Climate Change: An Opportunity for A Bilateral Approach

Regulatory Harmonization and Emissions Trading

John Drexhage

Director, Climate Change and Energy

IISD

The International Institute for Sustainable Development

Our vision

Better living for all – sustainably

Our mission

To champion innovation, enabling societies to live sustainably

Our role

To promote the transition toward a sustainable future; to demonstrate how human ingenuity can be applied to improve the well-being of the economy, the environment and society

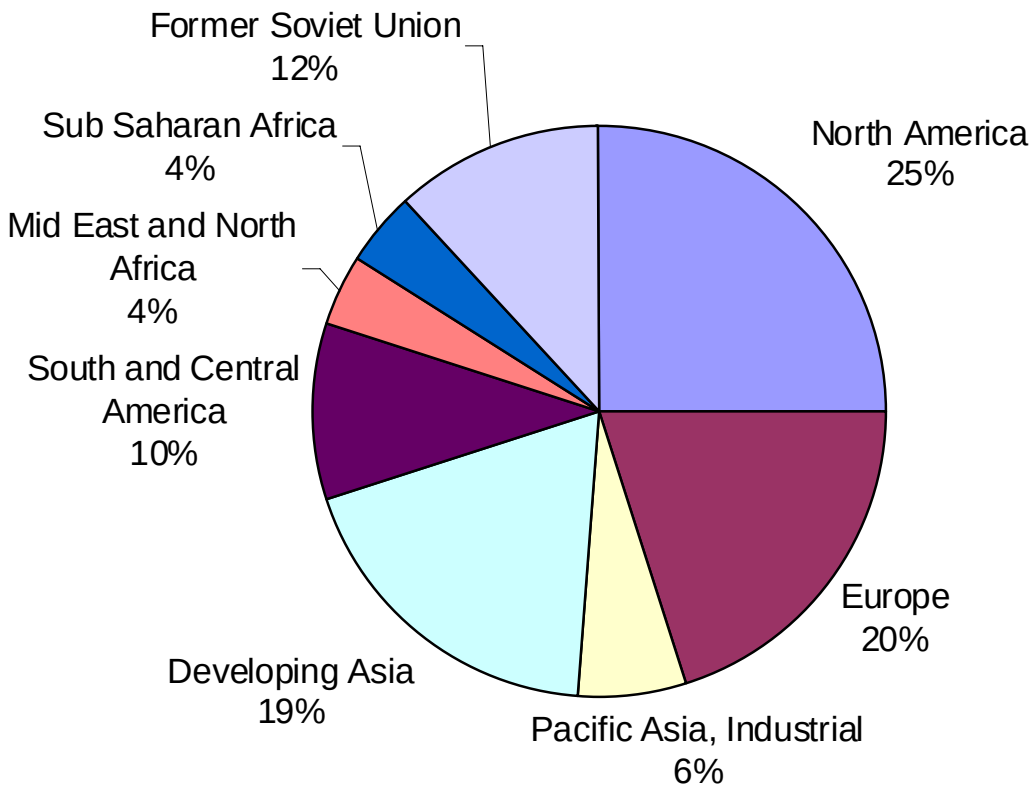
The International Institute for Sustainable Development

- Established in 1990, with offices in Winnipeg, Ottawa, New York and Geneva.
- More than 140 staff members, associates and Board members representing more than 30 countries
- Programs: Climate Change and Energy, International Trade and Investment, Natural Resource Management, Measurement and Assessment
- Services: Earth Negotiations Bulletin, Youth Internship, Knowledge and Communications

