Effectiveness, efficiency, equity & institutional feasibility of using auction revenue

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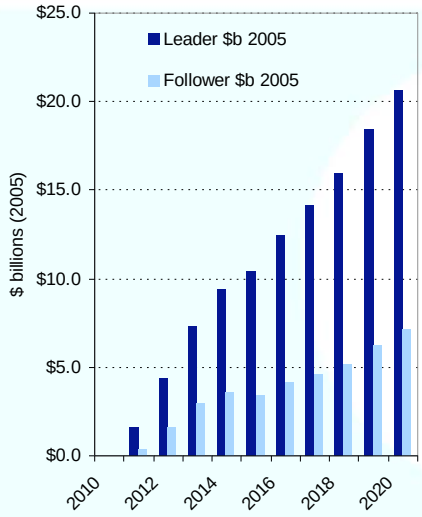
Introduction

- IPCC on good policy:
  - Environmental effectiveness (national and global)
  - Cost effectiveness
  - Equitable
  - Institutional feasibility
- Rate against these groups:
  - Low income groups
  - Trade exposed industries
  - Electricity generators
  - Developing country assistance

Source: Gupta, et al. (2007)

Emission trading dividend



LEADER: 20% reduction on 1990 levels by 2020

· $20.6 billion revenue in 2020 (1.5% GDP)

FOLLOWER: 1990 levels by 2020

· $7.2 billion revenue in 2020 (0.5% GDP)

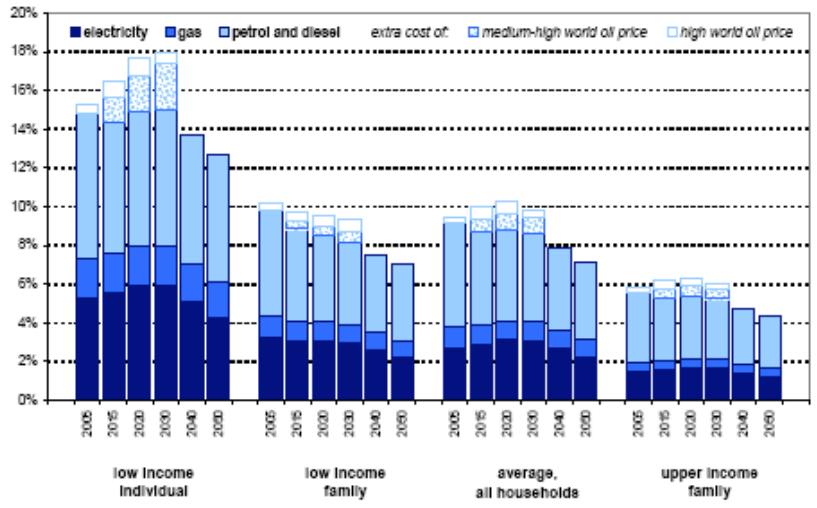
Source: Hatfield-Dodds et al. (2007), Unpublished data

Community attitudes

- Priorities for auction revenue:
  - 34% helping low income households
  - 21% for helping all households
  - 20% research for development for clean energy technologies
  - 16% energy efficiency measures and public transport
  - 10% helping average households
- Helping businesses affected by emissions trading not a priority

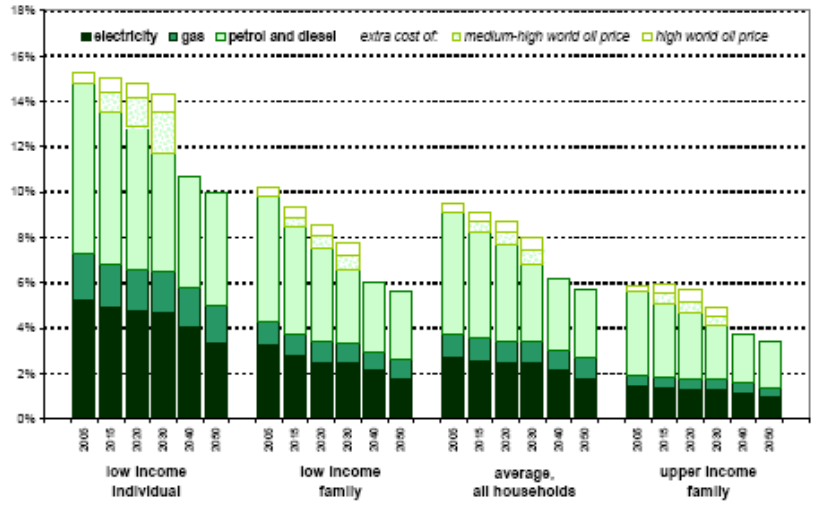
Source: Essential Media Communications (2008), unpublished

Energy affordability



Source: Hatfield-Dodds et al. (2008)

Energy affordability



Source: Hatfield-Dodds et al. (2008)

Affordability payments

- Addressing low income groups rates very highly on “equity” and “institutional feasibility” grounds
- Mix of responses will be required:
  - Direct payments (e.g. through welfare system)
    - Better to over fund help in early years and monitor
    - Don’t do it at the petrol pump!
    - Hatfield-Dodds (2008): est. $360-560 million in 2020 required
  - Energy efficiency and public transport
    - Contributes to low cost emission reductions
    - Builds institutional support through engagement
    - Avoids “carbon lock” and decreases vulnerability
- Multi-billion dollar financial package needed

