

# Trees, Industry and Trade A Chilean Overview

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- 1. Four decades of development**
2. Our challenge: excellence within the market
3. A new customer: more than products and services



# 1 Four decades of development

**60's.**

The beginning:  
a state vision

**70's.**

Critical mass of  
plantations

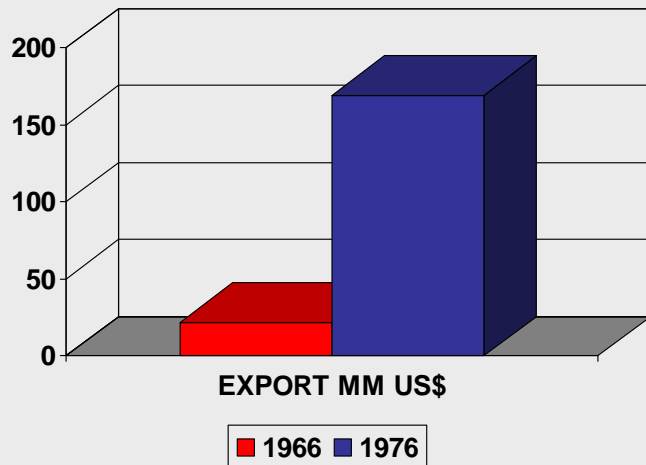
**80's.**

Exporting  
power

**90's.**

Industrialization





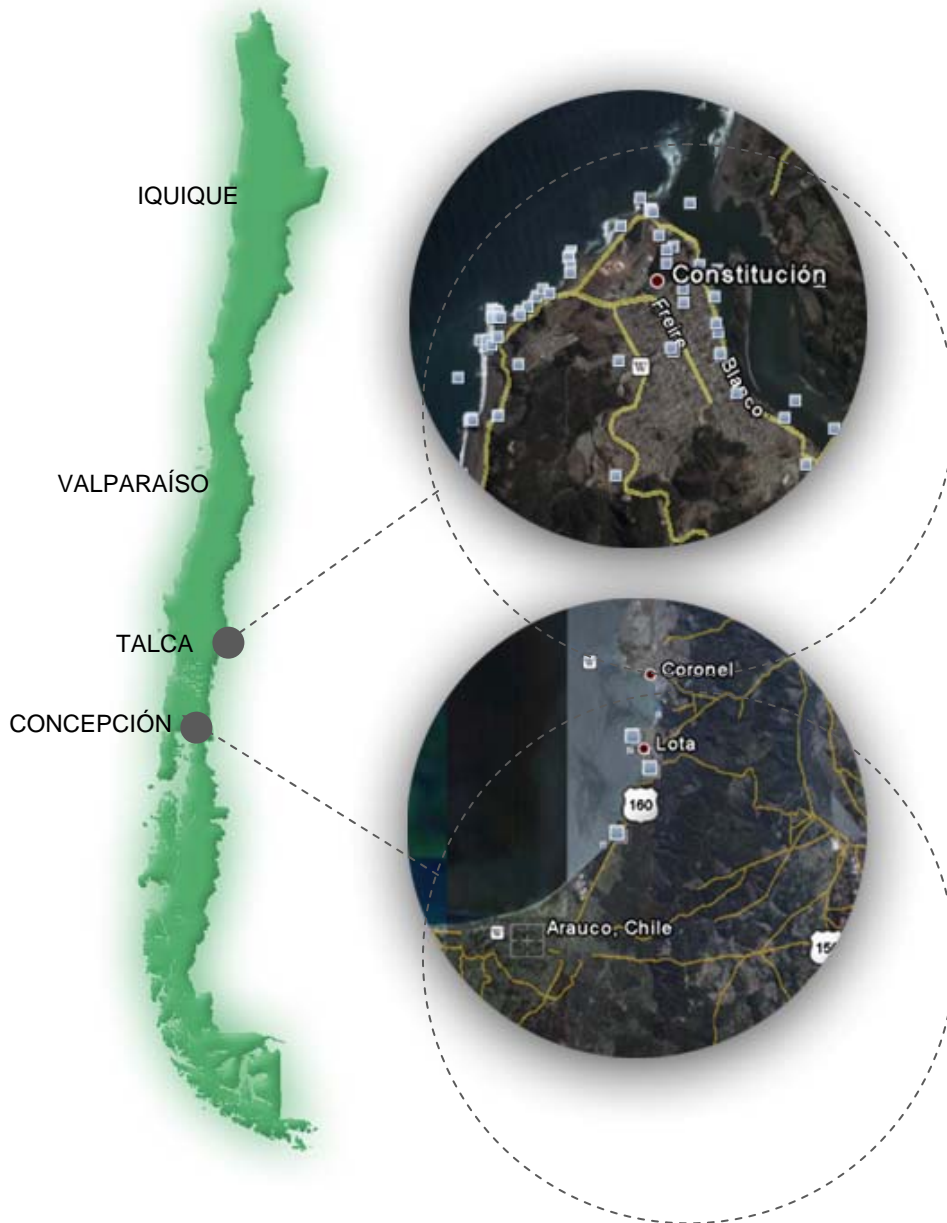
- 1962 : INFOR is created
- 1965 : new boost for forestry plantations (pulp and paper industry development, CORFO credits, agrarian reform law)
- 1972 : CONAF is created
- 1974 - 1994: DL 701 -----> forestry incentives
- CONAF/PNUD/FAO-CHI/76/003 Program “Research and Forestry Development”
- CONAF/PNUD/FAO-CHI/83/017 Program “Research and Development of Wildlife Areas in Arid and Semiarid Zones of Chile”
- 1989: Eucalyptus plantation begins