Climate Change and Energy Program

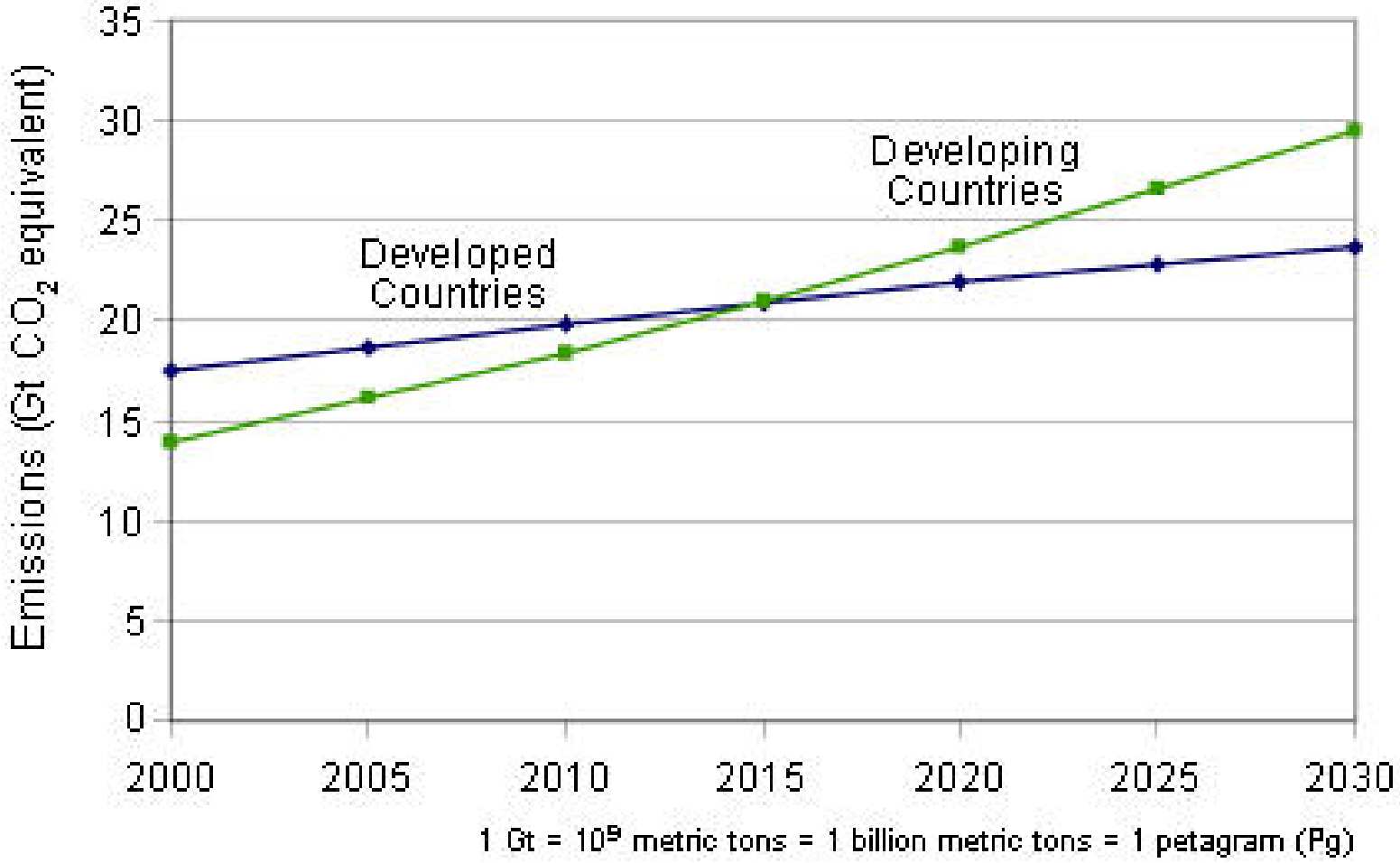
- Active at the provincial, national, regional and multilateral levels.
- Work with governments, private sector and civil society.
- 15 staff, including associates, throughout North America and Europe
- Expertise in mitigation and adaptation policies.
- Provide capacity building and awareness raising exercises. Projects range from Sachs Harbor to Nairobi and all points in between.

Contributors to Climate Change (1900 to 2000)

