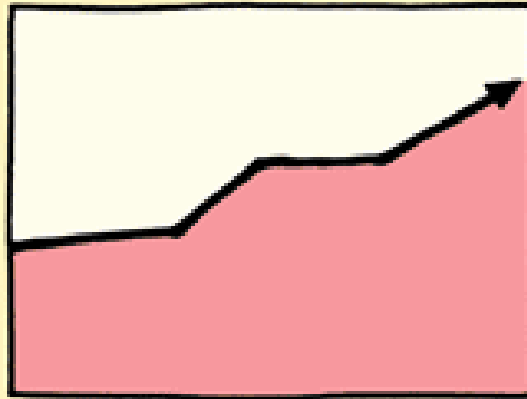


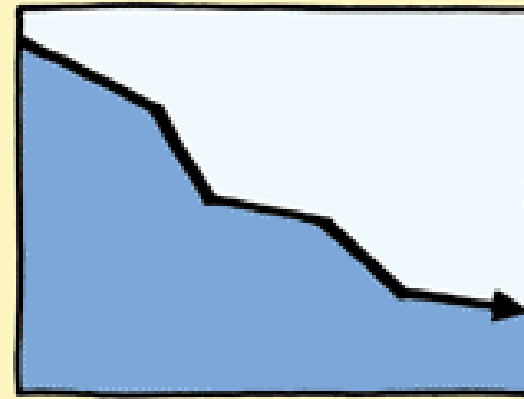


**Emissions Trading**  
**7<sup>th</sup> August 2008**

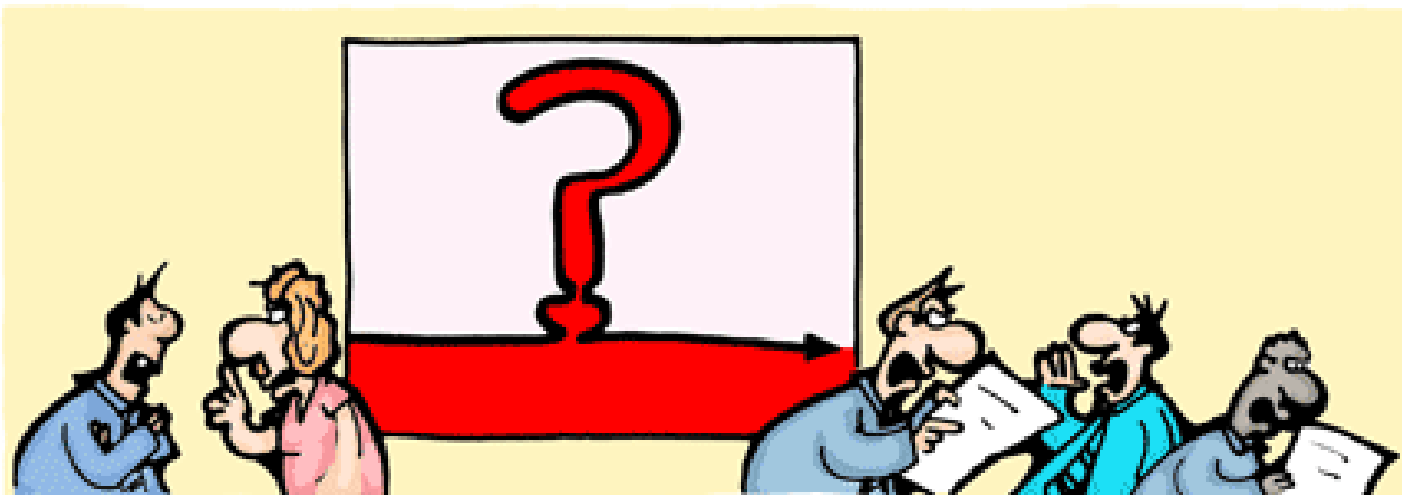
AUSTRALIAN PLANTATION PRODUCTS & PAPER INDUSTRY COUNCIL



*Temperature graph.*



*Rainfall graph.*

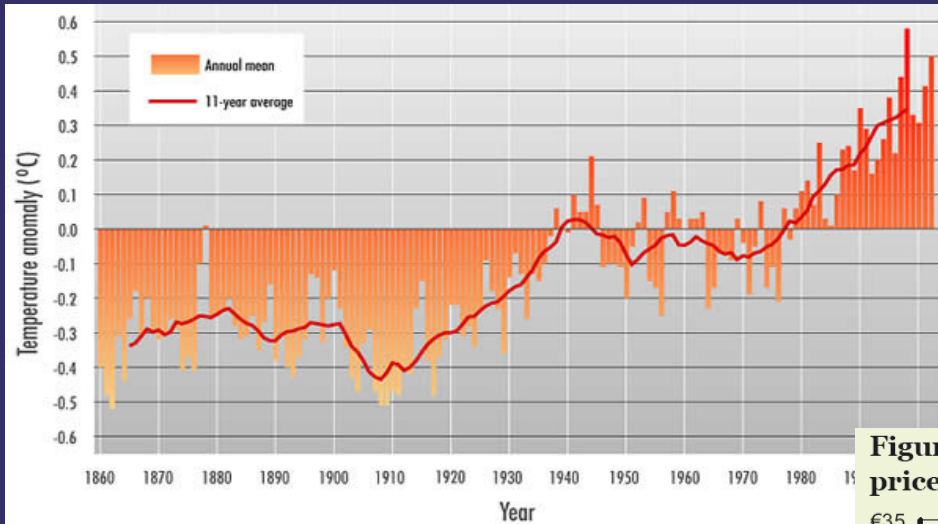


*Carbon emissions trading scheme graph.*

INKCINCT



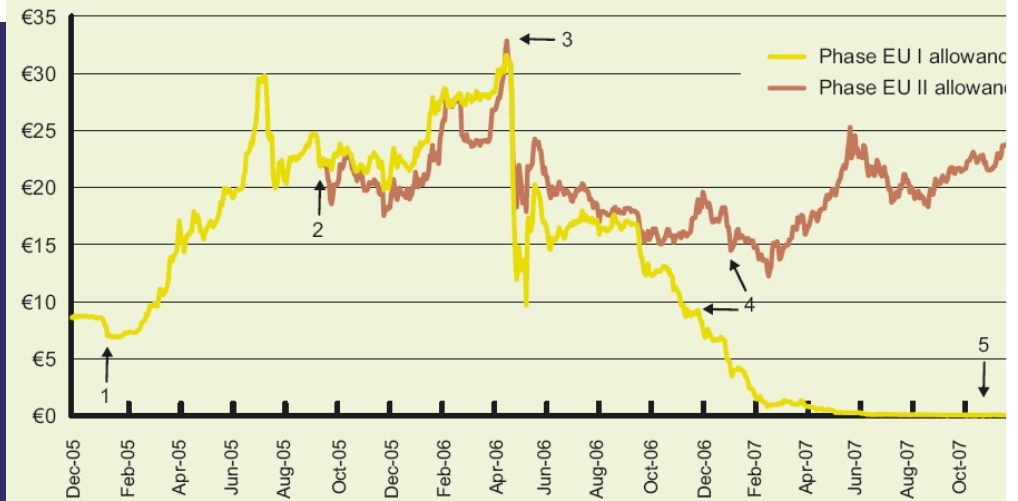
# Climate change or emissions trading?