**60's.**  
The beginning:  
a state vision

**70's.**  
Critical mass of  
plantations



**60's.**  
The beginning:  
a state vision

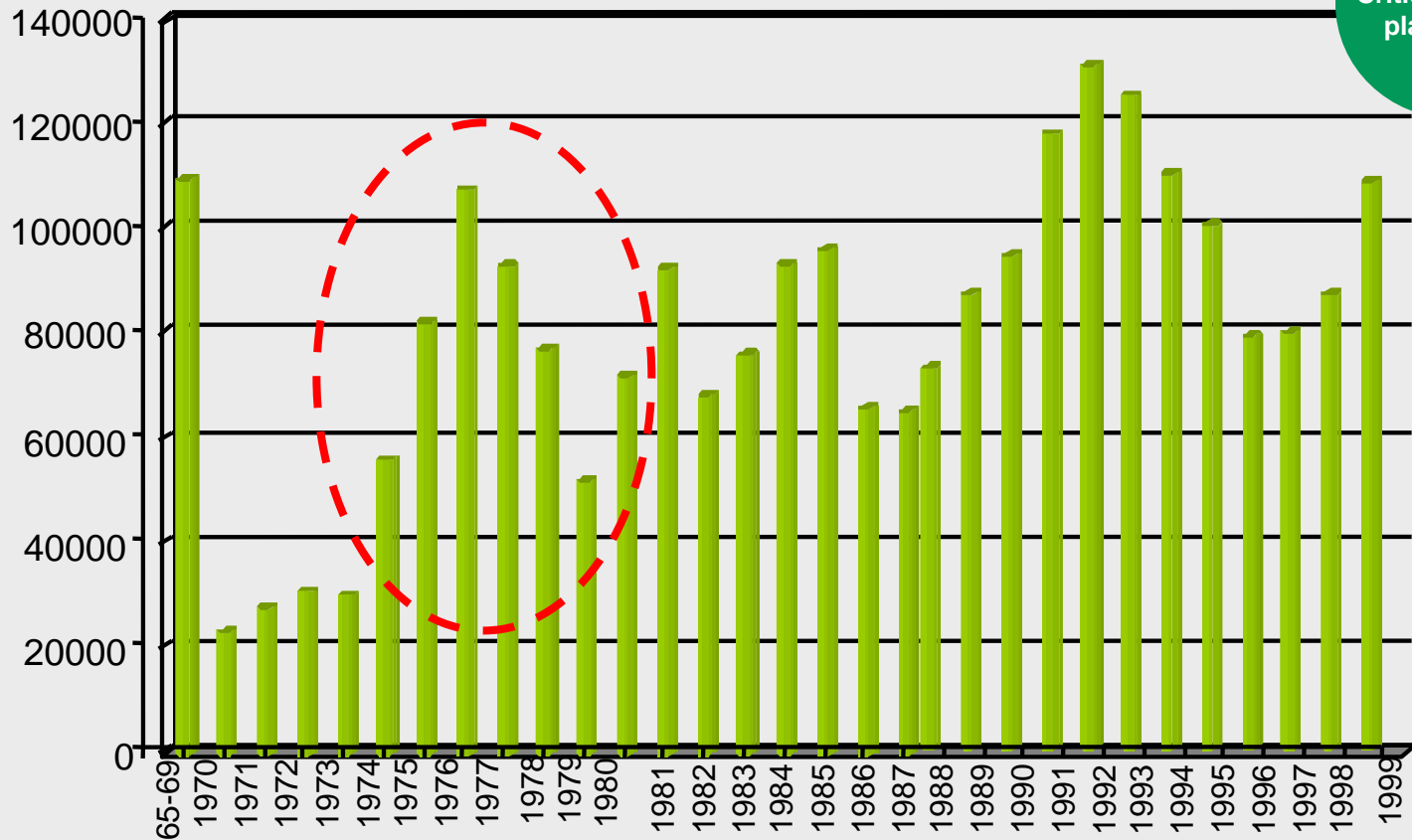


- Open meeting held in 1965.
- Corfo establishes “Celulosa Constitución” in 1968.
- Definitive operation begins in 1976.
- The State begins investments in Arauco Complex.



