

# ARAUCO

Corporate Presentation

Renewables for  
a better life





Arauco Overview

Business Segments

Investments

Recent Events and Initiatives

Sustainability

Copec acquires Celulosa Constitucion and Celulosa Arauco. The merged firm is called "Celulosa Arauco y Constitución S.A."



1977



Arauco begins producing Sawn Timber, and creates Aserraderos Arauco S.A.

1993



Creation of subsidiary Paneles Arauco S.A. Its Horcones mill starts operations in 1998.

1995



Acquisition of Licancel pulp mill from Attizhold Holding Swiss Company.

1999



1990

Arauco creates a forest research subsidiary named Bioforest.



1994

Arauco Generación (now Arauco Bioenergía) starts operations, producing energy through biomass.



1996

Arauco acquires in Argentina Alta Parana (now Arauco Argentina).



2000

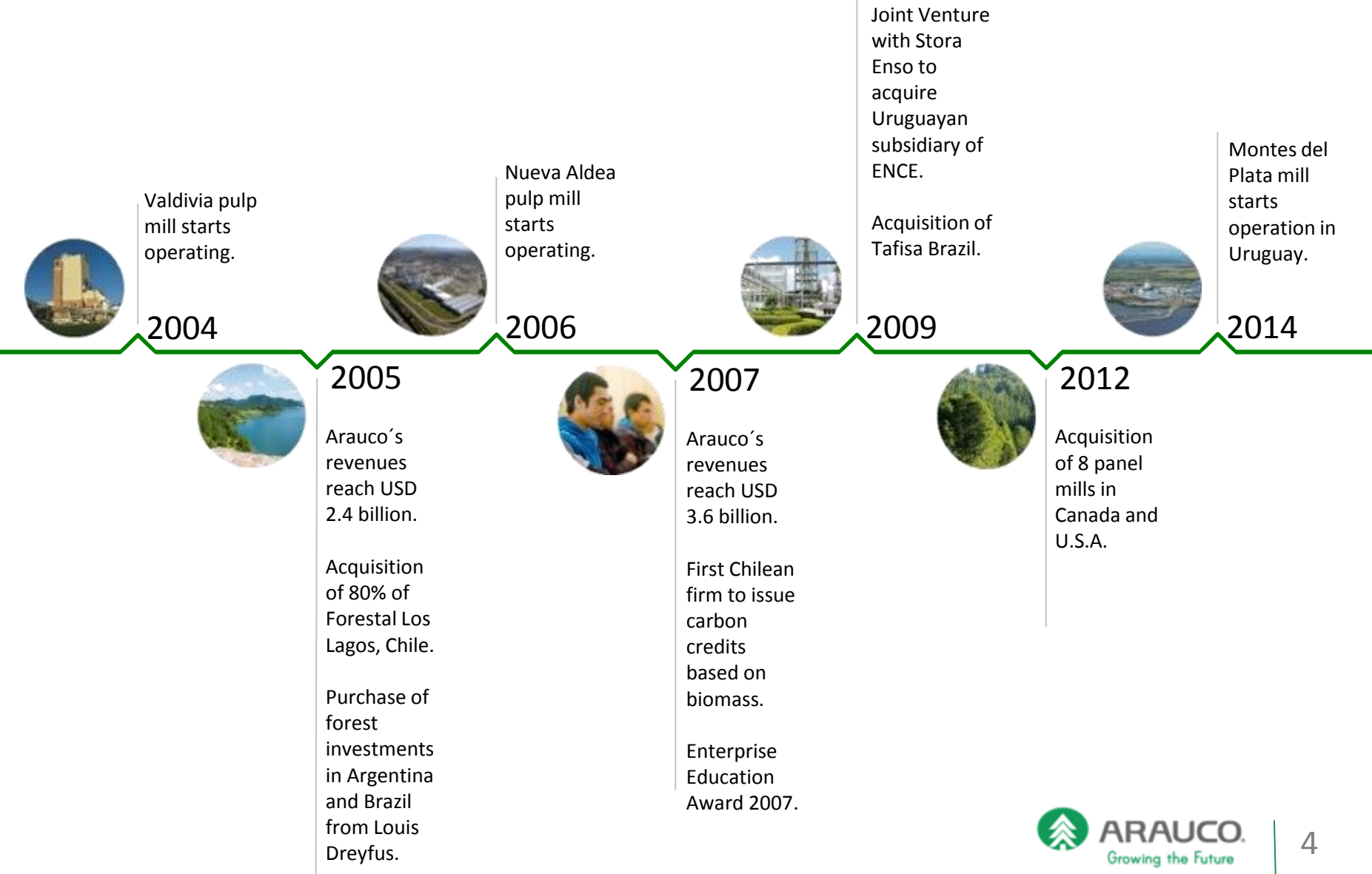
Arauco's revenues reach USD 1.2 billion.

Acquisition of Forestal Cholguán.

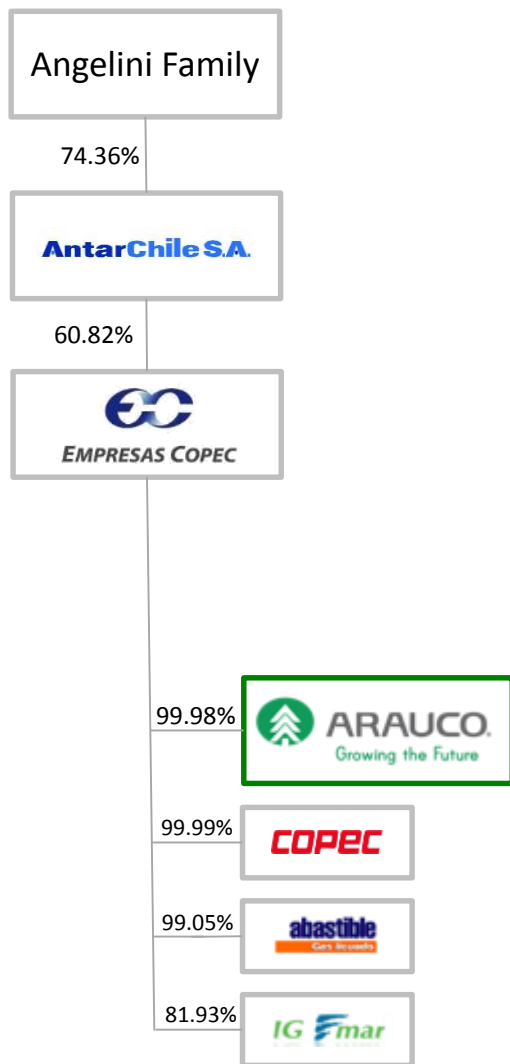
Acquisition of Trupán and Cholguán panel companies.

Arauco started as a **CHILEAN FORESTRY AND PULP FIRM...**

# ... and today is a **WORLD-CLASS PLAYER** in the **FORESTRY PRODUCTS INDUSTRY** with regional operations and global reach



# ARAUCO at a glance



- ▶ Controlled by the Angelini family
- ▶ Part of Empresas Copec holding (#2 in Chile in market cap)
  - Arauco represents app. 63% of E.Copec's EBITDA
- ▶ SEC-registered
- ▶ In the US bond market since 1995

## Consolidated Selected Financials (As of December 2015)

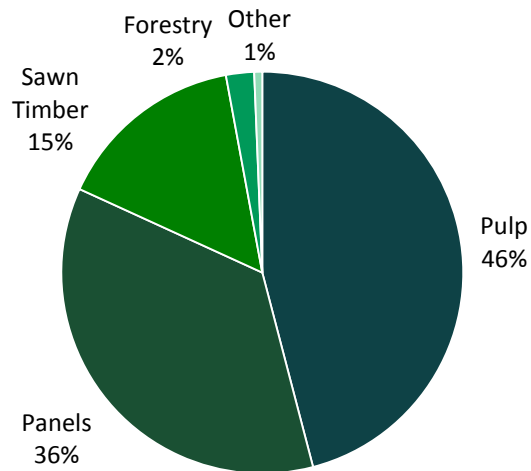
<i>In US\$ million</i>	Antarchile	Empresas Copec	Arauco
Sales	18,160	18,160	5,147
Assets	20,473	19,937	13,807
Consolidated Debt	6,374	6,156	4,305
Market Cap	4,248	11,153	—

