

ENGINEERED LUMBER TRENDS EUROPE VS NORTH AMERICA

April 7th 2016
Atlanta US



AGENDA

- Brief introduction to Pöyry
- Engineered Lumber Trends

BRIEF INTRODUCTION TO PÖYRY



PÖYRY – CONSULTING AND ENGINEERING EXPERTS

Pöyry is an international consulting and engineering company, dedicated to serving clients across the world's energy and industrial sectors

- 6,000 experts
- 10,000+ projects delivered annually
- Solid track record in forest industry
- Leading hydro and power market engineers
- EUR 575 million net sales in 2015



PÖYRY – SERVICES FOR ENTIRE BUSINESS LIFECYCLE



PÖYRY MANAGEMENT CONSULTING – SERVICE OFFERINGS



Corporate and Business Strategy

- Portfolio strategy
- Growth strategies
- Business strategies and business plans
- Business model development
- Scenario analysis
- Risk management
- Environmental strategies
- Market entry strategies
- Cooperation strategies



Resource and Technology Strategies

- Resource base valuations and development
- Technology mapping
- Technology benchmarking
- Technology options evaluation
- Technology strategies
- R&D portfolio strategies
- Technology acquisitions



Operational and Organizational Excellence

- Performance improvement
- Operational and organizational benchmarking
- Corporate restructuring
- Organizational design
- Business transformation
- Change management
- Post merger integration
- Manufacturing strategies
- Energy efficiency
- Asset Management
- Maintenance Strategies



Market Insights and Modeling

- Market analysis
- Market forecasts
- Demand, supply, and cost analysis
- Price projections
- Industry cost curves
- Market design and modeling
- Market regulatory frameworks
- Market scenarios



Sales and Supply Chain Strategies

- Supply/market analysis
- Pricing strategies
- Contract negotiations
- Supply chain optimization
- Sourcing strategy formulation
- Supplier assessments
- Transfer Pricing



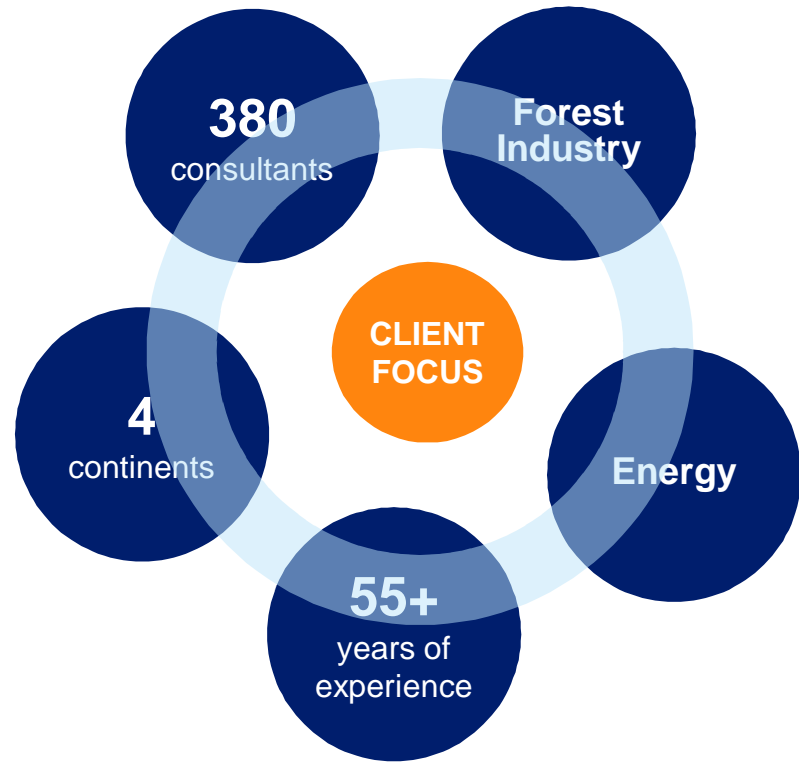
Investments and M&A

- Acquisitions
- Divestments
- Asset valuations
- Business valuations
- Project pre-feasibility / feasibility assessments
- Due Diligence (strategy, business, technical, environmental)
- Business valuation vs. Asset valuations

