South Africa's Vulnerability to 'Green Protectionism'

Gaylor Montmasson-Clair
Trade and Industrial Policy Strategies (TIPS)

Trade and Climate Change:
Exploring the Impact on South African Business

TIPS, the dti and the IDC

Johannesburg, South Africa

23 October 2013

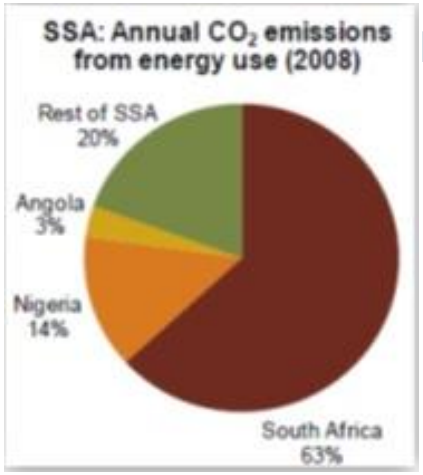
Outline

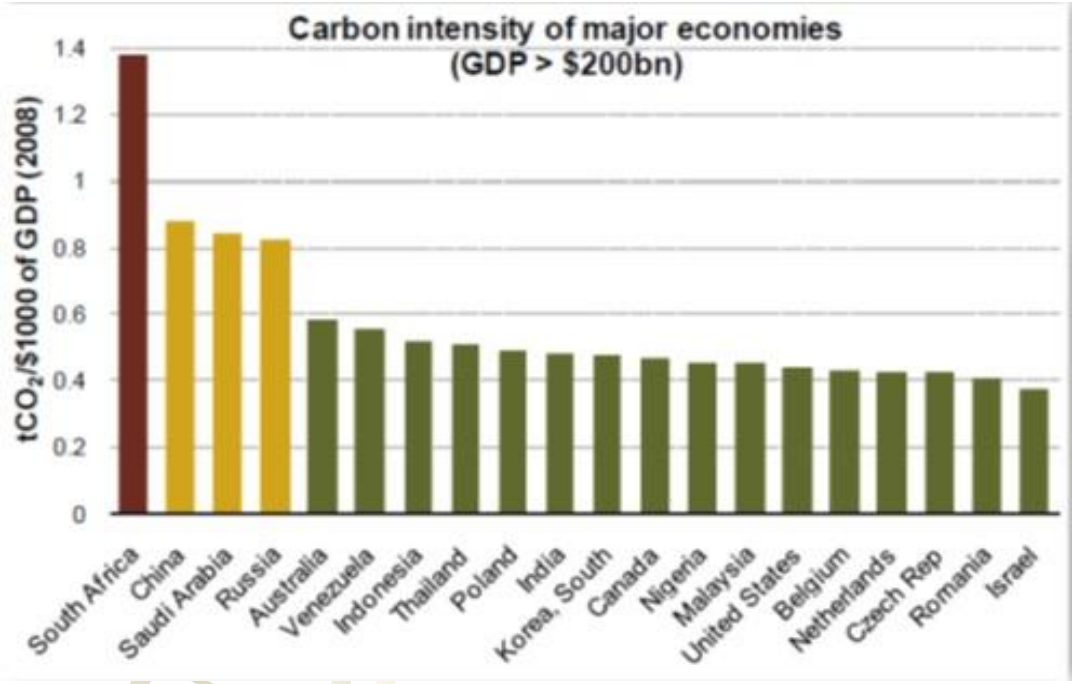
- South Africa's exposure to response measures
  - Carbon intensity/GHG emissions
  - Energy
  - Trade
  - Economic development
  - Policy environment
- Vulnerability to response measures
  - Impact of a BCA on trade with the EU and the USA
- Vulnerability to other trade measures
  - Trade restrictions
  - Liberalisation of EGS

TIPS
TRADE & INDUSTRIAL POLICY STRATEGIES

SA Exposure: Carbon Intensity and GHG Emissions

- 13th largest GHG emitter (1.5% of world's total)
- A larger emitter of CO2 than all other SSA countries combined
  - 63% of SSA's annual CO2 emissions from energy use (2008), ahead of Nigeria (14%) and Angola (3%)
- One of the world's most carbon-intensive economies