## Arauco's Credit Ratings

<b>FitchRatings</b>	<b>BBB (Stable)</b>
<b>STANDARD &amp; POOR'S</b>	<b>BBB- (Stable)</b>
<b>MOODY'S</b>	<b>Baa3 (Stable)</b>

# Diversified sales coupled with a solid capital structure

- ▶ **LARGEST** forestry company in **LATIN AMERICA**
- ▶ One of the world's **LOWEST COST** producers
- ▶ US\$ cash flows – 62% of revenues came from EXPORTS as of Dec. 2015
- ▶ **HIGH POTENTIAL** for sustained growth and profitability

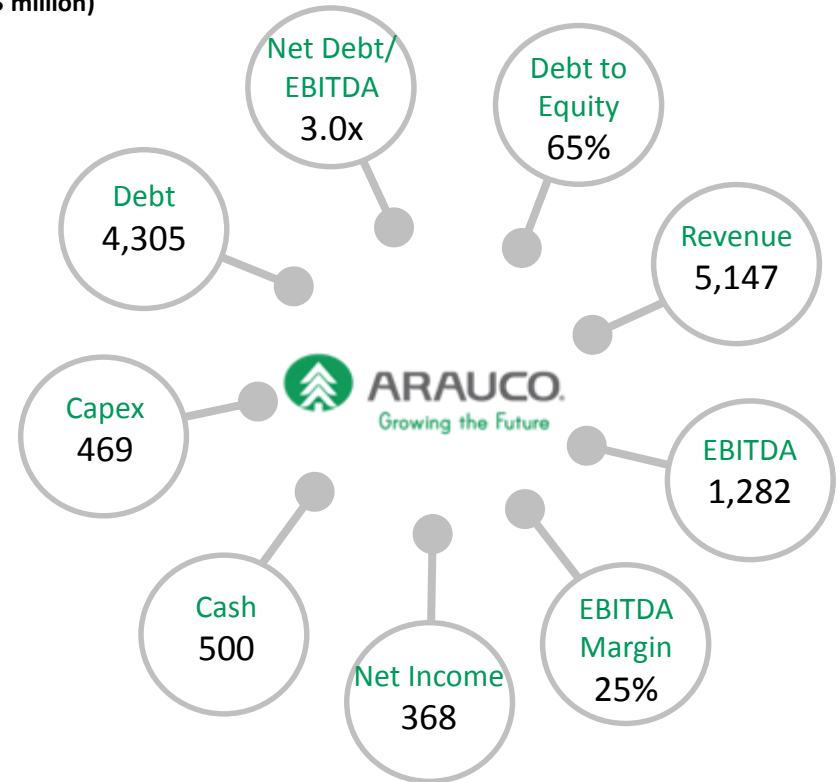


**Revenue**  
U.S.\$ 5,147 Million

*Note: Pulp, Panels and Sawn Timber division sales include energy*

## Financial Highlights December 2015

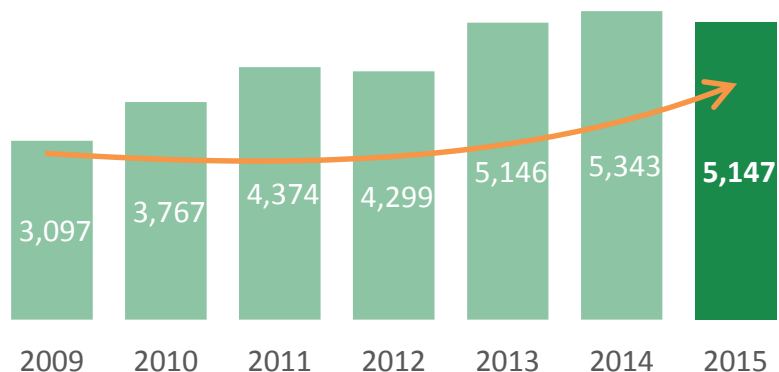
(in US\$ million)



# SOLID FINANCIAL PERFORMANCE throughout cycles

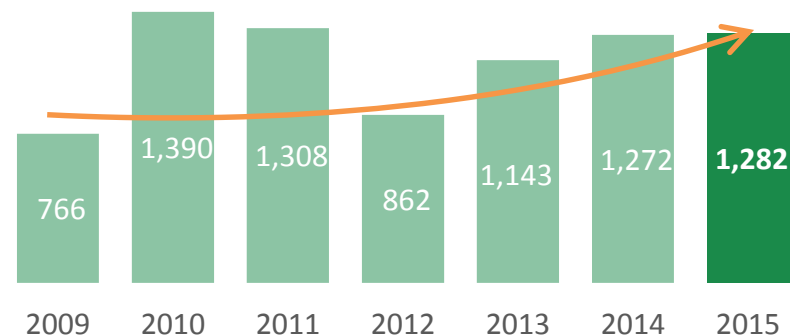
## Total Revenues

(in US\$ million)



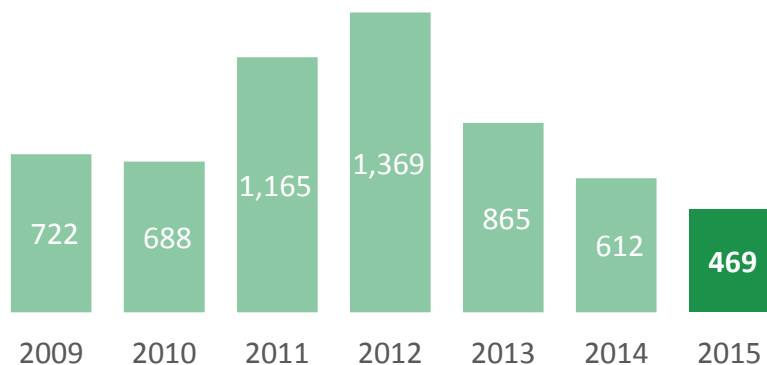
## Adjusted EBITDA

(in US\$ million)