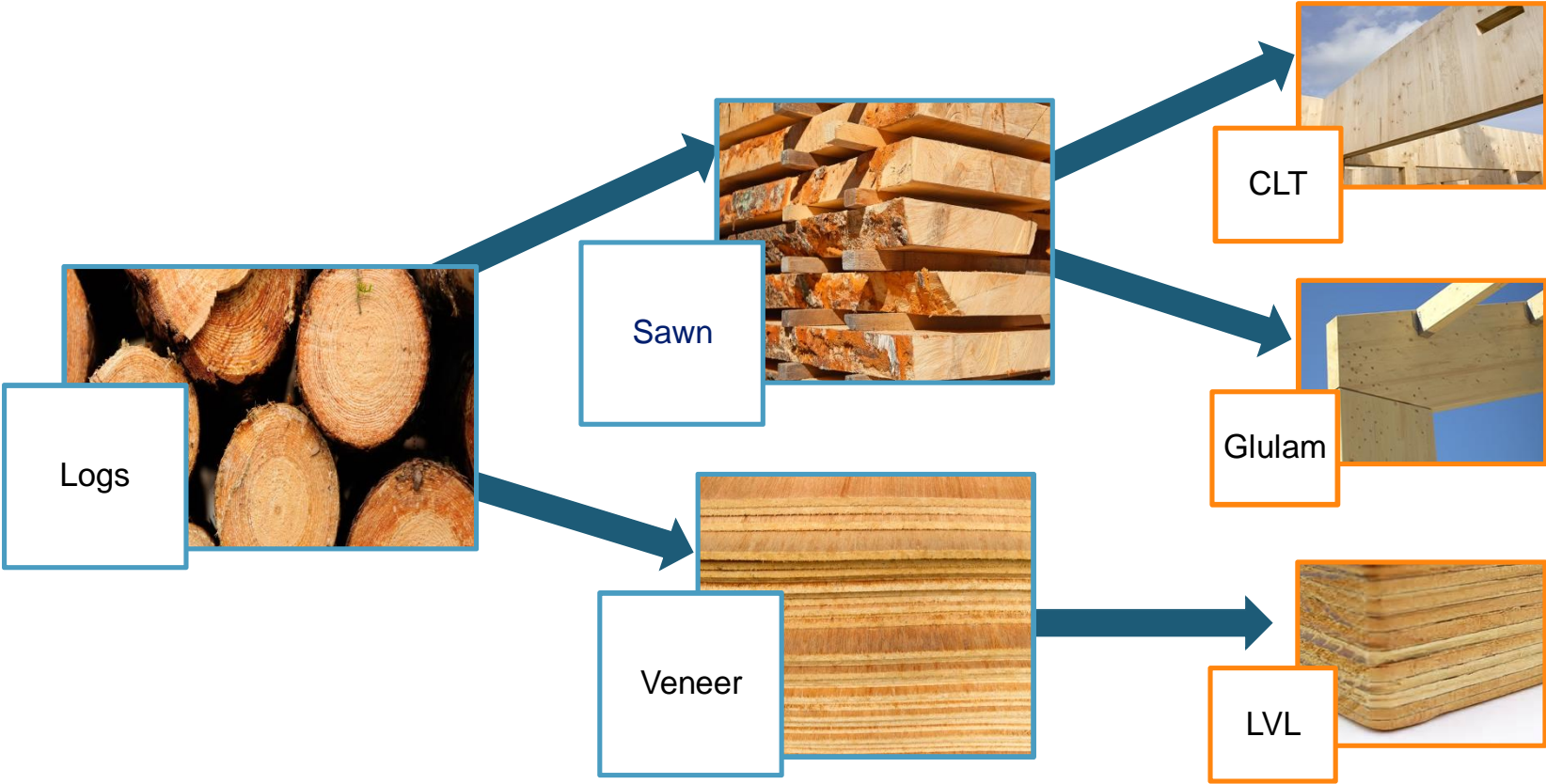
PÖYRY MANAGEMENT CONSULTING

Locations in 4 Continents

New York	Düsseldorf	Oslo	Dubai
Atlanta	Helsinki	Oxford	
	London	Paris	Shanghai
São Paulo	Madrid	Stockholm	Singapore
Curitiba	Milan	Vienna	Jakarta
	Moscow	Zurich	
	Munich		



