

Climate Policy and Carbon Tariffs: Some New Wine Mixed with Old Wine in New Green bottles?

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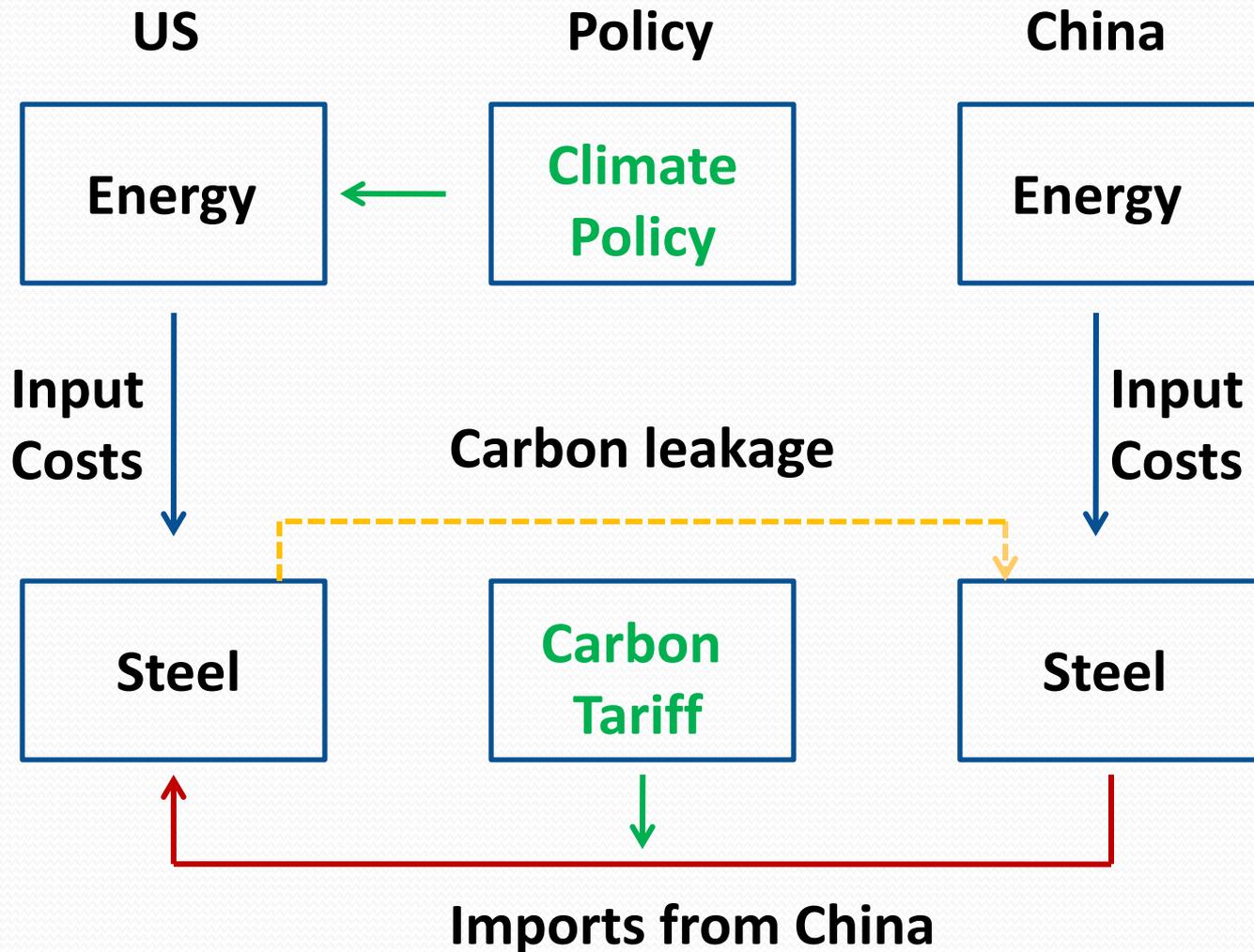
Climate Policy and Trade Policy

- Connection being made between climate policy and trade policy, e.g., US Congress - Waxman-Markey Bill (2009); Kerry and Graham (*NY Times*, Oct.10, 2009)
- Domestic climate policies should be accompanied by appropriate border measures
- Krugman claims “...there’s perfectly sound economics behind border adjustments...” (*NY Times*, Jun.29, 2009)
- Is this just “old wine in new green bottles”? (Lockwood and Whalley, 2008, NBER)

Why Carbon Tariffs?

