Climate Change Meets World Trade

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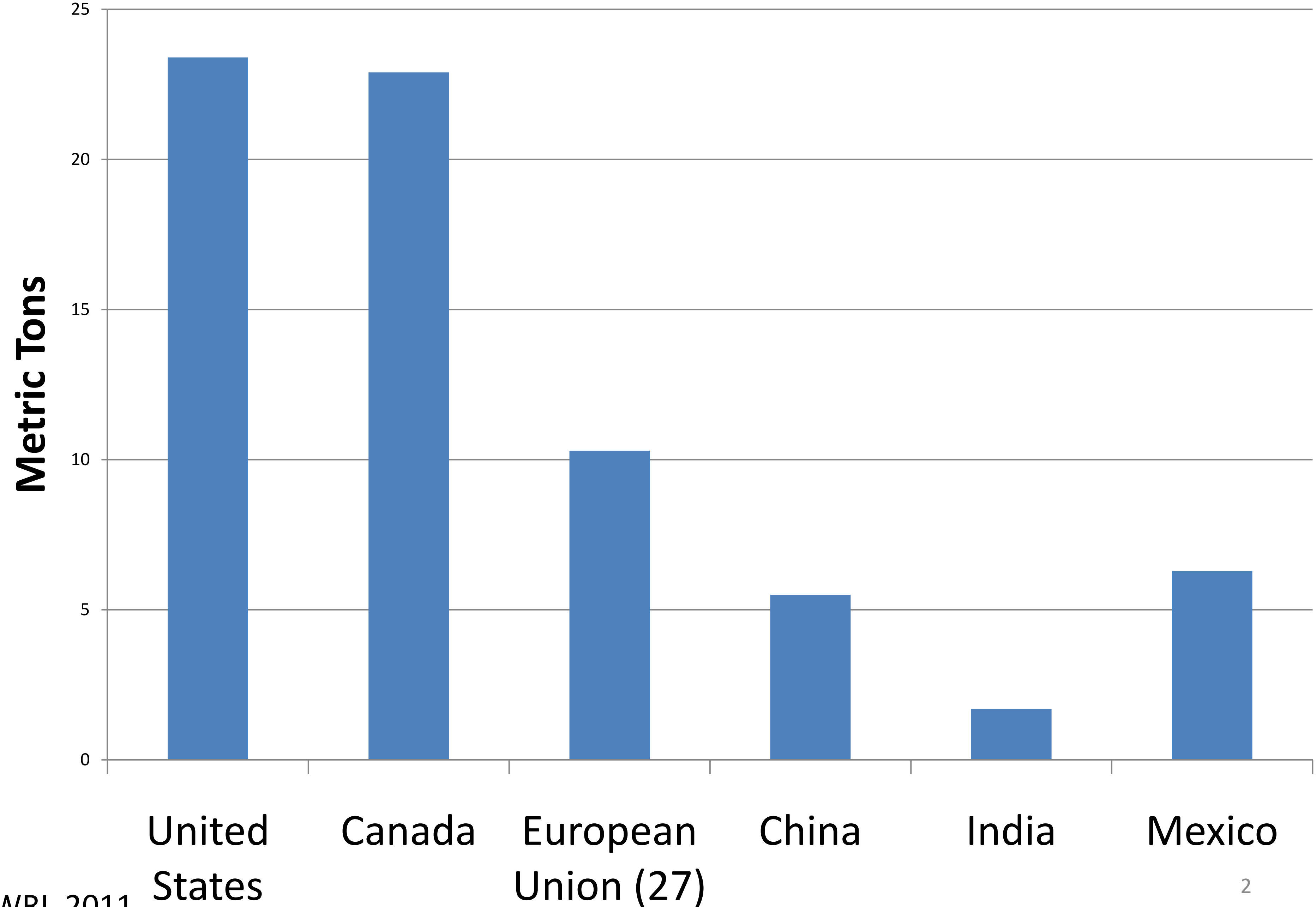
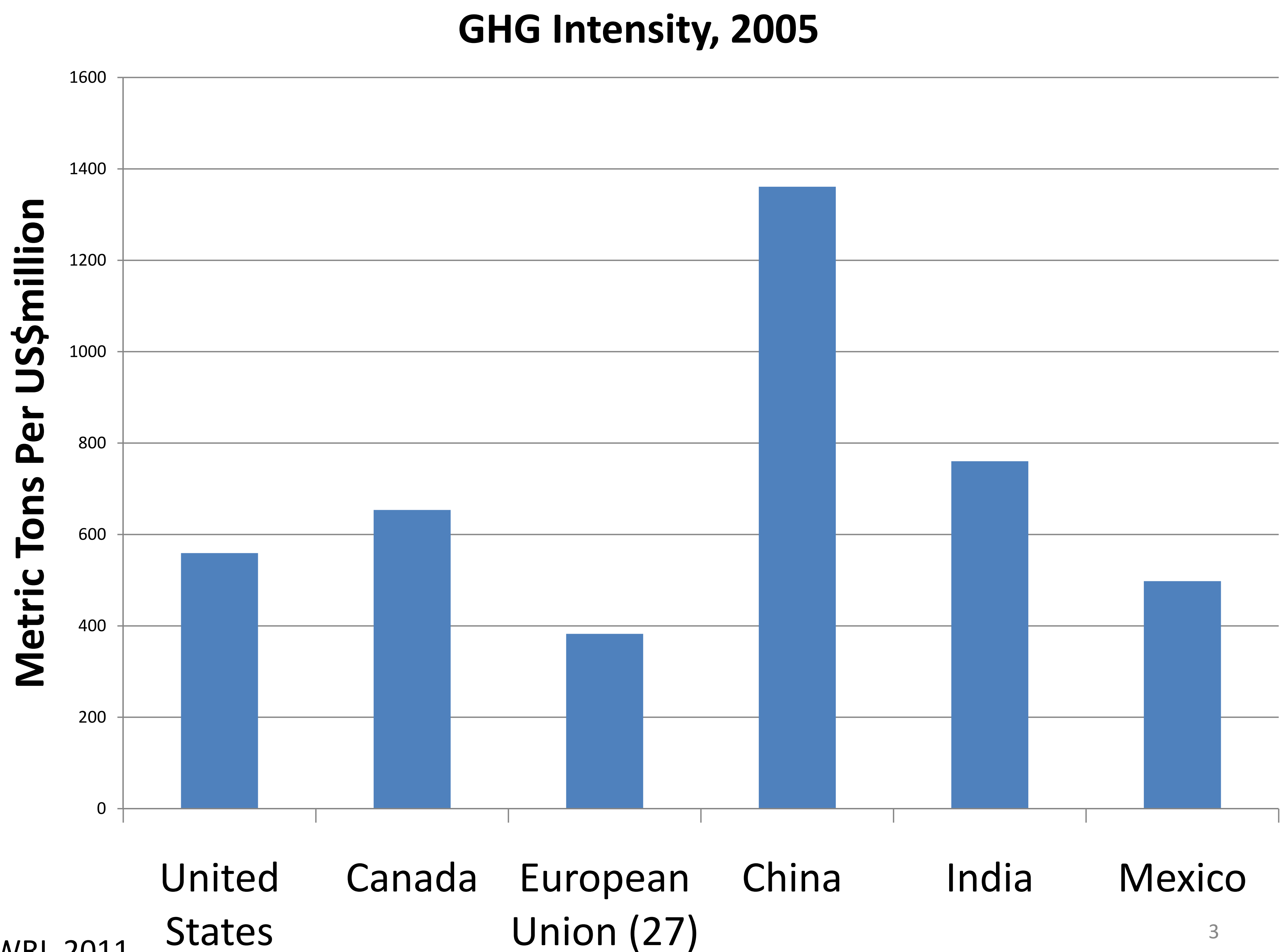
April 6, 2011

