

# *A Global Perspective on Market Opportunities*

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Institute of Chartered Foresters National Conference 2016:  
The Timber Supply Chain - Dynamics and Opportunities  
27-28 April 2016, Newcastle, United Kingdom



Food and Agriculture  
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# Content

- UNECE/FAO Forestry and Timber Section
- The Forest Products Annual Market Review
  - Sawnwood markets
  - Housing markets
  - Value added wood products
  - Biorefinery
- Where are the opportunities?
- Conclusions



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# UNECE/FAO Forestry and Timber Section



**United Nations  
Economic Commission for Europe**

*1947*

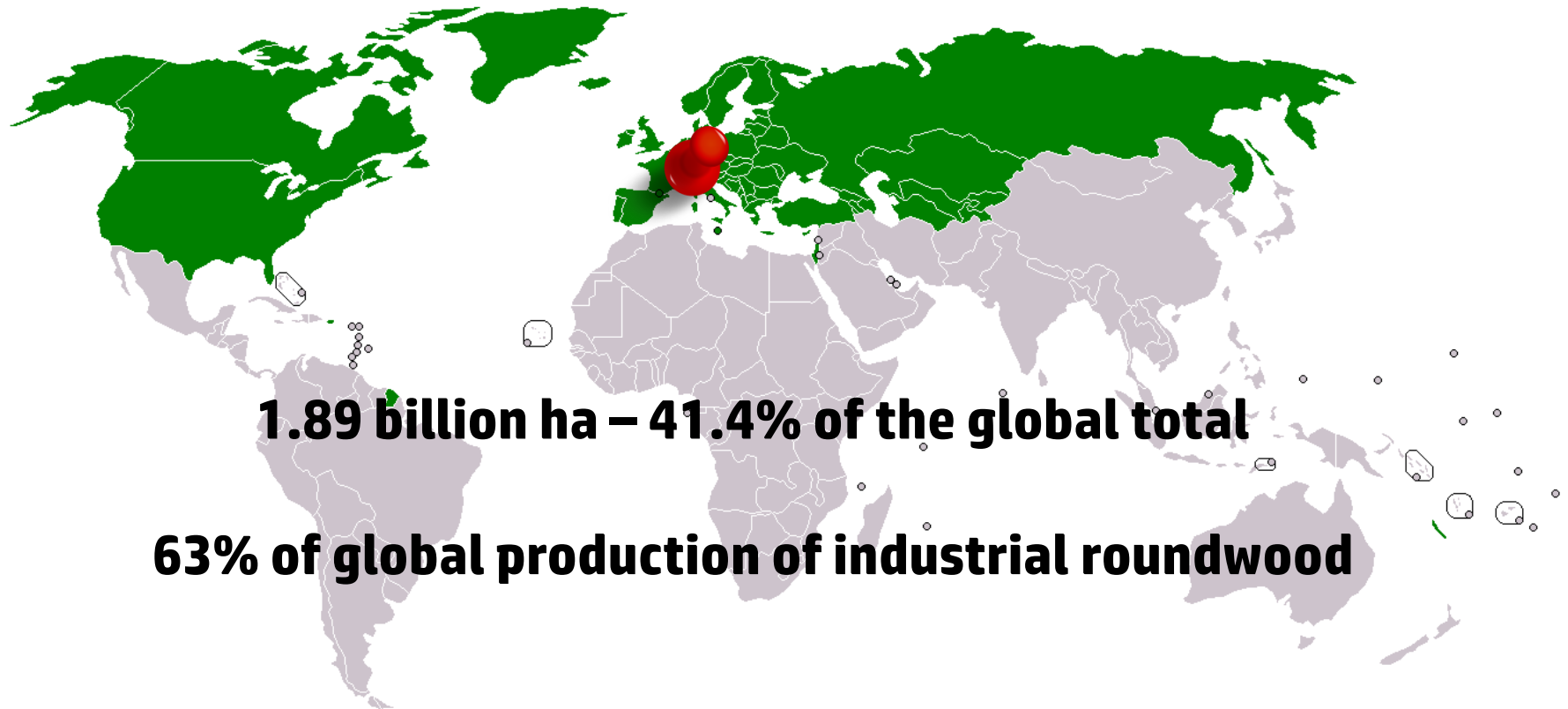


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# UNECE region





# Forestry and Timber Section

**WA1**

- data, monitoring and assessment

**WA2**

- policy dialogue and advice

**WA3**

- communication and outreach

**WA4**

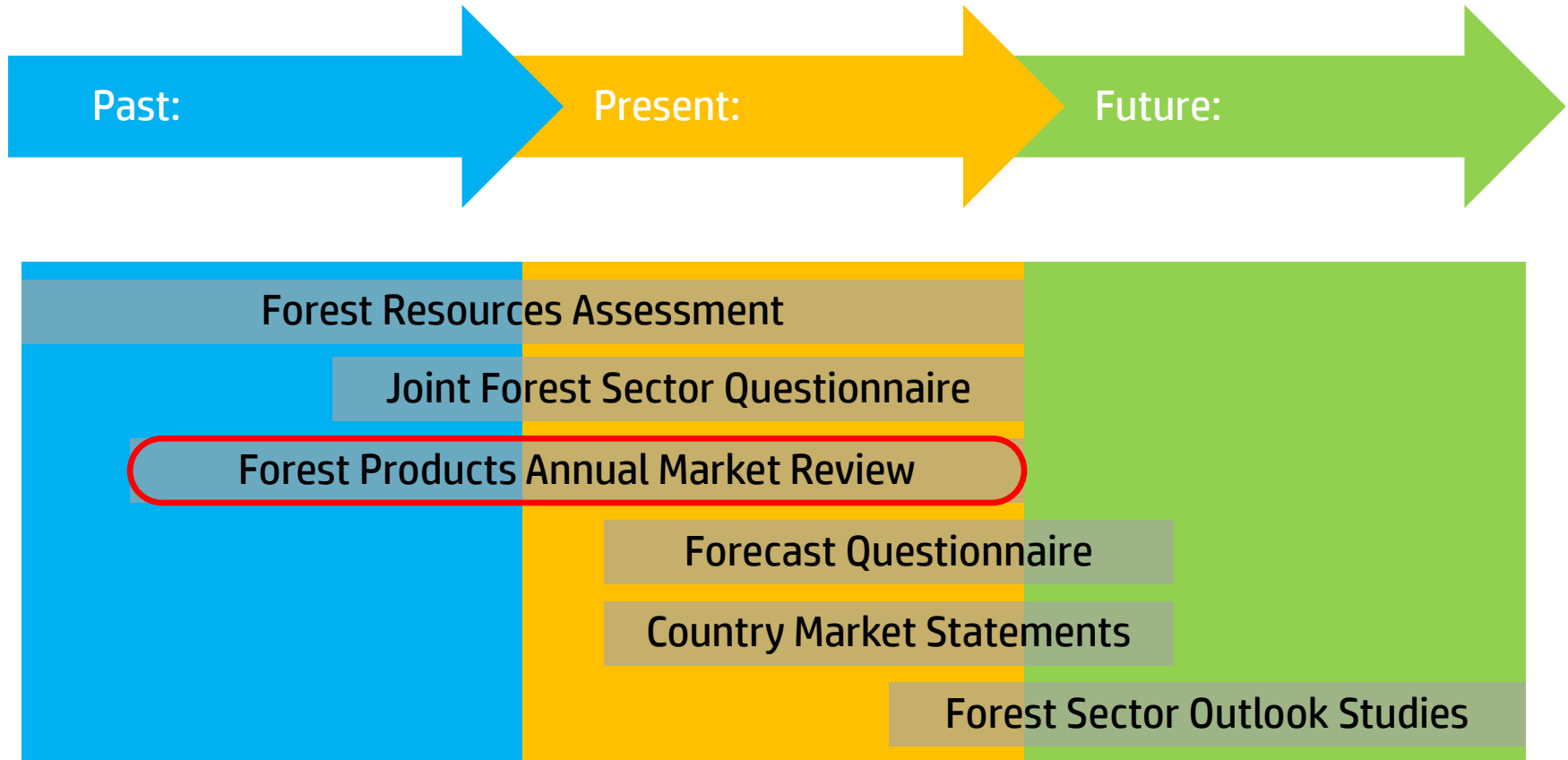
- capacity building