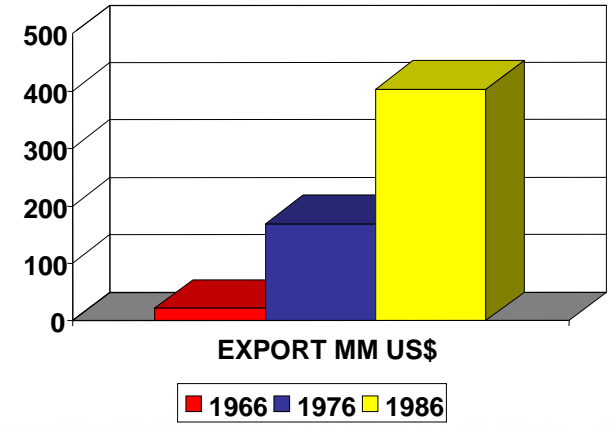
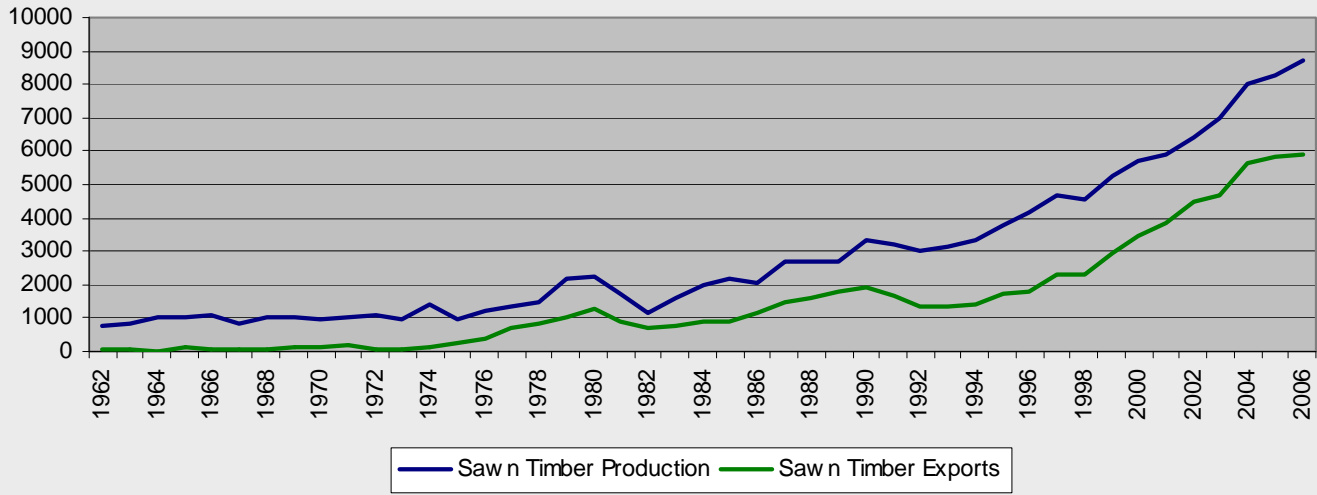
## Hectares planted per year