Per Capita Emissions of Major Economies, 2005



WRI, 2011


GHG Intensity, 2005
Metric Tons Per US$million
1600
1400
1200
1000
800
600
400
200
0
United States
Canada
European Union (27)
China
India
Mexico

WRI, 2011

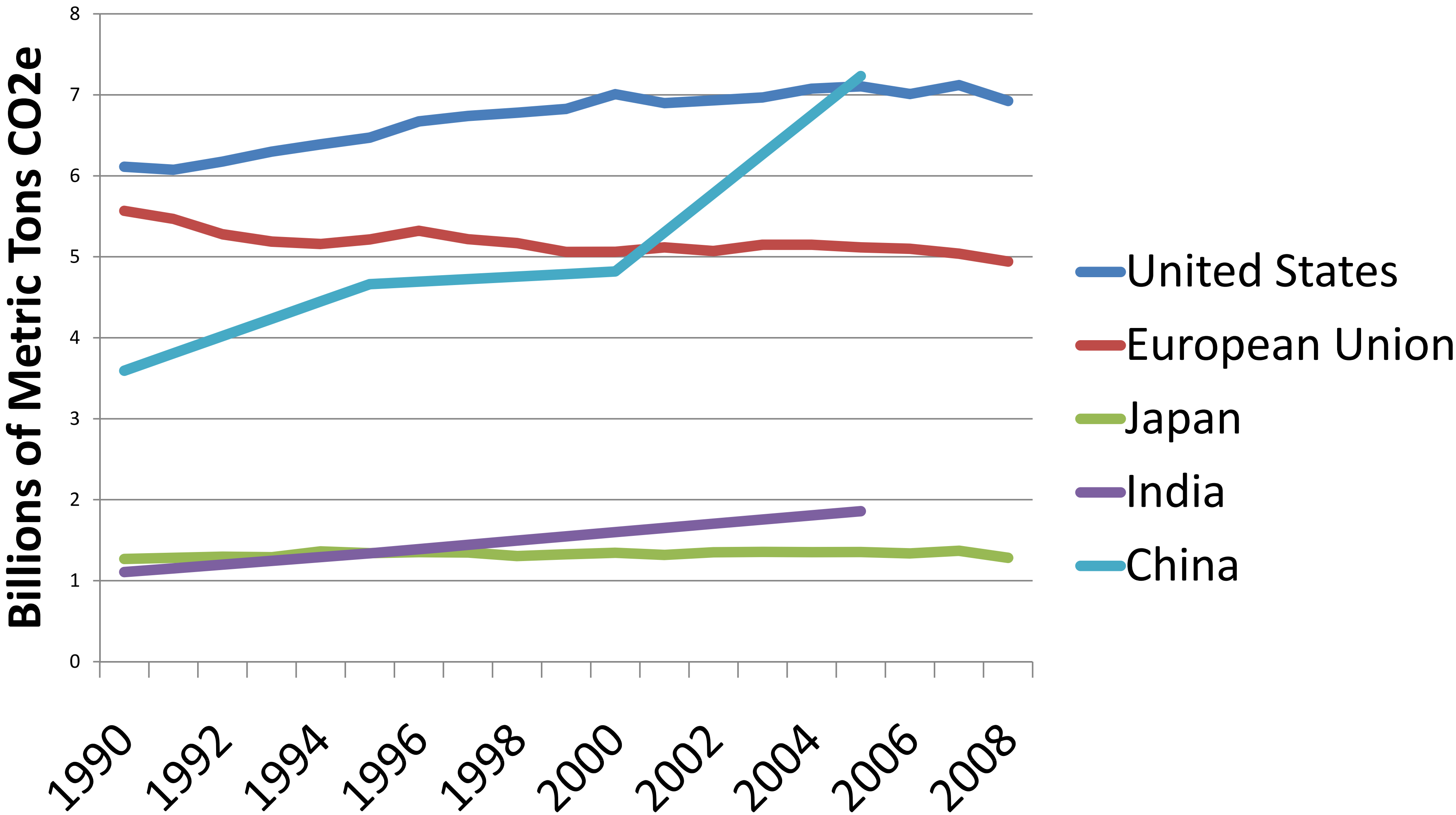
International Climate Negotiations

- For two decades, UNFCCC members have attempted to negotiate a comprehensive, global climate change regime.
  - Metrics for success: specific commitments with timetables, detailed financial support commitments, and robust independent framework for monitoring, reporting, and verification (MRV).
  - The 2009 Copenhagen Accord contains targets for 2020, but with little specificity. Few details on financial support or MRV.
  - The 2010 Cancun Agreements made modest progress on MRV and financial details.

International Climate Negotiations

- Progress was slowed by political differences:
  - Developing countries have very low per-capita GDP emissions relative to developed countries; they argue that historical culpability largely rests with OECD members.
  - But developing country emissions are rapidly growing, and their production processes are relatively GHG-intensive compared with production processes in developed countries.

