



**CEMENT** INDUSTRY  
FEDERATION

# Carbon Pollution Reduction Scheme and the Cement Industry

Robyn Bain

CEO of the Cement Industry Federation



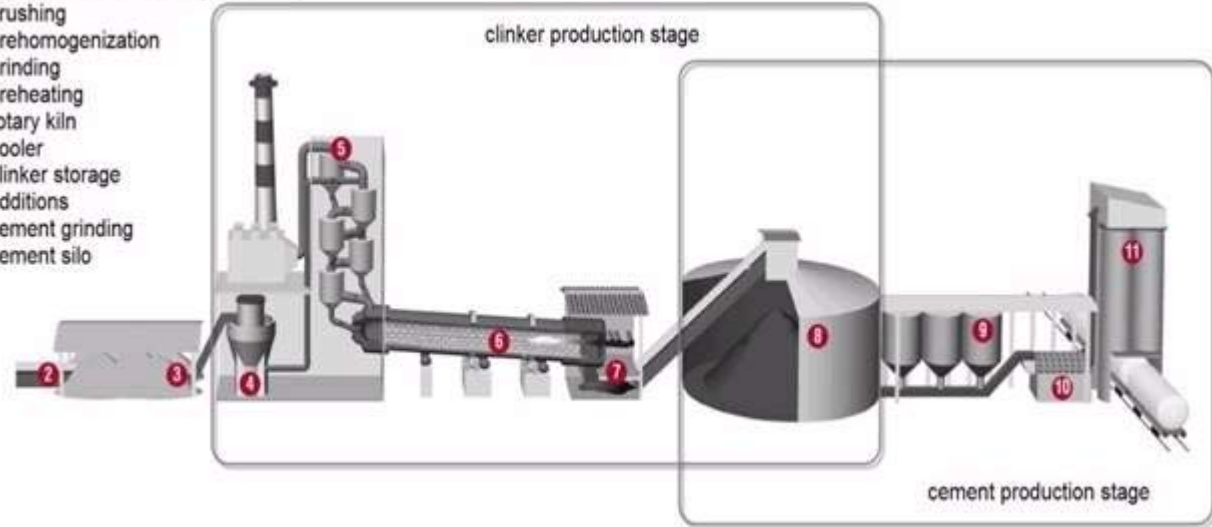
## **“A Rudd Government will**

- *Ensure that Australia’s international competitiveness is not compromised by the introduction of emissions trading*
- *Consult with industry about the potential impact of emissions trading on their operations to ensure they are not disadvantaged*
- *Establish specific mechanisms to ensure that Australian operations of emissions intensive trade exposed firms are not disadvantaged by emissions trading.”*