ENGINEERED LUMBER PRODUCTS



ENGINEERED LUMBER PRODUCTS

It is all about engineering the use of wood material to meet the requirements of high value applications and replace traditional wood, concrete, brick and steel products in construction

CLT



- “Cross Laminated Timber”
- Large panels made of sawnwood
- Substituting concrete elements
- Wall & floor structures
- Wooden multi storey buildings

Glulam



- Sawnwood laminated to straight and curved beams
- Alternative for large steel & concrete structures
- Residential, non-residential and infrastructure construction

LVL



- “Laminated Veneer Lumber”
- Thin veneers glued together grain parallel to long direction of beam
- Versatile uses: studs, I-joists, large structures, pre-fab elements

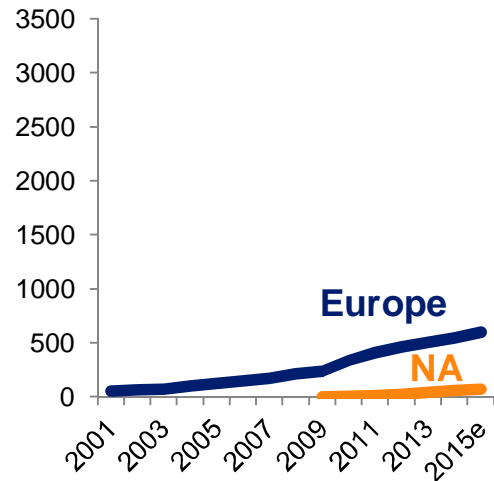
EUROPE VS NORTH AMERICA

	Population	GDP bln \$	GDP/ capita	Forest (Mha)	Forest (%)	ha / capita
North America	355 M	19,200	54,000	720	37.6%	2.0
Europe incl. Russia	740 M	22,000	29,500	1,117	50.6%	1.5
Europe excl. Russia	600 M	22,050	33,600	228	39.9%	0.35
EU 28	510 M	18,500	36,300	181	43.0%	0.36
Eurozone	340 M	13,440	39,700	120	44.8%	0.35

ENGINEERED LUMBER MARKETS

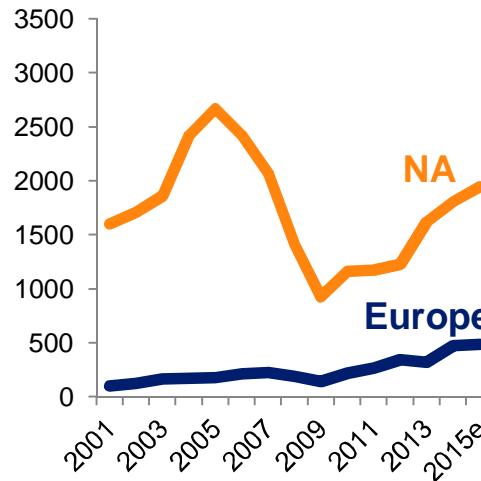
The CLT market is in early stage of development both in Europe and N-America. Glulam and LVL are more mature products and their total relative consumption in total closely similar (~0.005-0.006 m³/person) in NA and Europe (Excl. Russia).