GHG Emissions, 1990-2008



Source: UNFCCC, 2011; World Resources Institute, 2011.

Copenhagen Commitments for 2020

	United States	European Union (27)	Japan	China
Commitment	17% from 2005 level	20% from 1990 level	25% from 1990 level	40% intensity reduction from 2005 level
Percent Below 1990 Level	3.5	20	25	>160 percent above
Percent Below BAU	17	17	30	0

Sources: Cline, 2010; Climate Access Indicators Tool, WRI, 2011. Percent below 1990 levels calculated using data reported to the UNFCCC and EIA projections.

Projected Upper Limit Annual Cost of GHG Reductions

	United States		European Union (27)		Japan		China	
	2020	2030	2020	2030	2020	2030	2020	2030
Percent of GDP (From BAU)	0.3	1.2	0.3	0.8	0.6	1.2	0	2.4
Dollars per ton CO2e	83	166	81	121	95	127	0	188

Source: Cline 2010. Assumes that countries first achieve their 2020 Copenhagen targets and then reduce emissions at a constant rate, slashing per-capita GHG emissions to 1.5 tons by 2050. Modeling projections are derived from the Energy Modeling Forum's 2009 survey of integrated assessment model results.

Souring Domestic Climate

- The Obama Administration has promised modest emissions reductions and large sums for impacted industries at home and developing countries abroad.
- A souring political environment for climate spending makes it unlikely that the US will deliver on these promises.
- In the next few years, action will be undertaken largely at the local and state levels and regulatory agencies in the executive branch (notably EPA and DOT).
- Collectively, this action is likely to be modest.

Consequences of Souring Domestic Climate

- US regulatory uncertainty prevents Canada, which depends on energy-intensive exports to the United States, from moving forward on climate change.
- Inaction by the US and China hamstrings international negotiation on climate change going forward.
- A weak international agreement could trigger national efforts to prevent “carbon leakage”.

Climate Change and Trade

- Climate change regulations could be costly for highly energy-intensive firms.
- If some countries or regions impose these costs and others do not, energy-intensive, trade-exposed (EITE) industries that are regulated could find themselves at a disadvantage.
- This concern has contributed to skepticism over climate change policies. Border trade measures are promoted as an answer.
- International coordination could be an alternate answer. However, progress to date has been very slow.