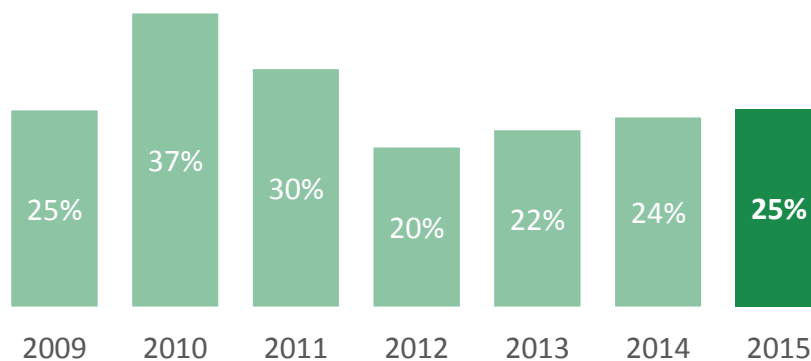


## CAPEX

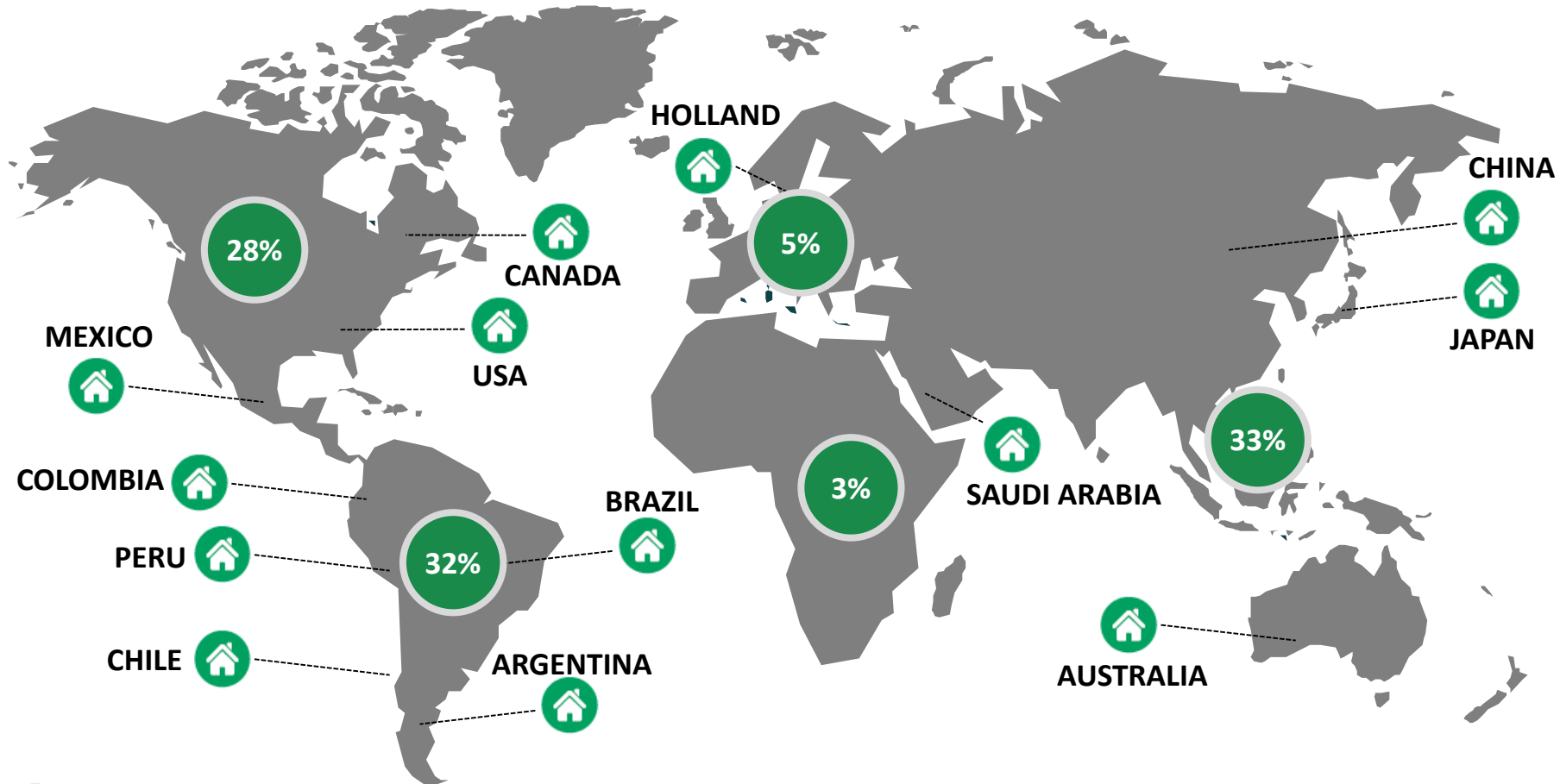
(in US\$ million)



## Adjusted EBITDA Margin



# Commercial Strategy: We sell to **OVER 70 COUNTRIES**



 % of Total Sales

 Sales Offices



# OPERATIONAL EFFICIENCY

✓ Bioenergy generation – self sufficiency in electricity consumption

✓ Access to low-cost wood

✓ Research & Development

✓ Competitive distances from forests to mills and from mills to ports
















✓ Lean management

✓ Maximize value of own pine trees through optimization technology

✓ Centralized strategic sourcing

✓ Economies of scale

# FIVE STRATEGIC BUSINESS SEGMENTS in a diversified operational footprint

	FORESTRY	PULP	PANELS	SAWN TIMBER	ENERGY
	1,108,683 Ha	5 mills 2,887,000 ADt	4 mills MDF: 515,000 m <sup>3</sup> PB: 300,000 m <sup>3</sup> HB: 60,000 m <sup>3</sup> Plywood: 710,000 m <sup>3</sup>	8 sawmills 4 remanufacturing facilities	10 Power Plants 606 MW
	263,384 Ha	1 mill 350,000 ADt	2 mills MDF: 300,000 m <sup>3</sup> PB: 260,000 m <sup>3</sup>	1 sawmill 1 remanufacturing facility	2 Power Plants 78 MW
	181,908 Ha		2 mills MDF: 1,255,000 m <sup>3</sup> PB: 310,000 m <sup>3</sup>		
	50% of 236,032 Ha	50% of 1,300,000 Adt			50% of 164 MW
 			8 mills MDF: 1,470,000 m <sup>3</sup> PB: 1,416,000 m <sup>3</sup>		
<b>TOTAL</b>	<b>1,671,991 ha</b>	<b>3.9 million Adt</b>	<b>6.6 million m<sup>3</sup></b>	<b>3.0 million m<sup>3</sup></b>	<b>766 MW</b>

December, 2015



Arauco Overview

**Business Segments**

**Forestry**

Investments

Pulp

Recent Events and Initiatives

Panels and Sawn Timber

Sustainability

Energy

# Forestry

Our strategy is to **MAXIMIZE THE VALUE** of each tree



→ Pulplogs



BSKP / UKP / MDF / HB / PBO

→ Sawlogs



Sawn TIMBER

→ High Quality Sawlogs



Plywood / Knot Free Sawn Timber  
Remanufactured Wood Products



Biomass



Energy



→ Pulplogs

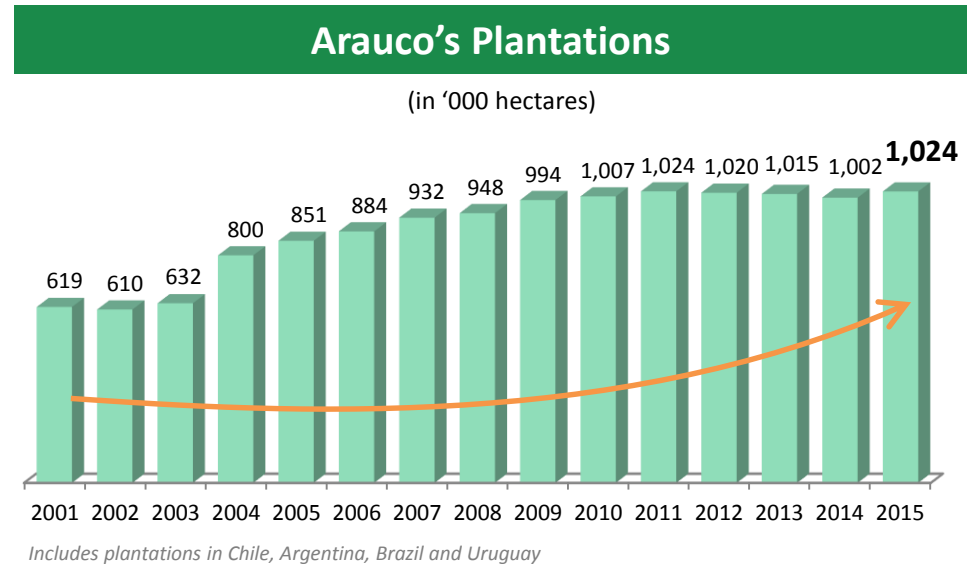


BHKP



# Forestry The base for **GROWTH**

- ▶ **LARGEST OWNER OF FORESTRY LAND** in the Southern Cone – 1.6 million hectares of land
- ▶ Strategically located plantations
- ▶ Ideal conditions for forests growth – **FAST GROWTH RATE AND SHORT HARVEST CYCLE**
- ▶ Efficient forest management, guaranteeing the sustainability of the operations
- ▶ **LOW FOREST OPERATING COSTS**
- ▶ Adoption of **STRICT ENVIRONMENTAL POLICIES** toward holdings of native forests



