



NIBIO

NORSK INSTITUTT FOR
BIOØKONOMI

Norwegian roundwood market


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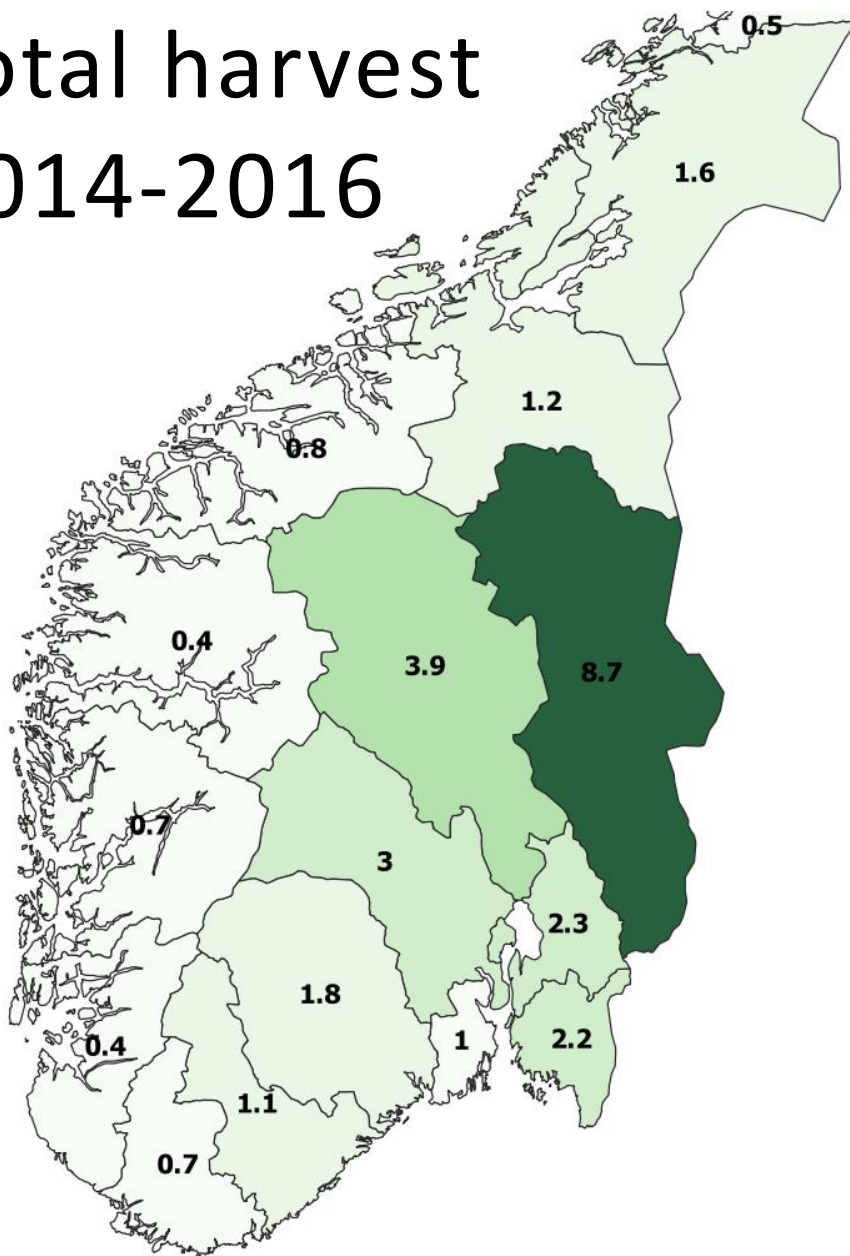
Traded timber assortments and volumes

Species	Assortement	2 014	2 015	2 016
Spruce	Pulp wood	3 112 641	3 208 993	3 290 879
Spruce	Sawnwood	4 192 131	4 264 690	4 288 258
Spruce	Down classed	84 409	103 204	120 142
Total Spruce		7 389 181	7 576 887	7 699 279
Pine	Pulp wood	987 749	1 013 345	1 093 464
Pine	Sawnwood	1 371 996	1 438 515	1 428 199
Pine	Down classed	5 087	5 939	5 091
Total Pine		2 364 832	2 457 799	2 526 754
Birch (+ other)	Pulp wood	142 524	166 416	191 911
Birch (+ other)	Sawnwood	4 158	1 248	6 526
Birch (+ other)	Down classed		38	
Total Birch (+ other)		146 682	167 702	198 437
Total firewood	Energy		279 426	340 289
Total sum		9 900 695	10 616 893	10 939 745

