

# Greenhouse Gas

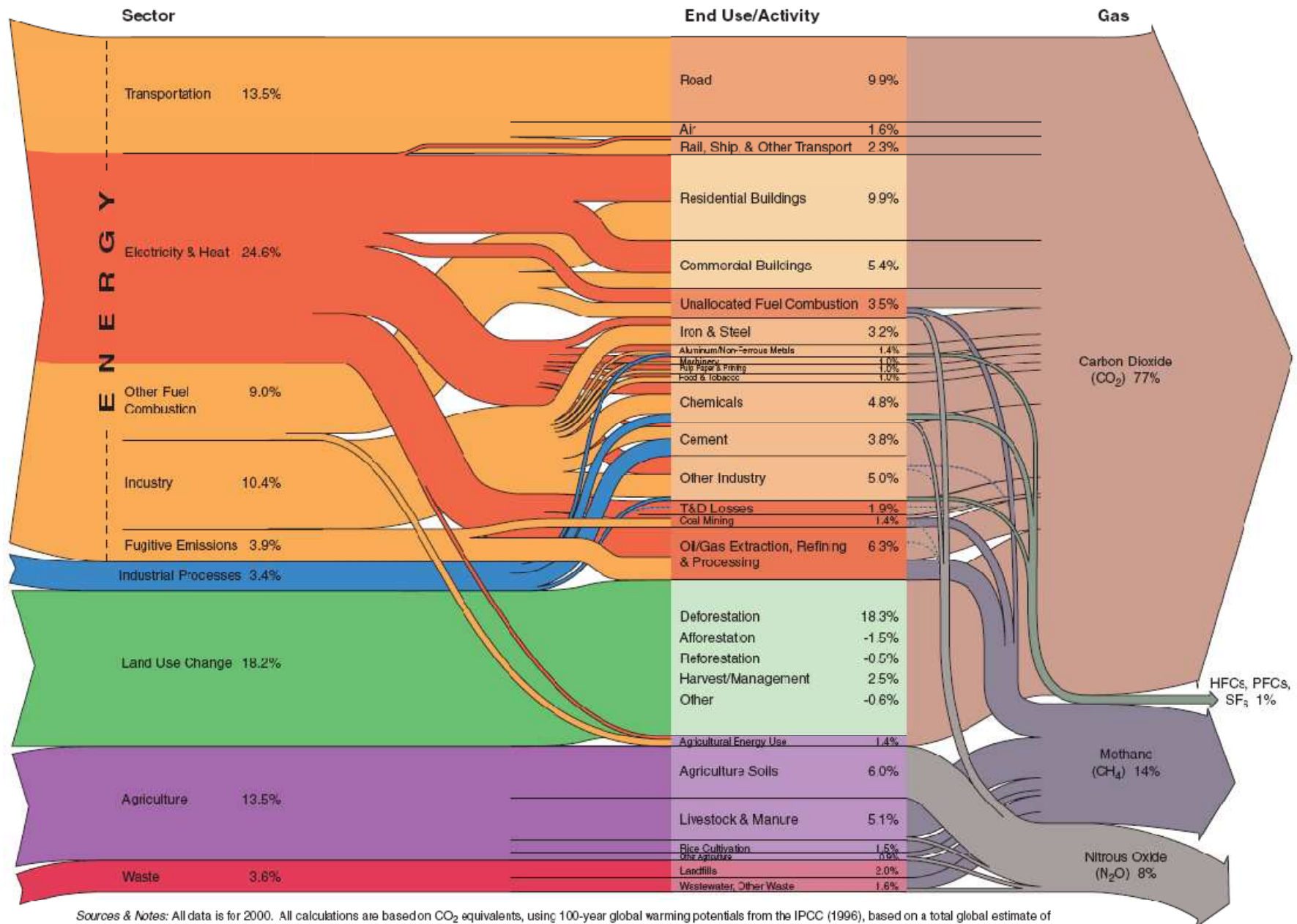
CO2 Equivalent Emissions &  
Savings

# Australia's GHG Emissions 2005

> New South Wales:	158.2 Mt
> Queensland:	157.0 Mt
> Victoria:	121.9 Mt
> Western Australia:	66.6 Mt
> South Australia:	28.1 Mt
> Northern Territory:	13.5 Mt
> Tasmania:	11.0 Mt
➤ ACT:	1.1 Mt.
➤ Total	<b>559.1 MT</b>

# World GHG Emissions Flow Chart

## 41,755 MT CO<sub>2</sub> e (yr 2000)



Sources & Notes: All data is for 2000. All calculations are based on CO<sub>2</sub> equivalents, using 100-year global warming potentials from the IPCC (1996), based on a total global estimate of 41,755 MtCO<sub>2</sub> equivalent. Land use change includes both emissions and absorptions; see Chapter 16. See Appendix 2 for detailed description of sector and end use/activity definitions, as well as data sources. Dotted lines represent flows of less than 0.1% percent of total GHG emissions.