## Arauco invests in **RESEARCH AND TECHNOLOGY** to increase the quality and productivity of its operations



- ▶ We apply leading-edge biotechnology to the development of new ways to increase the quality, productivity and performance of our plantations
- ▶ Our plantations yield 40% more since we started applying our research program 25 years ago
- ▶ Our forestry operations use top-notch technology, enabling a safe environment for our workers and top performance



Arauco Overview

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Forestry

**Pulp**

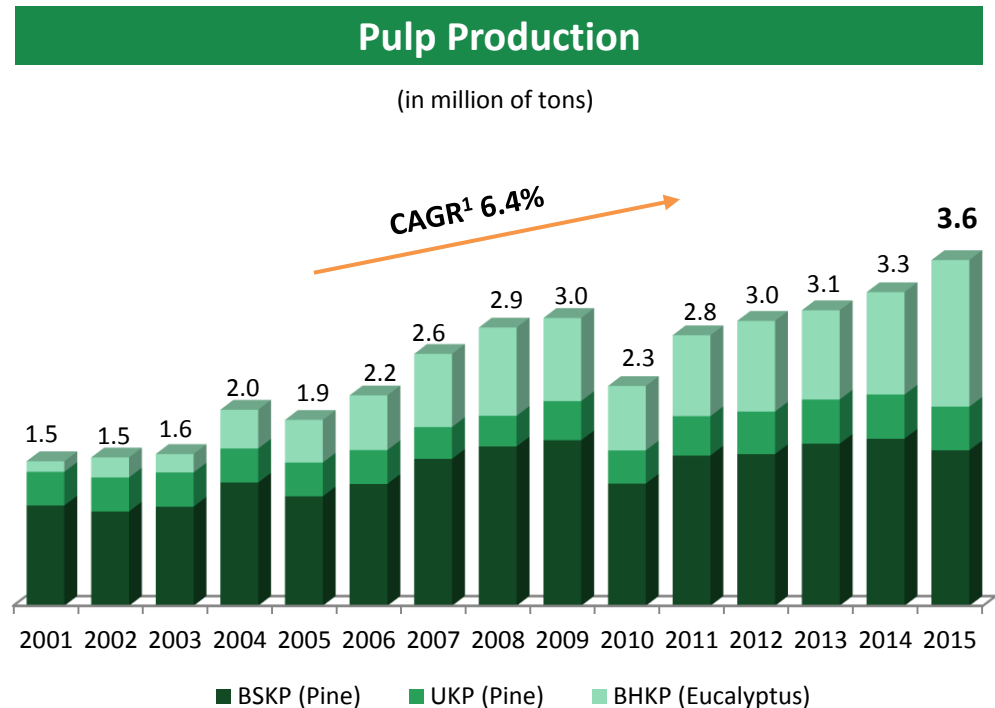
Panels and Sawn Timber

Energy

# PULP

## Arauco's MAIN INDUSTRIAL ACTIVITY, generating 46% of the company's sales

- ▶ **NUMBER TWO IN THE WORLD** in terms of market pulp capacity
- ▶ **LOW PRODUCTION COST**
- ▶ **STRATEGICALLY LOCATED MILLS:** proximity to forests, production facilities and ports
- ▶ Balance between short and long fiber pulp production
- ▶ **EXPORTS** represent **MORE THAN 87%** of pulp total sales as of 2015
- ▶ **COMPETITIVE** positioning in fast growth **ASIAN MARKETS**



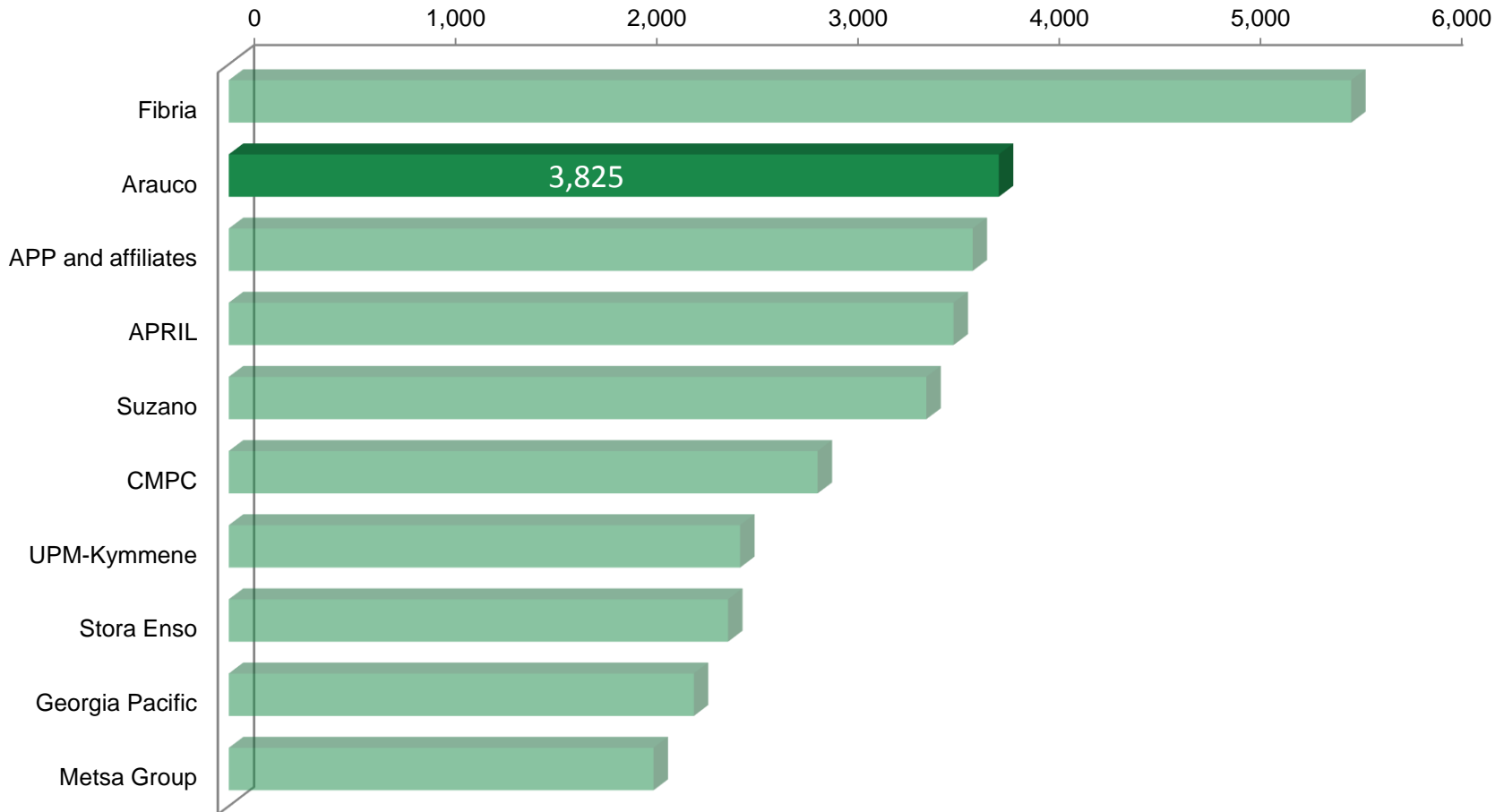
(1) Compounded Annual Growth Rate



# We are a **MAIN PLAYER** in the global market

## Installed Capacity – Market Pulp

(in thousand of tons)



# PULP OUR MILLS



645 Th. tons

1,155 Th. tons

1,505 Th. tons

## Arauco Mill (Arauco I)

- Completed in 1972
- Annual production capacity of 290,000 tons of Bleached Pulp

## Constitucion Mill

- Started production in 1976
- Annual production capacity of 355,000 tons of Unbleached Softwood Pulp

## Arauco Mill (Arauco II)

- Started production in 1992
- US\$600 MM investment
- Annual production capacity of 510,000 tons of Softwood Bleached Pulp