1. Carbon-intensity of a largely coal-based electricity generation base
2. Large mineral wealth, i.e. strong role of the mining sector
3. Governmental strategy of encouraging investment in energy-intensive industries, including aluminium and other non-ferrous metal beneficiation

Source: US Energy Information Administration, 2008

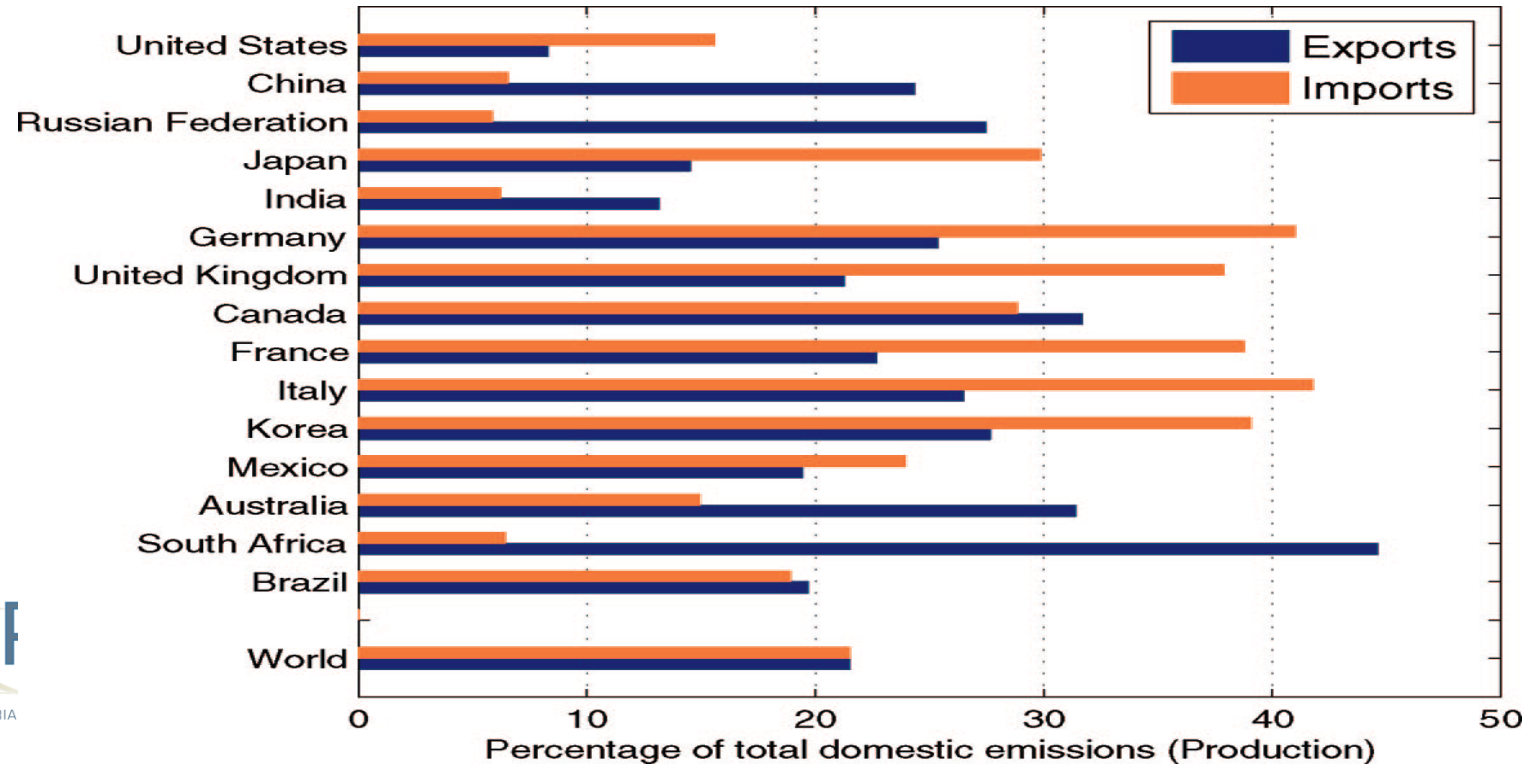
SA Exposure: Energy Intensity of Exports