Respond to climate change?

Or... respond to climate change policy (and its impacts)?

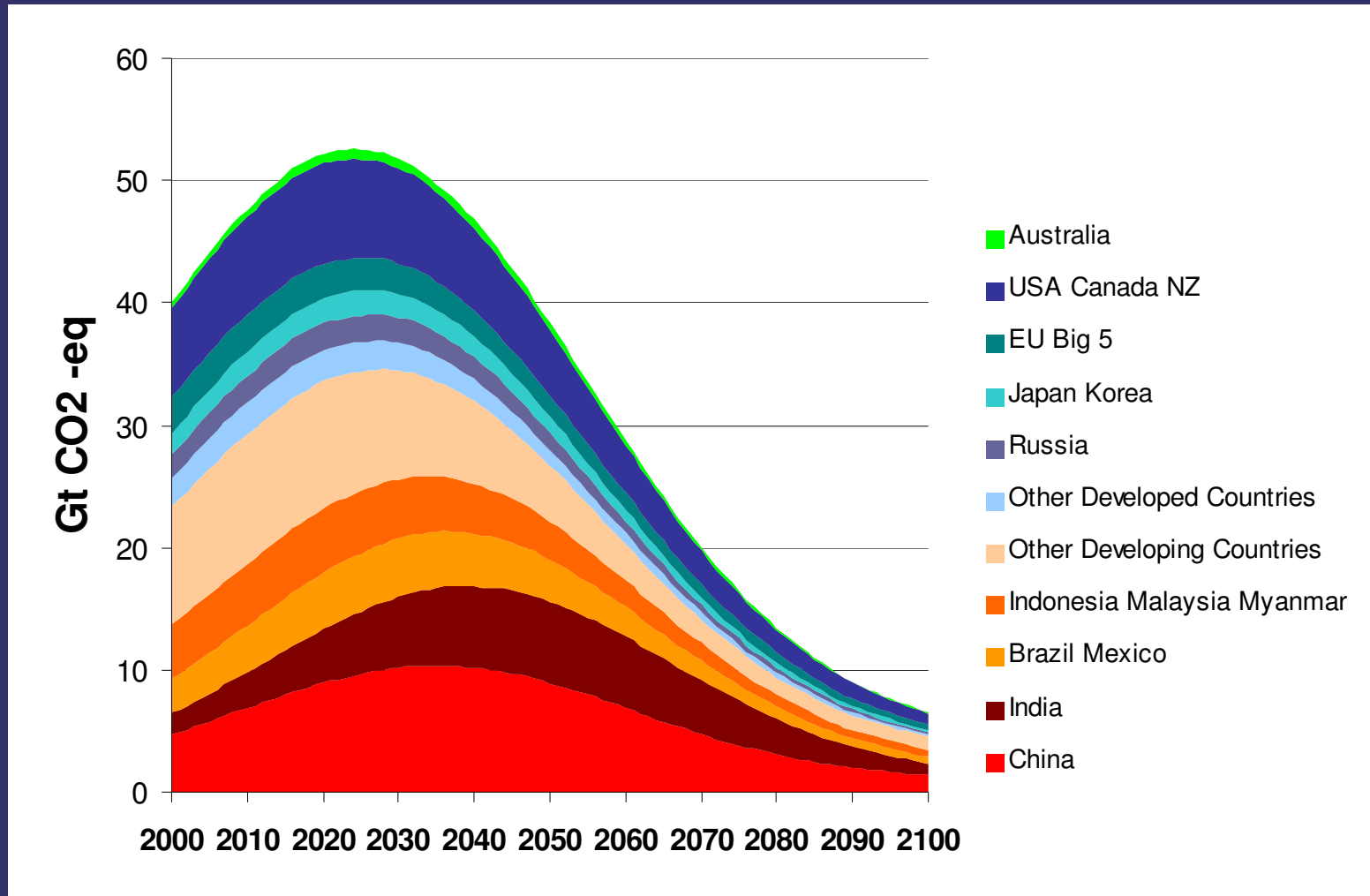
Figure 3.1 European Union Emissions Trading Scheme Phase I price development