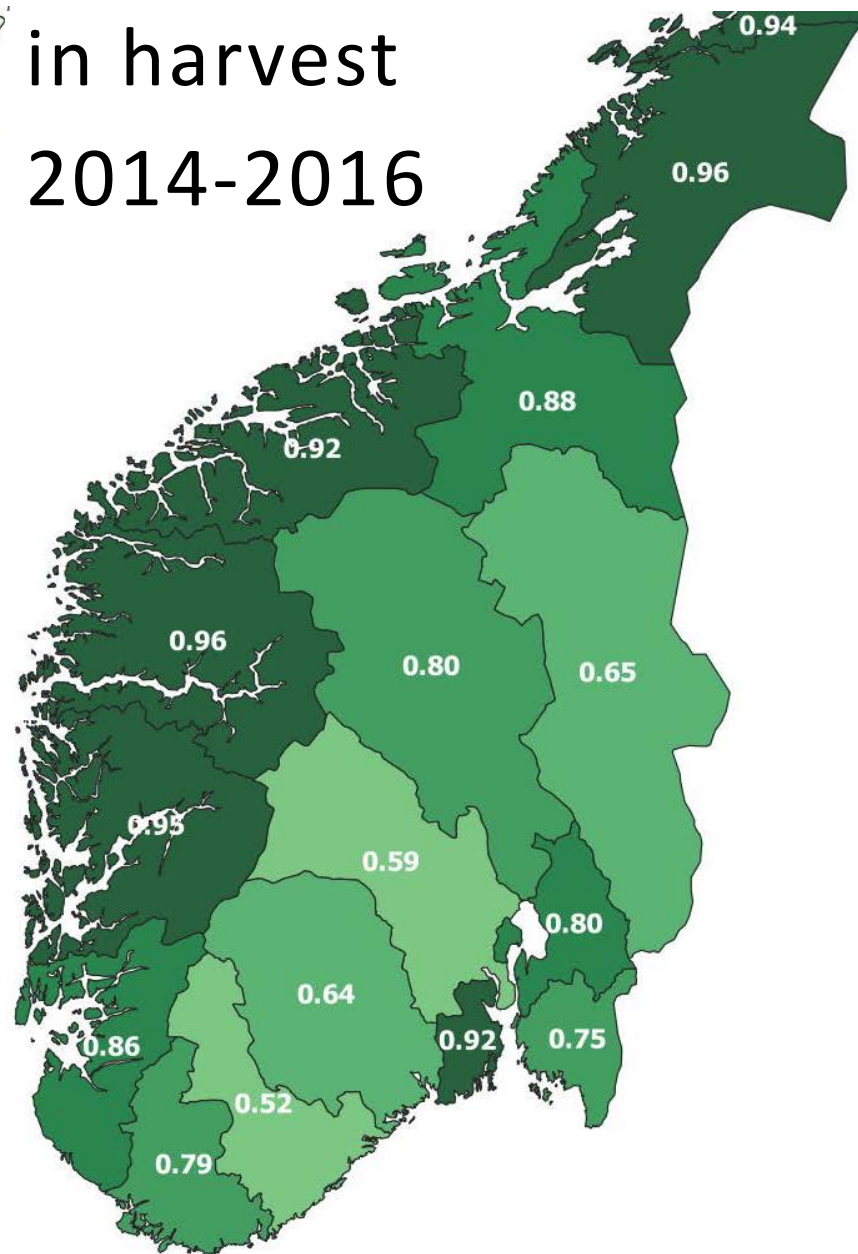
Regional harvesting, 2014-2016

County	Spruce	Pine	Birch	Total sum
Hedmark	5 686 641	2 730 633	267 765	8 685 039
Oppland	3 098 448	768 627	20 723	3 887 798
Buskerud	1 769 482	1 175 547	40 633	2 985 662
Oslo/Akershus	1 822 634	407 255	42 106	2 271 995
Østfold	1 652 335	489 916	54 149	2 196 400
Telemark	1 133 115	624 191	17 938	1 775 244
Nord-Trøndelag	1 571 045	48 072	10 712	1 629 829
Sør-Trøndelag	1 099 858	139 952	7 898	1 247 708
Aust-Agder	558 313	508 627	10 189	1 077 129
Vestfold	924 892	55 258	21 259	1 001 409
Møre og Romsdal	765 765	60 437	5 142	831 344
Vest-Agder	584 326	157 917	2 080	744 323
Hordaland	697 458	38 275	356	736 089
Nordland	499 833	21 770	9 011	530 614
Sogn og Fjordane	425 276	19 076	243	444 595
Rogaland	367 180	60 714	217	428 111
Finnmark		27 164		27 164
Troms	8 746	15 954	2 400	27 100
 Totalsum	22 665 347	7 349 385	512 821	30 527 553