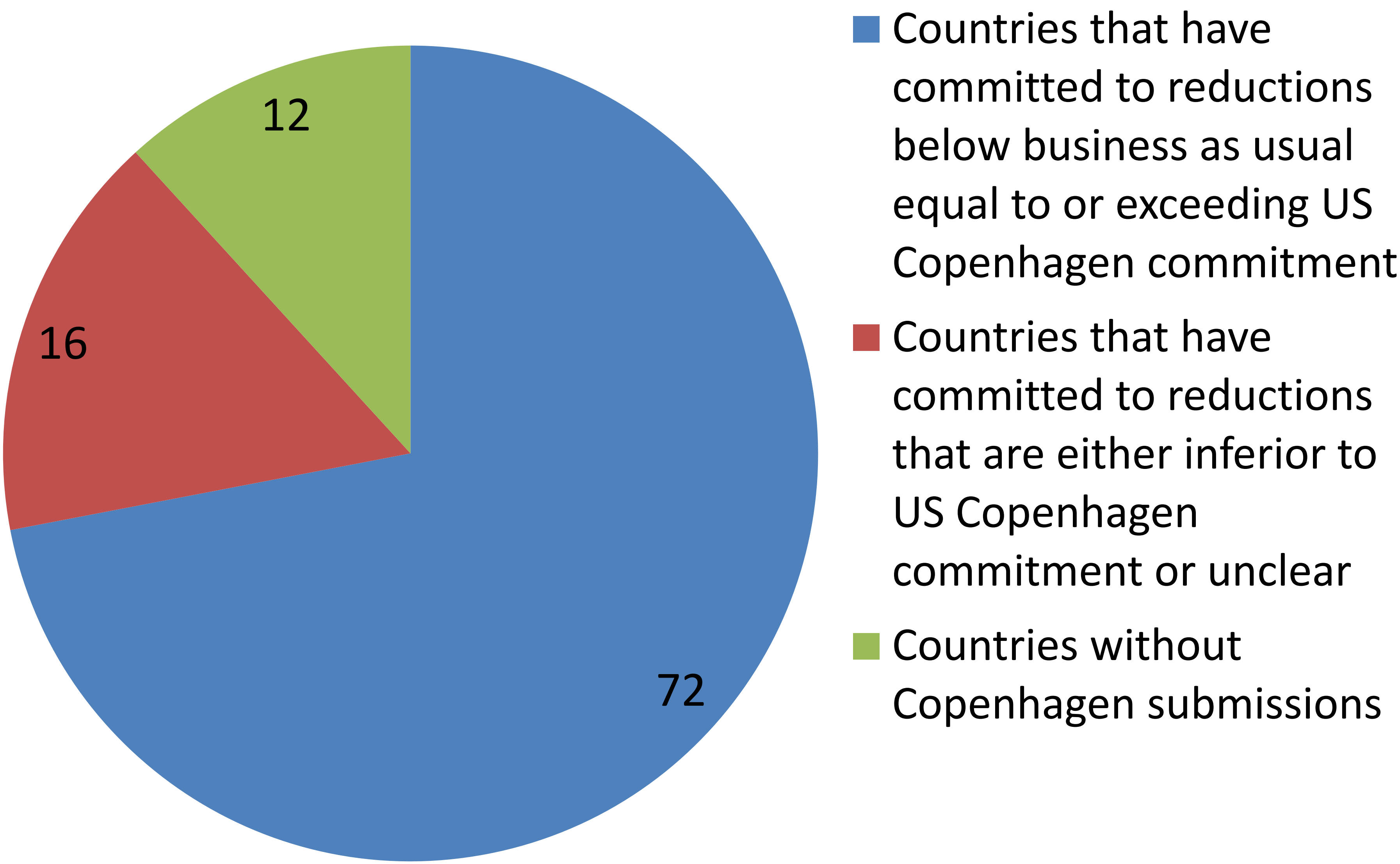
Response to Trade Concerns

- Border trade measures (e.g., carbon tariffs, international reserve allowance programs) are envisioned by US and EU policymakers as a means of protecting energy-intensive, trade-exposed (EITE) industries.
- Border measures were included in US cap-and-trade legislation, and Congressmen have urged their inclusion in upcoming EPA regulations under the Clean Air Act.
- WTO law is vague on border measures. For example, no WTO case law clarifies whether an energy tax is a direct or indirect tax, or whether taxes on inputs such as fossil fuels that are not physically incorporated into products can be adjusted at the border.

Border Adjustments: Issues and Challenges

- GATT Article XX states that environmental protection measures should not be “arbitrary or unjustifiable” or a “disguised restriction on trade.” Measures designed to ensure continued competitiveness are not permissible in the WTO.
- However, only 12 percent of US energy-intensive imports come from countries that have not committed to reductions under the Copenhagen Accord.

US Imports of Energy-Intensive Goods By UNFCCC Commitment Level, 2010 (Percent of Total)