Source: Point Carbon website

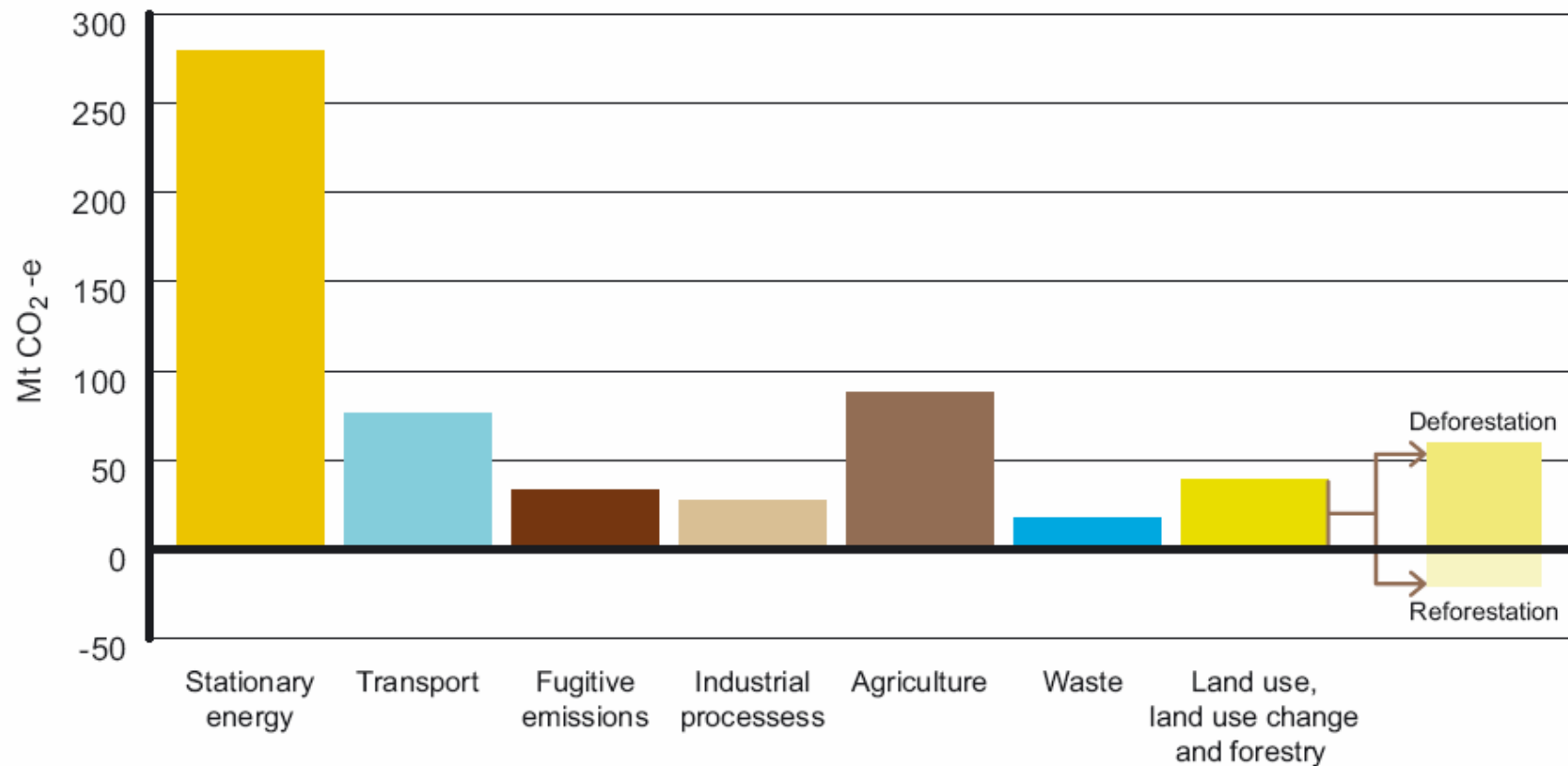
# Scale of response

profile consistent with ~ 575 ppm ultimate concentration



# Australia's Emissions

**Figure 5 Australia's national emissions profile in 2006**



Source: National Greenhouse Gas Inventory 2006, Department of Climate Change

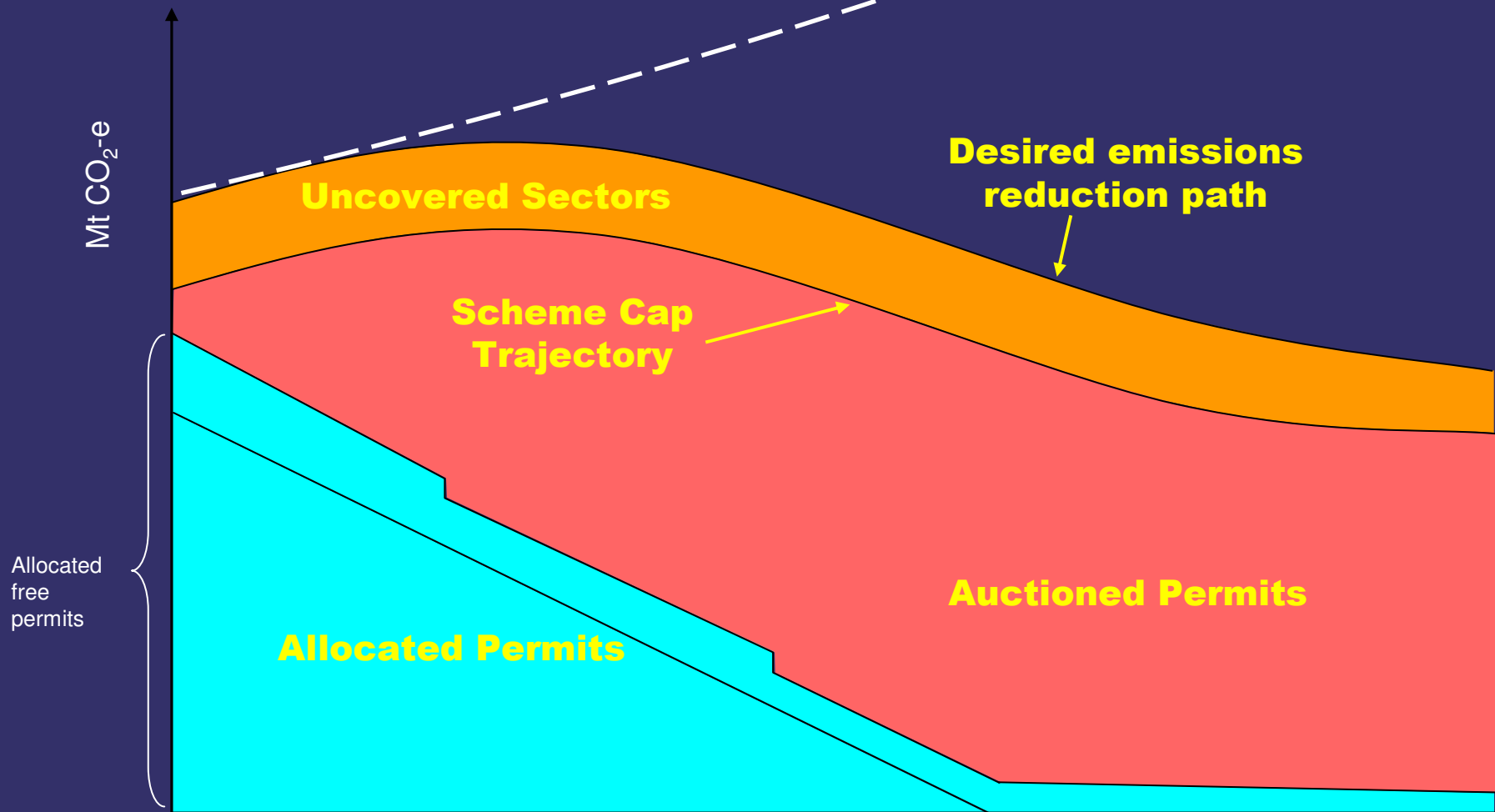
# Cap and Trade

- Government determines **coverage**
- Government sets **cap** (for covered firms) = creates market
- **Permits** issued (up to the cap) – allocation or auction
- **Covered firms** must acquire and surrender permits
- Permits can be **traded**
  - Reduce emissions where you can cheaply
  - Buy permits where you can't
  - Stop producing if you can't afford permits