Total harvest 2014-2016



Share of spruce in harvest 2014-2016



Industry structure

- Pulp mills: 3 large
 - Skogn (mid-Norway = 600' + 100' m³)
 - Borregaard (se-Norway = 500' + 50' m³)
 - Suagbrugs (se-Norway = 550' + 100' m³)
 - Equals ~1650' m³
 - Total consumption for pulp+paper = 1950' + 250' mill m³
 - Saw mills: several smaller
 - Energy?
- ⇒ determination of market prices?

Market organisation, places, trade practices...

- Limited number of market actors,
 - Middle-men covering almost all roundwood
 - Mostly based in forest owners associations,
 - With face-to-face interaction
-
- Increasing competition over time

1. Glommen Skog SA

2. Mjøsen Skog SA

3. Viken Skog SA

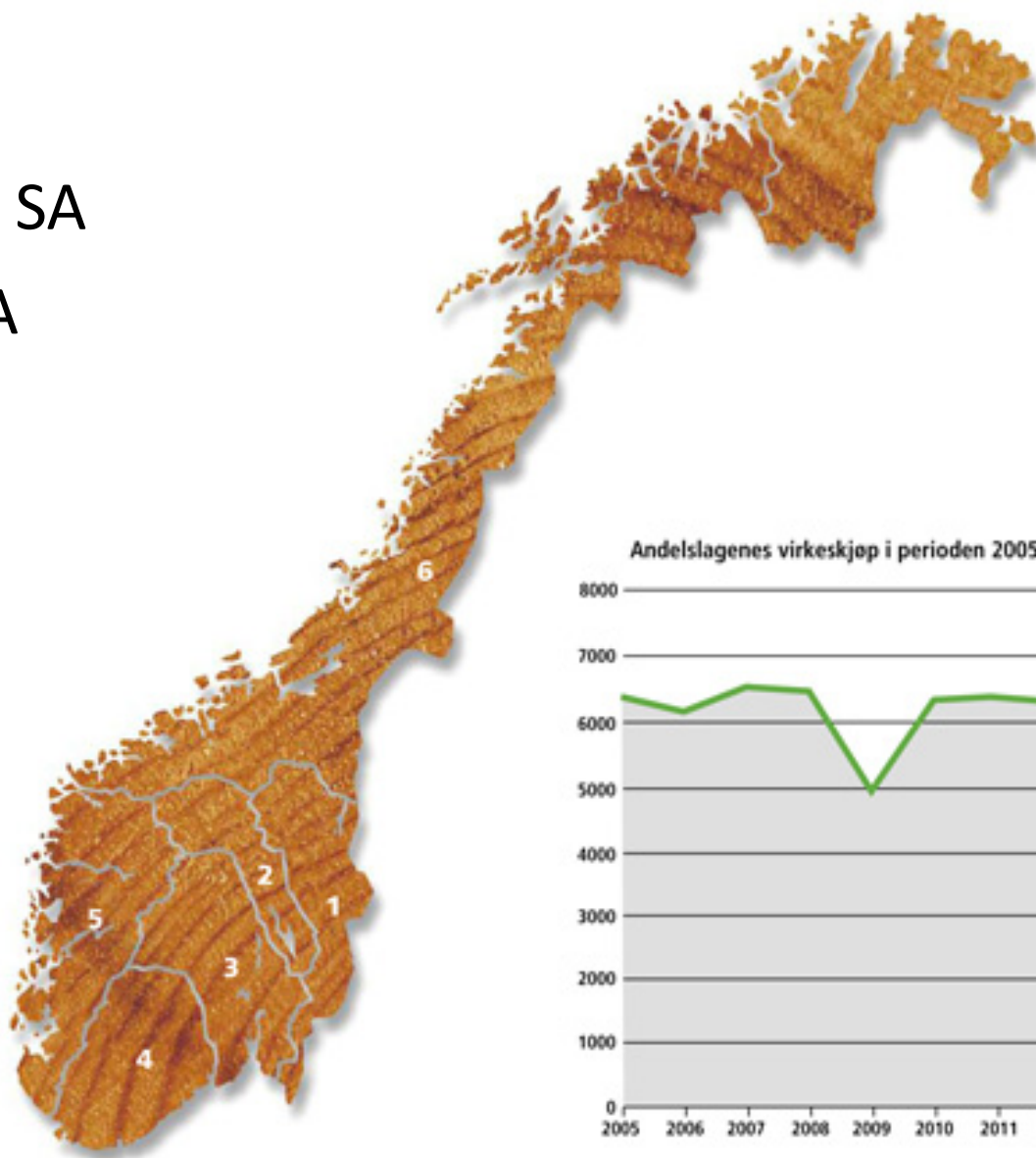
4. AT Skog SA

5. Vestskog SA

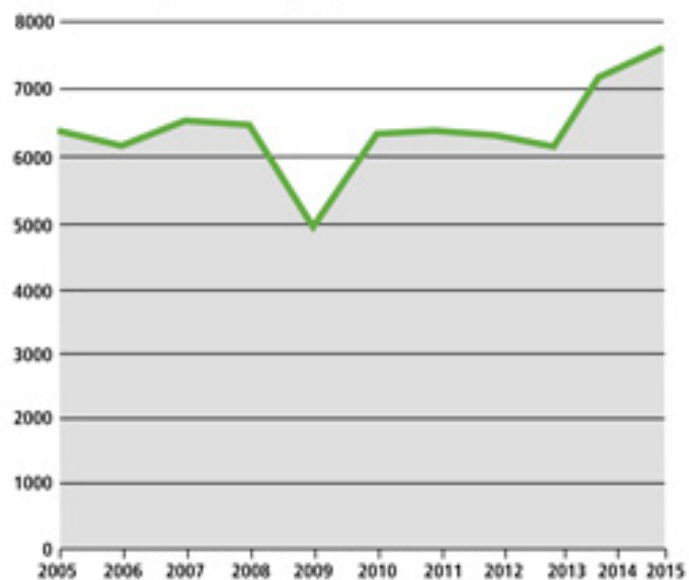
6. ALLSKOG SA

SB skog

Nortømmer



Andelslagenes virkeskjøp i perioden 2005-2015 i 1000 kbm