# Data, analysis, trends





# Forest Products Annual Market Review



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## Forest Products

Annual Market Review 2014-2015



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- Comprehensive analysis of markets in the UNECE region
- A range of products from roundwood and primary processed products to value-added and innovative wood products
- Statistics and analysis
- An overview of policies, institutional forestland ownership and markets for wood energy, value-added wood products and housing
- The role of sustainable forest products internationally
- Drivers and trends in policies

# FPAMR 2015-2016 - chapters

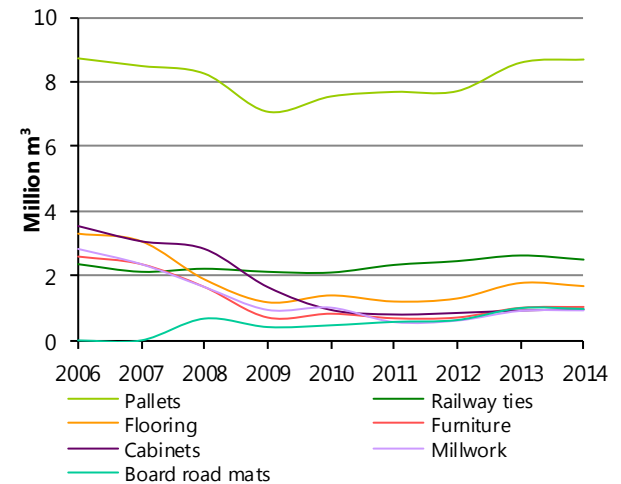
## Chapter 3 on a special topic

1. Overview
2. Policies
3. **Wooden pallet and packaging (2016)**
4. Wood raw material markets
5. Sawn softwood markets
6. Sawn hardwood markets
7. Wood-based panel markets
8. Paper, paperboard and woodpulp markets
9. Wood energy markets
10. Value-added wood products markets
11. Housing and construction markets

Global demand over 5.1 bil. units by 2017 (200 mil. m<sup>3</sup>), with almost 10 bil. pallets in circulation!