**70's.**  
Critical mass of plantations



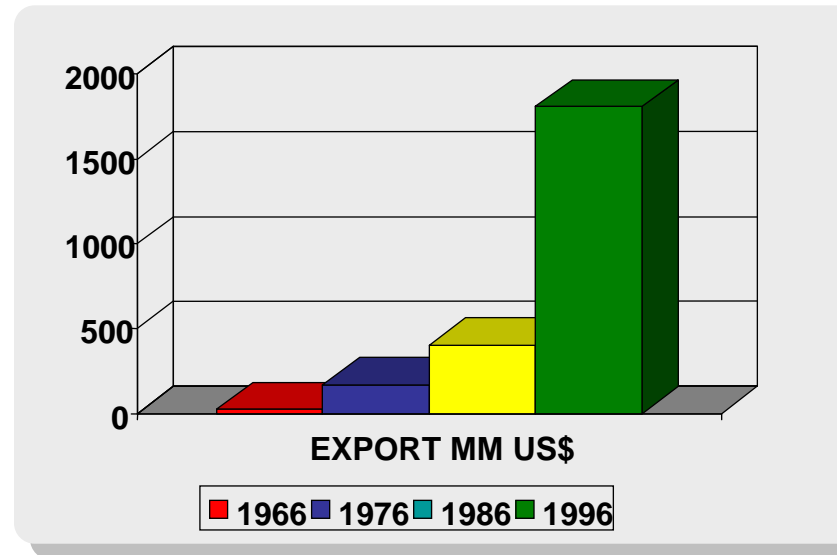
**80's.**  
Exporting  
Power

**SAWN TIMBER Th. m<sup>3</sup>**



# Employment

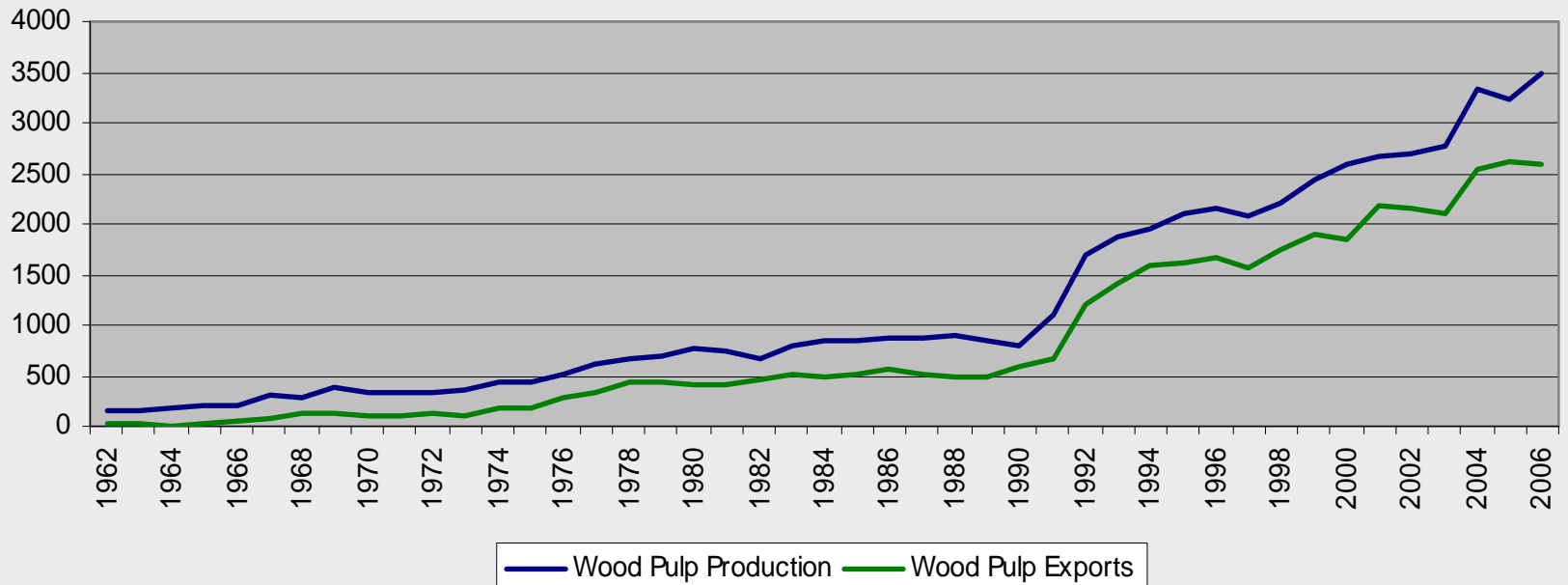
**90's.**  
Industrialization





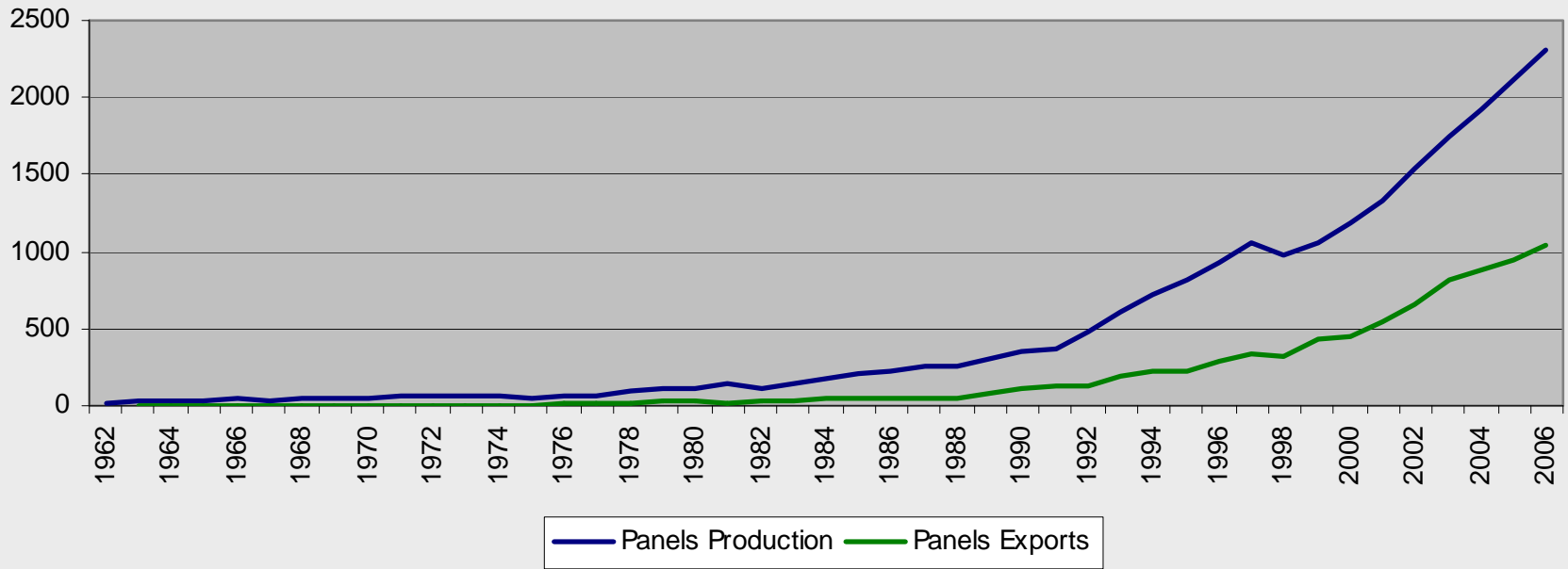
