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# Dealing with Climate Change:

## A primer on emissions trading

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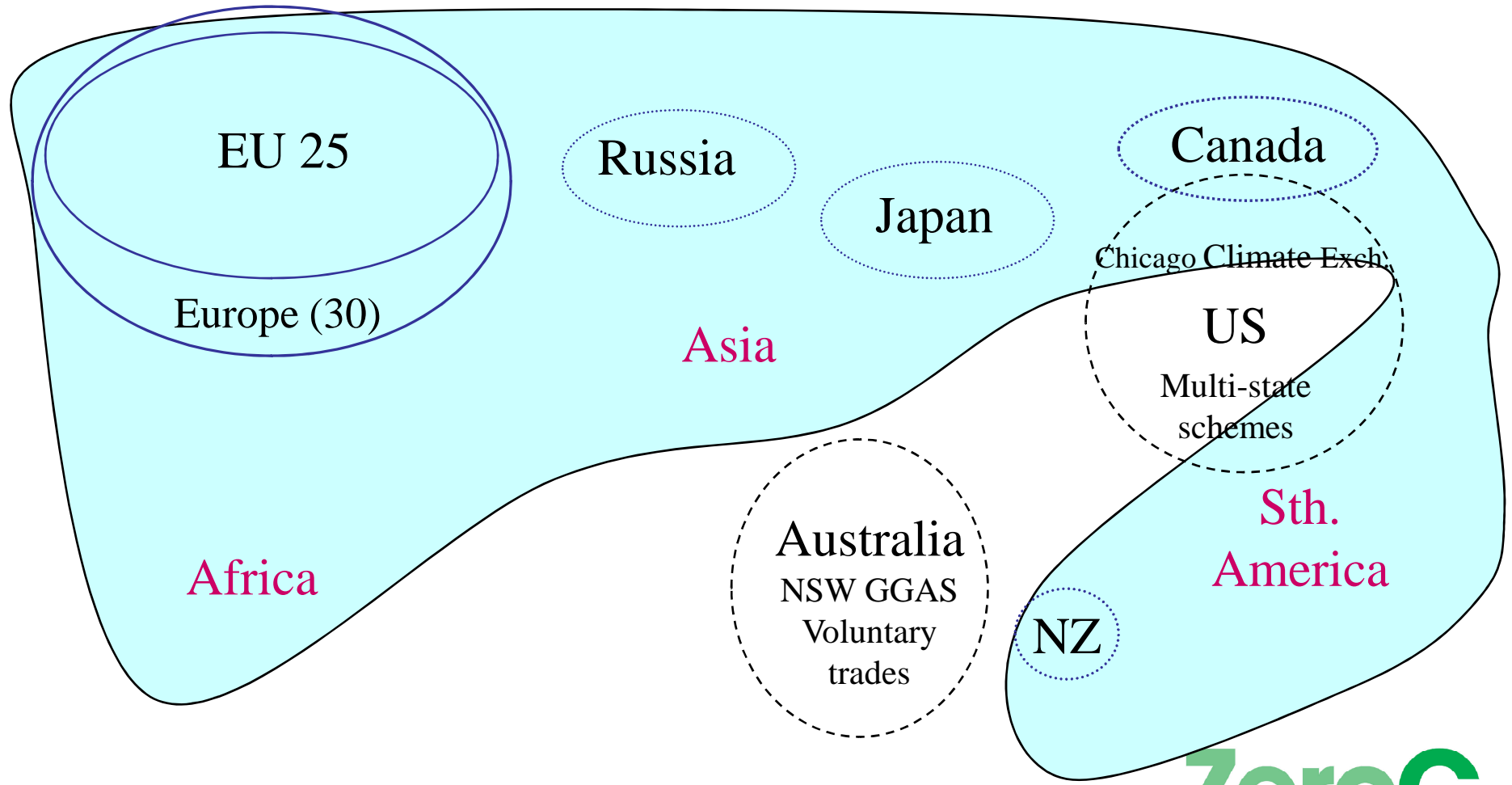
# Today

- Emissions trading globally: cap and trade model
- World view: emissions markets
- Australia pre- & post-November 2007 election
- New markets: can you be part of the solution?

# Cap and Trade

- Large emitters: grandfathered right to emit to specified level- the cap
- If your emissions  $<$  cap, you can trade remainder
- Kyoto: other ways to create credits-
  - Clean Development Mechanism (CDM) and Joint Implementation (JI) projects
- CDM and JI are also tradeable
- Bought by businesses that cant meet their cap
- T CO<sub>2</sub>e