US sawn hardwood consumption, by subsector, 2006-2014





# Sawnwood



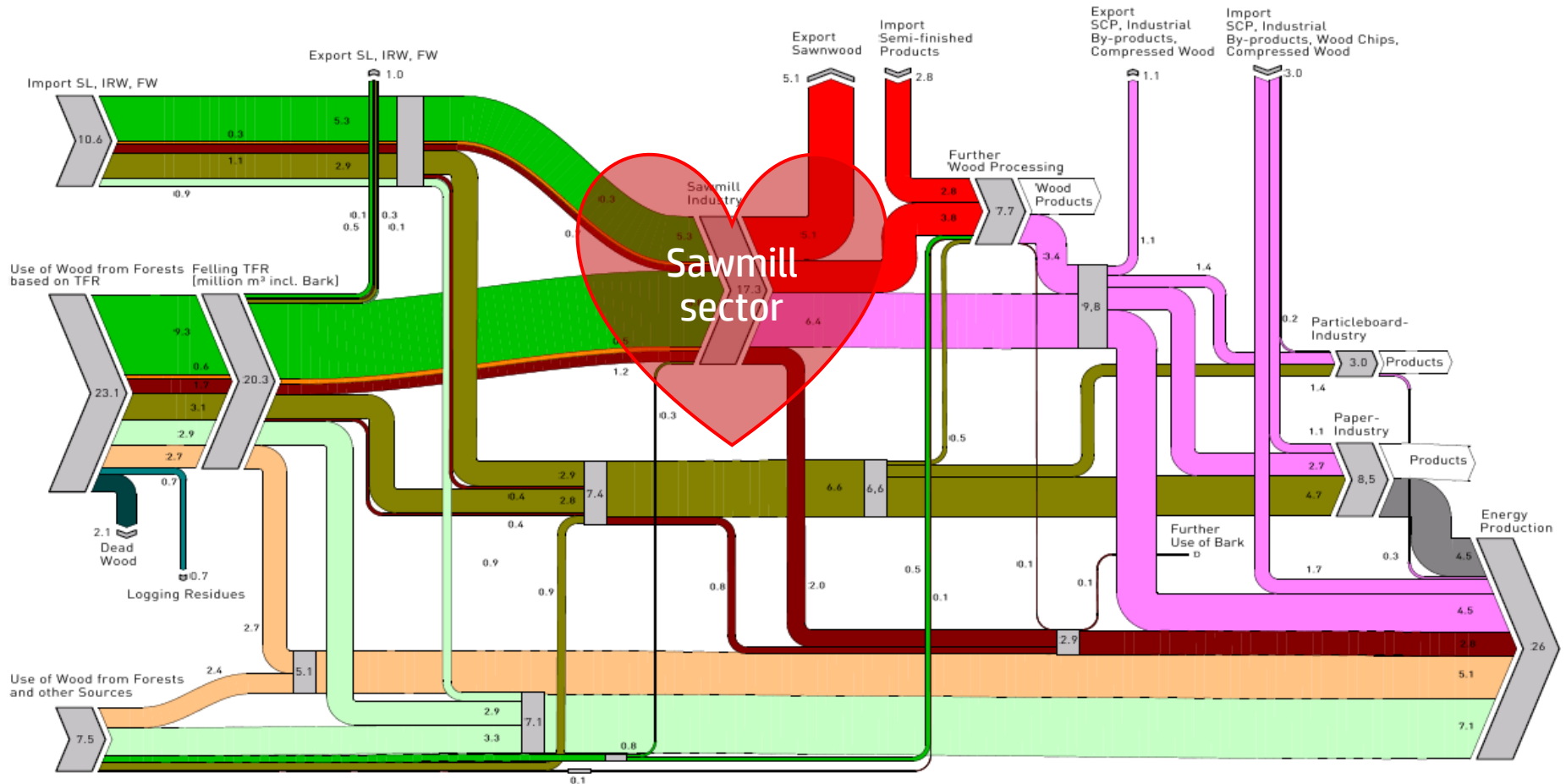
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# The role of sawmills



LEGEND (All values are given in million m³; values < 0.1 million m³ are not shown; numerical values partially rounded)

- Sawlogs (SL)
- Cross-Cut Ends
- Firewood (FW) incl. Bark
- Logging Residues
- Bark
- Sawmill Co-products (SCP), Industrial By-products, Compressed Wood
- Industrial Wood (IRW)
- Wood Chips
- Black Liquor
- Dead Wood etc.
- Sawwood & Semi-finished Products