## Alto Parana Mill

- Acquired in December 1996
- US\$290 MM investment
- Annual production capacity of 350,000 tons Pine Bleached Kraft Pulp and Fluff



1,660 Th. tons

2,210 Th. tons

3,237 Th. tons

3,888 Th. tons

## Licancel Mill

- Acquired in September 1999
- US\$127MM investment
- Annual production capacity of 150,000 tons of Unbleached Softwood Pulp

## Valdivia Mill

- Started production in 2004
- US\$574 MM investment
- Annual production capacity of 550,000 tons of Bleached Pulp

## Nueva Aldea Mill

- Started production in 2006
- US\$850 MM investment
- Annual production capacity of 1,027,000 tons of Bleached Pulp

## Montes del Plata Mill (50%)

- Started production in June 2014
- US\$2,500 MM investment
- Annual production capacity of 1,300,000 tons

**PULP**

## Montes del Plata - Uruguay

Total Investment  
US\$2,500 MM

Annual capacity  
1,300,000 Adt

Generation capacity  
164 MW



# PULP

We achieve **COMPETITIVE DISTANCES** from forests to mills, and from mills to ports in Chile



**123 kms.**  
*(weighted average)*

	Kms
Chile	85
Uruguay	282

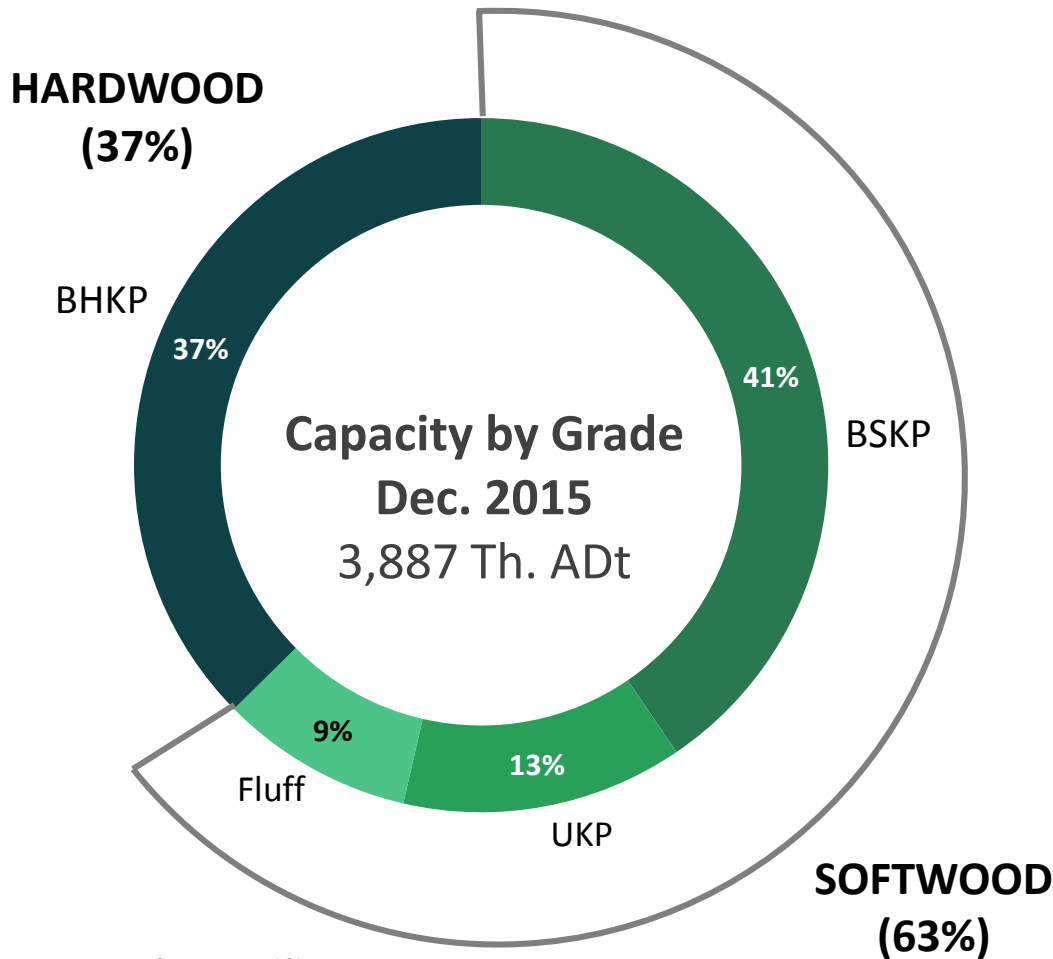
Average Distance  
Forest to Mill

	Kms
Nueva Aldea	63
Arauco	35
Valdivia	301
Constitución	316
Licancel	420
Montes del Plata	0

Average Distance  
Mill to Port

Weighted average distance between our pulp mills located in Chile and Uruguay  
November 2015

# Increasing our **BALANCE** between short and long fiber

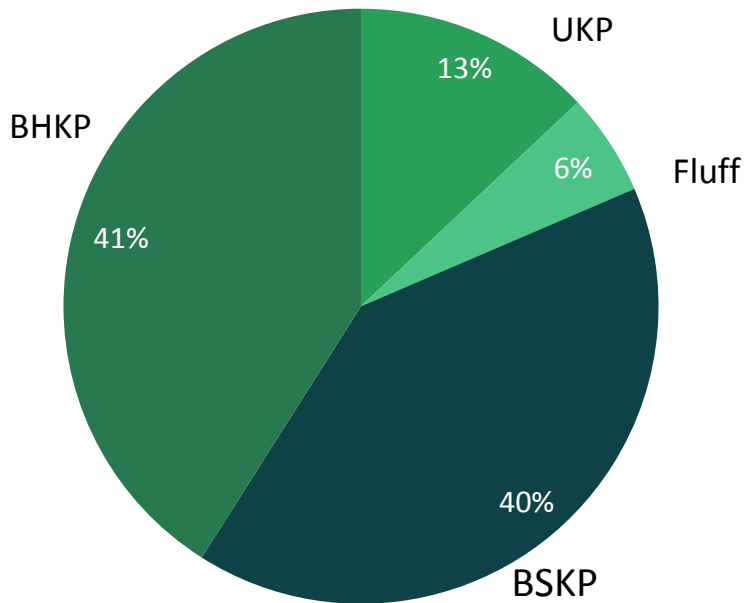


- ▶ At least 60% of our pulp is sold in **EMERGING** and **NON-DEVELOPED MARKETS**
- ▶ **CHINA** is our main market destination and where we see high potential of growth
- ▶ **HIGH POTENTIAL OF GROWTH:** Low per capita consumption of tissue and paper compared to that of developed countries
- ▶ **Flexibility to switch** between short and long fiber in Valdivia mill

Source: Company information and filings

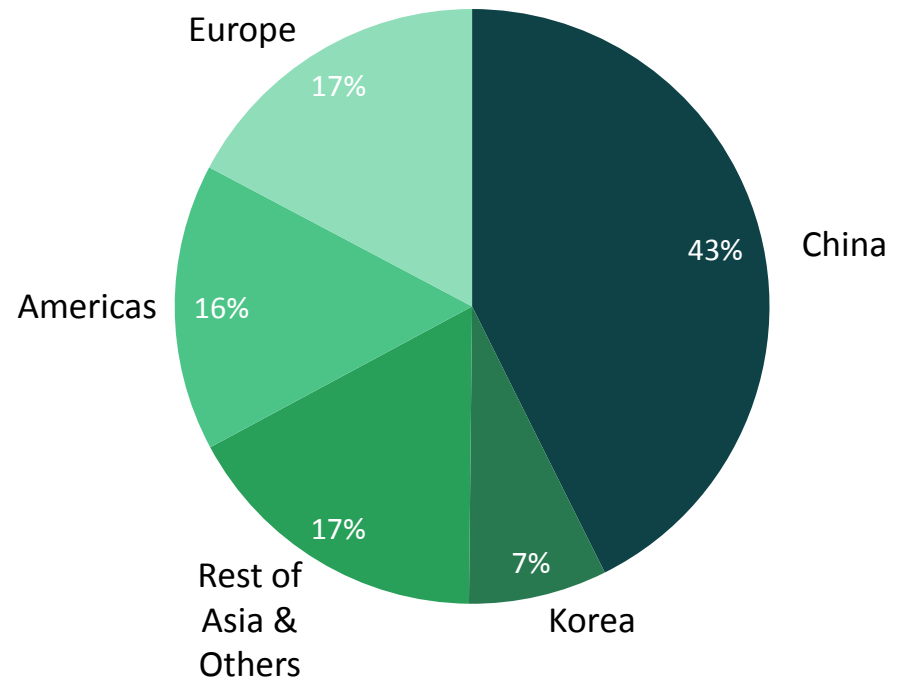
Arauco uses its **COMPETITIVE ADVANTAGES** to efficiently **SUPPLY WORLDWIDE** pulp demand