# Targets, caps and permits

Source: PM's Task Group on Emissions Trading

**Business-as usual emissions**



# Emissions Trading 101

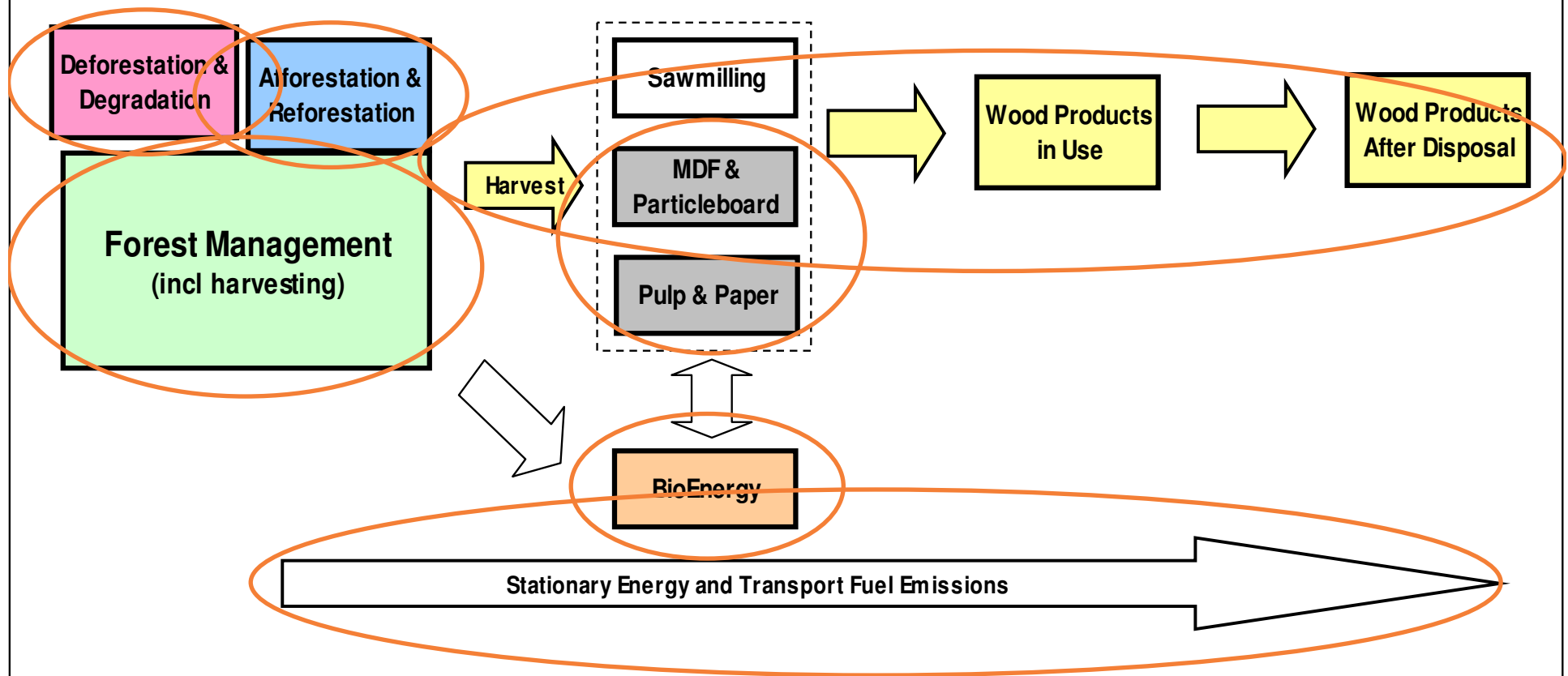
- Its about emissions trading
- Changing competitive advantage – for better or worse, no guarantees
- Carbon has a value
- Understand your exposure and opportunities
- Influence policy - artificial market

# Covered, offsets, not included?

- **Covered = required to surrender permits for emissions**
  - Permits could be allocated, purchased at auction, purchased on a secondary market, or credits.
- **Offsets = could generate credits for improvements over BAU**
- **Not included = not liable for direct emissions**
  - But will incur costs from other covered sectors such as electricity and fuel

# Forest Industry and Emissions Trading

Each component – covered, offsets, included?



# Opportunities for Forest Industry

Component	Impact	Risk	Comment
Afforestation	Large positive	Low	Seek optional
Deforestation	Possible negative	Moderate	Need to address
Forest Management	Unknown	High	Not yet, if ever?
Harvested Wood Products	Large positive	Low	Next Priority
BioEnergy	Potential	Low	Further measures?
Pulp & Paper Competitiveness	Large positive	Low	High \$ impact

# A3P – Greenhouse Priorities

- Reforestation – optional inclusion from scheme commencement
- Carbon in timber – included ASAP
- Competitiveness of pulp & paper
- Streamlined policy environment
  
- Forest management should stay as “included but neutral”

# Other Greenhouse Policy

- Renewable Energy Targets
- Reporting (NGERS)
- Energy Efficiency
- NSW GGAS
- Regulation – GES, Buildings
- Greenhouse Challenge

**Sawmilling and  
Timber sales**

**Local v  
imported  
timber**

**Building  
Codes**

**Broad  
economic  
impacts**

**Carbon  
promotion  
of timber**

**Energy  
prices**

**Carbon credits  
for timber**

**Other input  
costs**

**Investment  
in plantations**

**Reporting  
obligations**

**Timber v  
steel, concrete**

**Incentives to  
reduce  
harvesting**

**State and  
Commonwealth  
duplication**

**Policy  
distraction**

- Do we get swamped by regulation, uncertainty and changing circumstances?
- Are we ultimately worse off?
- Are we ultimately better off?
  
- Next level of policy is important
- Yet to be determined

making • connections  
connections • making  
making • connections  
connections • making  
making • connections  
connections • making

[www.a3p.asn.au](http://www.a3p.asn.au)

# The Green Paper

- **Pulp & paper**
  - Concerned, critical to viability
- **Reforestation**
  - Included, rules to be determined
- **Harvested wood products**
  - Positive statement, speed-up implementation