ISSUE of June 2015

Reference year: 2013



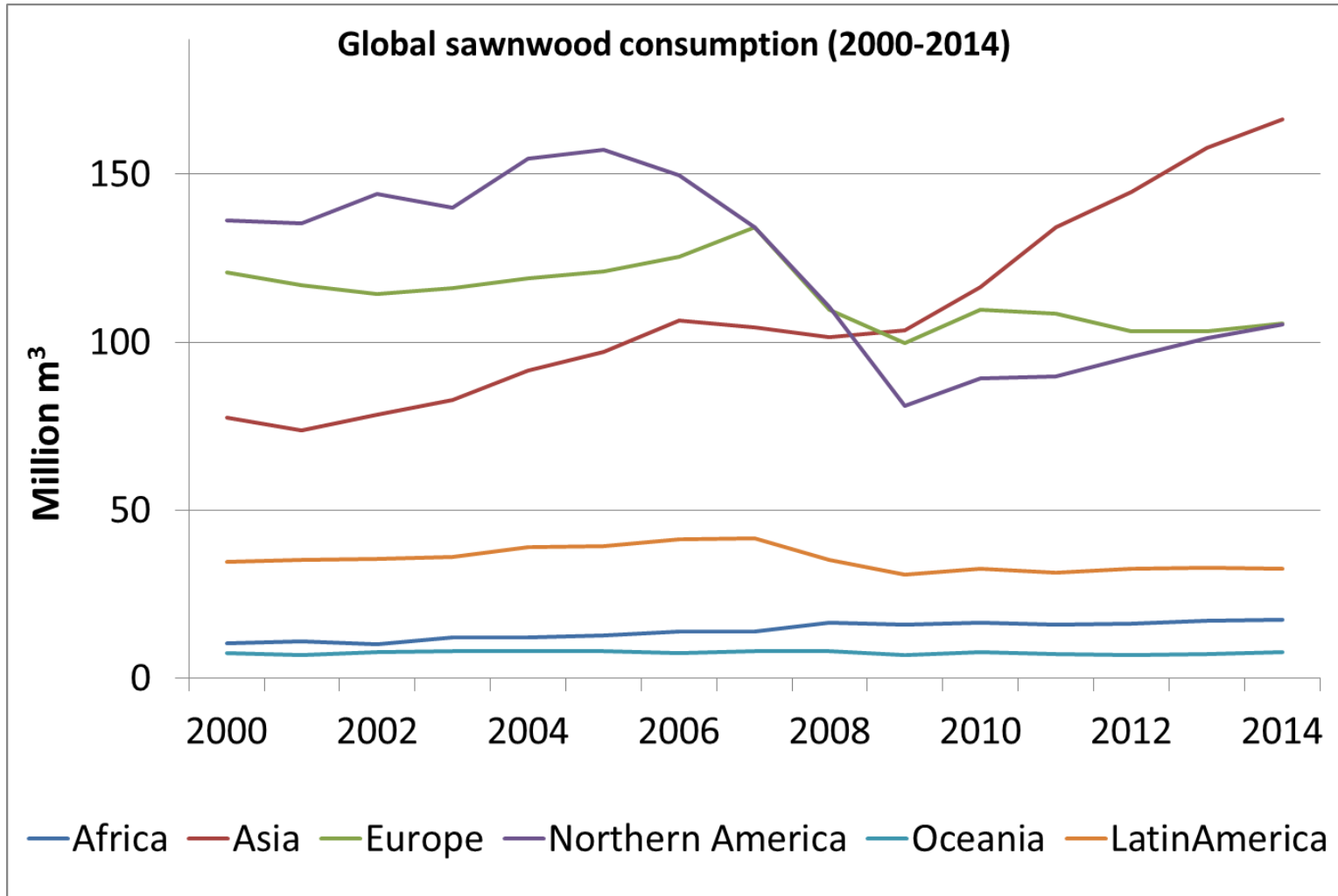
# Sawnwood

## Apparent consumption of sawn softwood in the UNECE region, by subregion, 2013-2014

*(thousand m<sup>3</sup>)*

	2013	2014	<i>m<sup>3</sup>/ capita (2014)</i>	Change (%) 2013- 2014	Change (%) 2010- 2014
<b>Europe</b>	84,233	86,526	0.140	2.7	-3.7
<b>CIS</b>	18,307	17,629	0.064	-3.7	19.8
<b>North America</b>	82,181	85,598	0.246	4.2	18.4
<b>Total</b>	184,721	189,753	0.152	2.7	7.3

# Sawnwood







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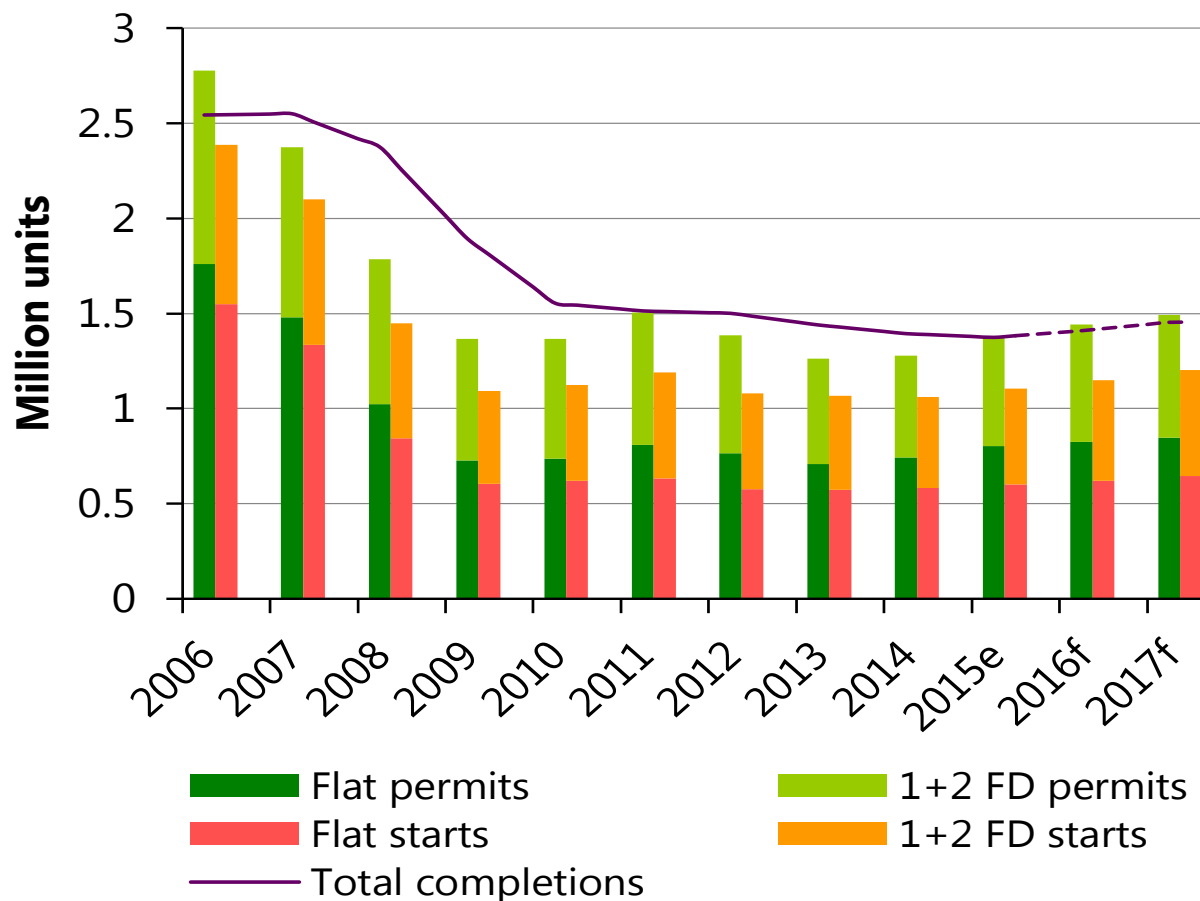
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# Housing and construction