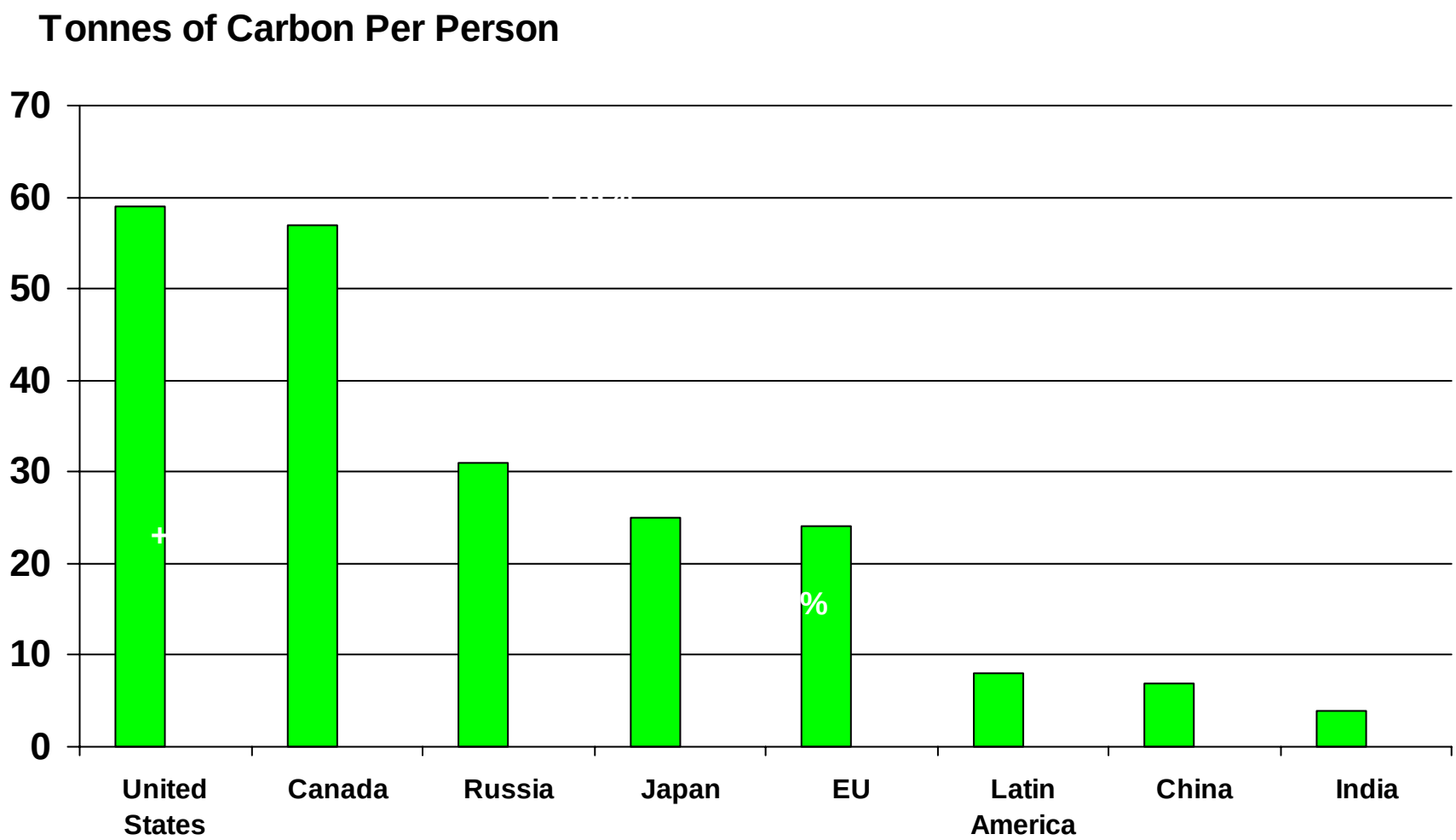


Source: WRI, Options for Protecting the Climate, 2002

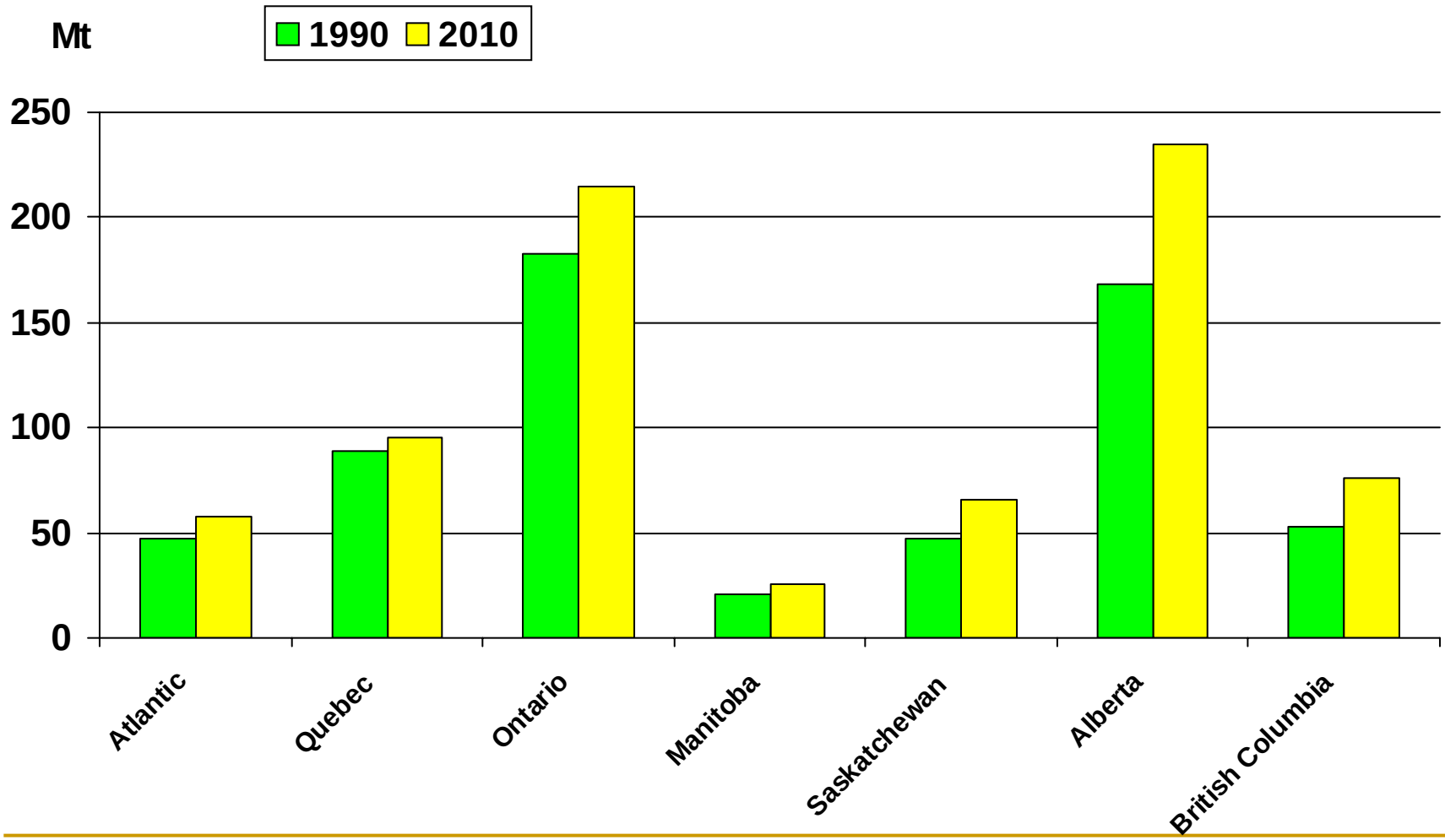
Figure 3: Total Greenhouse Gas Emissions by Region