**Source: Labor commitment (2007 election campaign)**

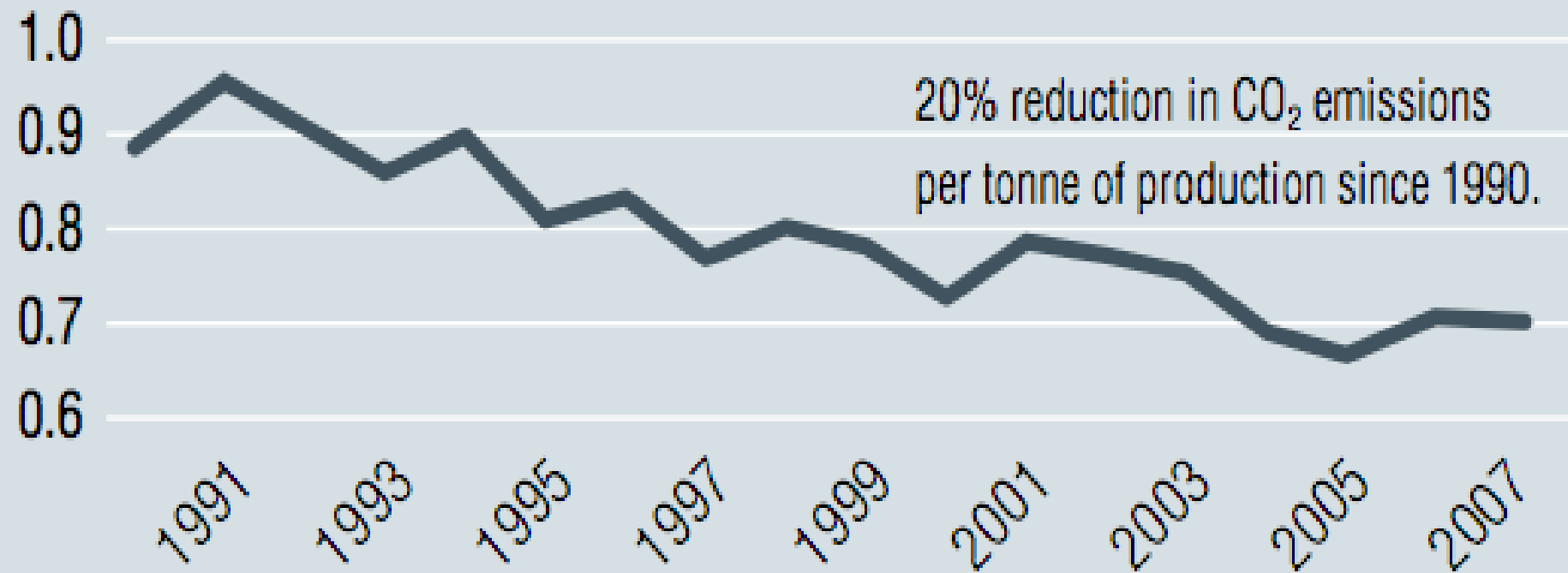
# Cement Making Process

- 1 raw material extraction (not shown)
- 2 crushing
- 3 prehomogenization
- 4 grinding
- 5 preheating
- 6 rotary kiln
- 7 cooler
- 8 clinker storage
- 9 additions
- 10 cement grinding
- 11 cement silo