CLT



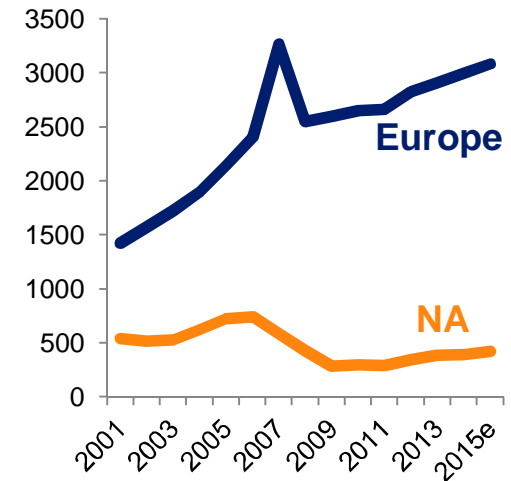
- New product
- Growing capacity
- 30-35 producers in Europe, 3 in NA

LVL



- Well established in NA
- New producers and capacity in Europe

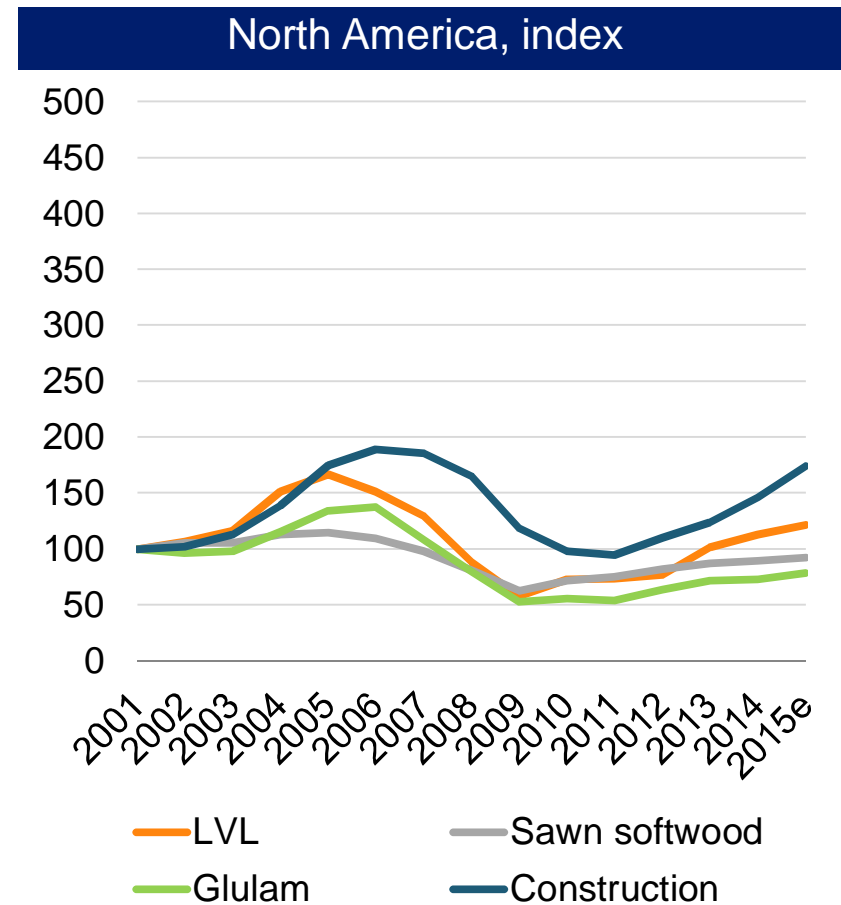
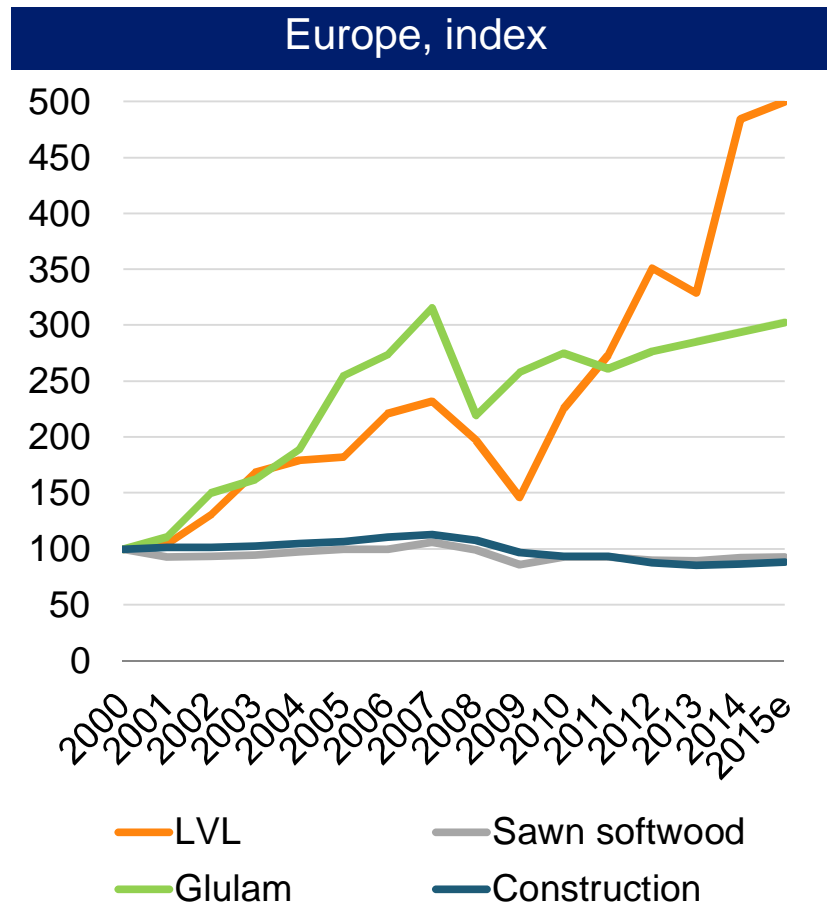
GLULAM