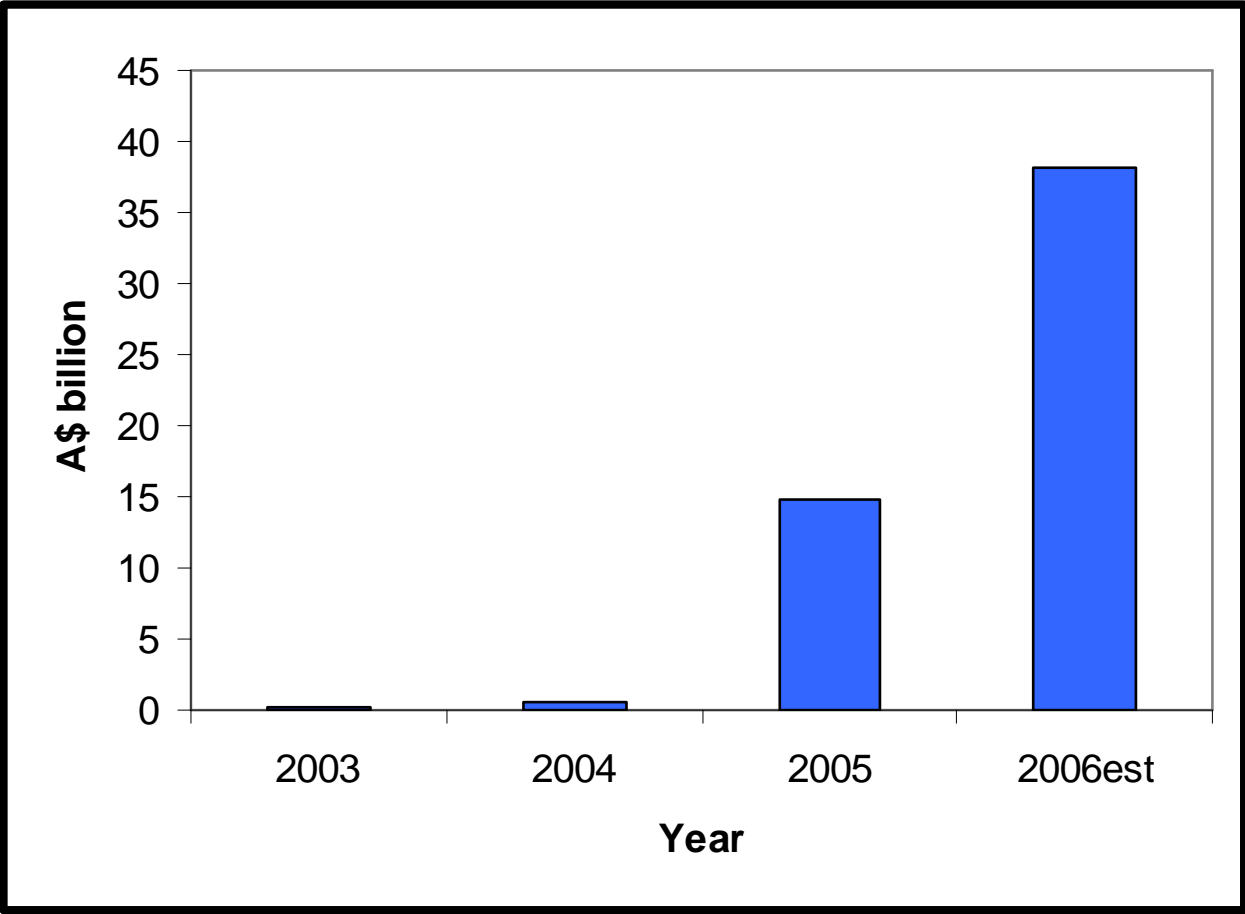
# Carbon as a commodity: where?



Source: Australian Emissions Trading Forum



# Global market size



Source: World Bank 2006/AETF



# Australia: pre- November 2007

- NSW Greenhouse Gas Abatement Scheme
  - NGACs (compliance market)
- 2<sup>nd</sup> largest market by volume and value in 2006
- Australian Greenhouse Office
  - Greenhouse Friendly (voluntary trade)
- Both in broad alignment with Kyoto rules

# Australia: Nov 29th 2007

- Prime Minister Elect Kevin Rudd vows to ratify Kyoto
  - Australia must meet 108% of 1990 level emissions
- Vows to bring in emissions trading by 2010
- Model yet to be defined, unclear field of play; likely to be cap and trade

# Carbon as a commodity: what?

- Creating credits T CO<sub>2</sub>e
  - Avoided emissions vs. baseline (captured, stored, burned, efficiency, compost vs. landfill)
  - Renewable power generation (biofuels, solar, wind, geothermal, not nuclear)
  - Vegetation (avoided deforestation, revegetation)
- Carbon based projects receive project funding to make an otherwise unattractive proposition viable

# Carbon as a commodity: how?

- Rules: clearly defined by scheme regulator
- Key criteria (common to all schemes, inc. Kyoto)
  - Measurable emissions reductions vs. baseline
  - Real time reductions: storage?
  - Ownership of savings can be proven  
(= responsibility!)
- Not business as usual: barrier analysis

# Compost and carbon

- Avoided emissions: landfill methane vs. aerobic composting
- Soil carbon...?
- Issues
  - New approach, untested under Kyoto
  - Permanence: for vegetation, 100 year rule
  - Ownership?
  - Compliance costs/verification

# Review

- Emissions trading is coming
- There is a \$ value on saving emissions
- Can your business model capture value?



Measure, Manage, Mitigate

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