- With no international carbon price, domestic climate policy may affect *competitiveness* of domestic firms, i.e., lost profits and market share (UN/WTO, 2009)
- Non-universal application of climate policies also creates potential for *carbon leakage*
- Will result in environmental inefficiency, as well as potential for capital flight to *carbon havens*
- *Carbon tariffs* should be applied to carbon-intensive imports - border tax adjustments (BTAs) in “GATT-speak”!

Why Carbon Tariffs?



Trade and the Environment

- Literature on *pollution havens* suggests that “dirty” industries may relocate to countries with less restrictive environmental policy (Copeland and Taylor, 2004)
- Results in lobbying for less stringent environmental regulation in developed countries – *regulatory chill*
- Bagwell and Staiger (2001) argue countries should be allowed to renegotiate *bound* tariffs in face of tougher domestic environmental policy
- Principle essentially applied in WTO rules on BTAs

What are BTAs?

- Old principle dating back to Ricardo:

“...In the degree then in which (domestic) taxes raise the price of corn, a duty should be imposed on its importation...By means of this duty...trade would be placed on the same footing as if it had never been taxed...” (Sraffa, 1953)

- Issue of legality in 1960s - EEC adopted VAT system with taxes on imports/tax rebates on exports
- Switch to *destination basis* of taxation – no real effects on trade (Lockwood and Whalley, 2008)
- No dispute settlement initiated, but GATT Working Party on BTAs established in 1968

What are BTAs?

- **GATT (1970) defined BTAs as enabling:**

“...imported products sold to consumers to be charged with some or all of the tax charged in the importing country in respect of *similar* domestic products...”

- **Objective of BTAs is:**

“...to ensure *trade neutrality* of domestic taxation...and thus to preserve the *competitive equality* between domestic and imported products...”

- **Legal debate about BTAs applied to final products (steel) using inputs (carbon) subject to a domestic environmental excise tax**

Trade Law and Carbon Tariffs

- **GATT Articles II.2(a) and III.2 are key:**
 - **Article II.2(a) states that imports can be subject to:**

“...a charge equivalent to an internal tax imposed consistently with the provisions of paragraph 2 of Article III in respect of the *like* domestic *product* or in respect of an *article* from which the imported product has been *manufactured or produced* in whole or in part...”
 - **Article III.2 states imported products:**

“...shall not be subject *directly or indirectly*, to internal taxes or other internal charges of any kind in excess of those applied, directly or indirectly, to *like* domestic products...”