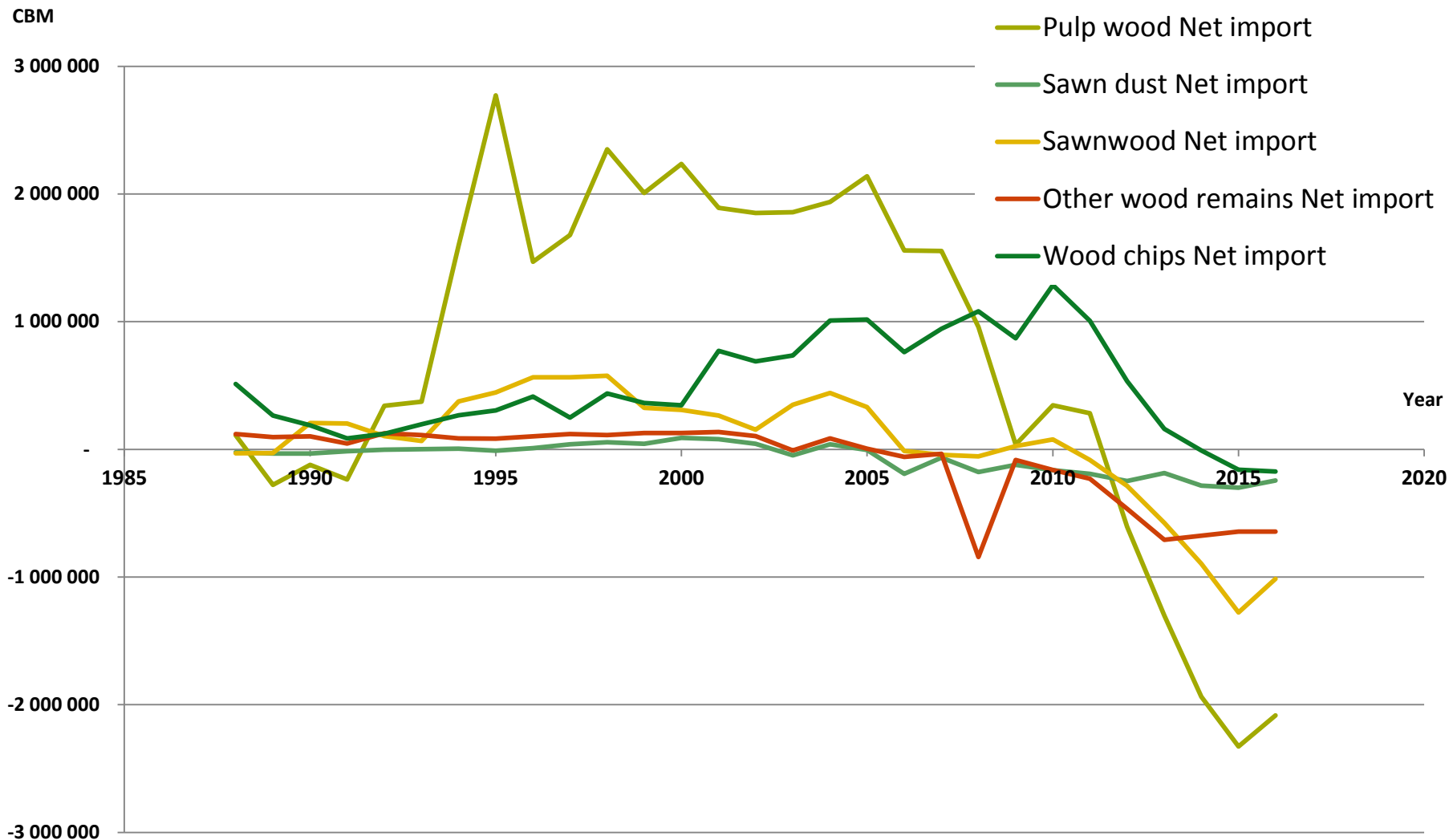


Buyer (1. hand)	2 014	2 015	2 016	2 017	Total sum
VIKEN SKOG BA	1 737 887	2 133 123	2 142 736	1 282 683	7 296 429
SB SKOG AS	747 843	763 497	806 774	516 517	2 834 631
GLOMMEN SKOG SA	1 432 318	1 318 308	1 643 887	1 029 644	5 424 157
GLOMMEN SKOG AS	239 882	273 522	246 326	134 338	894 068
HAVASS SKOG SA	329 863	320 778			650 605
NORTØMMER AS	1 351 973	1 317 636	1 354 362	961 835	4 985 806
ALLSKOG SA	1 201 954	1 170 645	1 158 847	634 837	4 166 283
MJØSEN SKOG SA	1 012 021	1 038 080	1 146 429	726 929	3 923 459
AT SKOG SA	809 351	928 087	956 517	617 029	3 310 984
NEG SKOG AS	157 612	173 533	151 262	4 758	487 165
VESTSKOG SA	207 284	241 167	402 525	255 406	1 106 382
SOGN OG FJORDANE	161 879	101 781			263 660
BERGENE HOLM AS	73 788	84 887	86 697	43 735	289 107
STORA ENSO AS	80 473	88 198	67 475	32 770	268 916
MOELVEN VIRKE AS	59 885	58 031	51 103	29 527	198 546