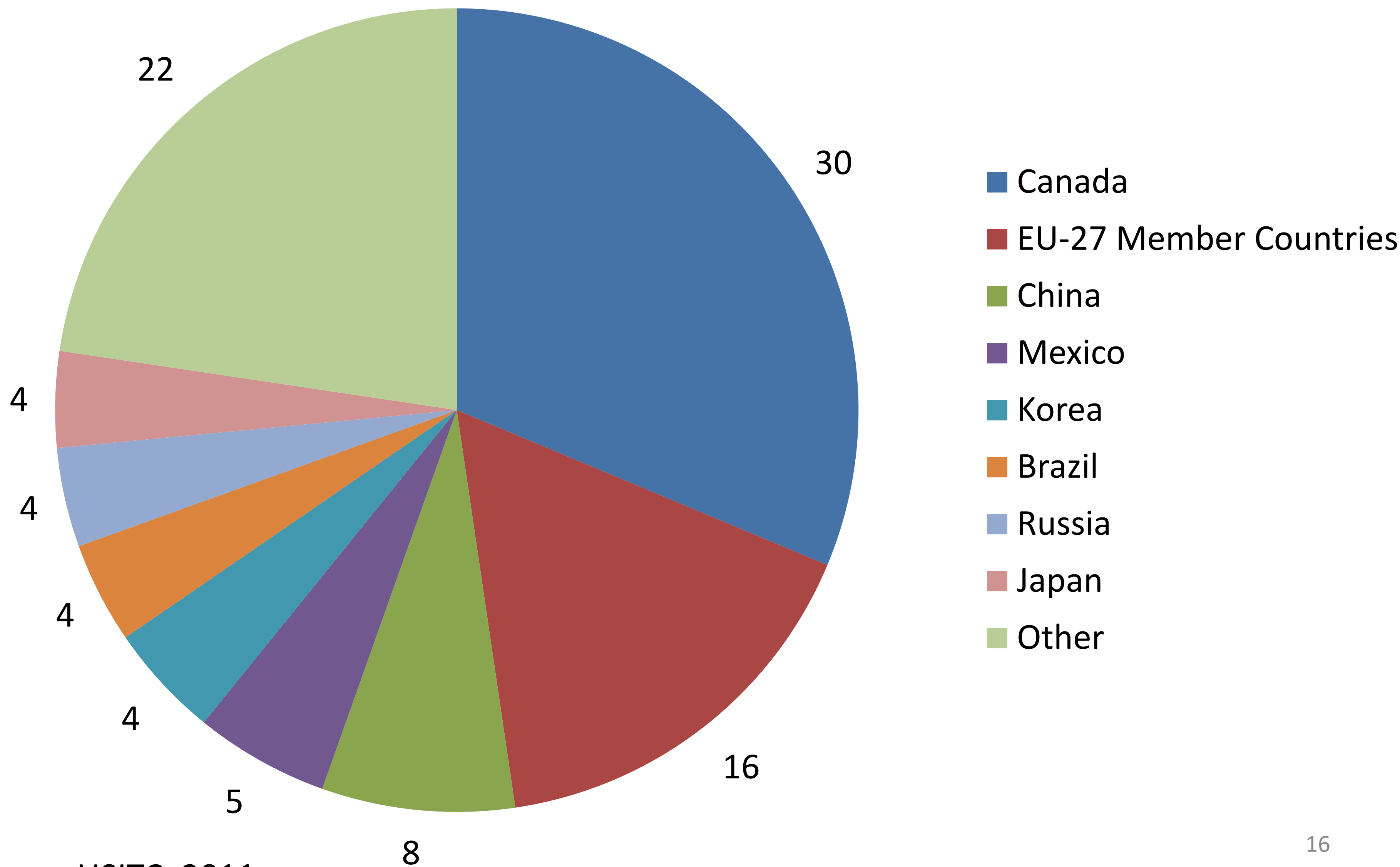


Sources: USITC ,2011; UNFCCC, 2010; Cline, 2010.