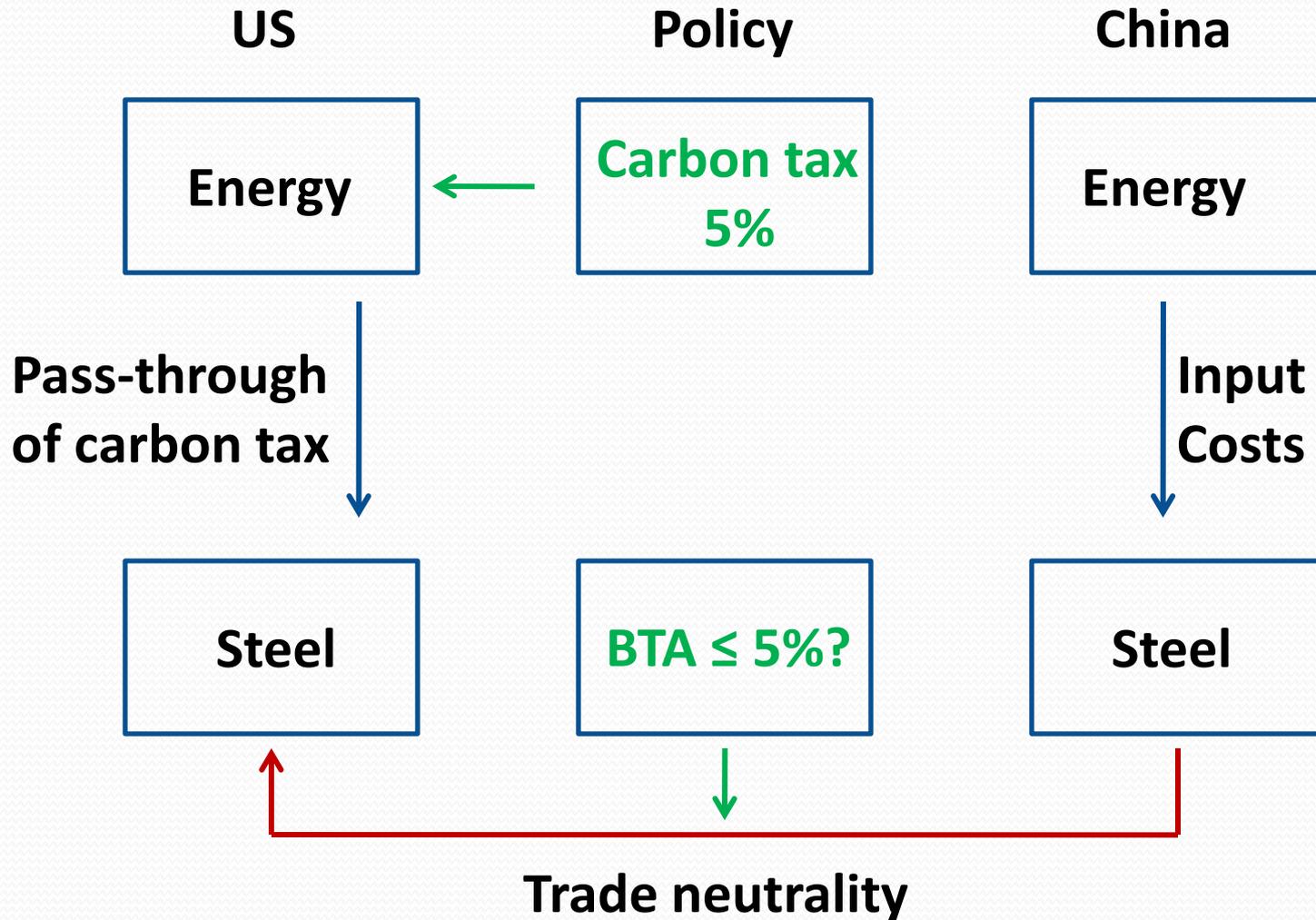
Trade Law and Carbon Tariffs

- Article II.2(a) interpreted as restricting BTAs to inputs *physically incorporated* into the final product; Article III.2 interpreted as allowing BTAs to be applied to inputs *used* in the production process
- *GATT Superfund Case (1987)* cited as precedent for carbon tariffs - US taxes on imported substances that were end-products of chemicals taxed in the US, were deemed consistent with Article III.2
- Note – GATT Panel did *not* examine issue of whether chemical inputs were incorporated into end-products

Economic Impact of Carbon Tariffs

- **World Bank (2009) - carbon tariffs could have significant effects on trade and carbon emissions – although results very sensitive to basis of carbon tariff:**
 - **if carbon content of imports, equivalent to imposing a 20% tariff on imports from China and India**
 - **if carbon content of domestic production, trade consequences for China and India much less serious**
- **However, study ignores *trade neutrality* of carbon tariffs, i.e., what matters is preservation of *competitive equality* of domestic and imported products**

Trade Neutrality and Carbon Tariffs



Trade Neutrality and BTAs

- Poterba and Rotemberg (1995) examine perfect competition at intermediate and final goods stages
- Import tax on final good equal to environmental tax times extent to which intermediate good enters final good cost function is trade neutral (e.g., CFCs)
- McCorriston and Sheldon (2005) used model of successive oligopoly to explore two rules concerning trade neutrality:
 - *Import-volume* neutrality (Figure 1)
 - *Import-share* neutrality (Figure 2)