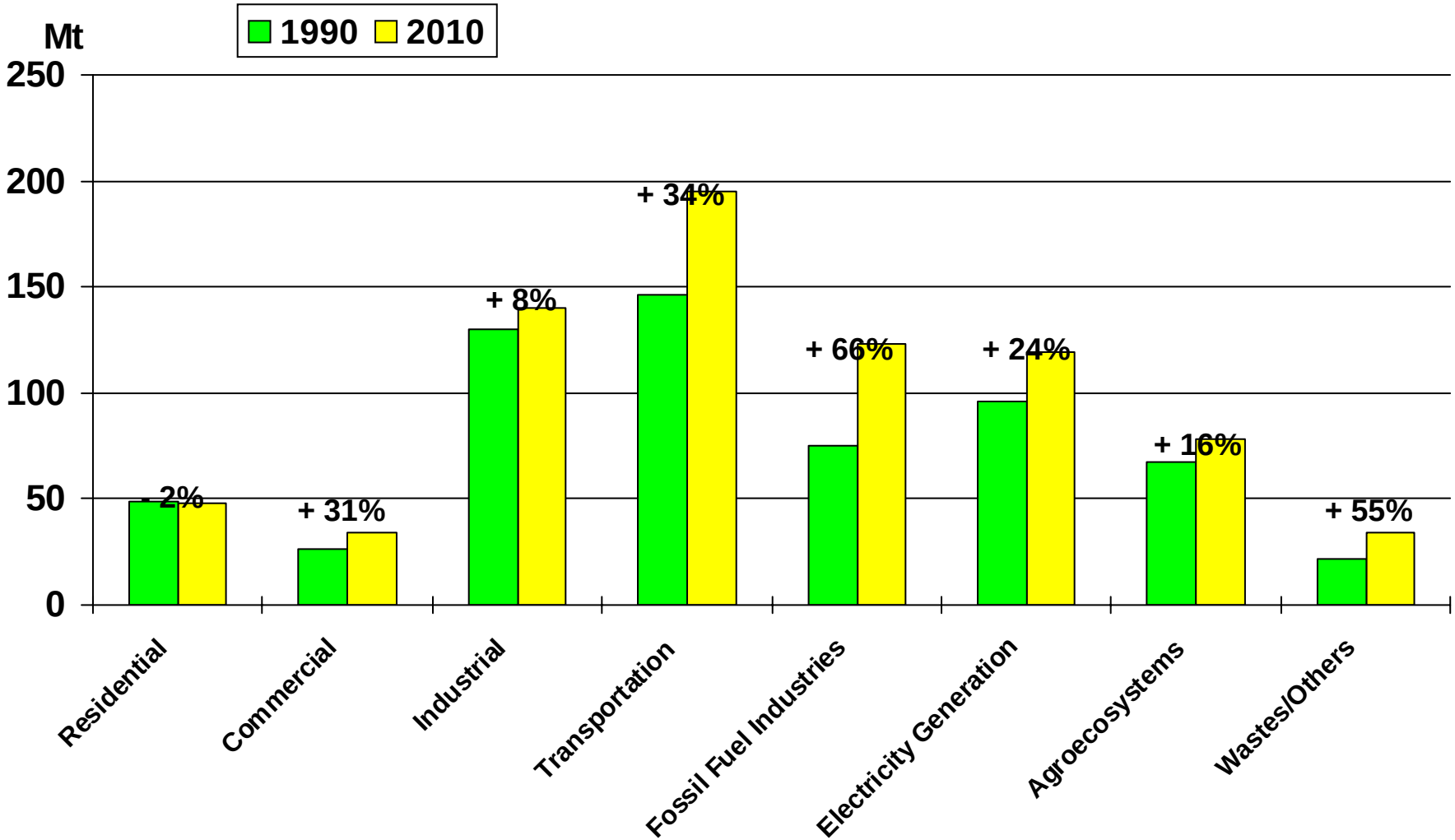
Global Per Capita Emissions



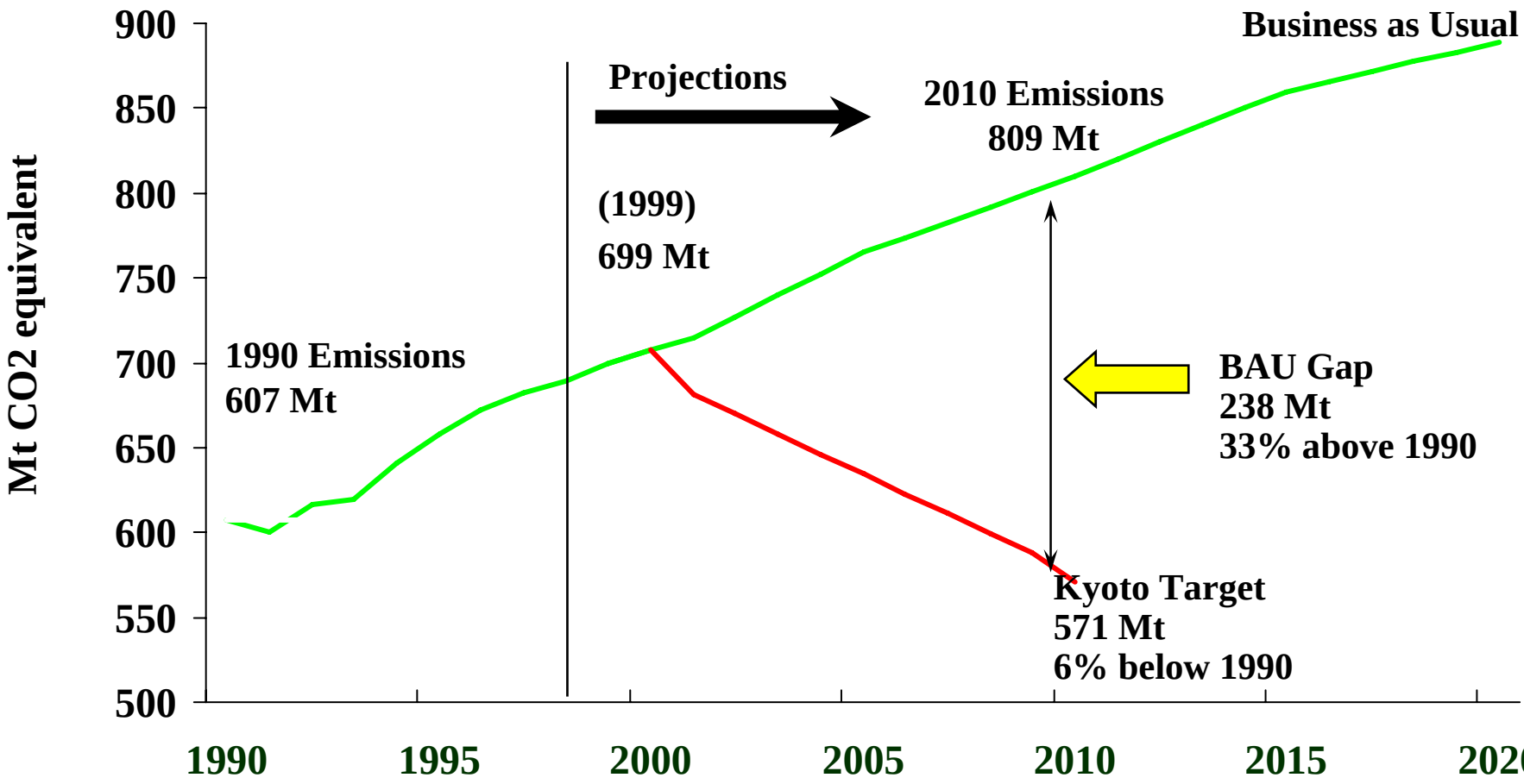
GHG Emissions By Province



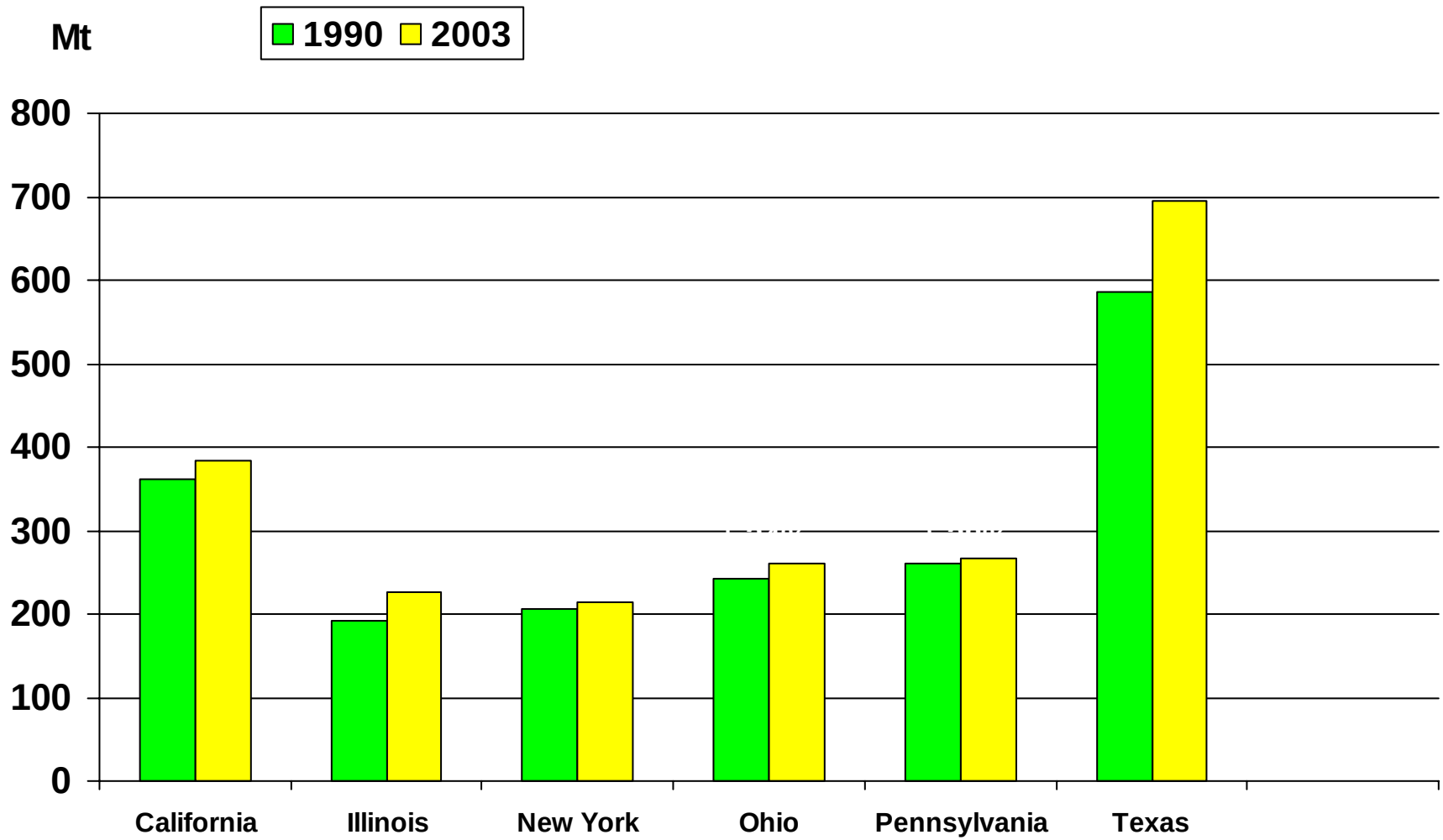
GHG Emissions By Sector



Canada's Projected GHG Emissions: All talk and voluntary actions

