

Forecasting timber resources in Poland and their potential for industrial partners

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Resources

Item	Unit	Large Area Forest Inventory				
		Overall	The State Forests	Private Forests	Taken for forecasting	Other forests*
Area	ha	9 242 439	7 109 976 (76,9%)	1 782 319 (19,3%)	96,2%	350 144 (3,6%)
Forest resources	1 000 m ³ (gross)	2 617 926	2 048 900 (78,3%)	444 140 (17,0%)	95,3%	124 885 (4,7%)
Stocking	m ³ /ha	283	288	249		
Average age	years	58	60	50		
		Timber harvesting				
Timber harvesting	1 000 m ³ (net)		38 178 (95,4%)	1 446 (3,6%)	99%	407 (1%)

Forecasting ingredients and methods

1. Current increment, m³/ha/year : The State Forests: 9,0; private forests: 8,5
2. Partial/gap final fellings: 60%.
3. Average period for regeneration: 30 years
4. Average age of final fellings: 100 years
5. Conversion factor from gross to net: 0,8 (The State Forests final fellings: 0,845)
6. Transfer from final fellings to younger age classes: to Ia: 30%; to Ib: 30%; to IIa: 40%
7. Forest area enlargement by 2025: plus 355 000 ha (including 295 000 ha in private forests)