- High energy intensity of exports, even though some reduction in the last two decades
- However, most of the decrease in energy intensity has resulted from a reduction in the energy intensity of the product due for example to technological innovation (by opposition to scale and composition effects)
- Only a small portion has been due to a change in the composition of exports

TIPS
TRADE & INDUSTRIAL POLICY STRATEGIES

SA Exposure: Role of Trade in SA's GHG Emissions

- High trade exposure: around 45% of SA emissions are due to the country's exports (of carbon-intensive goods) rather than domestic consumption
- Distance from main markets (regulation of bunker fuels)



Source: Peters and Hertwich, 2007

TRADE & INDUSTRIA

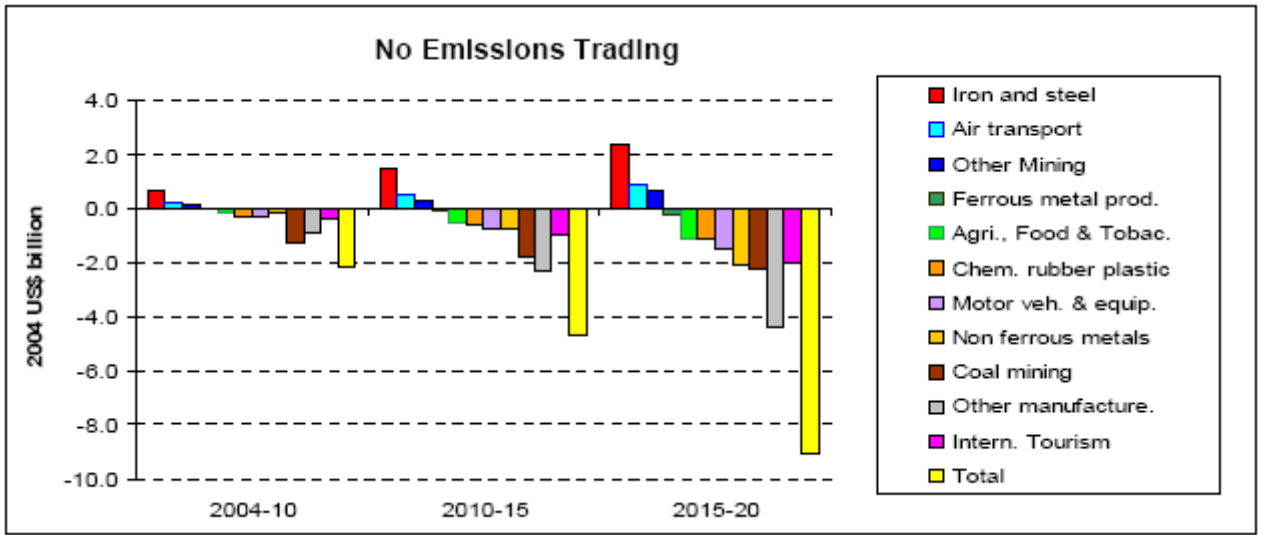
SA Exposure: Economic and Policy Development

- 28th largest economy
- Status of Upper Middle Income Country
- GDP per capita: USD 7,508 (76th)
- HDI: 0.629 (121st)
- No economy-wide carbon legislation (as yet)
  - No recycling of revenues domestically, which significantly increases the impact on economic growth, social welfare and environmental protection
  - Risk of double taxation: domestic carbon pricing might not prevent being targeted by BCAs

TIPS
TRADE & INDUSTRIAL POLICY STRATEGIES

Vulnerability to Response Measures

- Scenario: 25% emission reduction from 1990 levels by 2020 for Annex 1 countries => carbon tax, domestic ETS, BCAs, etc.
  - Shift in production and trade patterns from developed countries
- But no international emissions trading : each country/region must achieve individual targets
- A variety of sectors in SA would be significantly (even severely) affected by response measures, especially coal, non-ferrous metals, other manufactures