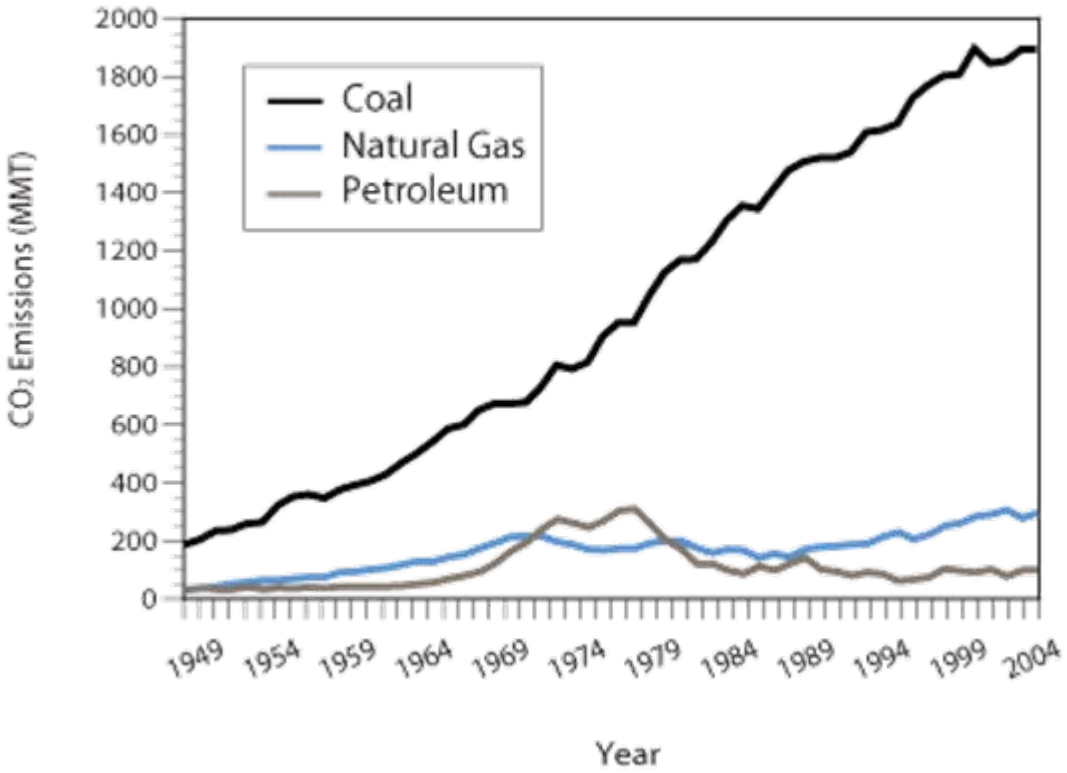


GHG Emissions By Selected States



Trends in CO_2 Emissions from the Electric Power Sector

United States, 1949 - 2004

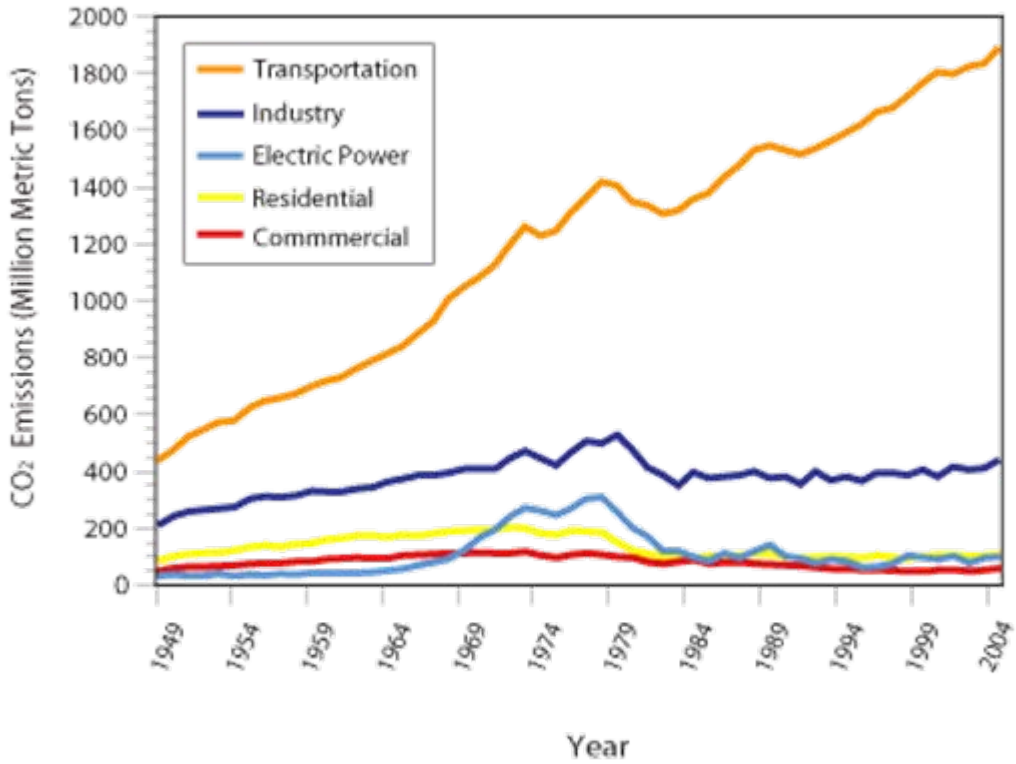


Source: Report # DOE/EIA-0573(2004)

1949-1959: Calculated from energy data in the Annual Energy Review.
1960-1989: Calculated from energy data in the State Energy Data Report.
1990-2004: Estimates documented in Greenhouse Gases in the United States 2004.

Trends in CO_2 Emissions from Oil Combustion

United States, 1949 - 2004



Source: Report # DOE/EIA-0573(2004)

1949-1959: Calculated from energy data in the Annual Energy Review.
1960-1989: Calculated from energy data in the State Energy Data Report.
1990-2004: Estimates documented in Greenhouse Gases in the United States 2004.