# What is most important?

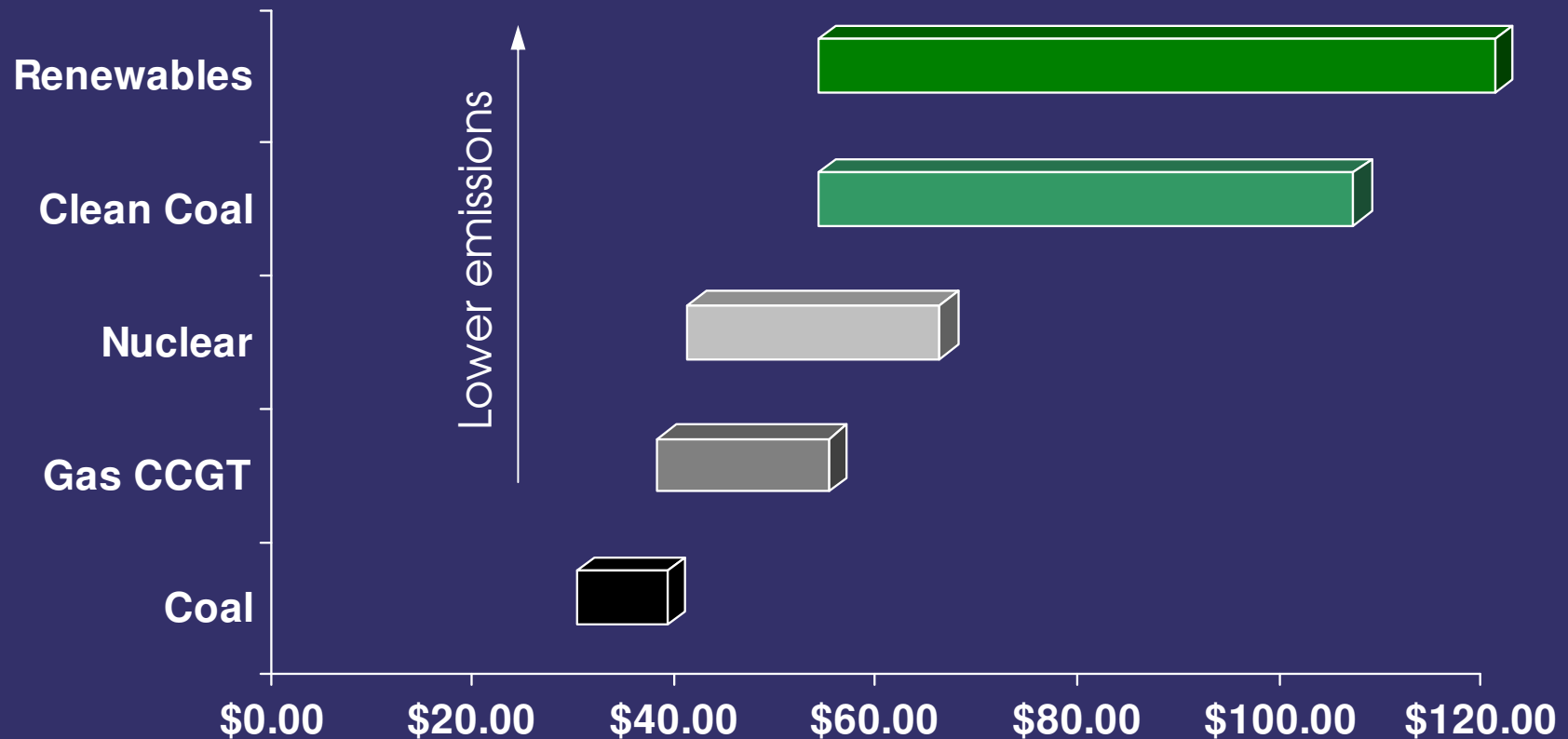
- Economic impacts
- Energy prices
- Reporting
- Harvested wood products
- Measures for steel and concrete
- Impacts on wood supply

# Economic impacts

- (Nearly) everything that emits will incur a cost.
- Fuel, electricity, industrial processes, waste disposal.
- Plus everything that uses those inputs.
- Change is not uniform – aims to be distortionary
- Narrow and broad impacts