STANGESKOVENE, SKOG-AVD.	37 982	61 447	64 442	27 578	191 449
TRYSIL KOMMUNESKOGER KF	52 646	48 542	51 309	190	152 687
NYGÅRD OG MÆLUM	101 470	657			102 127
Totalsum	9 900 516	10 202 491	10 424 286	6 357 816	36 885 109

Market shares in regions

FYLKENAVN	Viken skog	Glommen skog	Nor-tømmer	All-skog	Mjøsen skog	AT skog	Vest-skog	Bergene Holm
Hedmark	14 %	46 %	20 %		16 %			
Østfold	39 %	48 %	9 %					
Oppland	43 %	1 %	10 %		44 %			
Buskerud	78 %	5 %	17 %					1 %
Oslo/Akershus	52 %	16 %	10 %		8 %			4 %
Vestfold	74 %	10 %	9 %					7 %
Telemark	2 %	6 %	16 %			75 %		2 %
Aust-Agder	1 %		5 %			93 %		
Vest-Agder			4 %			95 %		
Møre og Romsdal			15 %	83 %			1 %	
Hordaland	1 %		37 %				62 %	
Sogn og Fjordane	1 %		3 %				96 %	
Rogaland			34 %			5 %	61 %	
Nord-Trøndelag	20 %		2 %	78 %				
Sør-Trøndelag	6 %		3 %	90 %				
Nordland	2 %			91 %		7 %		
Troms	10 %			43 %		47 %		
	28 %	19 %	14 %	11 %	11 %	10 %	4 %	1 %