# Housing and construction

## Building permits, housing starts and completions, Euroconstruct region, 2006-2017



**Notes:** FD = family dwellings; e = estimate; f = forecast.

**Source:** Euroconstruct, 2015.





# Housing and construction

## Top five Euroconstruct region countries for new construction and renovation expenditure, 2014-2017

(\$ billion)

<i>New construction</i>					<i>Renovation</i>				
<i>Country</i>	<i>2014</i>	<i>2015e</i>	<i>2016f</i>	<i>2017f</i>	<i>Country</i>	<i>2014</i>	<i>2015e</i>	<i>2016f</i>	<i>2017f</i>
Germany	52.1	54.4	56.0	57.4	Germany	126.1	126.1	125.5	124.8
France	49.4	48.4	51.8	55.2	Italy	72.0	72.2	72.8	73.8
UK	44.4	47.5	48.4	50.1	France	58.2	58.7	59.3	60.3
Italy	16.5	17.3	19.0	21.0	UK	41.9	43.4	44.1	44.4
Spain	17.8	16.2	16.3	16.5	Spain	14.8	15.0	15.5	16.1

**Notes:** e = estimate. f = forecast.

**Source:** Euroconstruct, 2015.

UK (2014), Gross value-added in the forestry sector (ISIC Rev.4 Division 02, 16 and 17):

9.5 billion \$



# Value-added wood products

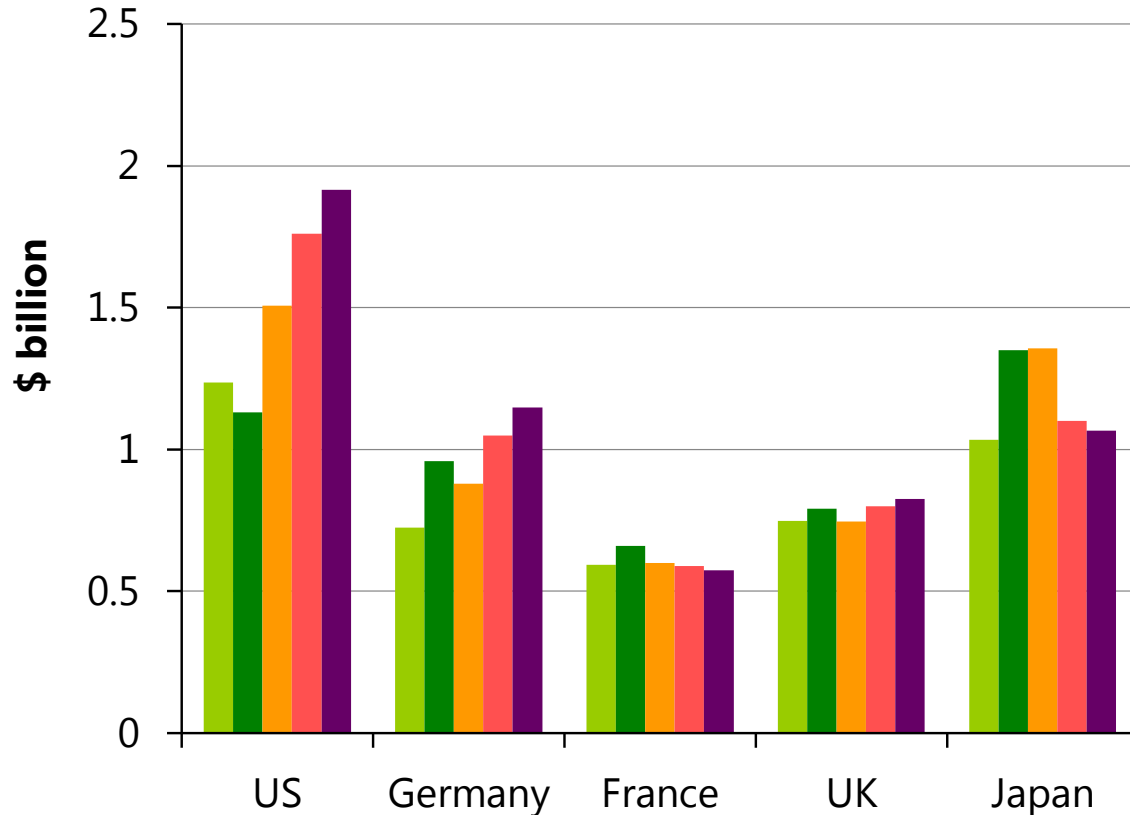
- builders' joinery and carpentry products (BJCs)
- profiled wood
- cross-laminated timber (CLT).