**Sales by Product FY 2015**



Total = 3,537 Th. ADt

**Sales by Region FY 2015**



Total = 3,537 Th. ADt

## New market pulp supply to enter the market

<i>In 000 Adt/year</i>	2016	2017	2018	2019	Total
Bleached softwood	+1,075	+995	+600	-10	+2,660
Bleached hardwood	+1,415	+2,125	+2,710	+1,570	+7,820

## Main projects entering the market:

- Klabin – Puma (BHKP+fluff, completed, ramp up): +1,100
- CMPC - Guaiba (BHKP, completed, ramp up): +1,330
- Fibria – Tres Lagoas (BHKP): +1,750
- El Dorado – Tres Lagoas (BHKP): +2,025
- APP – OKI (BHKP): +2,200



Arauco Overview

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Pulp

**Panels and Sawn Timber**

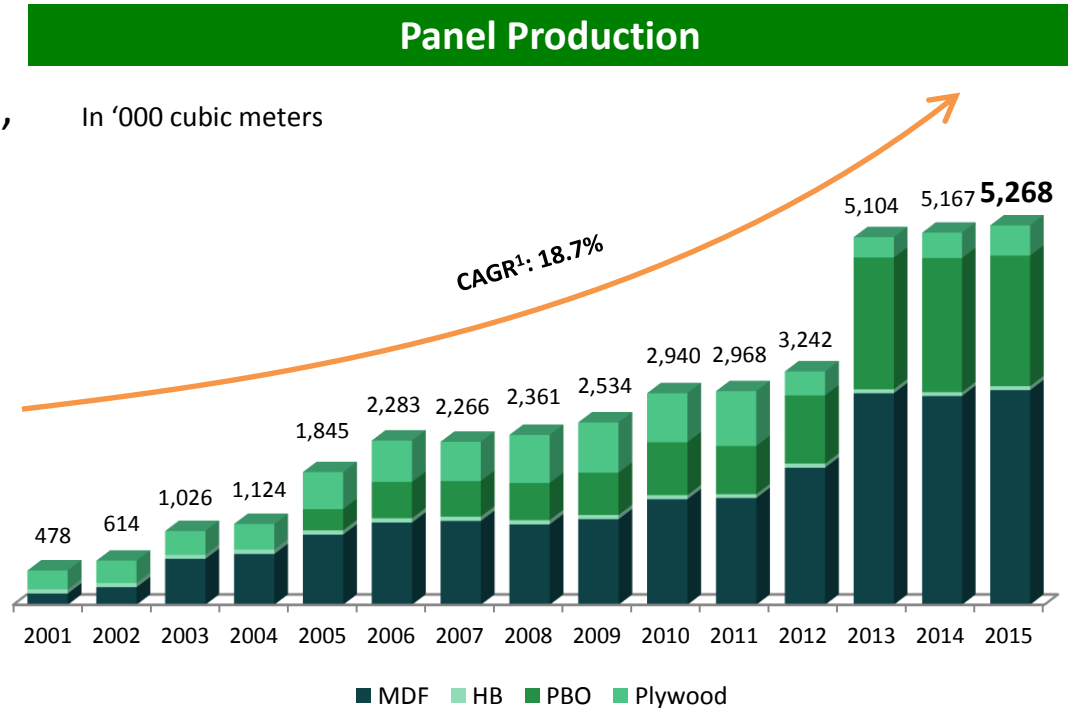
Energy



## Panels & Sawn Timber

# PANELS: Represents 36% of ARAUCO'S REVENUES

- ▶ Operations in USA, Canada, Brazil, Chile and Argentina
- ▶ Ranked **#1** in capacity in North America and **#3** worldwide
- ▶ **LOW COST PRODUCER**
- ▶ Our products are used mainly in the **FURNITURE INDUSTRY**

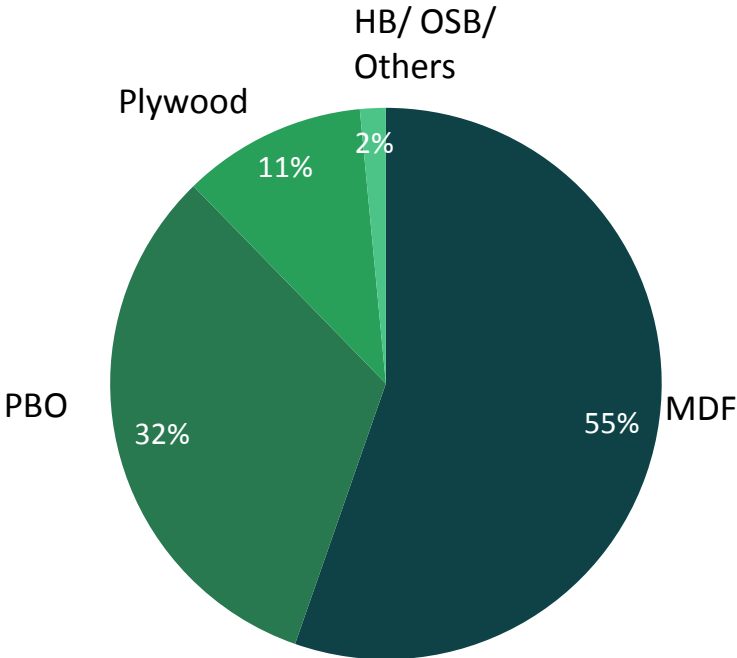


(1) Compounded Annual Growth rate

# Panels & Sawn Timber

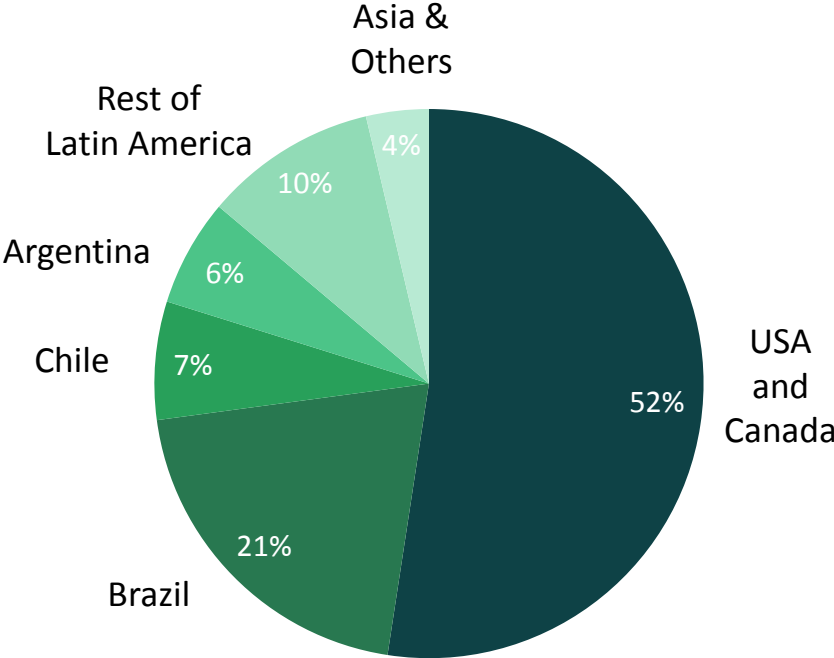
## PANELS: DIVERSIFIED PRODUCT MIX and CLIENT BASE