Figure 1: Import Volume Neutrality

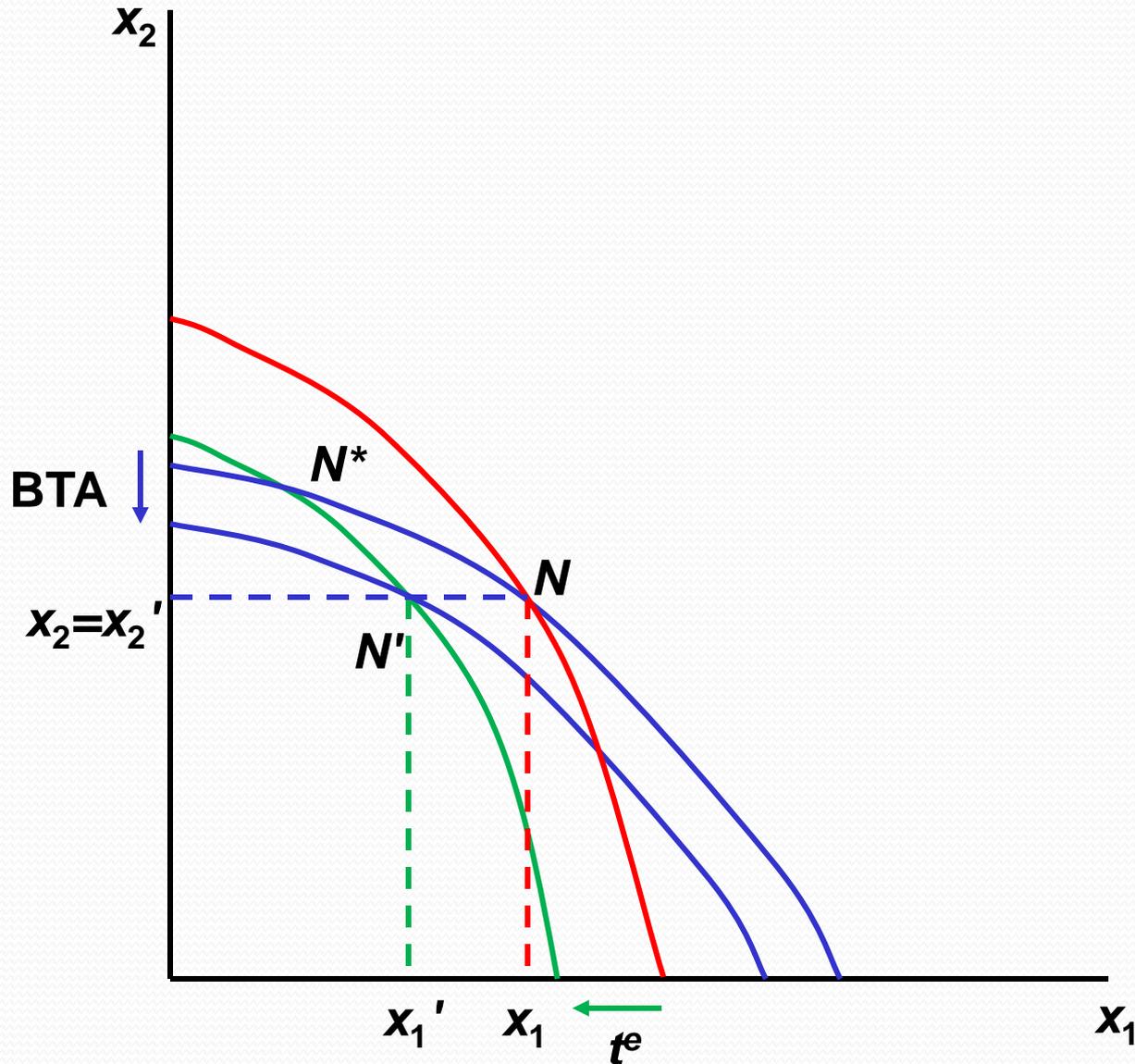