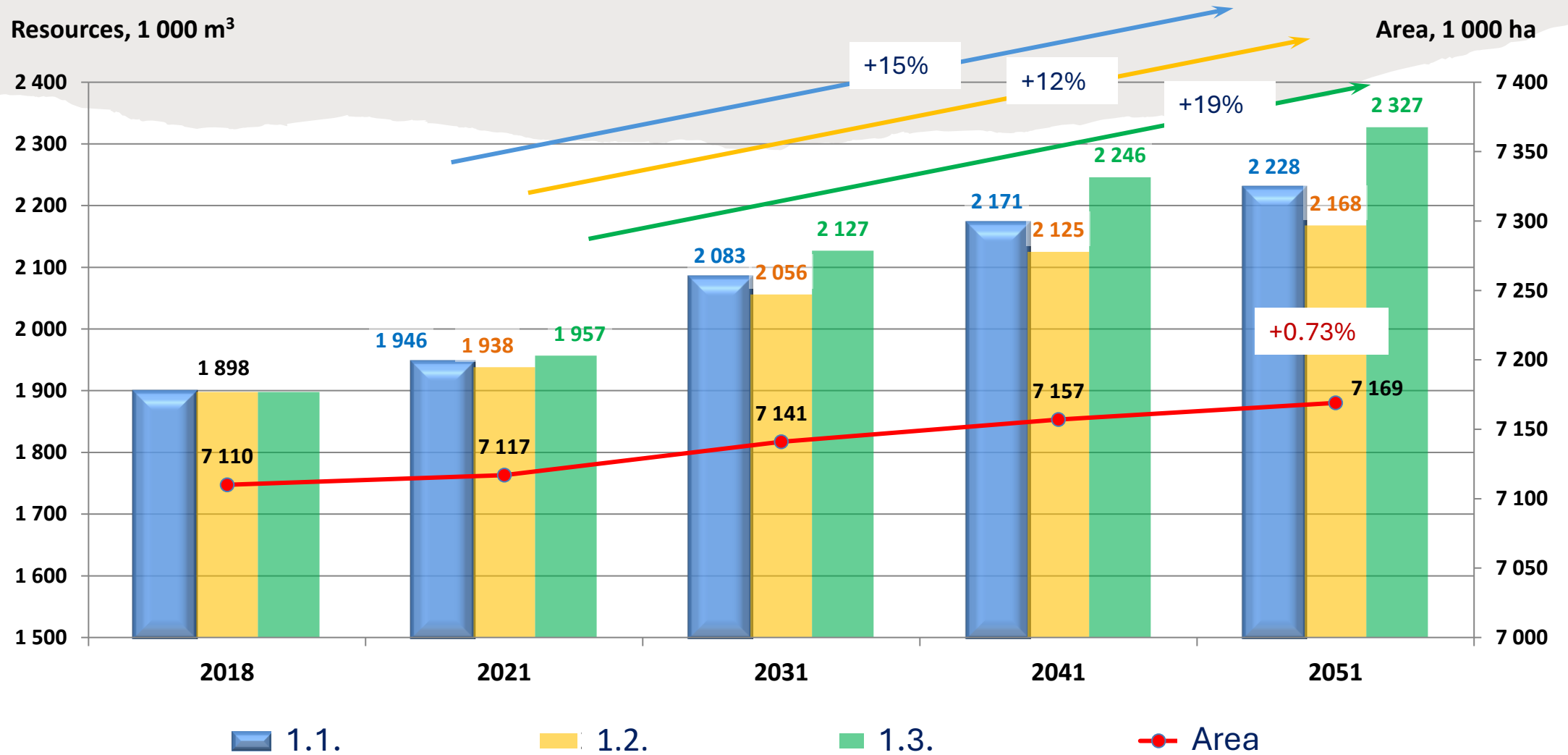
Forecasting scenarios

1.1. Standard: according to current inventory results

1.2. Increased – including salvage timber harvesting, e.g. after windbreaks
+6.6% final fellings and +3.0% thinnings

1.3. Reduced: protection, **FSC anf PEFC**:
- 10% final fellings and - 5% thinnings

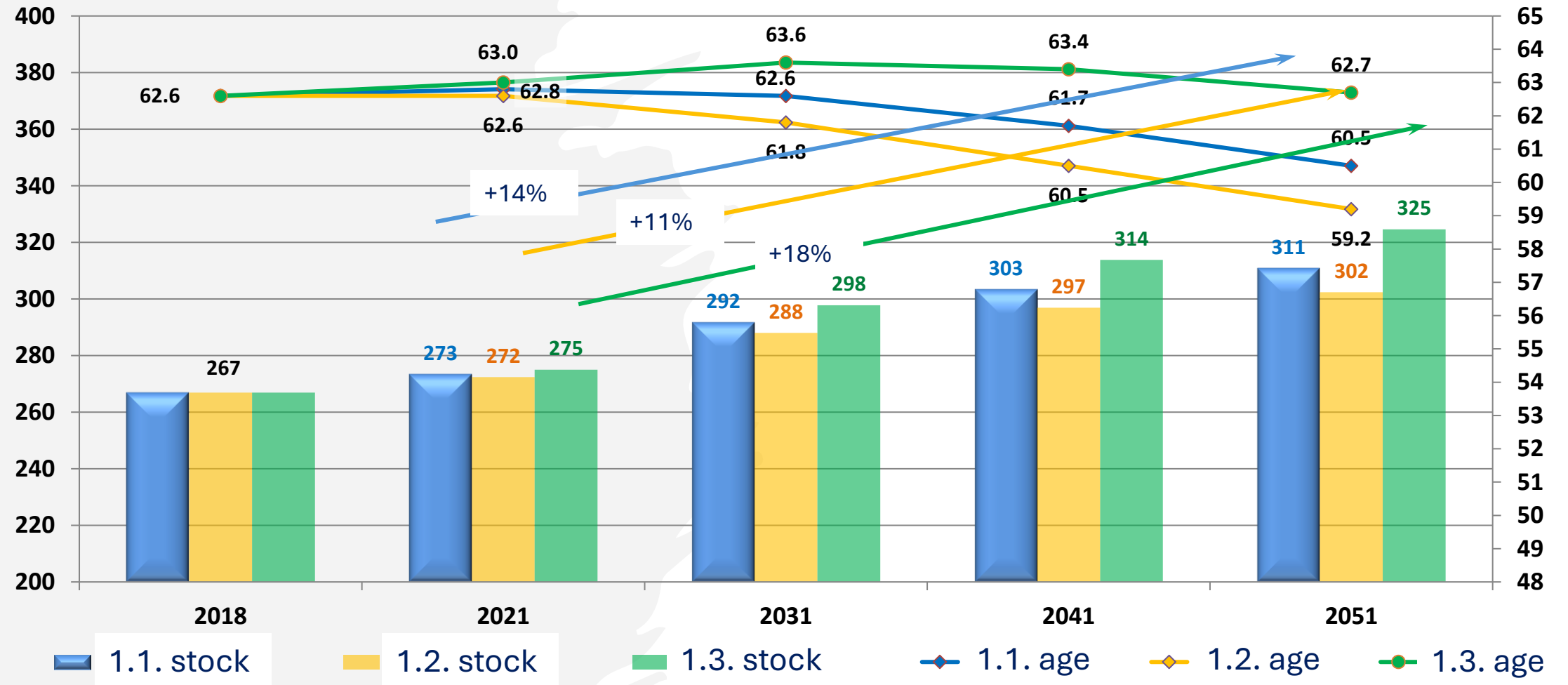
The State Forests, resources and area



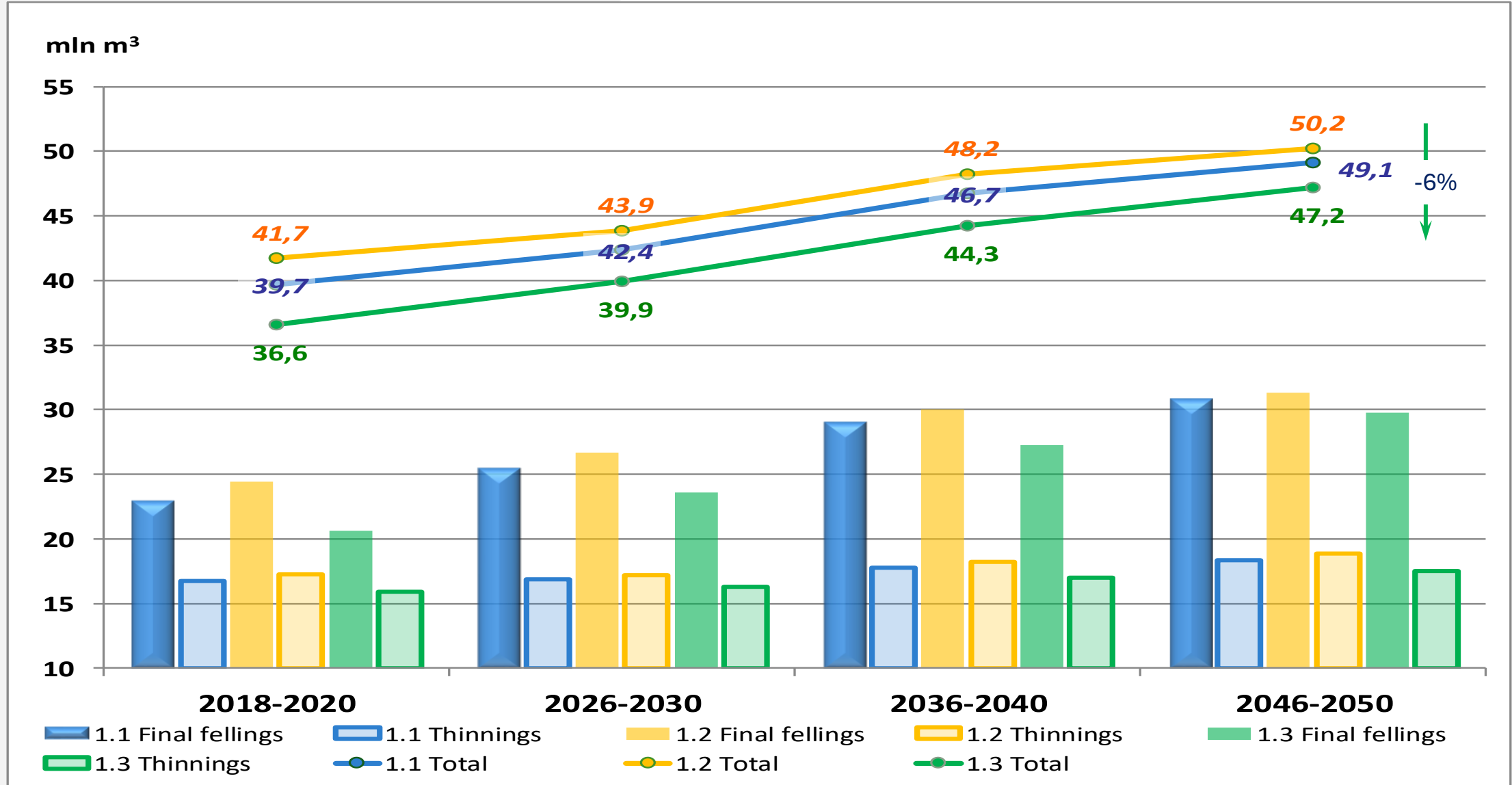
The State Forests, stocking and age

Stocking, 1 000 m³/ha

Age, years



The State Forests, harvesting



The State Forests, harvesting intensity

Period	Harvesting, %	The State Forests			Private forests	
		scenario				
		1.1	1.2	1.3	2.1	2.2
2018–2020	of volume	2,53	2,66	2,34	1,28	1,67
	of increment	75	79	69	38	49
2026–2030	of volume	2,54	2,65	2,36	1,32	1,72
	of increment	80	83	75	43	55
2036–2040	of volume	2,65	2,78	2,44	1,32	1,73
	of increment	88	91	83	48	60
2046–2050	of volume	2,70	2,82	2,49	1,37	1,80
	of increment	92	94	89	55	67

Conclusion

By 2050

Growing timber resources: +12 to 19%

Growing forest area: +0.73%

Growing timber harvesting: +24% (standard scenario)

FSC and PEFC cert will limit access to timber resources by 6%