Trade exposed industries

- *Primia facie* case for assistance
- Needs to be done in a way that:
  - Positions Australia for low carbon economy
    - Transitional and phased out
    - Encourages world’s best practice innovation
  - Creates net benefits to Australia as a whole
- Under current proposals $3-6 billion/year would be transferred to these industries
  (based on $20-$40/t CO2e)

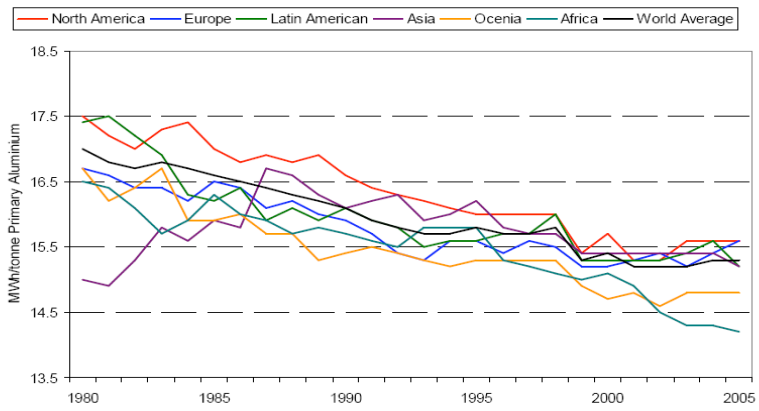
Trade exposed industries

- Case for carbon leakage overstated:
  - In many cases investments/production in other countries would lower global emissions
  - If production shifts it **may** increase emissions
  - In some cases investments other countries would not impact on Australian companies (i.e. they are multi-nationals)
- Danger that false negatives and positives see:
  - Unnecessary wealth transfer
  - Less revenue for other parts of the economy
  - Reduced speed of adjustment
  - May lock in high emission intensity
  - Increase in global emissions

Sources: MMA (2008a), in preparation

Carbon leakage?

Regional aluminum smelting energy consumption



Source: International Aluminium Institute, 2003, *Life Cycle Assessment of Aluminium: Inventory Data for the Worldwide Primary Aluminium Industry*, London

Sources: MMA (2008b)

Trade exposed industries

- “Environmental” and “institutional feasibility” case for assistance is weak
- “Equity” is contested but the honest rational
- Assistance must decline through time
- Better to provide direct assistance to deploy world’s best practice low emission technologies

Electricity generators

- Core issue is whether lack of support is barrier or not to low emission investments
- Additional $34-95 billion investment needed to 2050 in electricity alone
- Environmental effectiveness uncertain
- Lacks institutional feasibility
- The core arguments are around equity
- Better to provide direct assistance to deploy world’s best practice low emission technologies

Developing country assistance

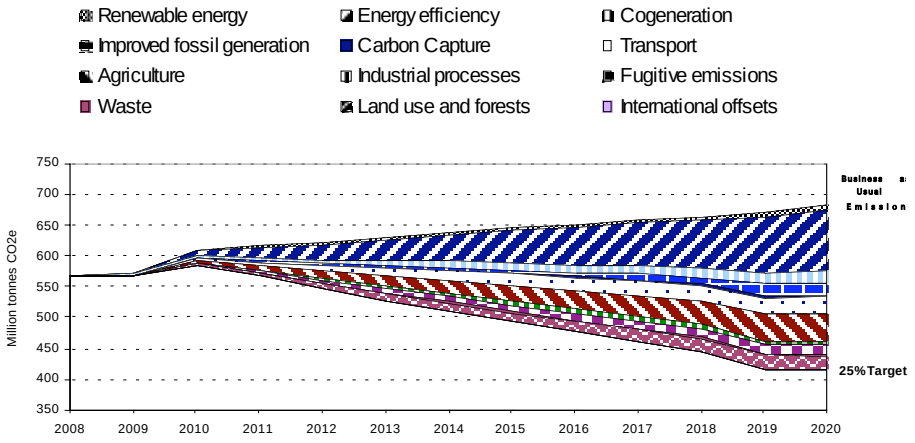
- Avoiding dangerous climate change
  - Developed countries major contributors (-25-40% reductions required by 2020)
  - However, major reductions in developing countries needed (emissions peak by 2020)
- Driving clean technology revolution
  - Enabling frameworks in developed and developing countries needed
  - Ball park estimates suggest US$25-50 billion/year needed in developing countries
  - Clean Technology Fund to remove barriers to investment in developing countries

Source: The Climate Institute (2008b)

Developing country assistance

- Rates highly on all grounds:
  - Environmental effective: Helps drive required investments
  - Equitable: Recognises historical responsibilities and capacity to act
  - Cost effective: Unlocks low cost abatement options in developing countries
  - Institutional feasibility: Developing countries will not play ball without it
- 10% of revenue should be directed to global solutions

Unlocking low cost abatement



Source: The Climate Institute (2008c)

Summary

- Support for low income groups
  - Justified on equity and institutional feasibility grounds
- Support for low emission technology in Australia and in developing countries
  - Ranks highly on all criteria
- Assistance to EITE industries and generators
  - Needs to be limited and tried to world's best practice technology deployment

References

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