Sales by Product FY 2015



Total = 5,509 Th. m<sup>3</sup>

Sales by Region FY 2015



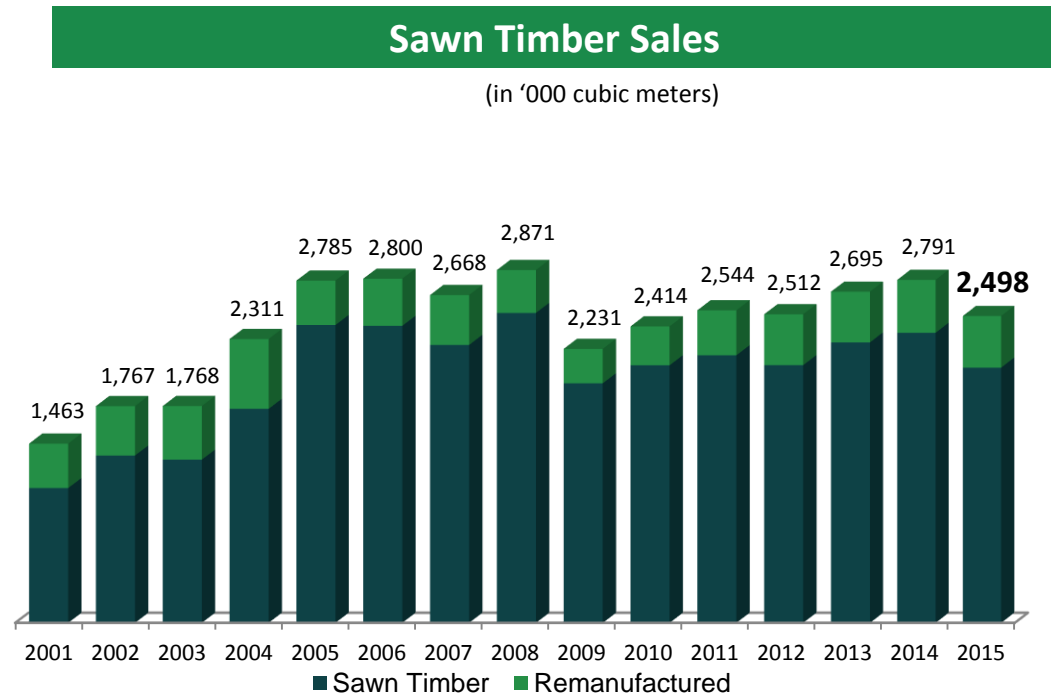
Total = 5,509 Th. m<sup>3</sup>

Source: Company information and filings

## Panels & Sawn Timber

# Arauco is one of the LARGEST SAWNTIMBER COMPANIES

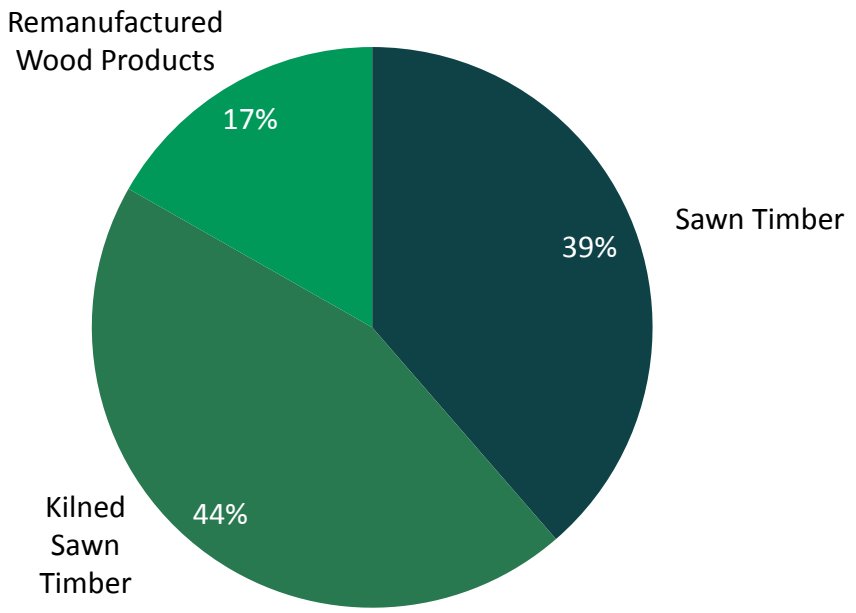
- ▶ Operations in Chile and Argentina
- ▶ Installed annual capacity of 3.0 million m<sup>3</sup>
- ▶ Improved saw log quality enhances value of product mix
- ▶ Economies of scale in transportation costs provide growth opportunities
- ▶ Main use of our sawn timber products is for the construction and packaging industry



# Panels & Sawn Timber

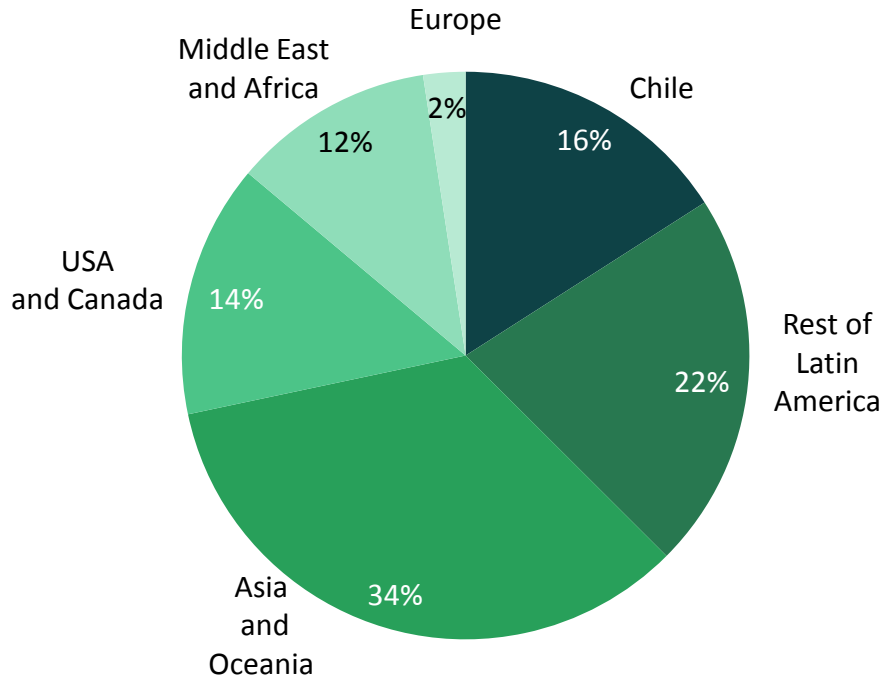
In **SAWN TIMBER**, Arauco is a **RELEVANT SUPPLIER** for the global construction sector with **HIGH QUALITY PRODUCTION STANDARDS**

Sales by Product FY 2015



Total = 2,498 Th.m<sup>3</sup>

Sales by Region FY 2015



Total = 2,498 Th.m<sup>3</sup>

Source: Company information and filings



Arauco Overview

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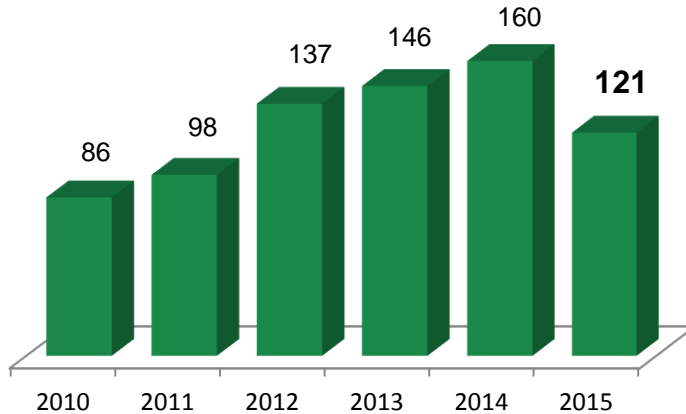
Pulp

