# **Productivity Commission**

Waste generation & resource efficiency



Michael Kennedy Brisbane Public Hearing

27th February 2006



"He holds the destiny of these remarkable timbers in his hands, and posterity will measure his degree of efficiency by the amount of success attending his efforts to protect such a magnificent and valuable national asset from passing into the limbo of oblivion." (Baker, 1919)



### Aussie timbers

- World class engineering timbers
- wharves
- warehouses
- bridges
- poles
- Sleepers
- General construction
- Throughout Australia and the world





# Kennedy's Classic Aged Timbers

- 80-year involvement in timber industry
- 3<sup>rd</sup> generation family company
- evolved from boatbuilding, cabinetmaking and sawmilling



# Specialist 'timber recycler' since 1995





### Nature of business

Value-adding + reclaimed 'waste'

Milton showroom and design service

Banyo timber yard and admin centre

Narangba 2006 EPA approved processing facility

including waste transfer station under construction



# Kennedy's vision

- remove impediments
- improve efficiencies
- greater resource recoveries
- implement incentives/disincentives
- Innovative and composite wood products

#### BENEFITS

- sustainable, long-term employment
- improved environmental outcomes
- triple bottom line resource efficiency
- Zero "wood waste" into landfill



# Kennedy's Projects

#### "waste wood"

- Old Parliament House Canberra
- Suncorp Stadium Sydney
- Federation Square Melbourne
- Millennium Arts Brisbane (under construction)



**Old Parliament House, Canberra** 



# Timber Resource Recovery

- Traditional native hardwood logging
  - Only 30-40% recovery (Timber Qld, 2005)
  - 60-70% of a sawlog is lost as bark, sawdust and non-useable off cuts
- Reclaimed timber
  - 80-100% recovery (DPI&F, 2005)
  - 0-20% non-useable off cuts



### Current situation

ONLY 30% of redundant timbers are salvaged
 (Old DSDTI Industry Report, 2005)

70% into a black hole (>200,000M³/Year)



### Future situation

- volumes set to quadruple
- **3,000,000** m<sup>3</sup> over next 10 years
- 70-year-old plus infrastructure
  - warehouse, wharf, bridge, pole and sleeper simultaneously reaching 'end-of-life' design



### And...

- urban real estate values
- Qld experiencing highest population growth in Aust.
- unprecedented boom in demolitions
- majority of structures find their way to landfill
  - \$\$\$ cost factor
  - time factor





#### At the same time...

- Native hardwood forest
  - reduced access (RFA's)
  - 2022 cessation of Crown native hardwood
- Hardwood plantations
  - lack of private sector interest (Long ROIC)
  - scarce public funds for establishment
  - strong competition for other land use



### Heavy reliance on imports

- approaching 50,000 m³/yr in Qld alone
   (Timber Queensland, 2005)
- traditional- SE Asia, Pacific, N. America
- expanding Africa, S. America and Russia





# Offshore examples

USA- Regulated "wood waste" including reusing preservative treated timbers and "wood waste" not allowed in landfill sites

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Australia - Little or no guidelines for re-use therefore authorities prefer to bury it despite these timbers being able to be reused and almost irreplaceable



# Offshore examples

- **European Union-** *zero wood waste* policies successfully implemented 1990's
- 4 class system for 'wood waste resource'
- Fibre feedstock for board production
- UK- online waste resource trading solution
  - one man's waste is another's resource



irreplaceable, world class timbers
..buried in a hole in the ground!!!

unsustainable,
waste of valuable resources!



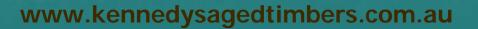


- Absence of reliable data-
  - Volumes, types, wood waste
  - Nervous asset managers- no tools to help with decision making at end-of-life
  - If it can be measured, it can be managed



- Poor planning creates time pressure
- Landfill –cheapest inAustralia







- No requirement for recyclable materials' audit prior to demolition
- No training for contractors to identify recyclable materials
- Lack of clear incentives/disincentives for demolishers and re-users of recycled timber



- Poor Local Government administration of demolition permits
- Doesn't allow for logistical processing of demolition projects
- State Government inaction and procrastination for recycled timber (Last 5 years over \$50M spent on native hardwood logging restructuring NIL on recycled timber)



- Lack of research into structural, engineered, composite and panel products from 'wood waste'
- Ignorance of potential value of wood fibre
- Lack of industry standards for recycled timber products
  - potential for poor quality products to destroy industry reputation



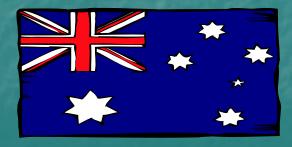
### Must be addressed at all levels

- Industry
- Local Govt
- State Govt
- Federal Govt



### To maximise resource recovery

- A well-equipped recycling sector with consistent supply
- relieve pressure on domestic native forests
- reduce the reliance on imports
- consumer confidence- sustainable products





- Huge potential for export of valueadded, certified, recycled Aussie timbers
- Trade generates employment = 4 x multiplier effect (Austrade, 2004)







### Triple bottom line outcomes

Long-term employment Sustainable environmental outcomes Exponential resource recovery





"For these to be allowed to pass away without any attempt at their recovery would be almost bordering on criminality, for not many countries can boast such a wonderful heritage as our marvellous hardwoods." (Baker 1919; Kennedy 2006)



# Thanks for listening