**90's.**  
Industrialization

**WOOD PULP Th. Tons**



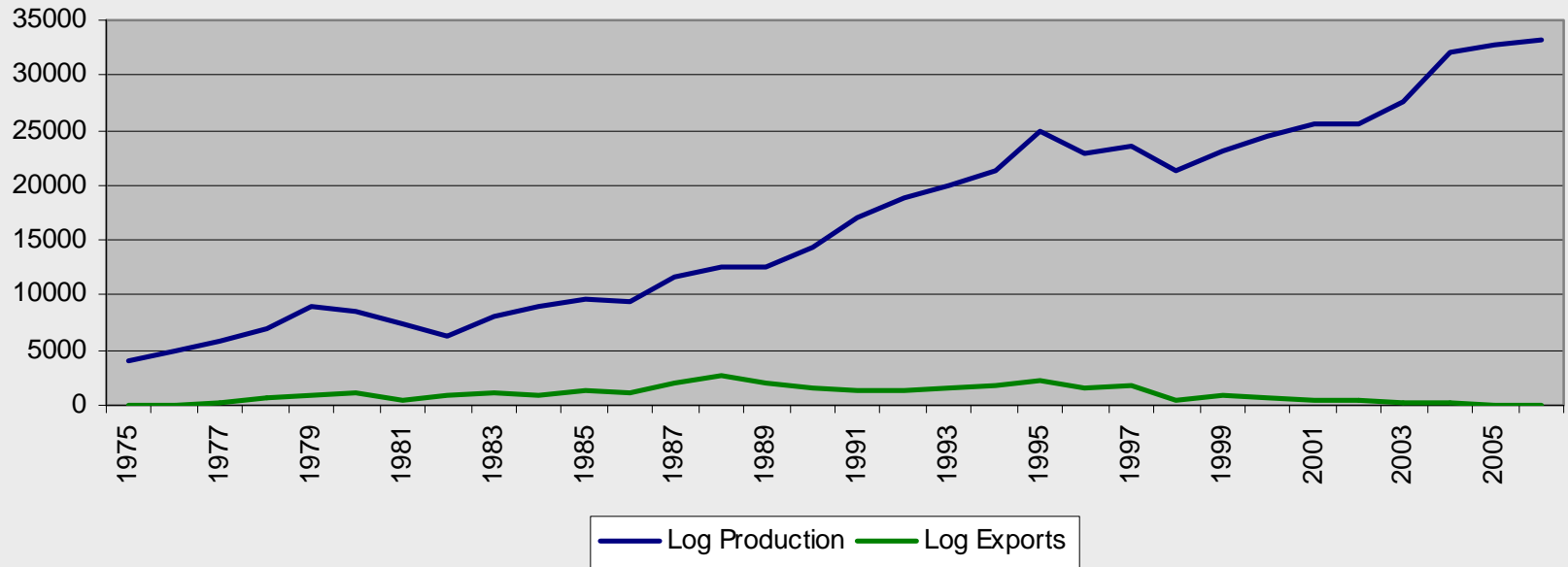
**90's.**  
Industrialization

**PANELS AND VENEERS Th. Ton**



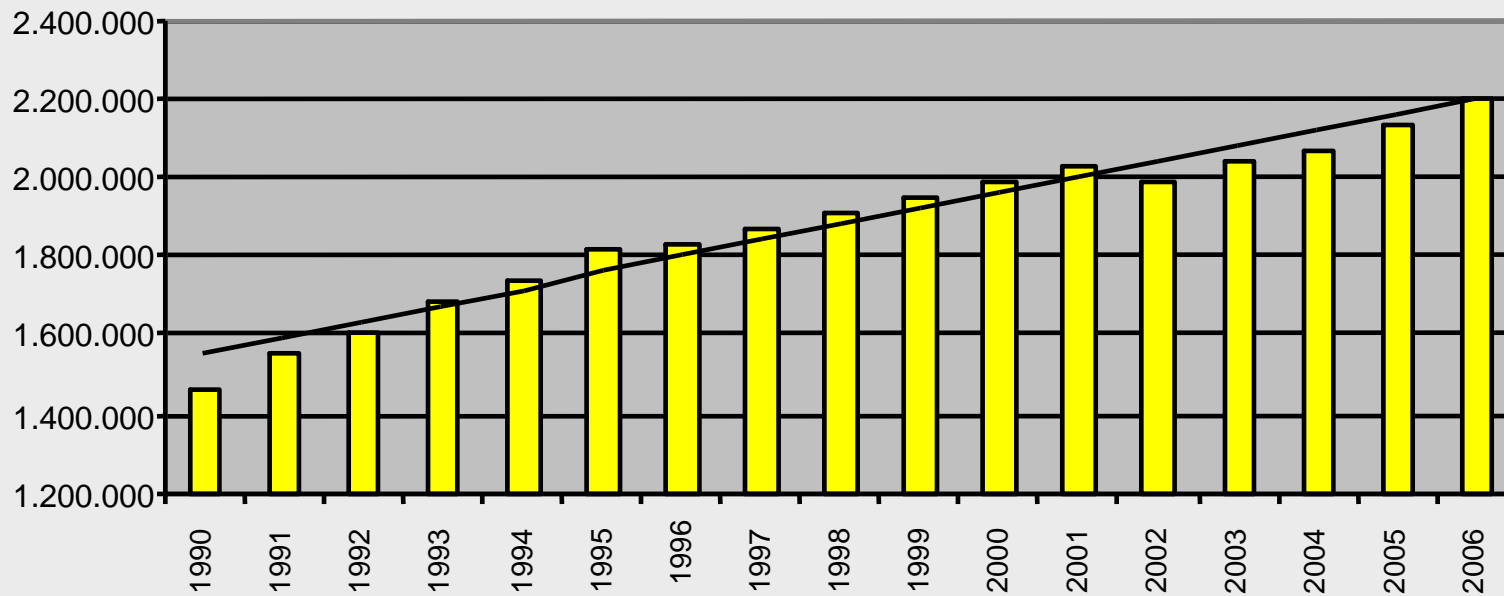
**90's.**  
Industrialization

**LOGS Th. Ton**



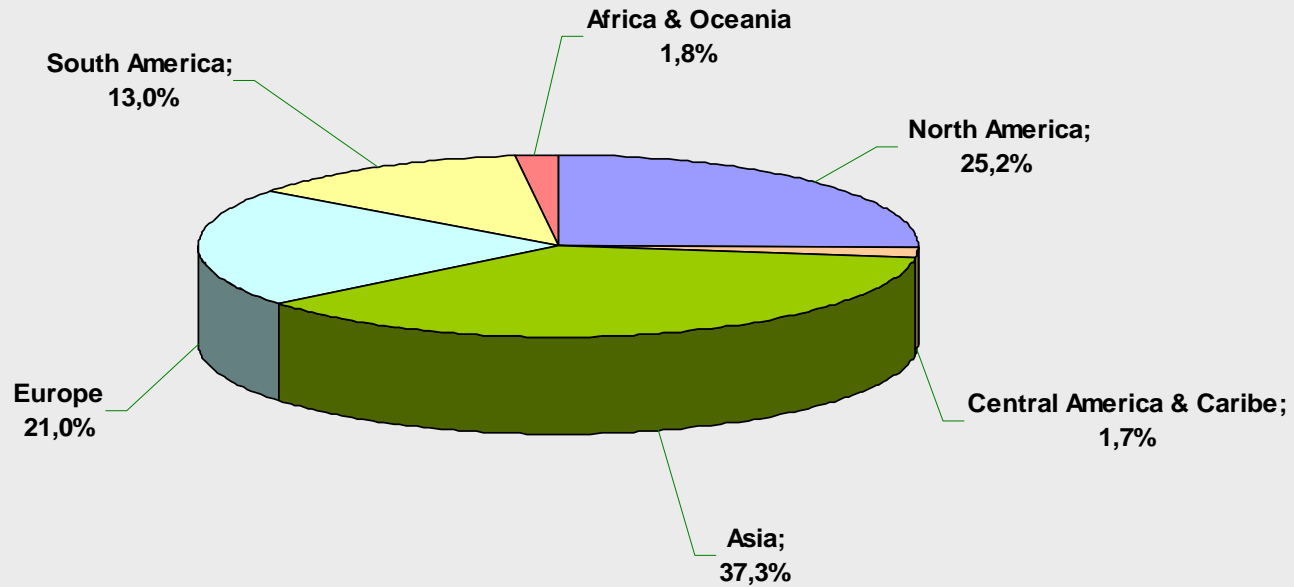
90's.  
Industrialization

Forest plantations (ha)



90's.  
Industrialization

**CHILEAN FORESTRY EXPORTS  
PER DESTINATION REGION - YEAR 2007  
(US\$ 4.952 Million)**



1. Four decades of development
- 2. Our challenge: excellence within the market**
3. A new customer: more than products and services