- Maturing market in Europe
- Relatively small in NA

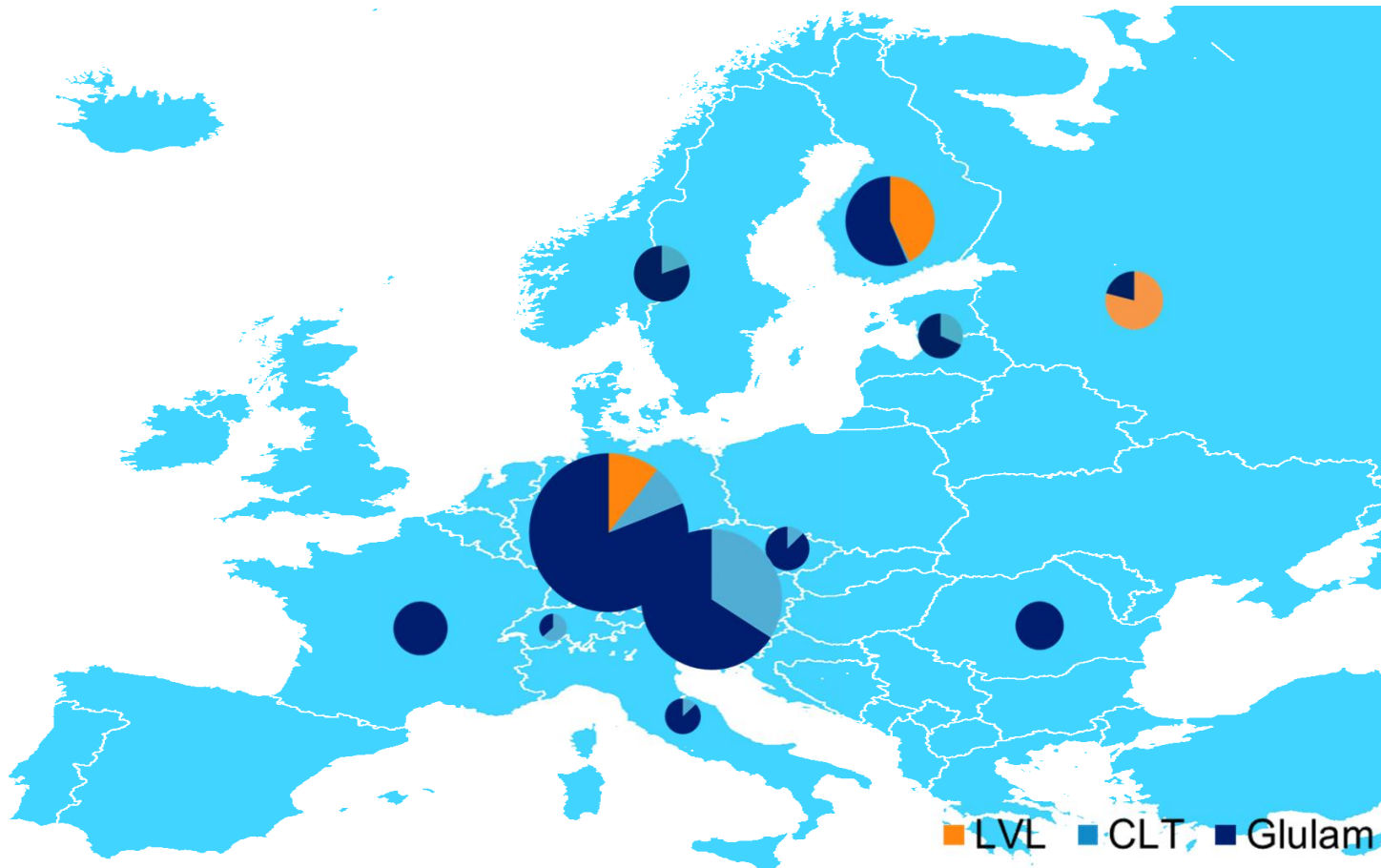
MARKET TRENDS OF ENGINEERED LUMBER

In Europe, the market of engineered lumber products still grows faster than construction, whereas in