



**MACQUARIE CAPITAL**

SUSTAINABLE FOREST INVESTMENT FORUM  
RISKS AND OPPORTUNITIES IN THE ASIAN FORESTRY SECTOR



MACQUARIE

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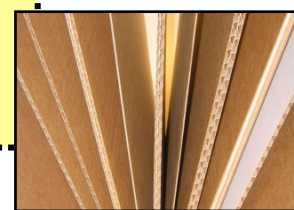
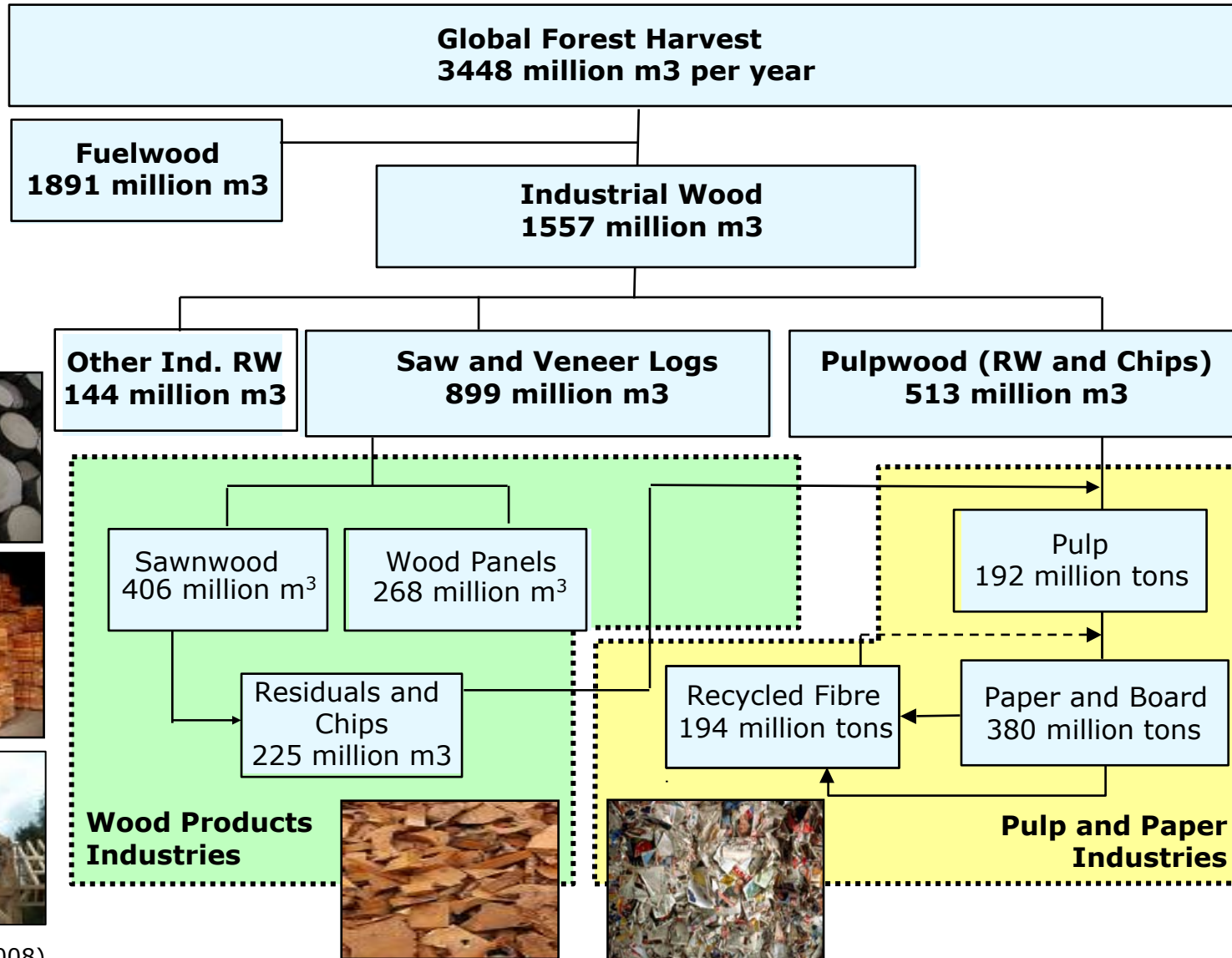
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# Industry Sector Overview



# Issues - Industry

- Improving level of environmental consciousness by industry participants.
- Still seen as discretionary cost rather than part of total cost to operate.
- Processing facilities have generally moved toward low emission models.
- Too much focus on facility size economics rather than environmental balance.
- Poor product marketing and over-supply has driven down product prices.



# Issues – Environmental Movement

- Environmental movement has increased credibility as industry commentator.
- Create greater differentiation between “acceptable” and “unacceptable” cases.
- Give credit where due to support positive “case studies”.
- Environmental messaging sometimes “rumour and emotion” rather than “research and fact” based.
- Focus needs to be broader than pulp and paper industry.



# Issues - Certifiers

- Definition and monitoring of sustainable harvesting is still blurry and available technology not applied.
- Certification cost is too high.
- Methodology often inconsistently applied and somewhat political.
- Key principles (need for continuous improvement) creates lowest common denominator approach.



# Issues - Government

- Emerging market Governments placing premium on social issues rather than the environment.
- “Mouths to feed” key driver.
- Developed economies find it easy to point fingers but are often focused on own interests.
- Higher amount of visible and well compensated enforcement needed to create level playing field.



# Issues – Consumers

- Consumers showing only selective environmental consciousness.
- Limited willingness to pay higher price for environmental costs.
- Environmental argument has focused on “consume less” rather than “pay for quality”.



# Issues - Investors

- Investors not discerning enough about differences in “environmental investment quality”.
- Environmental differences not reflected in cost of capital.
- Due diligence often insufficient.
- Industry risks becoming irrelevant from investment perspective.
- Carbon could create major market distortion.



# Conclusion

*Resource owners need to price based on full (incl. environmental) cost*

## Plantations



**Higher Price  
Differentiation**



## Natural Forest



**Reflecting**

**Cost of establishment  
On-going development  
Certification**

**Environmental cost  
Rehabilitation cost  
Social cost**

*Investors need to ensure WACC reflects environmental and social factors*

**Greater Cost of Capital  
Differentiation**

**Higher Overall Product Pricing**

*Industry needs to convince consumers that environmental protection has a price*