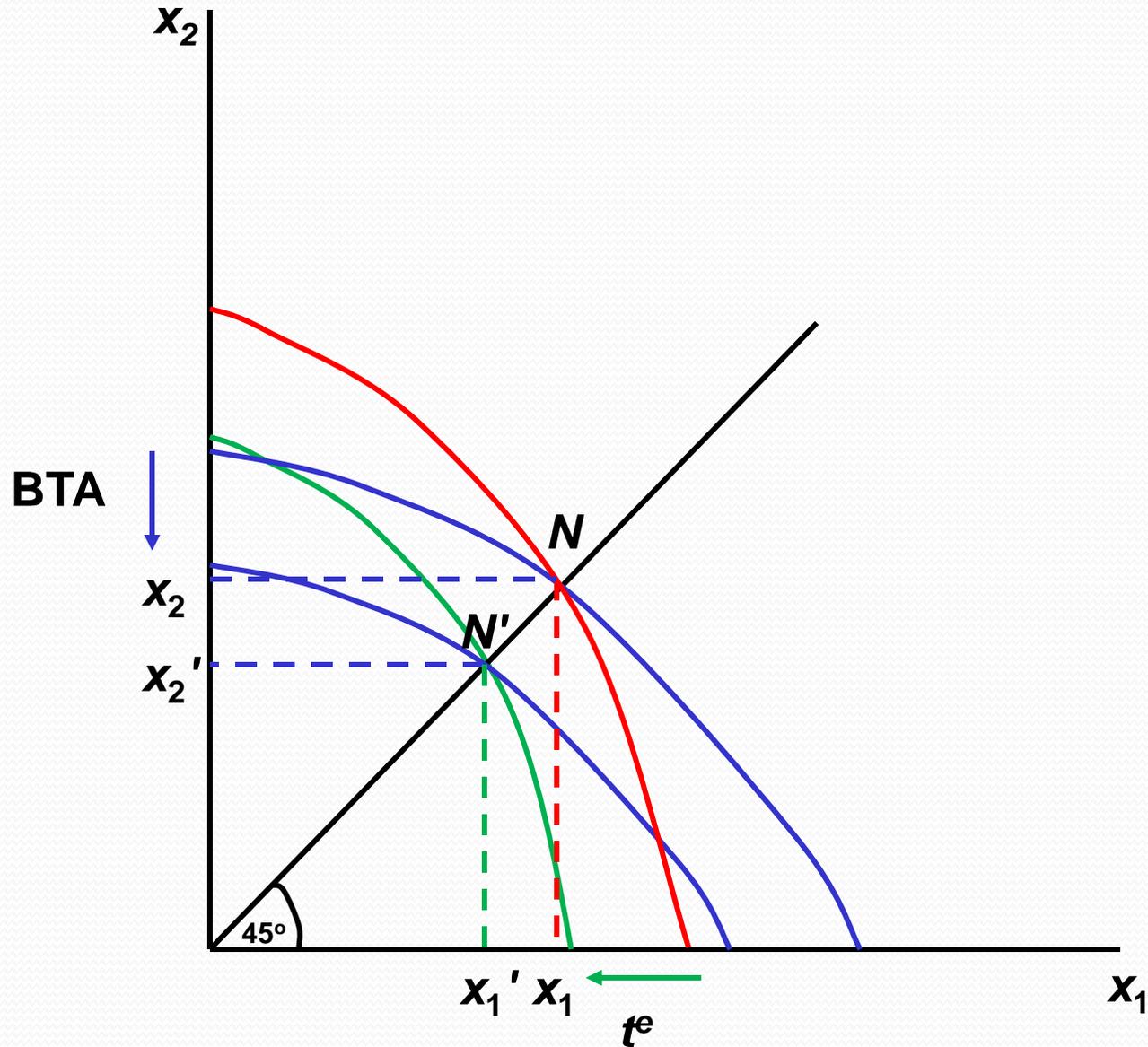