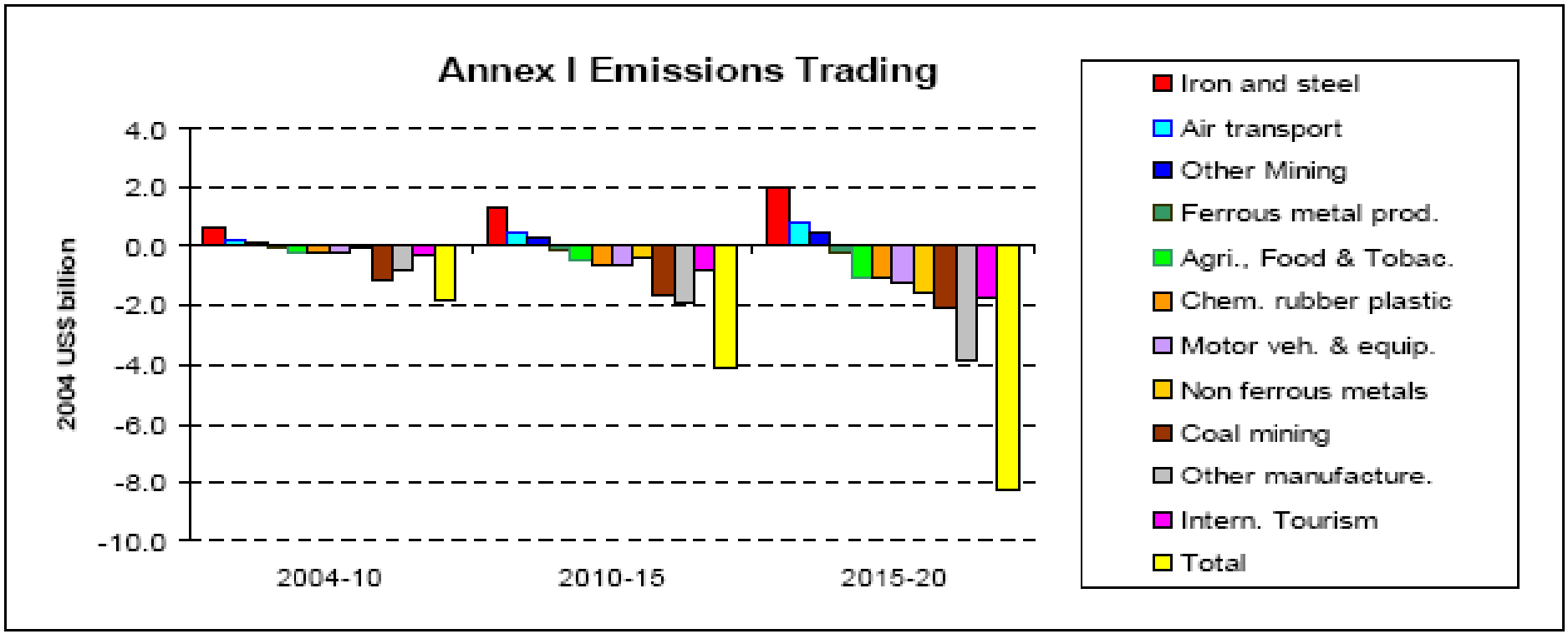


Source: Jooste, *et al.*, 2009)

TIPS
TRADE & INDUSTRIAL POLICY STRATEGIES

Vulnerability to Response Measures (2)