# 2 Our challenge: excellence within the market

**Excellence  
within the  
market**

**Global  
competitiveness**

**Environmental  
care**

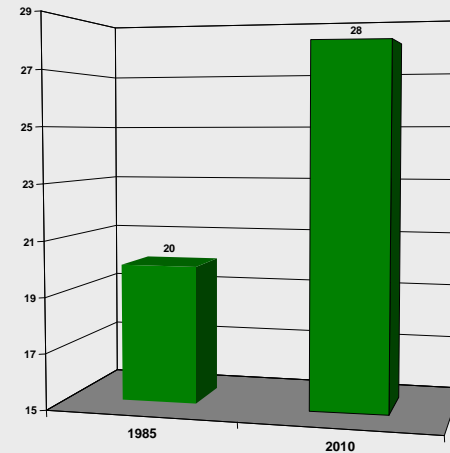
**Social  
development**



The global financial crisis forces us to strengthen our competitive position in the world:

- Production costs
- Transportation costs
- Competitive advantages: innovation + science
- Productivity

Changes in Productivity - M3/Ha/Year







Key factors to maintain our competitiveness

- The need to export
- The industry's global standards
- Certifications
- Knowledge on local regulations
- Knowing our customers
- Innovation / Adaptation

**It's about running a permanent race**



# Global warming vs. Full use of the trees

## Sustainable Forestry Management

Environmental  
care



**PULP: 46 %**  
Based on forest and industry waste products.



**MADERA ASERRADA: 26%**



**PANELS: 20%**



**ENERGY**  
Based on biomass (bark , sawdust, lignin)  
**538 MW Total / 165 MW Surplus**



Social  
development

- Centros Operativos
- Oficinas Comerciales
- Representantes



The higher our globalization level...

The more concern and interest is required by our immediate surroundings.



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# 3

## A new customer: more than products and services

Transparency

CSR

Environment

Labor  
regulations





Global brands...  
means global demands.

- Transparency in information



## Environment

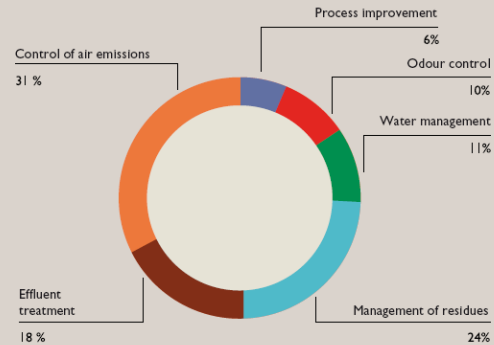
	2005	2006	2007
Energy (GWh)			
Use of electric power	1,536	1,784	2,069
Generation of electric power	1,766	2,062	2,406
Greenhouse Gases (GHG) in ARAUCO's Carbon Cycle (Millions of CO <sub>2</sub> equivalent tons)			
Emissions of greenhouse gases			
Net approximate GHG Emissions	-8.1	-9.3	-9.8
GHG emissions abated through biomass co-generation		-0.48 <sup>[1]</sup>	-0.27 <sup>[2]</sup>
Residues (Tons)			
Non-hazardous solid waste generated	N.A.	449,651	463,091
Hazardous solid waste generated	N.A.	15,457	3,959

<sup>[1]</sup>This corresponds to abated emissions between 2003 and 2006

as certified by the Clean Development Mechanism (CDM) of the Kyoto Protocol.

<sup>[2]</sup>Abated emissions in 2007

Environmental Investments  
in the Woodpulp Area  
(44 million dollars)