Border Adjustments: Issues and Challenges

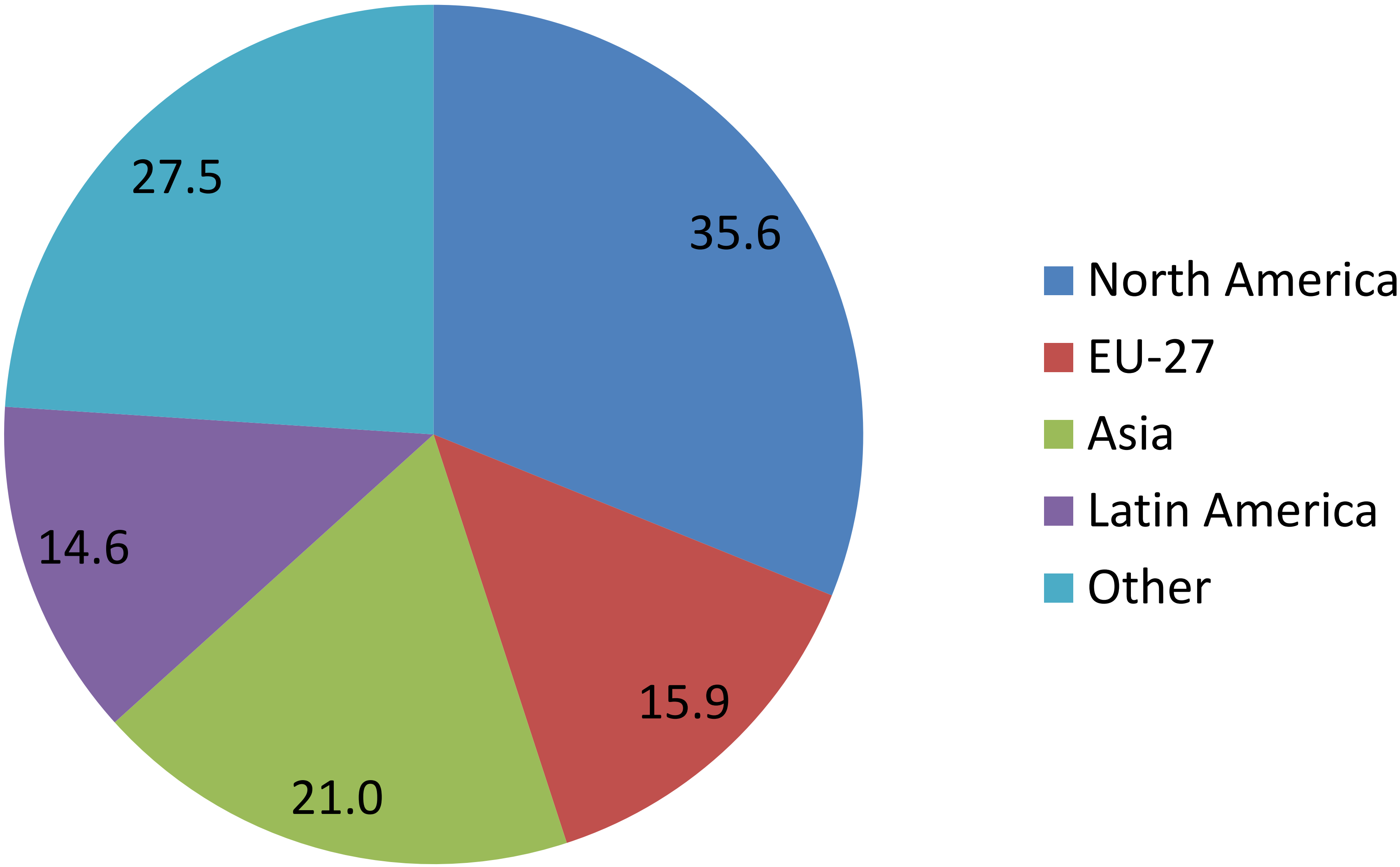
- A plurality of imports come from Canada and the European Union. Canada has committed to regulatory harmonization with the United States, and the European Union far exceeds US commitments.
- Border measures could reduce the leakage risk to the United States from the 28 percent of imports that come from countries that have not taken on commitments – but could increase the risk of border measures imposed against the US by the EU and others.
- US imports from China and India seem insufficient to provide substantial leverage over their policies.

US Imports of Energy-Intensive Goods By Country, 2010 (Percent of Total)