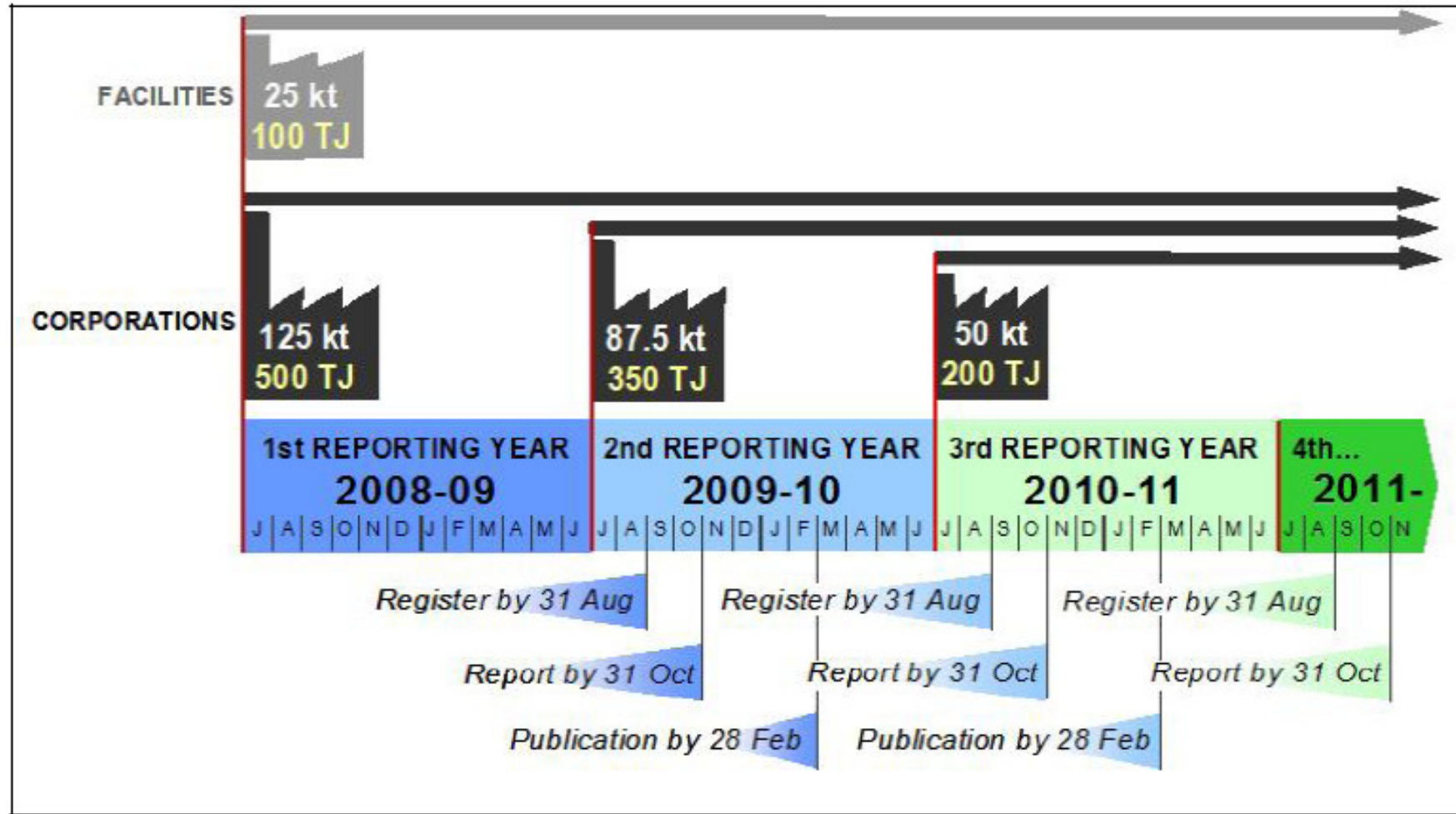
# Costs of electricity generation

Source: Switkowski Nuclear Report



# Reporting

The *NGER Act 2007* reporting thresholds for facilities and corporate groups

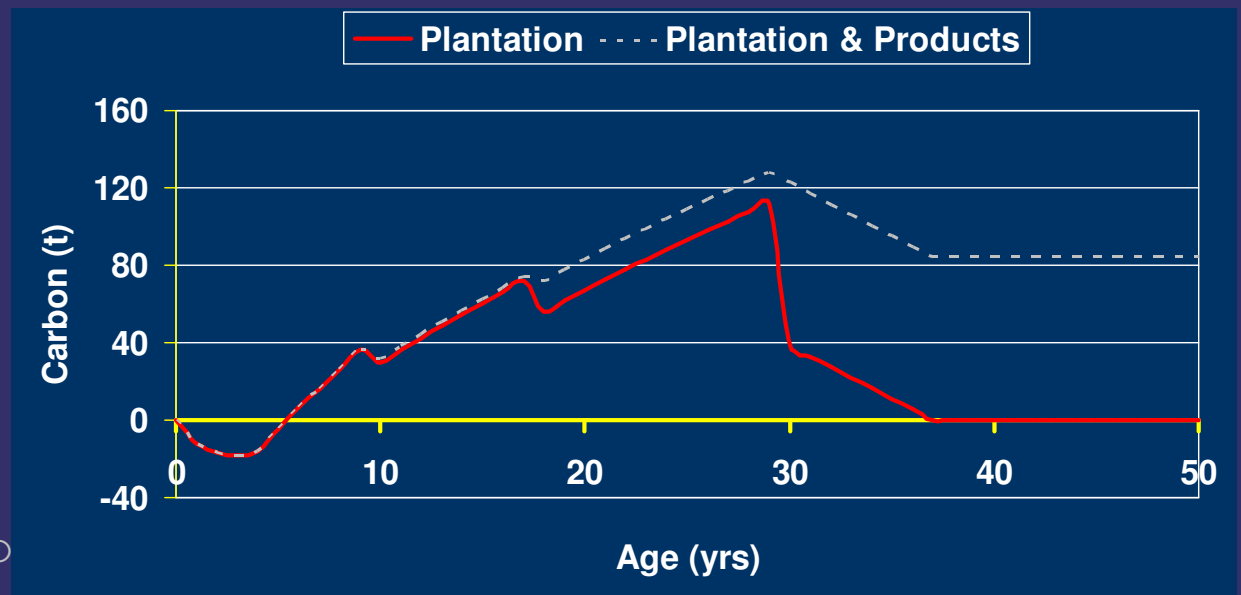


# Carbon in building materials

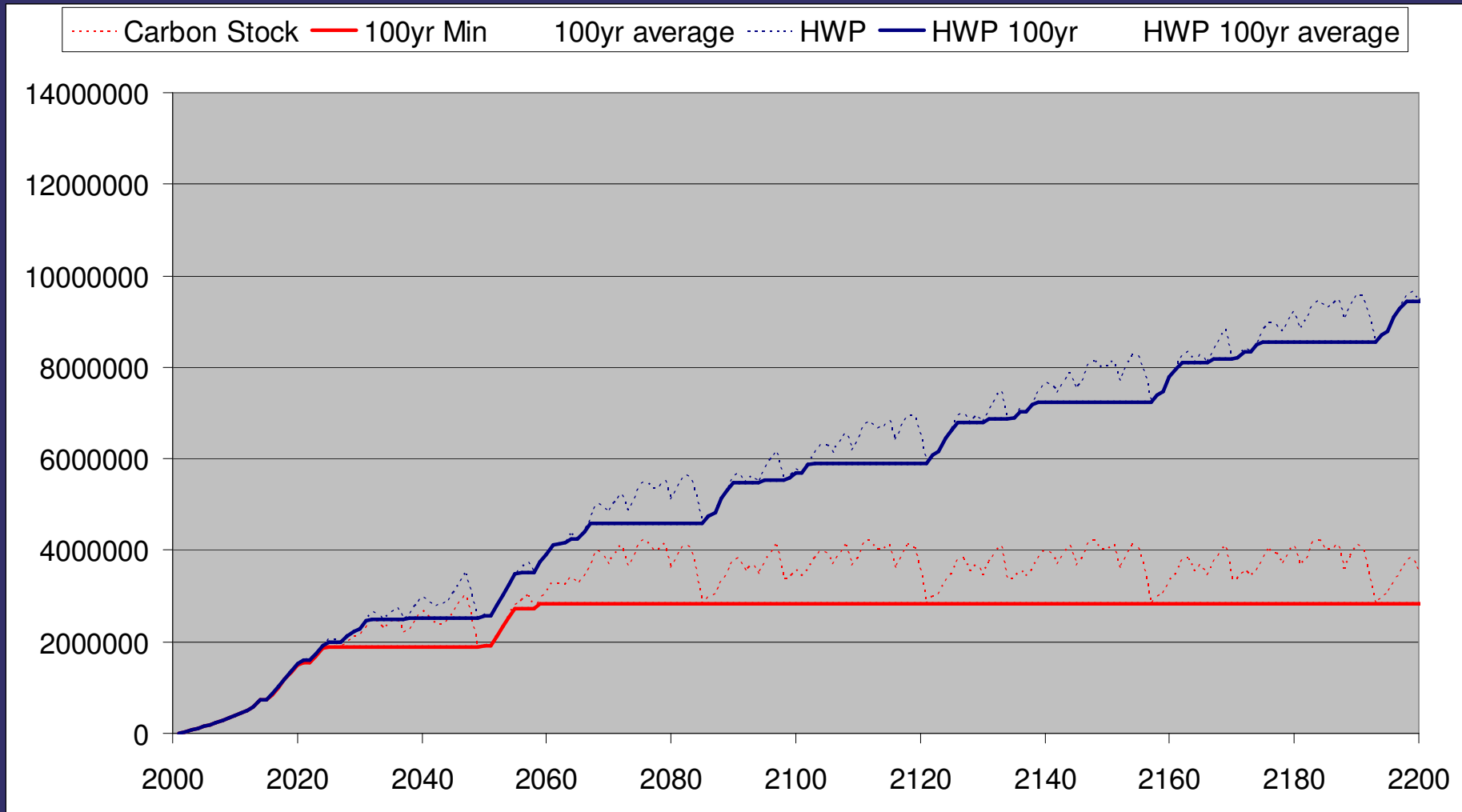
material	carbon released (kg/m <sup>3</sup> )	carbon stored (kg/m <sup>3</sup> )
sawn timber	15	250
steel	5 320	0
concrete	120	0
aluminium	22 000	0

# Harvested Wood Products – Current Status

- Processing emissions will be covered
- Current treatment – all carbon emitted at harvest – no stored carbon enters the sawmill
- For convenience, simplicity and politics
- Is this important?