# Value-added wood products

## Builders' joinery and carpentry imports, top five importing countries, 2010-2014



**Sources:** Eurostat, 2015; Trade Statistics of Japan, 2015; US International Trade Commission, 2015.

# Value-added wood products

TABLE 10.3.1

## Builders' joinery and carpentry imports, top five importing countries, 2013-2014

(values in billion dollars and market share in percentage)

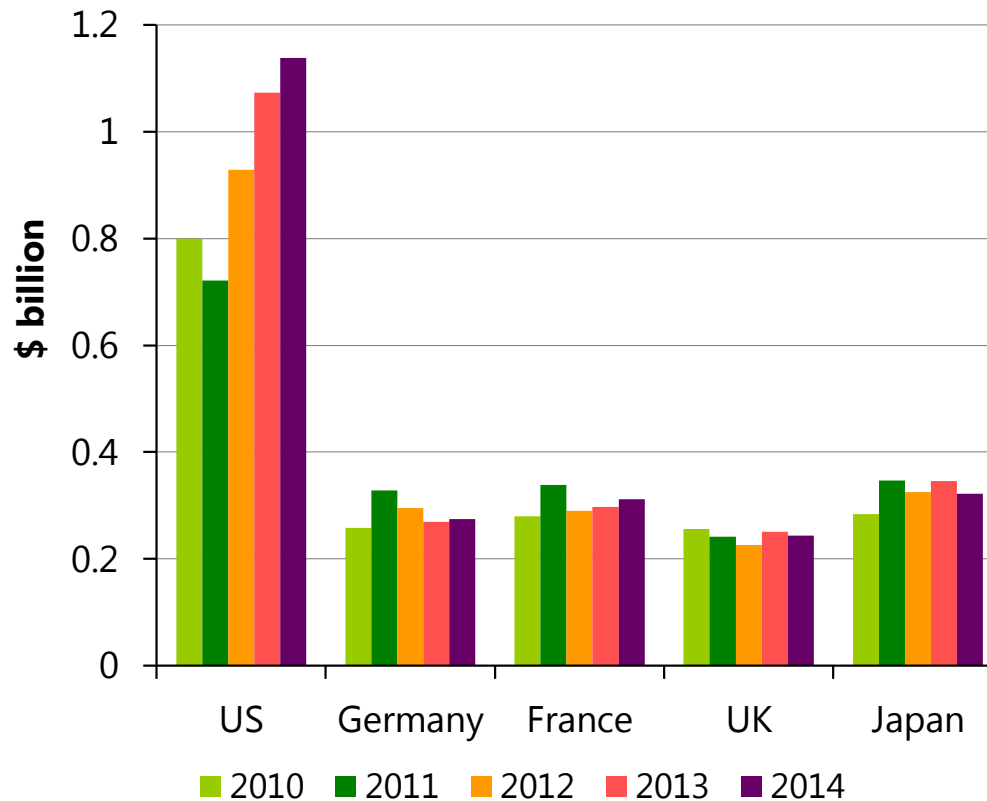
	US		Germany		France		UK		Japan	
	2013	2014	2013	2014	2013	2014	2013	2014	2013	2014
Total value of imports	1.8	1.9	1.0	1.1	0.6	0.6	0.8	0.8	1.1	1.1
<i>Origin (%)</i>										
Asia	34.4	33.7	8.6	8.1	9.9	9.8	34.4	36.8	88.8	91.6
North America	47.0	47.3	0.2	0.2	0.7	0.5	1.8	1.9	3.0	2.9
Europe	4.8	5.0	90.8	91.0	87.2	87.7	59.6	57.2	5.5	3.6
Latin America	13.6	13.6	0.0	0.0	1.3	1.0	2.8	2.8	0.0	0.0
Others	0.2	0.4	0.4	0.6	0.9	1.1	1.5	1.3	2.6	1.9

**Sources:** Eurostat, 2015; Trade Statistics of Japan, 2015; US International Trade Commission, 2015.



# Value-added wood products

**Profiled wood imports, top five importing countries,  
2010-2014**



**Sources:** Eurostat, 2015; Trade Statistics of Japan, 2015; US International Trade Commission, 2015.



# Value-added wood products

TABLE 10.3.2

## Profiled wood imports, top five importing countries, 2013-2014

(values in billion dollars and market shares in percentage)

	US		Germany		France		UK		Japan	
	2013	2014	2013	2014	2013	2014	2013	2014	2013	2014
Total value of imports	1.1	1.1	0.3	0.3	0.3	0.3	0.3	0.2	0.3	0.3
<i>Origin (%)</i>										
Asia	20.2	20.3	19.9	22.0	10.5	9.3	59.3	55.8	77.7	76.4
North America	9.9	10.9	1.3	1.1	0.2	0.2	3.7	4.4	7.2	7.1
Europe	3.1	3.1	72.2	71.0	69.6	69.7	35.9	38.1	9.5	10.2
Latin America	64.9	64.4	3.9	3.3	18.5	19.5	1.0	1.5	4.3	5.0
Others	1.9	1.3	2.6	2.6	1.2	1.3	0.1	0.2	1.3	1.3