Source: CAIT <http://cait.wri.org/figures.php?page=/World-FlowChart>

# Tasmania

## Change from Kyoto Base Year

Category	Emissions Mt CO <sub>2</sub> -e		Per cent
			change
	1990	2005	in emissions
	1990	2005	1990 - 04
<b>Tasmania's Net Emissions</b>	<b>14.3</b>	<b>10.998</b>	<b>-23.09</b>
<b>Energy</b>	<b>3.86</b>	<b>4.234</b>	<b>9.69</b>
<b>Industrial Processes</b>	<b>0.97</b>	<b>1.125</b>	<b>15.98</b>
<b>Agriculture</b>	<b>2.26</b>	<b>2.24</b>	<b>-0.88</b>
<b>Land Use, Land Use Change and Forestry</b>	<b>6.7</b>	<b>2.991</b>	<b>-55.36</b>
Afforestation and reforestation	0	-2.128	
Land use change (deforestation)	6.7	5.119	-23.60
<b>Waste</b>	<b>0.4</b>	<b>0.386</b>	<b>-3.50</b>

Source: Australia's National Greenhouse Accounts 2005 State And Territory Greenhouse Gas Emissions

# Tasmanian Timber Production

Total all tenures	2001-02	2002-03	2003-04	2004 05	2005-06
Hardwood – Sawlog, Veneer and Peeler (m3)	626,638	708,797	798,786	736,027	661,062
Softwood – Sawlog (m3)	522,303	410,151	401,055	377,470	346,056
Hardwood pulpwood	4,640,445	5,369,784	5,225,962	5,270,762	4,198,056
Softwood Pulpwood	402,653	508,861	497,831	405,918	447,152
	<b>6,192,039</b>	<b>6,997,593</b>	<b>6,923,634</b>	<b>6,790,177</b>	<b>5,652,326</b>

Sources: Forestry Tasmanian Annual Reports 2004,2006

Private Forest Tasmania [http://www.privateforests.tas.gov.au/forestry\\_facts/annual\\_timber\\_harvest](http://www.privateforests.tas.gov.au/forestry_facts/annual_timber_harvest)

# Tasmanian Timber Harvesting

Table 1.3.2 Native forests: area (hectares) of operations covered by Forest Practices Plans certified in 2005–06 by harvesting method, future land use and tenure

	Partial logging <sup>1</sup>	Clearfelling followed by:			Non-forest land use <sup>2</sup>	Total
		Regeneration by seeding	Plantation			
			Eucalypt	Pine		
State forest	6,549	2,743	6,432	0	302	16,026
Private land	7,406	353	4,851	1,227	550	14,387
<b>Total</b>	<b>13,955</b>	<b>3,096</b>	<b>11,283</b>	<b>1,227</b>	<b>852</b>	<b>30,413</b>

1 thinning, retention of advanced growth, seedtrees, or shelterwood, group or single tree selection

2 clearing, primarily for agriculture and infrastructure, including roads

Table 1.3.3 Plantations: area (hectares) of operations covered by Forest Practices Plans certified in 2005–06 by harvesting method, future land use and tenure

	Existing Plantations			New plantations on cleared land	Total
	Thinning	Clearfelling followed by:			
		Plantation	Non-forest use		
State forest	2,432	1,815	259	111	4,617
Private land	2,469	5,775	255	17,315	25,814
<b>Total</b>	<b>4,901</b>	<b>7,590</b>	<b>514</b>	<b>17,426</b>	<b>30,431</b>

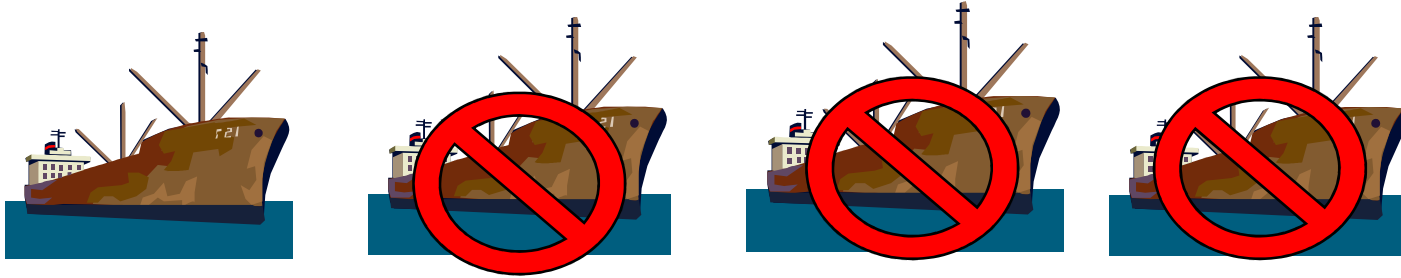
# GHG and Timber harvesting

- Tasmanian timber harvesting rates and production will not change due to having or not having a pulp mill
- Any increase will be due to plantation becoming ready for harvest
- Both Forestry Tasmania and Gunns have announced ceasing the practice of converting native forest to plantation
- Whilst Deforestation accounts for 18.3% of GHG emissions world wide, global forestry is either GHG neutral or removes GHG (eg +/-1%), due to regrowth after harvesting
- Australian plantations and commercial forests removed a net 43.7 Mt of CO<sub>2</sub> from the atmosphere in 2004
- About half the dry weight of a tree or wood product is carbon.
- One tonne of carbon represents 3.67 tonnes of CO<sub>2</sub>
- Carbon stored in wood is released back to the atmosphere only when the wood or wood product decays or is burnt.
- The accumulated storage in Australia's wood products is over 230 million tonnes of carbon.

Source: CAIT <http://cait.wri.org/figures.php?page=/World-FlowChart>

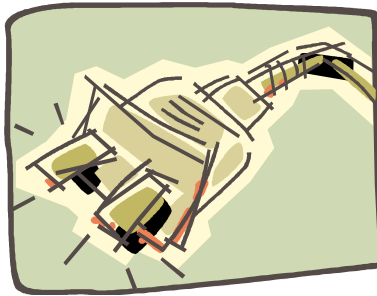
Cooperative Research Centre for Carbon Accounting, FWPRDC 2006 forests. Wood and Australia's Carbon Balance

# Impact of the Mill



SAVING

**1 Million tonnes of CO2**



RENEWABLE POWER

SAVING

**400,000 tonnes of CO2**



Pulp Mill Operation

Emissions

**150,000 tonnes of CO2**