North America they have become mature products exposed to market cycles.



EUROPEAN ENGINEERED LUMBER PRODUCTION

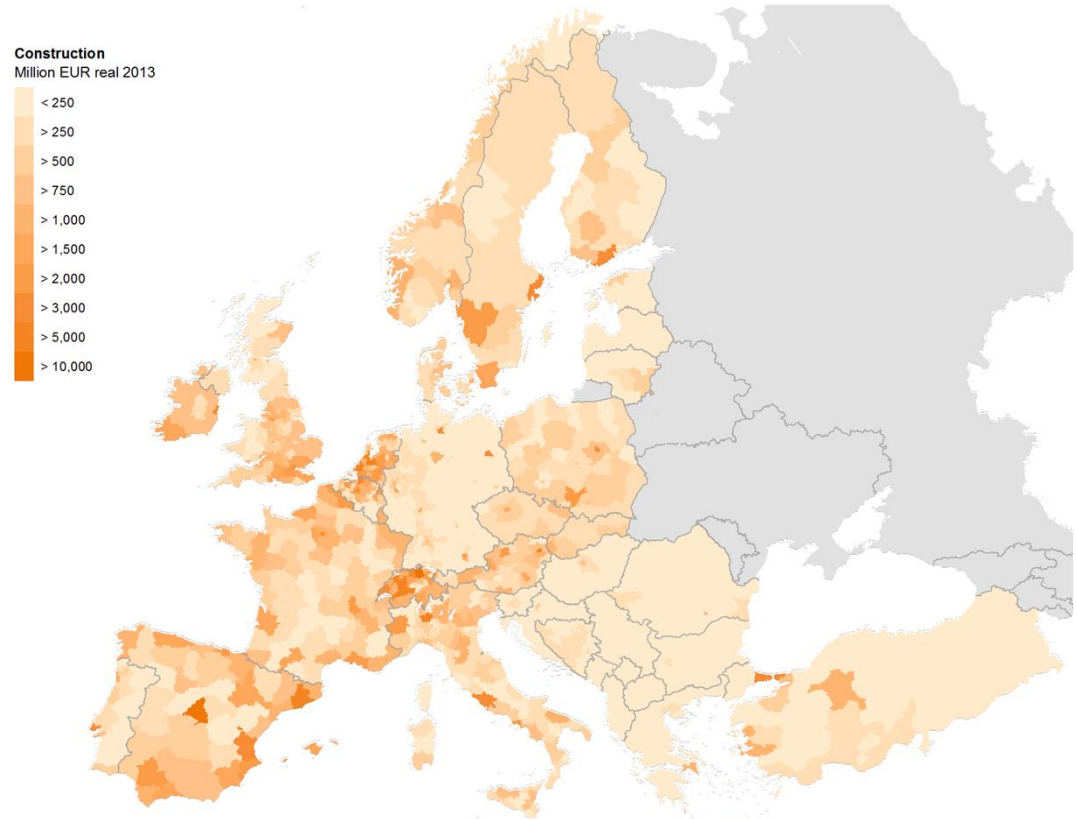
Austria, Germany and Finland are the leaders of engineered lumber in Europe