# Forest and wood products - example



# FWPA funded project on HWP

The aim of the project is to review existing and proposed methodologies for inclusion of carbon stored in timber under emissions trading schemes and discuss mechanisms for inclusion of wood products as legitimate carbon offsets.

*1. Collate and document existing information and data including latest research results as well as existing and proposed Emissions Trading Scheme designs.*

*2. Discussion paper outlining existing (national and project level) and potential accounting approaches and methodologies for estimating carbon in wood products.*

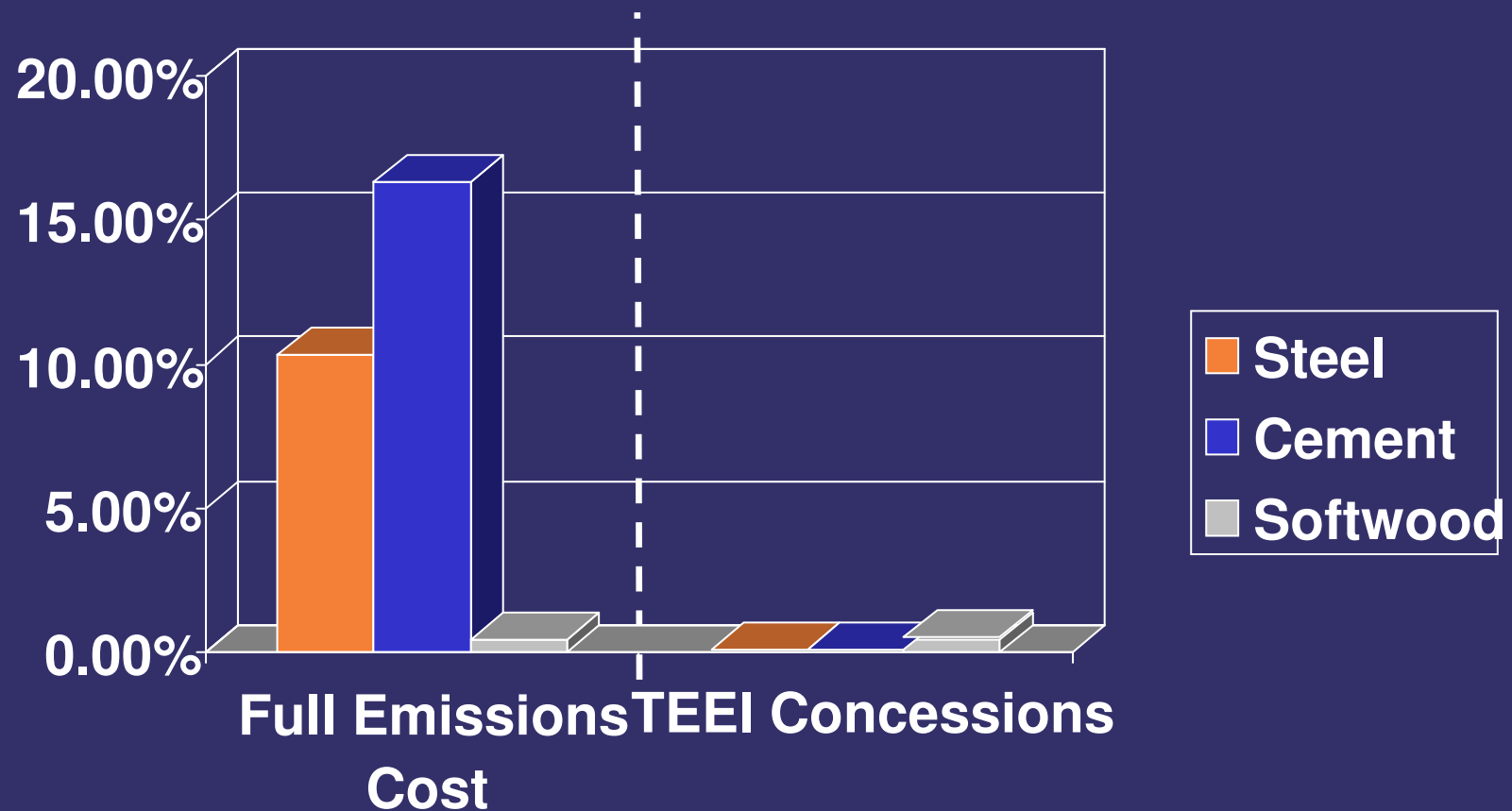
*3. Consultation with selected experts*

*4. Workshop with interested parties*

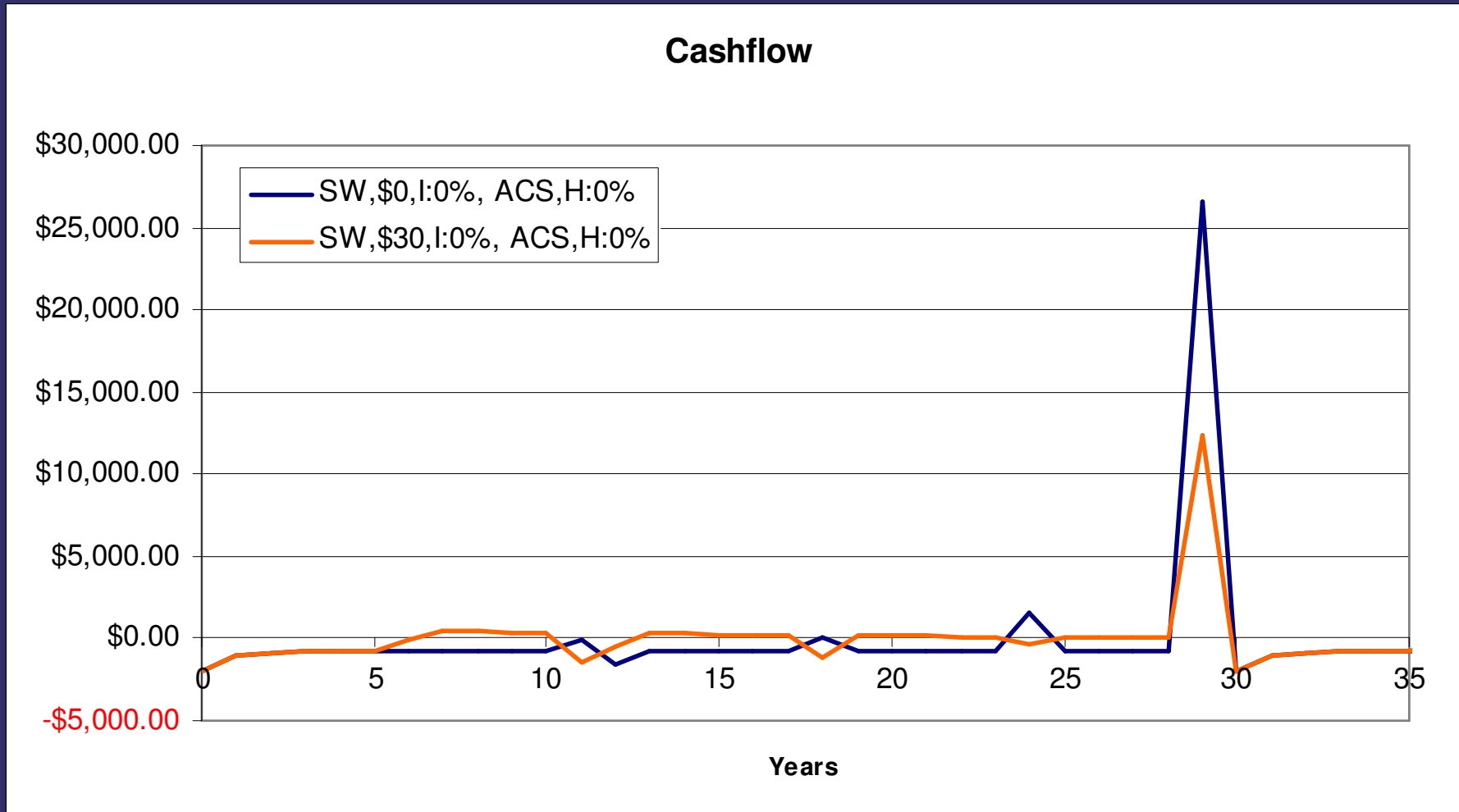
# Impact of ETS concessions

(Source Alison George, Monash Sustainability Enterprises, FWPA Project)