Figure 2: Import Share Neutrality

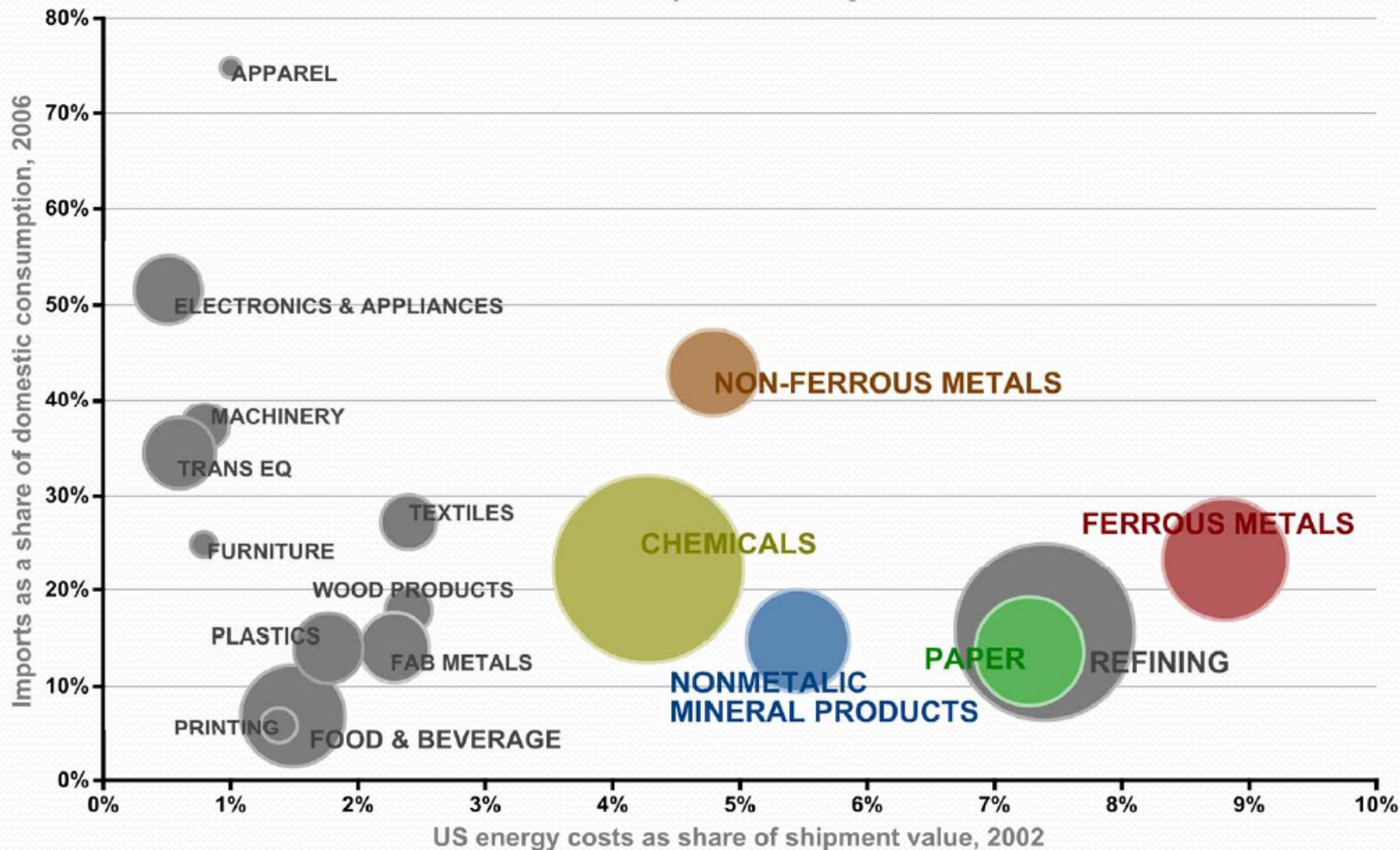


Implementation Issues

- Which import-competing industries?
- How is *carbon-intensity* of imports to be assessed?
- What constitutes product *likeness*?
- How will BTAs be set in presence of emissions trading schemes?
- What are implications of *free allowance* of permits – will they violate WTO disciplines on subsidies?
- What constitutes *comparable action* on climate change by other countries?

Industry Exposure to Climate Costs

Carbon-intensity and trade exposure



Source: BEA, EIA and CSA estimates. Circle size indicates 2002 US CO2 emissions

Conclusions

- **Connection between trade and climate policy not a new issue – significant debate since early-1990s in trade and environmental economics literature**
- **Legal issues also not new, although only a ruling on carbon tariffs in presence of domestic climate policies will resolve current legal uncertainty**
- **Climate policies present additional layer(s) of complexity to problem of determining appropriate BTAs – there is “*some new wine mixed with old wine in new green bottles*”!!**