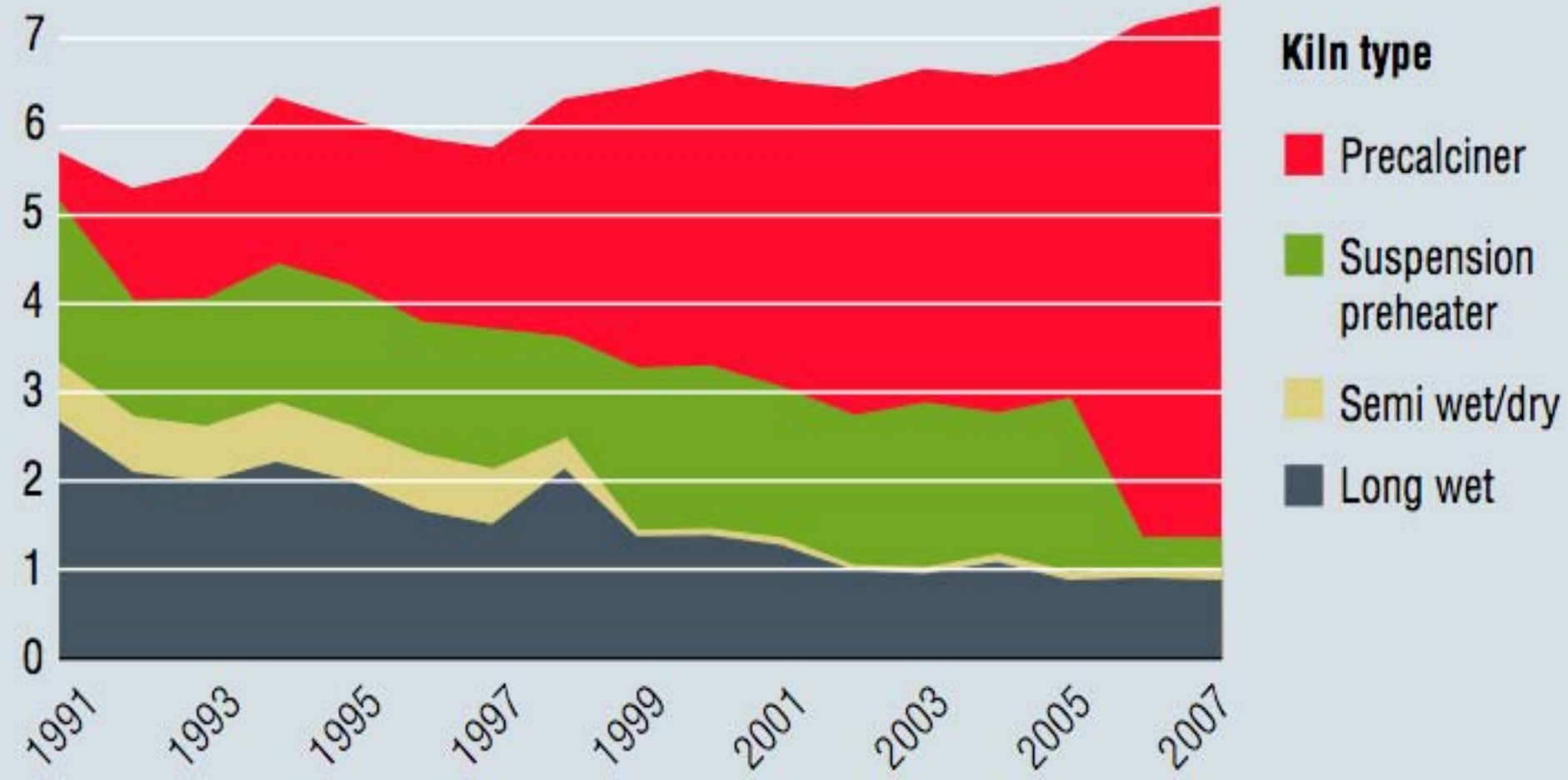


## Cementitious material sales and CO<sub>2</sub> emissions



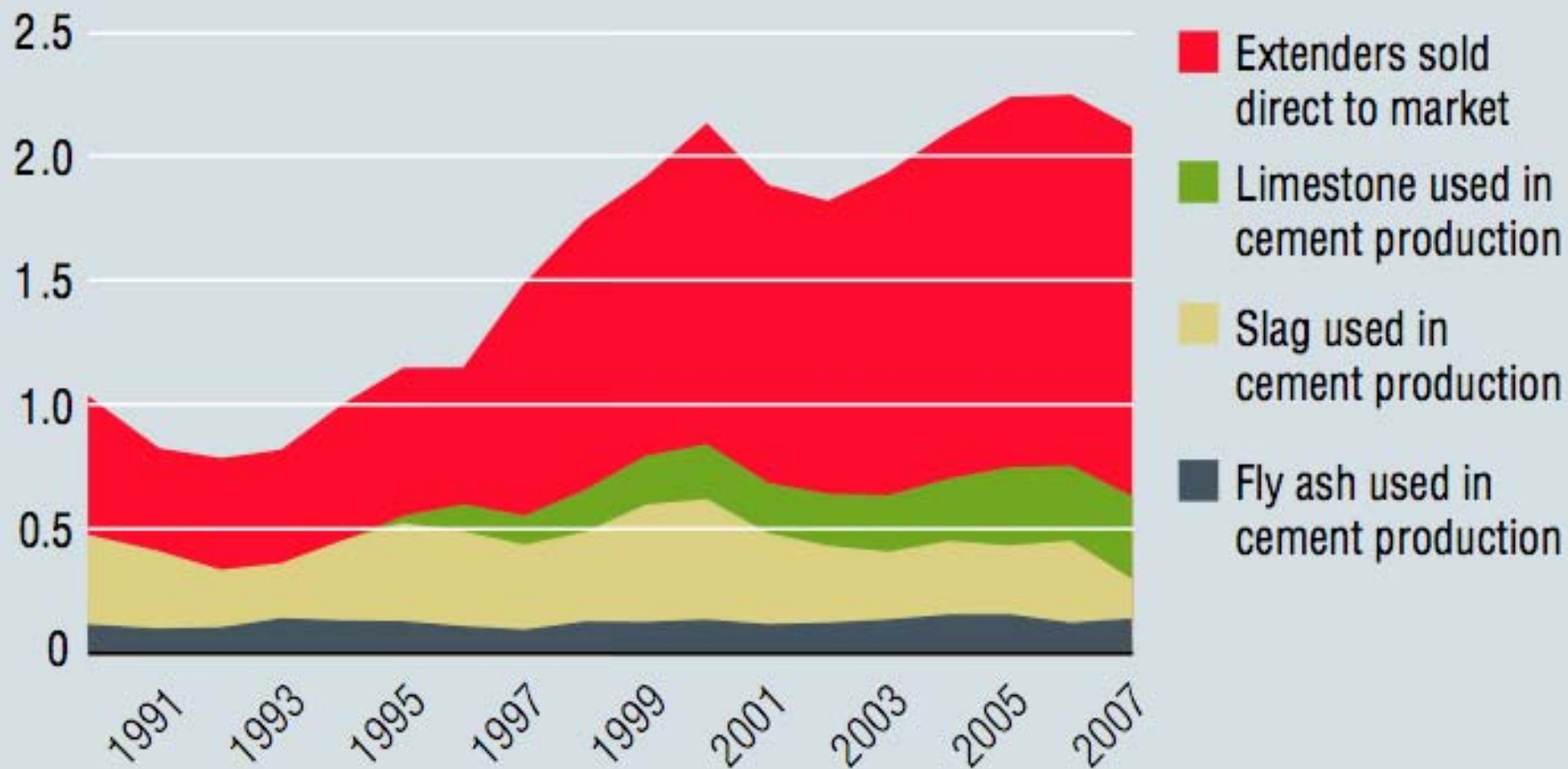


# Clinker production by kiln type (million tonnes)



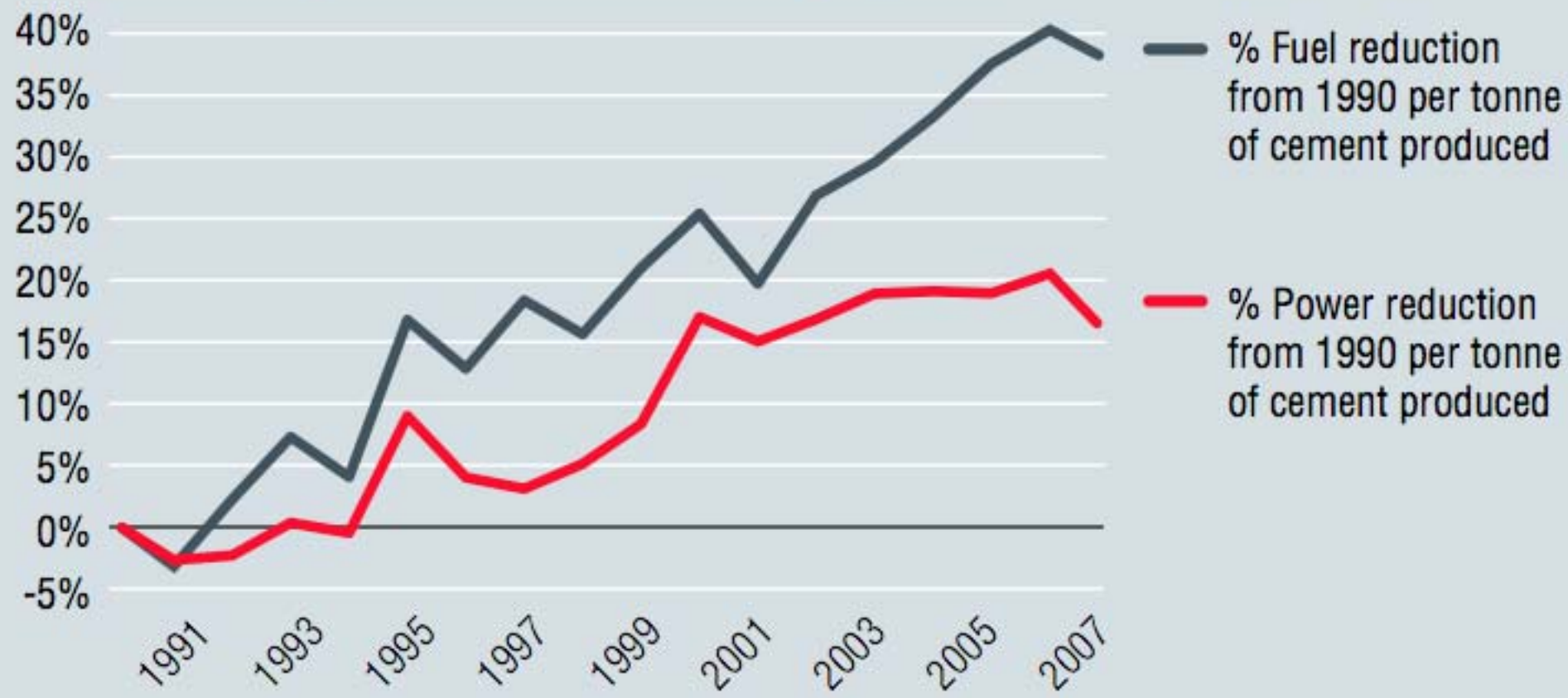


# Cement extenders used in cement production and sold for concrete production (million tonnes)





# Fuel and power efficiency gains



# So ... why do we care?



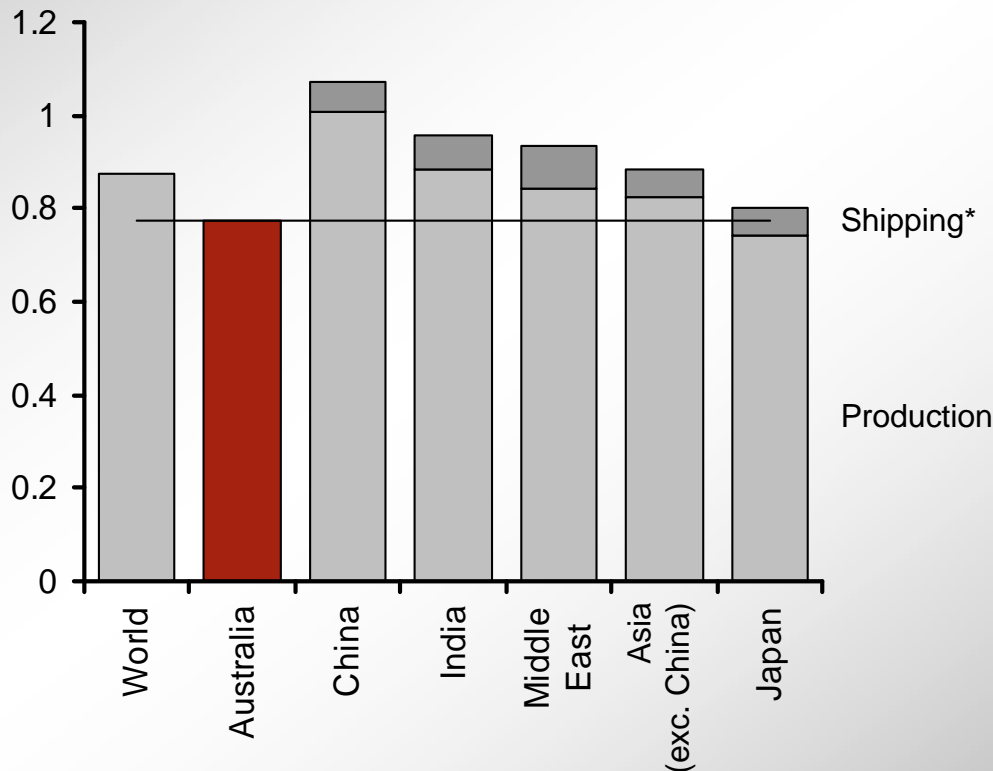
A reduction of assistance rate for the Australian Cement Industry over time will:

- Force unrealistic abatement opportunities  
(we are close to Worlds Best Practice)
- Diminish competitiveness  
(significant impact on the profitability of the sector)
- Gradual rundown of the industry
- Premature closure of production facilities
- Deter new investment