EUROPEAN MARKET OPPORTUNITIES

Opportunities for production closer to markets or alternative raw material sources?

Overview of European construction

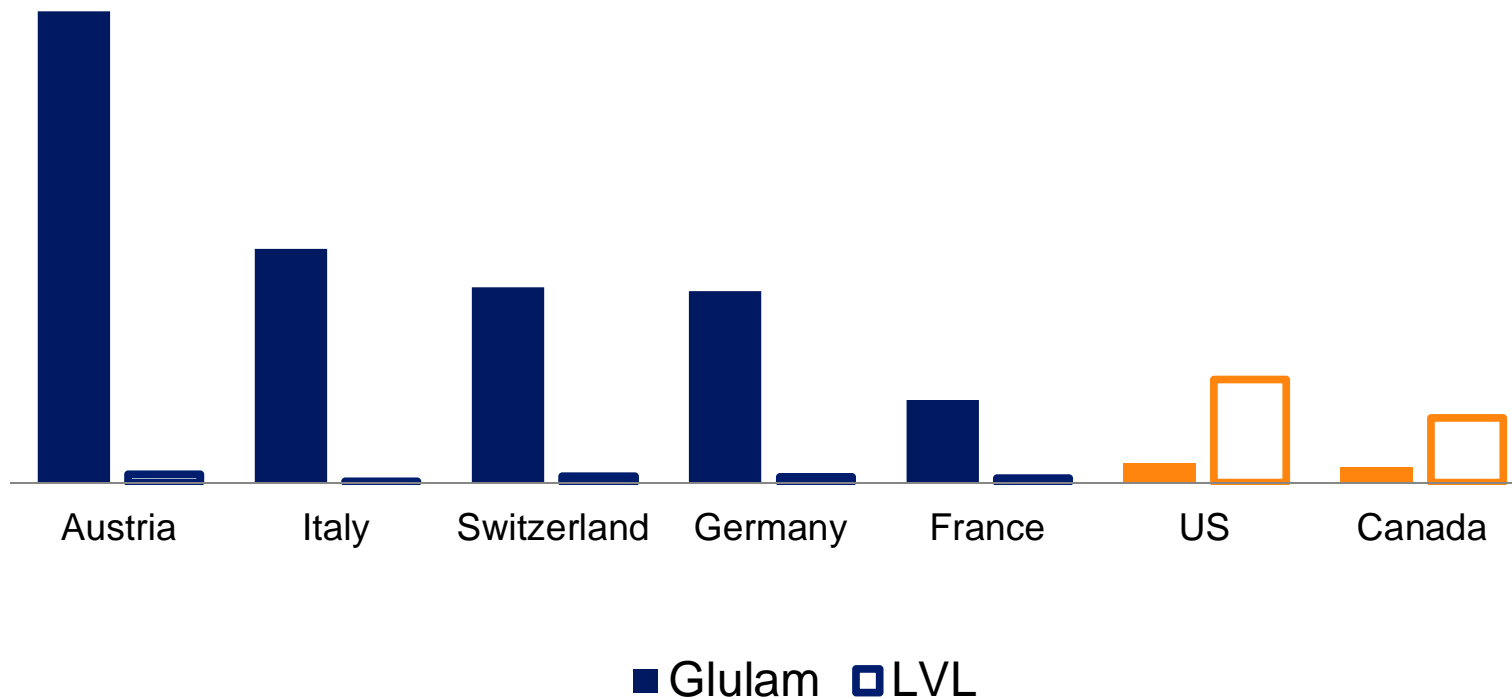


In the map, in national level measured construction expenditure is allocated based on population of smaller statistical areas to highlight the areas of intense construction activity

