

- A hectare (ha) = 100 x 100 metres.
- A cubic metre (m³) = 1 metre x 1 metre x 1 metre.
- An average *Pinus radiata* tree yields 2.4 m³ of wood at harvest.
- 1 hectare of 28 year-old *Pinus radiata* contains between 650 and 800 m³ of wood.
- 1 hectare grows up to 28 m³ of wood each year.
- A log truck and trailer carries approximately 30 tonnes of logs.
- A log ship contains approximately 30-35,000 tonnes of logs.

Organisations by abbreviations

FAO	Food & Agriculture Organization of the United Nations
FGLT	Forest Growers Levy Trust
FIEA	Forest Industry Engineering Association
FISC	Forest Industry Safety Council
MfE	Ministry for the Environment
MPI	Ministry for Primary Industries
NEFD	National Exotic Forest Description
NZIER	New Zealand Institute of Economic Research
WPMA	Wood Processors and Manufacturers Association

2016/17 Facts & Figures organisation sites

Competenz	www.competenz.org.nz
FISC	www.safetree.nz
FAO	www.fao.org/forestry
MfE	www.mfe.govt.nz
MPI	www.mpi.govt.nz
NZIER	www.nzier.org.nz
NZFOA	www.nzfoa.org.nz
NZ Forests Portal	www.nzplantedforests.org
Scion	www.scionresearch.com
Statistics NZ	www.stats.govt.nz
WPMA	www.wpma.org.nz
WorkSafe NZ	www.business.govt.nz/worksafe

Disclaimer

Every effort has been made to ensure that the statistics and information found within this publication are accurate and fair. The Forest Owners Association provides no warranty as to accuracy and shall not be liable to any person for any loss or damage for the use, directly or indirectly, of the information.

Log Pricing Data

Log Type, Pricing Point and Market	Mar-11 Quarter	Jun-11 Quarter	Sep-11 Quarter	Dec-11 Quarter	Mar-12 Quarter	Jun-12 Quarter	Sep-12 Quarter	Dec-12 Quarter	Mar-13 Quarter	Jun-13 Quarter	Sep-13 Quarter	Dec-13 Quarter	Mar-14 Quarter	Jun-14 Quarter	Sep-14 Quarter	Dec-14 Quarter	Mar-15 Quarter	Jun-15 Quarter	Sep-15 Quarter	Dec-15 Quarter	Mar-16 Quarter	Jun-16 Quarter	Sep-16 Quarter	Dec-16 Quarter
EXPORT (NZ\$ per JAS m ³ f.o.b)																								
Pruned – Japan, Korea	179-197	155-181	161-173	146-155	144-513	154-163	153-166	144-190	168-192	169-209	177-201	181-206	171-198	158-190	146-187	165-236	186-199	121-199	189-211	121-228	220-230	204-236	184-207	180-225
A Grade – Japan	132-144	133-148	123-132	112-122	110-117	110-122	116-118	103-125	128-138	136-153	143-162	137-169	142-165	104-142	110-140	127-169	134-150	81-133	90-133	81-141	118-166	146-169	138-162	138-162
J Grade – Japan	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
K Grade – Korea	130-148	125-145	108-114	105-112	94-109	104-116	103-110	90-121	112-131	114-147	132-156	127-159	133-159	96-137	101-134	117-163	124-143	99-126	91-125	91-135	99-158	135-162	124-157	135-167
Pulp	129-137	110-176	109-118	98-112	87-100	84-111	91-120	79-102	106-108	108-123	128-131	119-154	125-140	110-122	92-108	112-135	117-121	65-107	73-110	65-118	55-138	120-143	111-134	125-140
All grades average per quarter	150	147	130	120	114	121	122	119	135	145	154	157	154	132	127	153	147	116	128	123	148	165	152	161
DOMESTIC (NZ\$ per tonne delivered at mill)																								
P1	128-147	130-152	132-152	127-134	120-134	127-170	120-136	122-149	135-150	142-158	126-157	132-156	129-155	131-155	132-154	134-154	139-164	135-170	135-174	135-174	140-187	142-195	140-193	142-186
P2	110-127	122-130	114-130	111-128	110-127	110-123	111-126	111-123	120-121	121-133	114-125	121-127	126-126	119-130	125-126	121-130	116-136	116-133	116-133	105-170	129-182	134-188	130-192	102-189
S1	88-98	99-125	99-105	99-103	95-100	95-98	95-102	95-104	97-102	103-110	102-120	102-123	98-112	101-111	103-109	98-108	108-112	100-109	100-108	96-109	102-118	104-123	105-123	105-126
S2	92-103	86-105	94-108	93-101	88-100	88-97	88-96	90-97	95-98	101-107	90-110	90-113	92-118	91-123	101-110	98-109	96-109	85-109	85-105	85-109	90-114	90-118	80-116	93-120
L1 and L2	72-103	74-115	78-95	76-91	90-110	83-92	80-89	77-96	84-100	88-105	78-111	80-113	77-123	78-78	81-87	85-103	97-139	78-95	78-94	78-109	79-130	71-132	74-130	82-138
S3 and L3	82-92	81-92	82-89	79-87	66-81	76-79	77-80	77-86	92-90	83-100	75-106	75-102	86-108	90-115	81-100	86-100	88-100	69-96	76-90	69-96	68-106	82-119	69-107	71-112
Run of bush	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Pulp	47-57	48-61	49-61	49-54	49-55	49-55	47-49	48-53	46-50	46-51	47-54	46-54	44-55	46-55	45-55	49-54	50-55	31-54	31-55	31-55	31-59	44-59	31-61	40-52
All grades average per quarter	96	101	99	95	95	95	93	95	97	103	101	102	104	102	101	102	103	102	102	102	110	114	111	111

2015/16 Facts & Figures organisation sites

Competenz	www.competenz.org.nz
FAO	www.fao.org/forestry
MfE	www.mfe.govt.nz
MPI	www.mpi.govt.nz
NZIER	www.nzier.org.nz
NZFOA	www.nzfoa.org.nz
NZ Forests Portal	www.nzplantedforests.org
Scion	www.scionresearch.com
Statistics NZ	www.stats.govt.nz
WPMA	www.wpma.org.nz
WorkSafe NZ	www.business.govt.nz/worksafe

The photos on pages 3, 7, 9, 16, 18, 20, 23, 24, 25, 26, 30, 36, 42, 44 and 50 came from Phil Taylor, Port Blakely NZ Ltd.

Notes

* Limited response – very small volume traded.
 ** Data not available.

Source Log Pricing Data MPI

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