- Importing of clinker will increase  
(likely to be produced with a higher emissions intensity)
- **Inevitably lead to carbon leakage**

# Should Australian production move offshore, the result would be opposite to the intended objectives of an ETS and a responsible environmental policy

## Imported Cement CO<sub>2</sub> Emissions\*\* (2005)

t CO<sub>2</sub>/t cement



- It is likely that imported cement will result in higher emissions than Australian produced cement
- Australia is an efficient producer of cement emitting less tonnes than average of CO<sub>2</sub> per tonne of cement
- importing cement would result in emissions from shipping

Note: \*Shipping emissions will vary depending on whether emissions are considered for both legs or a one-way voyage and which Australian port is the destination; \*\*Emissions relate to cement and exclude other cementitious materials such as fly ash or slag  
Source: L. Price & E. Worrell, Global Energy Use, CO<sub>2</sub> Emissions and the Potential for Reduction in the Cement Industry, IEA, Paris 4-5 Sept 2006, CemBureau, Searates.com, Japanese Cement Association



## **“A Rudd Government will**

- *Ensure that Australia’s international competitiveness is not compromised by the introduction of emissions trading*
- *Consult with industry about the potential impact of emissions trading on their operations to ensure they are not disadvantaged*
- *Establish specific mechanisms to ensure that Australian operations of emissions intensive trade exposed firms are not disadvantaged by emissions trading.”*

**Source: Labor commitment (2007 election campaign)**