MARKET PENETRATION – EUROPE & N-AMERICA

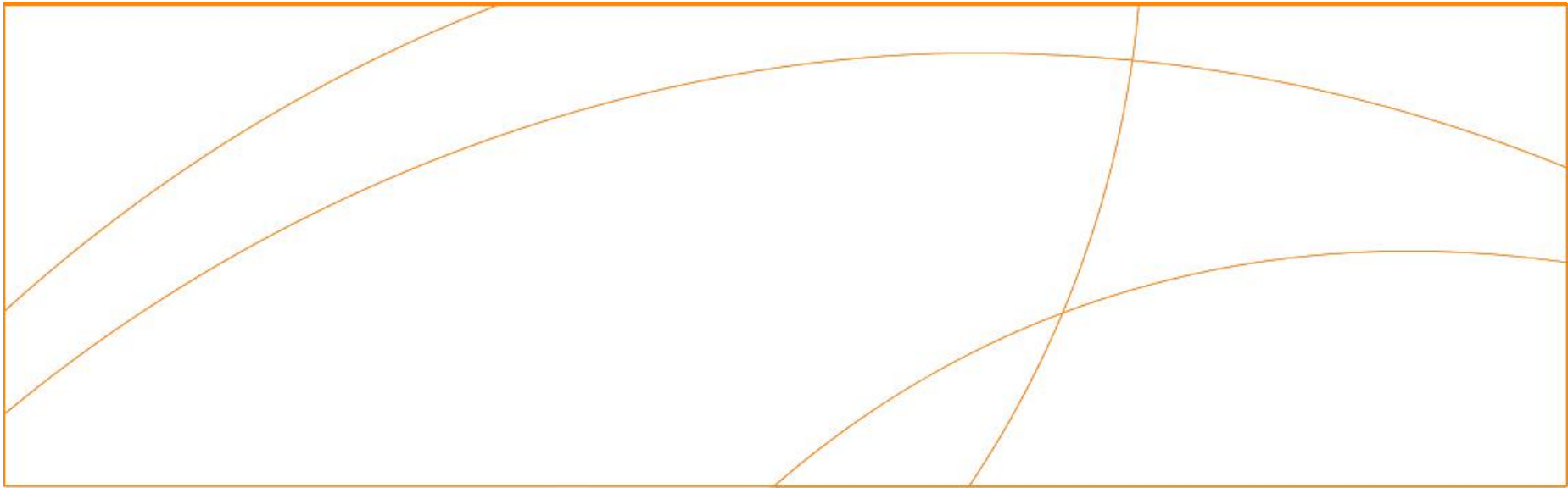
Varying wood resources and construction practices have also lead to different consumption patterns within Europe. Glulam is more common than LVL throughout the Europe, whereas the situation is reverse in both US and Canada.

Glulam/LVL consumption per capita



CONCLUSIONS

- Use of engineered wood products in Europe has grown much faster than construction activity – Engineered wood products have clearly gained market share from both traditional wood products and other materials.
- Variable consumption patterns of different products in different European countries indicate further potential for growth in selected markets.
- The industry has been able to accelerate growth in the use of engineered wood products with focused marketing campaigns, e.g. by Austrian proHolz accelerating growth of glulam market in Italy.
- CLT is still in early stage of development and a major growth opportunity both in North American and Europe. It can also have a significant impact on sawnwood demand. E.g. 10% market share gain in residential construction in Germany would increase the demand of sawnwood by 1.5-2 Mm³ or by 300-400 million EUR.



The leading advisor to the world's energy, forest and bio-based industries. Clients choose us for the sharpness of our insight, deep industry expertise and proven track record – because results count.

Pöyry Management Consulting