## Increase in Material Cost



# Impact of carbon cost on plantation cashflow



# Indicative carbon price to delay harvest

Delay	Carbon price
5 years	\$27/tonne
10 years	\$48/tonne
Perpetual	\$110/tonne

# Profitability under carbon scenarios

Scenario	Hardwood	Softwood
No Carbon Cost	2.3%	1.6%
Carbon @\$30/tonne	6.3%	2.9%
+ Carbon rising at 2% per annum	1.7%	-ve
+ Harvested wood products	1.7%	6.2%

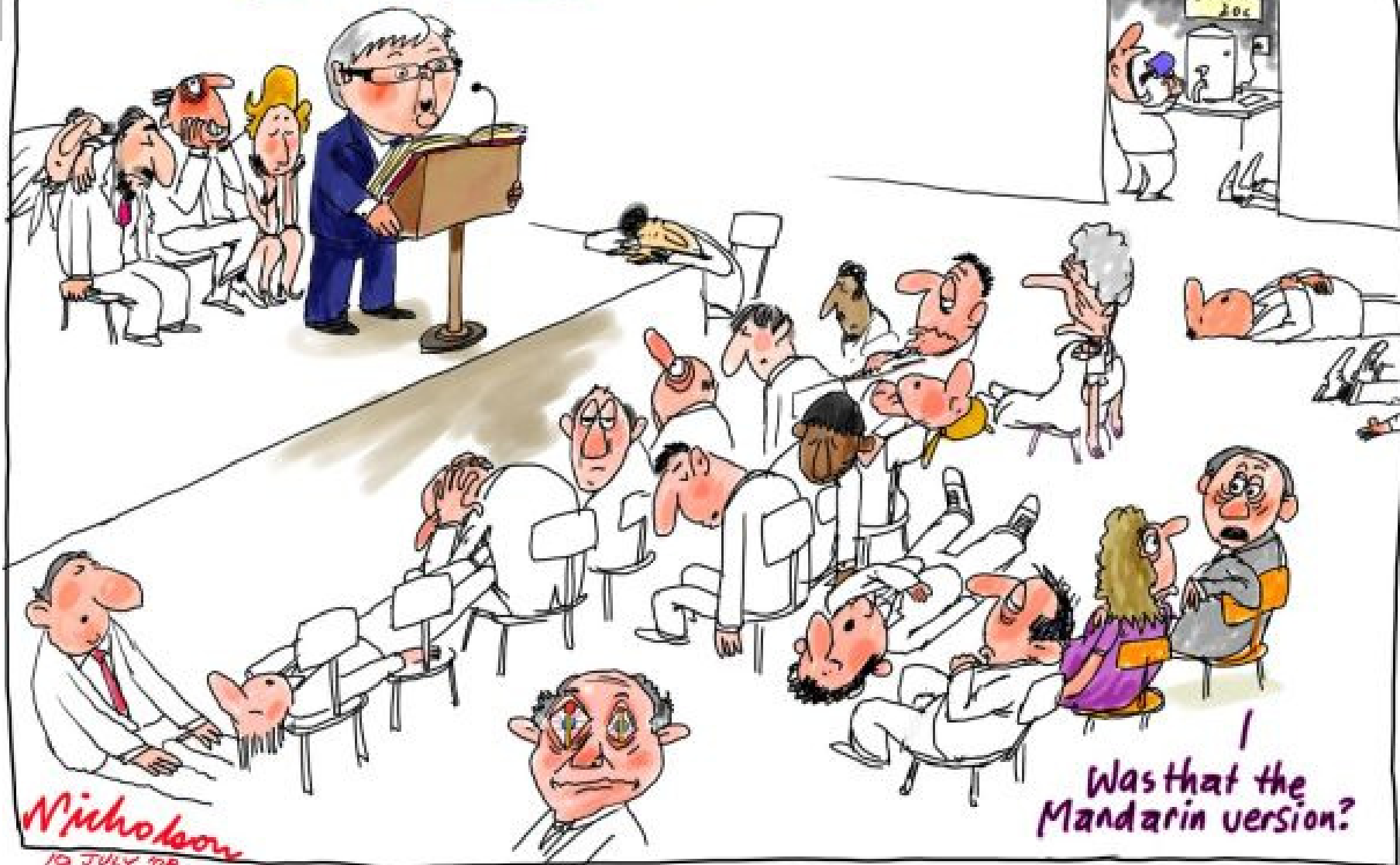
# What to do now (policy)?

- Work out what is important
- Who has similar views?
- Single industry voice
- Influence rules and policies

# What to do now (business)?

- Understand emissions profile
- Which emissions will incur a cost
- Consider impact on competitiveness – narrow and broad
- Identify opportunities and first moves
- Scenario analysis

...and that's how Emissions Trading works. Any questions?



Nicholson  
19 JULY 08

Was that the  
Mandarin version?