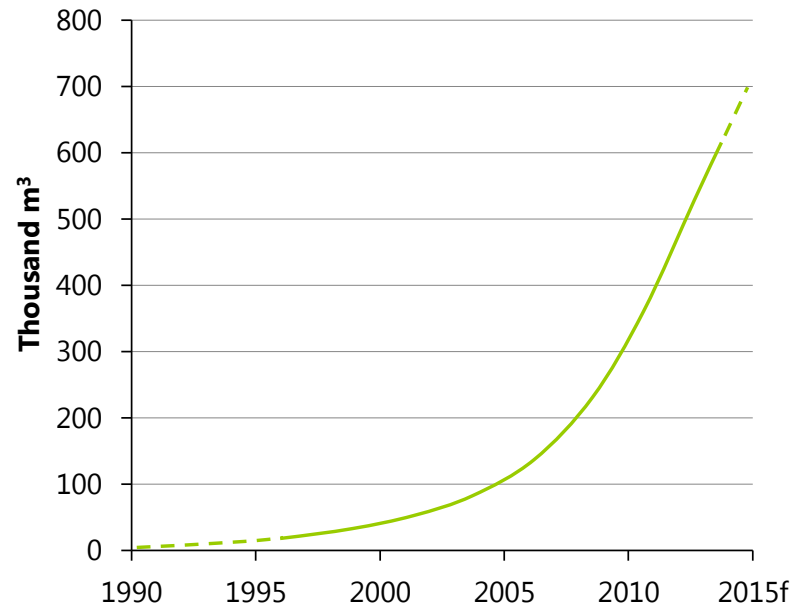
**Sources:** Eurostat, 2015; Trade Statistics of Japan, 2015; US International Trade Commission, 2015.



# Value-added wood products

GRAPH 10.5.4

Global production of CLT, 1990-2015



**Note:** f = forecast.

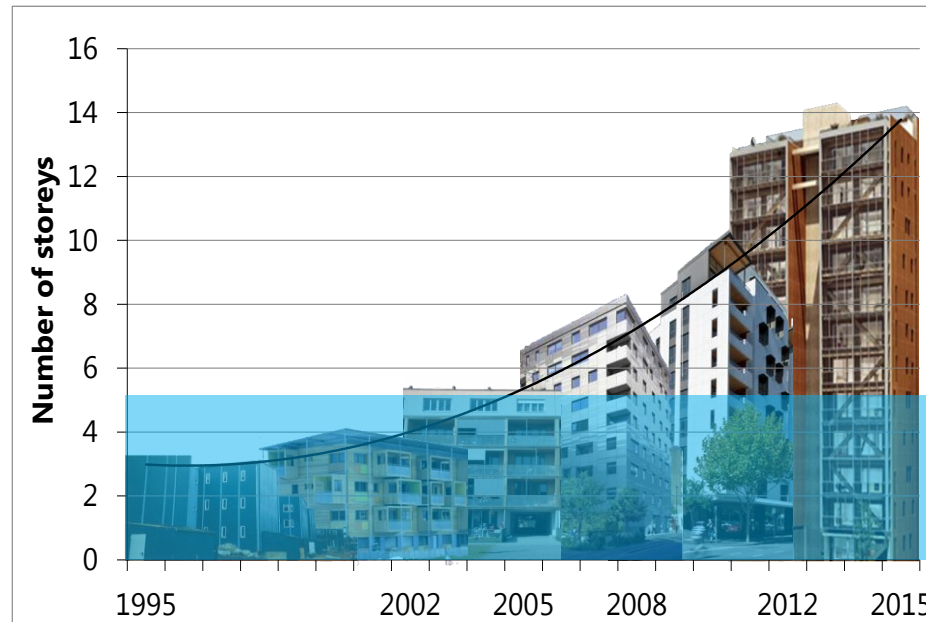
**Source:** Institute of Timber Engineering and Wood Technology, Graz University of Technology, 2015.



# Value-added wood products

GRAPH 10.5.6

Number of storeys of CLT residential and office buildings, 1995-2015



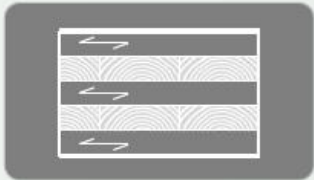
**TU Graz  
recommendation  
up to 5 storeys**

**Note:** \*1 = Aichach, Germany; \*2 = Judenburg, Austria; \*3 = Vienna, Austria; \*4 = London, UK; \*5 = Melbourne, Australia; \*6 = Bergen, Norway.

**Source:** Institute of Timber Engineering and Wood Technology, Graz University of Technology, 2015.

**Ongoing: Product Optimisation and Standardisation**





# Approvals and Standardisation

**1st STEP**  
National Approvals

**2nd STEP**  
ETAs

**3rd STEP**  
Standardisation

**Austria**

**France**

**Germany**

**Russia**

**Spain**

**ÖSTERREICHISCHES INSTITUT FÜR BAUTECHNIK**

**European technical approval** **ETA-06/0138**

English translation. The original version is in German.

<b>Handelsbezeichnung</b> Trade name	<b>KLIH Metall-Flugplatte</b> KLIH metal roof slab
<b>Zulassungspflichtiger Hersteller</b> Holder of approval	<b>KLIH Metall-Flug-Deckel</b> 8842 Klafsch an der Mur 202 Ostersonn
<b>Zulassungsbereich und Verwendungszweck</b> General type and use of construction product	<b>Metallene, stützenförmige Holzbockelemente für tragende Bauteile in Bauwerken</b> Steel metal slab element to be used as structural elements in buildings
<b>Datum der Zulassung</b> Validity from	<b>01.07.2011</b>
<b>Abgelaufenes Datum</b> Validity to	<b>31.06.2016</b>
<b>Hersteller</b> Manufacturing plant	<b>KLIH Metall-Flug-Deckel</b> 8842 Klafsch an der Mur 202 Ostersonn
<b>Dieses Europäische technische Zulassung zugehörig</b> This European technical approval consists of	<b>17 Seiten einschließlich 8 Anhängen</b> 17 pages including 8 Annexes
<b>Dieses Europäische technische Zulassung verlängert</b> This European technical approval extends to	<b>ETA-06/0138 mit Geltungsdauer vom 27.07.2016 bis zum 26.17.2011</b> ETA-06/0138 with validity from 27.07.2016 to 26.07.2011