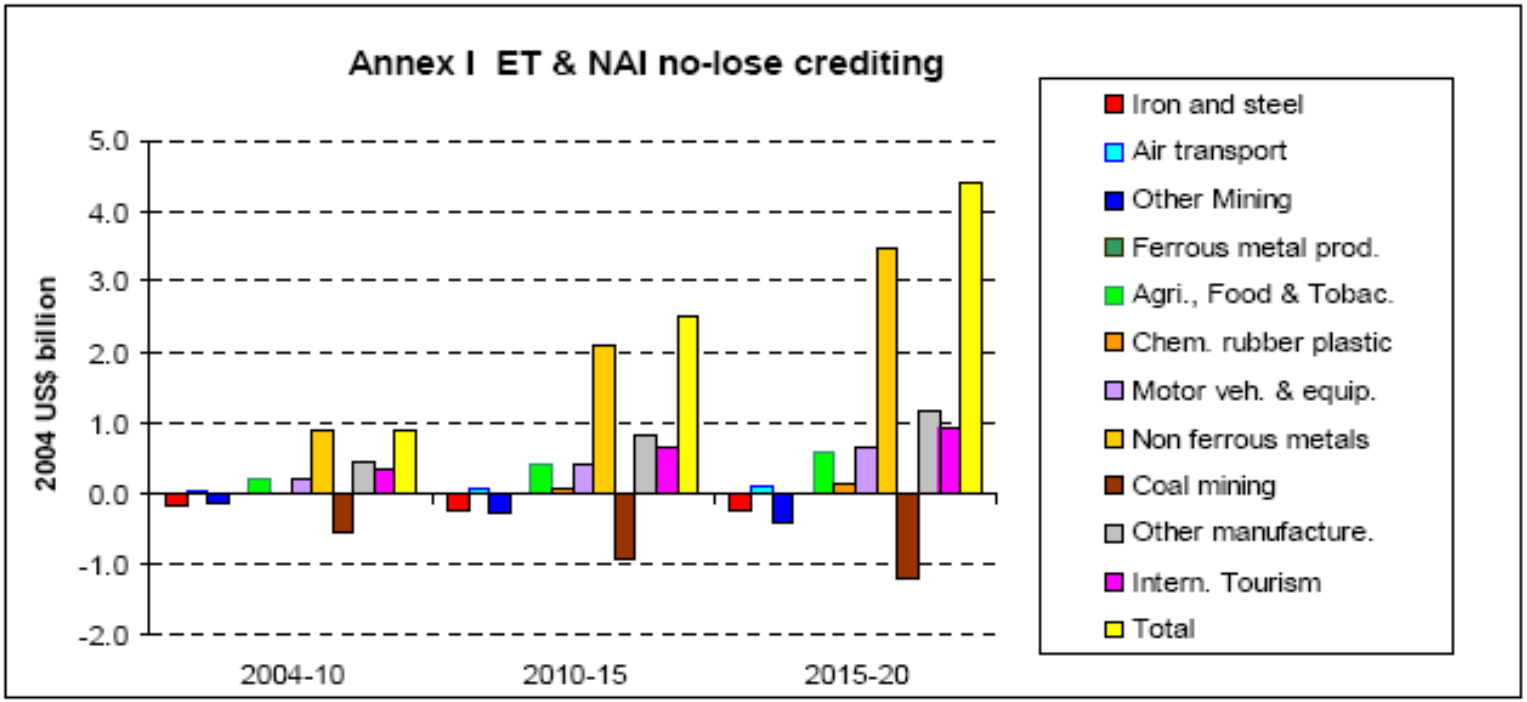
- ETS for Annex 1 countries only (i.e. excluding developing countries)
- Similar impact as with no emission trading scheme



Source: Jooste, *et al.*, 2009)

Vulnerability to Response Measures (3)

- ETS for Annex 1 countries and access to the carbon market on a 'no-lose' crediting basis by developing countries (i.e. non-Annex 1 countries)
- Positive impact on most sectors (except for coal mining, but the impact is less severe)



Source: Jooste, *et al.*, 2009)

TIPS
TRADE & INDUSTRIAL POLICY STRATEGIES

Case Study: Impact of a BCA on Trade with the EU and the USA

- BCA: around USD 20 per tonne of CO2
- Non-ferrous metals (gold, platinum, copper, aluminium, cobalt, etc.): about 25% of exports vulnerable; equivalent to a 10% *ad valorem* tax
- Iron and steel: about 20% of exports vulnerable; equivalent to a 10% *ad valorem* tax
- To an lesser extent: mining and quarrying (coal), paper, pulp and print, chemical and petrochemical and textile

TIPS
TRADE & INDUSTRIAL POLICY STRATEGIES

Vulnerability to Other Trade Measures

- Trade restrictions (phyto-sanitary measures, labelling schemes, other NTBs) based on environmental grounds
  - Agricultural products, wine industry, etc.
- Asymmetrical benefits and detrimental impacts which could potentially arise from the liberalisation of the EGS sector:
  - Liberalisation of climate mitigation goods may bring benefits to developed economies and a portion of middle-income countries but it may not provide developing countries with any environmental benefits or economic growth potential
  - Any liberalisation agreement under the WTO would need to be matched by financial and technical assistance packages

TIPS
TRADE & INDUSTRIAL POLICY STRATEGIES

Thank you very much for your attention!

TIPS
TRADE & INDUSTRIAL POLICY STRATEGIES