**ARAUCO**  
Sembremos Futuro.

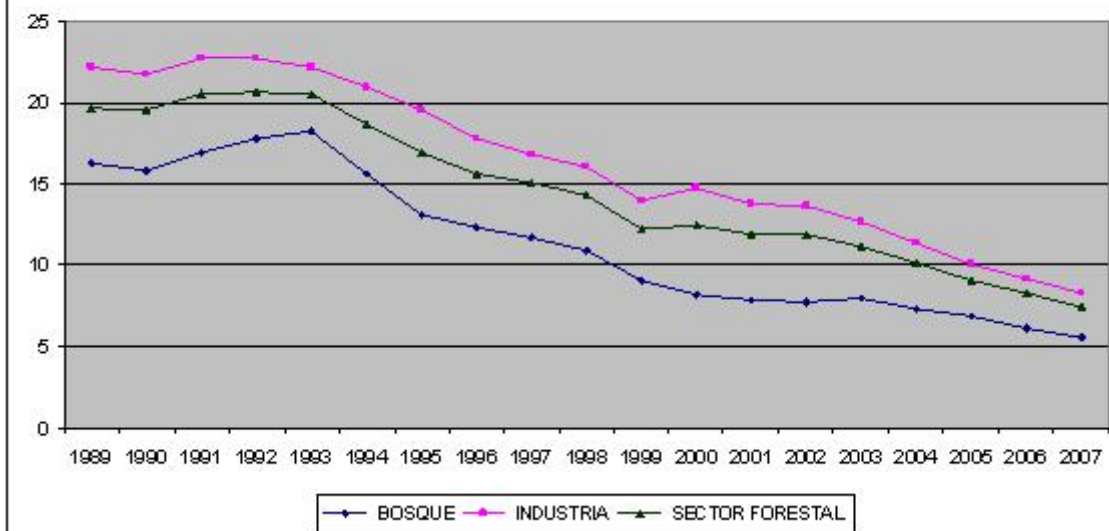
Environment

### High standards for environmental care:

- We provide for our own electric energy consumption
- We contribute clean energy to the SIC (Central Interconnected System)
- We increased our carbon emission reduction indicators
- We reduced the generation of dangerous solid residue
- Best Available Technologies (BAT)
- Online monitoring plans

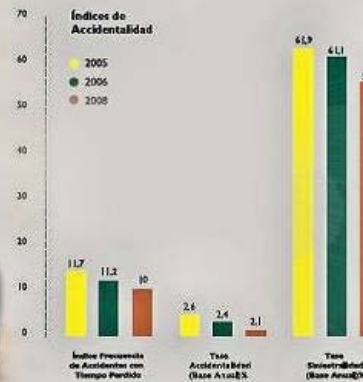


EVOLUCION DE TASA ACCIDENTALIDAD FORESTAL Y MADERERA  
DICIEMBRE 1989-DICIEMBRE 2007





# Work well, work safe



- We systematically reduced our accident rates.
- During 2008 we began a special program to further improve our results.

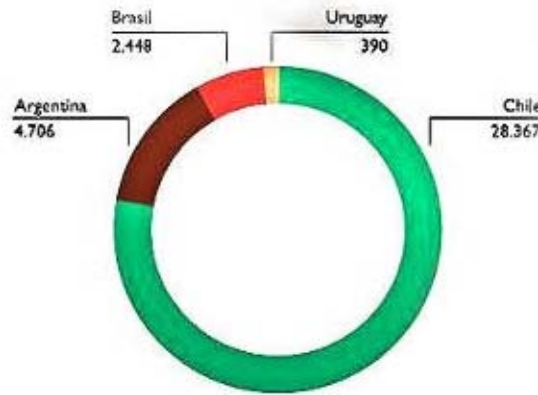




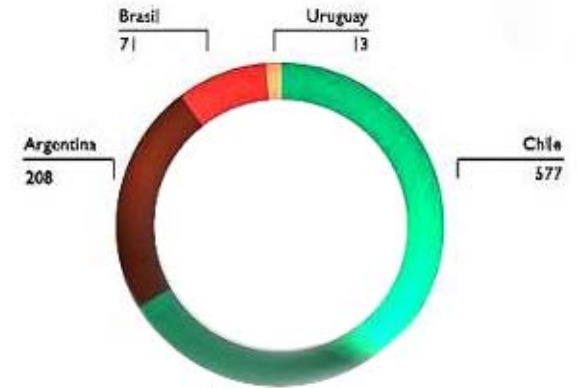
The community within our operation's surroundings is significantly constituted by our workers' and collaborators' families.



**Trabajadores Directos e Indirectos por País**  
(Total 35.833)



**Empresas Contratistas por País**  
(Total 867)





### Programas Fundación Educacional Arauco

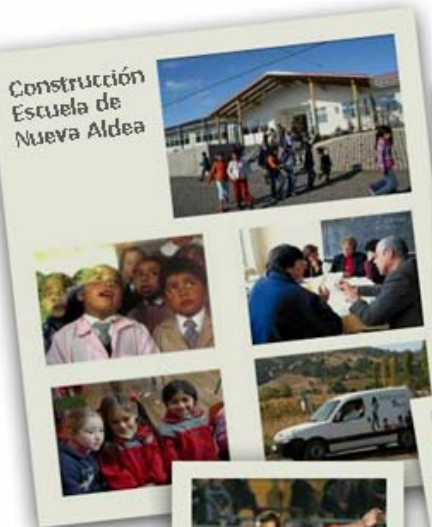
- Programa Interactivo para el Desarrollo de la Educación Básica
- Programa "Raíces" de Apoyo al Desarrollo del Lenguaje
- Programa "Sembrar" de Apoyo a la Primera Infancia
- Programa "Bibliomóviles" de Fomento a la Lectura
- Jornada de Actualización Docente "Niños con necesidades educativas especiales de trabajo"
- Programa de Apoyo al desarrollo comunal de los Objetivos Transversales de la educación "Orquesta Sinfónica Juvenil"
- Programa de Apoyo a los Planes de Mejoramiento Escolar
- Programa de Autoestima y Fortalecimiento de Equipos Docentes



**ARAUCO** | Fundación Educacional

- 29 Communities
- 470 Schools
- 4.066 Teachers
- 71.268 Students





 **ARAUCO.** Fundación Educativa



**A global company must have local roots**



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