**EOTA** European Organisation for Technical Approvals  
Europäische Organisation für Technische Zulassungen  
Organisation Européenne pour l'agrément technique

**ISO 165**

**prEN 16351**

**EN 1995**

Source: Gerhard Schickhofer (2015)



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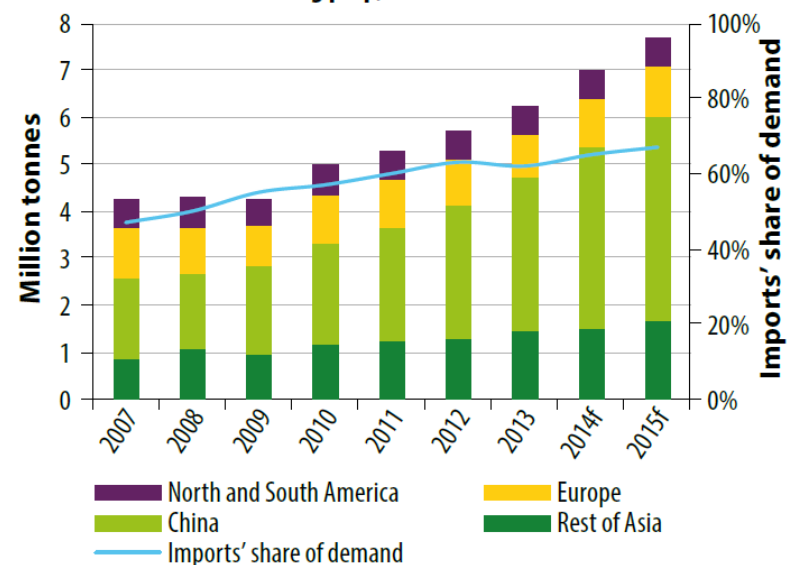
# Biorefinery



### CTK06 - Cotton #2 (ICEUS)



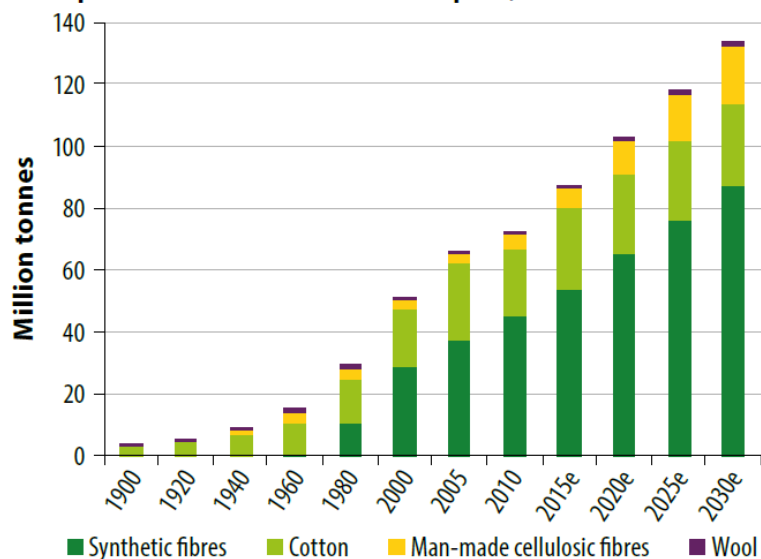
### Global demand for dissolving pulp, 2007-2015



Note: f = forecast

Source: RISI, 2014.

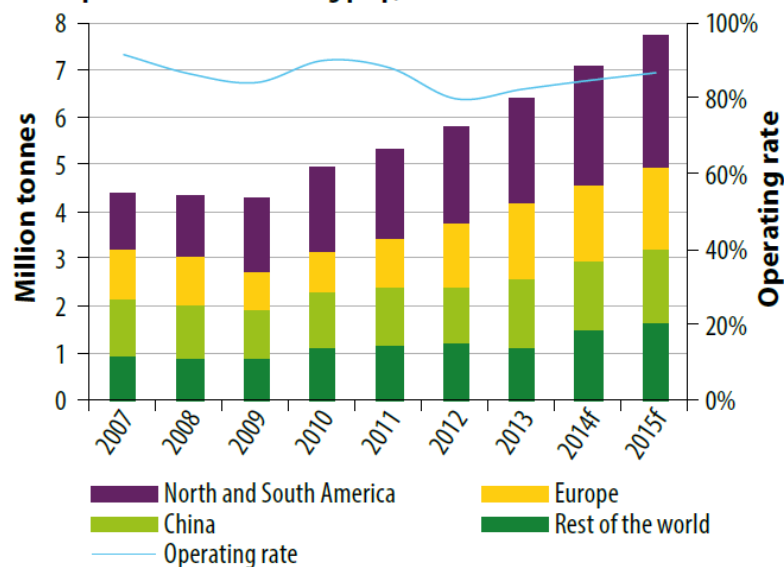
### Development of filament and fibre consumption, 1900-2030



Notes: e = future estimates and based on assumption that cotton is at peak production, i.e. reaches maximum potential for cultivation.

Source: Hämmerle, 2011.

### Global production of dissolving pulp, 2007-2015



Note: f = forecast

Source: RISI, 2014.





# Where are the opportunities?

- **Construction**
- **Climate change - COP 21**
- **2030 Agenda for Sustainable Development**
- **Green/Biobased/Circular Economy**



# Conclusions

- **Wood is local, THE global opportunity does not exist!**
- **The forest sector needs to be proactive at any level in linking up to policy developments *outside* the sector!**
- **The forest sector has great messages to tell and great products to sell!**



# Thank you for your attention!

**For more information contact:**

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