Panels and Sawn Timber

**Energy**

### Total Energy Revenues

(in US\$ million)



- ▶ **RENEWABLE**, environmental friendly energy
- ▶ Energy production is **PART OF OUR PRODUCTION PROCESS**
- ▶ Installed capacity of **766 MW**
- ▶ Arauco is **SELF-SUFFICIENT** in net electricity consumption
- ▶ **SURPLUS** of **253 MW** sold to National Grid in Chile, Argentina and Uruguay





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# FUTURE INVESTMENTS

## Dissolving Pulp Project

- ▶ In July 2014 Arauco submitted an environmental impact study to produce dissolving pulp at the Valdivia mill
- ▶ Dissolving pulp is a product used in the textile industry as an alternative of cotton
- ▶ Arauco would be the first company to produce this pulp in Chile
- ✓ It will provide flexibility to produce either dissolving or paper grade
- ✓ The estimated investment for this brownfield project is approximately US\$ 185 million
- ✓ The Valdivia project is still subject to technical and economical feasibility studies, and the board of director's approval





# FUTURE INVESTMENTS

## MAPA: New line at Arauco Mill and Cogeneration Plant

- ▶ Construction of a third pulp line in the Arauco Mill of 1.5 million Adt of annual capacity of short fiber pulp and a 166 MW cogeneration plant
- ▶ The project considers the closure of Arauco's line 1 of 290,000 Adt of short fiber pulp once the new line is operating
- ✓ The investment for this project will be approximately US\$ 2,300 million
- ✓ The MAPA project is still subject to technical and economical feasibility studies, and the board of director's approval



# FUTURE INVESTMENTS

## MAPA: Where we stand today



April 2011

Arauco commences Environmental Study for MAPA Project



April 2012

Arauco submits environmental study to Environmental Assessment Service (SEA)



Feb 2014

Environmental study is approved



March 2014

A group of communities files constitutional act (recurso de protección) against the SEA



Nov 2014

The Environmental Assessment Council (CEA) unanimously votes against the constitutional act. MAPA Project's approval is returned



April 2015

New claim filed against the environmental permit



Feb 2016

Claim against the environmental permit is voided

Arauco is currently undertaking several technical-economic feasibility studies

In preparation to the MAPA project, Arauco is constructing a new water treatment facility in the Arauco mill





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# MAIN EVENTS

## Arauco announces US\$ 325 million investment for new Particleboard Mill in USA

- ✓ Located in Grayling, Michigan, USA
- ✓ Annual production of 750,000 m3 of MDP
- ✓ Ground-breaking is estimated for late 2016, with the rollout of the first panel during the latter part of 2018
- ✓ Investment is subject to pending permits and Arauco's board approval



# MAIN EVENTS

## Joint Venture with Spanish affiliate of Sonae Industria in Panels

- ✓ Investment of € 137.5 million
- ✓ 10 mills located in Germany, Spain, Portugal and South Africa
- ✓ Total aggregate capacity: 4.2 million m<sup>3</sup>/year
- ✓ Production of MDF, PBO, OSB and sawn timber
- ✓ Combined with the rest of our company's assets, Arauco positions itself as the second largest panel producer globally, reaching 9.0 million m<sup>3</sup> of production capacity annually



## MAIN EVENTS

### In 1Q 2015 Arauco signed two revolving facilities for US\$ 320 million

- ✓ The first facility in UF of app. US\$ 120 million, was closed with a local bank January 2015
- ✓ The second facility in USD of US\$ 200 million, was closed with a club deal of international banks in March 2015
- ✓ The term of each line is 5 years

### In 3Q 2015 Arauco extended for three years a US\$ 300 million loan

- ✓ A US \$300 million loan with initial maturity in June 2016 was extended to September 2018
- ✓ The loan was renegotiated at a lower spread



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# SUSTAINABILITY

Arauco is committed to the occupational health and **SAFETY** of its workers, to the **ENVIRONMENT** and to the **WELFARE** of the **COMMUNITIES** in which it operates



**Safety**



**Environment**



**Community,  
Participation &  
Dialogue**





▶ All our business units are certified as compliant with the **OHSAS 18001** EHS standard

## SUSTAINABILITY

- ▶ Our plantation forests are **CERTIFIED** to **INTERNATIONALLY RECOGNIZED STANDARDS**
- ▶ We **DO NOT** source native forests or protected species
- ▶ We **PROTECT** more than **406,000 HECTARES** (1,000,000 acres) of native forest in permanent conservation set-asides
- ▶ During 2015 we invested **US\$ 52 MILLION** in environmental improvements
- ✓ We apply widely accepted **INTERNATIONAL SCIENTIFIC STANDARDS** to our silviculture.
- ✓ We **DO NOT** use genetically modified plants.



## ENERGY

- ▶ ARAUCO decided over twenty years ago to produce **CLEAN ENERGY** from forestry biomass arising from nature's virtuous cycles
- ▶ In addition to substantially meeting the needs of its own industrial facilities, ARAUCO can provide a up to **253 MW OF SURPLUS ENERGY** to the SIC, Chile's national energy grid
- ▶ The company has six cogeneration power plants in Chile and one in Uruguay registered as greenhouse gas (GHG) emission-reduction projects with the Clean Development Mechanism (CDM) of the **KYOTO PROTOCOL**
- ▶ This allows ARAUCO to annually **OFFSET 500,000 TONS** of **CO<sub>2</sub>e**



## CONTRIBUTING to communities

- ▶ Our operations directly benefit more than **14,000** workers and indirectly other **21,000** workers through our contractors.
- ▶ **WE RESPECT LOCAL COMMUNITIES** and **CONTRIBUTE TO THEIR DEVELOPMENT** through responsible management of our operations and the implementation of initiatives that generate value based on a method that fosters dialogue and participation.



# Community, Participation & Dialogue

## OUR PROJECTS

### ARAUCO EDUCATIONAL FOUNDATION

- ▶ **26 YEARS PRESENT** in communes where we operate in regions Maule, Bío Bío and Los Ríos
- ▶ The purpose is to **DESIGN, IMPLEMENT AND ASSESS** teacher-improvement programs



### CAMPUS ARAUCO



- ▶ Center for Higher Education and Training for employees, based on an **INNOVATIVE ACADEMIC METHOD** that combines the educational process with on-the-job work experience
- ▶ Campus Arauco offers **4 TECHNICAL CAREERS** for more than **660 STUDENTS**, and over **200,000 ANNUAL HOURS** of training for ARAUCO employees and service-providing business employees

### SUSTAINABLE RECONSTRUCTION PLAN (PRES)



- ▶ **SUSTAINABLE RECONSTRUCTION PLAN** for the city of Constitución, that was devastated by the earthquake and tsunami on February 27, 2010
- ▶ The PRES Plan encompasses **28 PROJECTS** that are in different stages of development

### HOUSING PLAN FOR WORKERS (HPW)

- ▶ This program promotes the construction of houses and housing units with a **HIGH TECHNICAL** and **SOCIAL STANDARDS** for company employees and their neighbors
- ▶ **9,000** houses will be built between 2013 and 2017



# Community, Participation & Dialogue

## OUR PROJECTS

### FOUNDATION ACERCAREDES

- ▶ **NON-PROFIT ORGANIZATION** established in 2011 under ARAUCO's innovation area
- ▶ AcercaRedes operates based on Hubs: a network of offices that **ATTRACT, CONNECT** and **CENTRALIZE** to promote the local development of areas located far from urban centers
- ▶ Today there are hubs operating in **MARIQUINA, CONSTITUCIÓN,** and **CURANILAHUE**





Visit [www.arauco.cl](http://www.arauco.cl) for more information