Export/import 1988-2016



Trade by country for the period 1988-2016

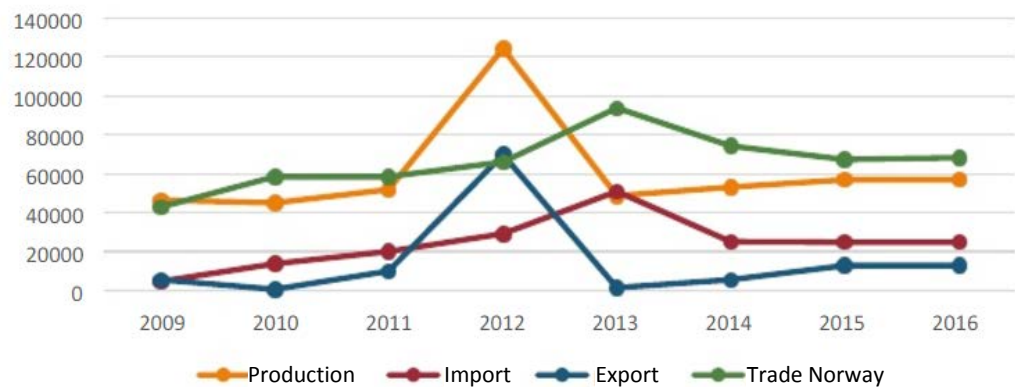
Country	Pulp wood		Sawnwood	
	Export	Import	Export	Import
SE Sverige	18 080 264	19 070 338	6 969 410	7 871 450
DE Tyskland	2 127 331	1 593 240	1 772 168	86 307
EE Estland	10 059	4 807 545	244	272 372
RU Russland	-	2 050 285	-	1 537 713
LV Latvia	142 393	2 480 696	45 978	38 929
DK Danmark	86 846	1 520 483	83 301	27 425
GB Storbritannia	9 299	730 459	2 772	1
LT Litauen	1 981	533 519	174	18 581
SU Sovjetunionen (-1992)	-	235 029	-	179 040
FI Finland	46 281	208 384	6 793	104 038
BY Hviterussland	-	135 679	-	45 583
BE Belgia	53 952	35	76 039	-
TR Tyrkia	20 599	-	101 975	3 096
Totalsum	20 579 005	33 365 692	9 058 854	10 184 535

Trade of energy wood

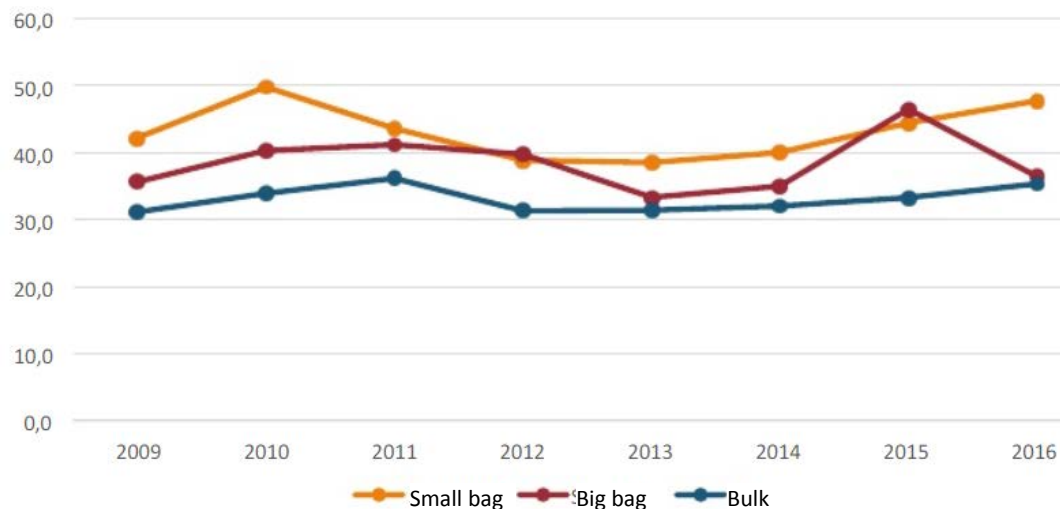
- Assortments
 - Energy wood
 - Forest chips
 - Pellets
- Volumes
 - Pellets is known
 - Forest chips mostly not measured (local use)
 - Energy wood part of Other in statistics...

Pellets production and price

Production and trade (tons)



Price on pellets at factory gate ex vat (øre/kWh)



Concluding remarks

- Increasing competition in 1. hand trade in some regions
- Increasing export
 - Diminishing industry
 - Costly transport