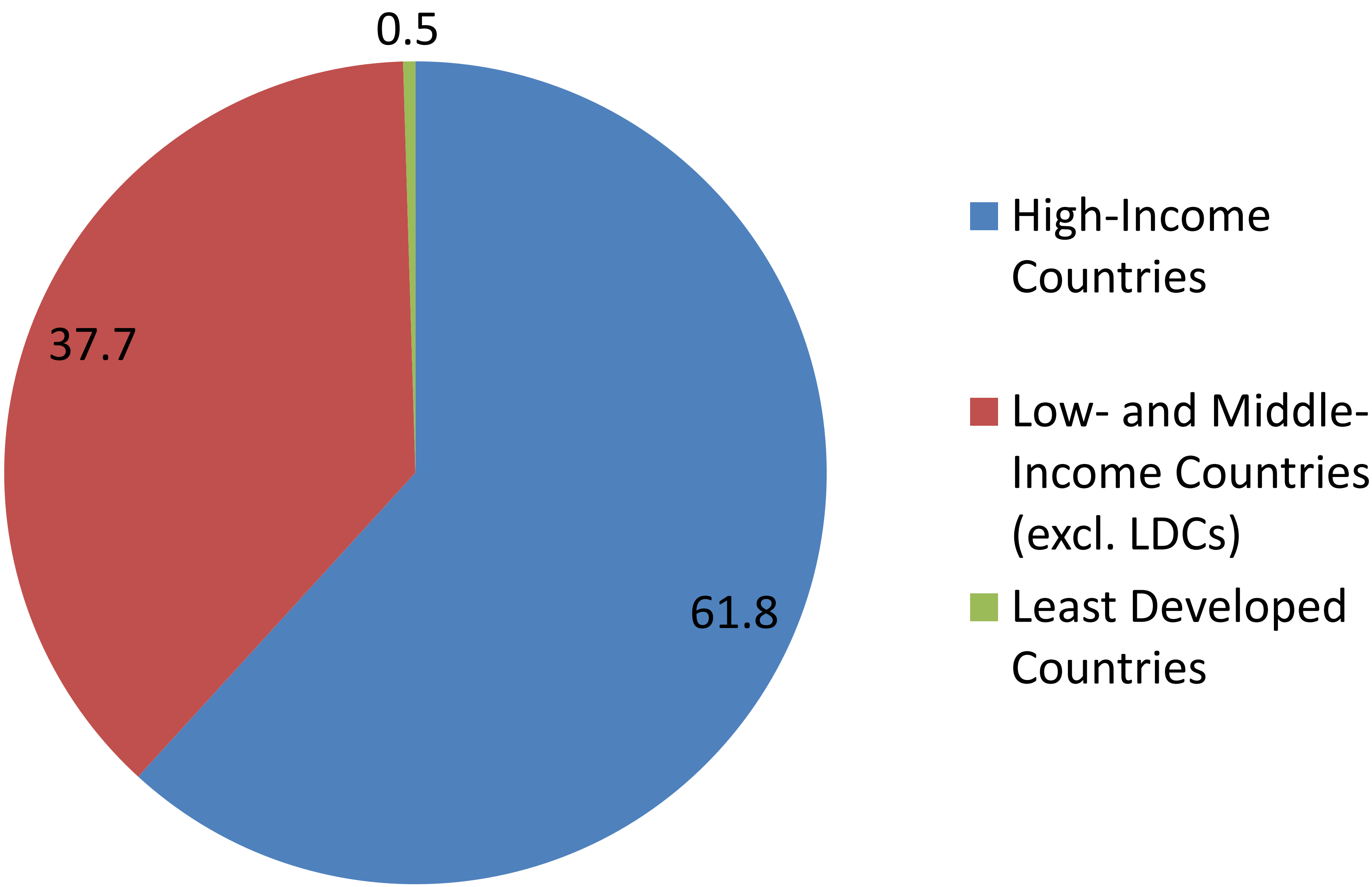
Source: USITC, 2011

US Imports of Energy-Intensive Goods by Region, 2010
(Percent of Total)



Source: USITC, 2011

US Imports of Energy-Intensive Goods By Income Level of Country of Origin, 2010



Source: USITC, 2011

Other Trade Challenges

- Companies engaged in GHG mitigation are likely to require their suppliers to meet carbon accounting standards, spelling practical challenges for developing country firms.
  - Aldonas (2010): These firms may not be able to implement the new standards, particularly if they are subject to multiple carbon accounting rules.
  - Effect on firms will depend on their ability to pass on the cost of carbon accounting, which in turn will depend on their size and position within the industry.

Policy Recommendations

- Increased integration of trade and climate change regimes.
  - Some aid should be allocated toward readying developing country firms to participate in supply chains that require carbon accounting.
- Reduce barriers to trade in low-carbon goods and services.
- Public-private partnerships to help developing-country firms adopt carbon accounting standards and access capital for low-carbon development.

Policy Recommendations

- Members of the WTO should immediately begin to negotiate agreements to resolve trade-climate issues. A number of actions can be taken:
  - Re-write WTO rules to take climate change into account. This would require consensus of members.
  - Form a “coalition of the willing” to negotiate a plurilateral agreement.
  - Approve a WTO waiver for certain actions. This would require the approval of three quarters of members.
  - Approve a “peace clause” prohibiting any challenges in the WTO dispute settlement system while an agreement is being negotiated.