Vehicle Miles Traveled in US

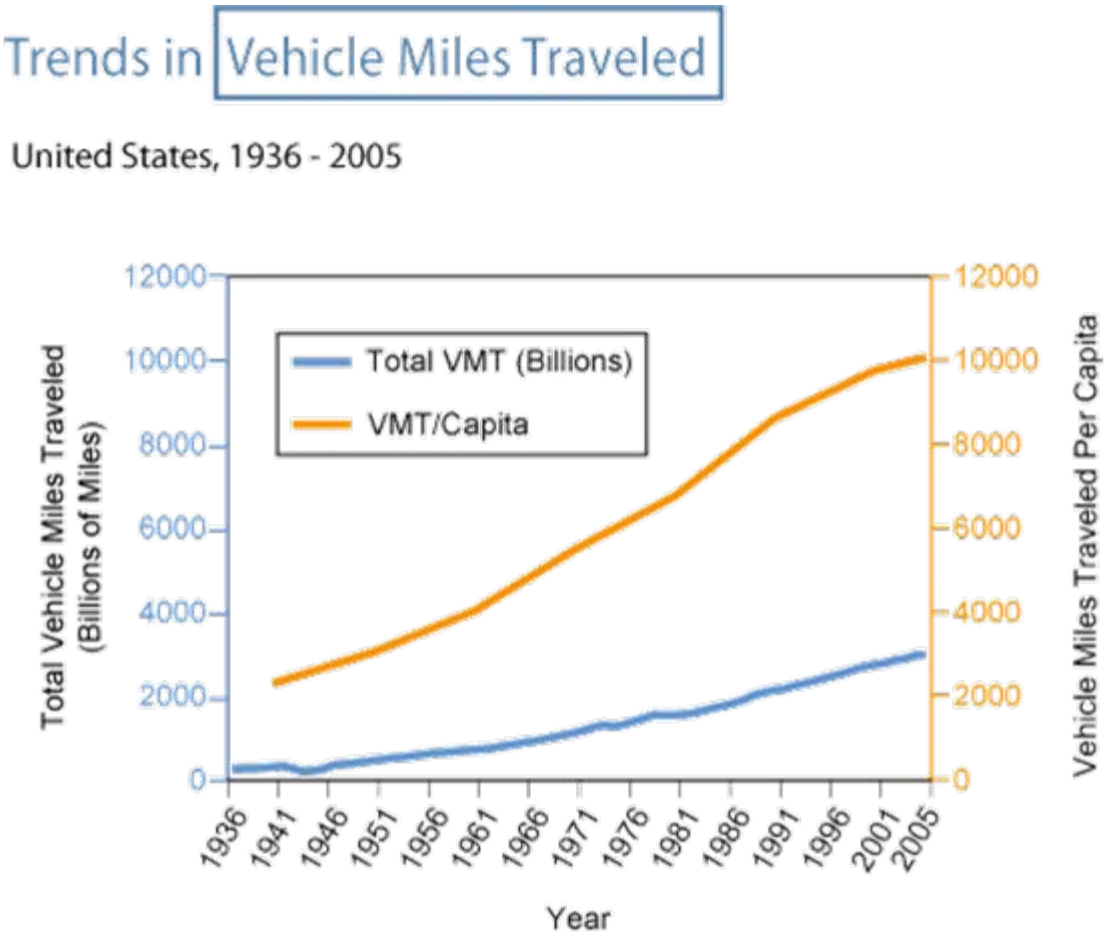


Figure 3: US Share of Exports and Imports on the Decline

….with the very notable exception of energy….

- The United States is Canada's major trade market for energy products, accounting for 99% ($84.8 billion) of all Canadian energy exports for 2006 – up from $50 billion in 1990

- Some with different climate change implications….
  - Canada exported $36.0 billion of natural gas to the United States (100%). In volume terms, Canada accounted for more than 85% of U.S. gas imports and had a 16% share of the U.S. market.
  - Electricity exports, mostly sourced from hydro represented some 3.1 billion in sales.

- than others:
  - Exports of crude oil were 1 578 000 barrels per day in 2005, valued at $29.9 billion. More than 99% of these exports were U.S.-bound. Canadian crude oil held an 11% share of the U.S. market in 2005 and accounted for more than 16% of U.S. crude imports.

Linking Systems

- Three broad state level/regional actions:
  - West Coast Initiative (Targets, etc, still under design, but likely absolute with limits on international or even inter-regional credits, but interest in technology offsets)
  - RGGI (Absolute targets, limits on offsets access)
  - Climate Action Registry (No targets)

- Provincial Actions
  - BC (absolute), Alberta (intensity), Quebec and Manitoba (Kyoto – absolute); with Ontario soon to come (absolute a shoo in)

Federal Initiatives (Canada)

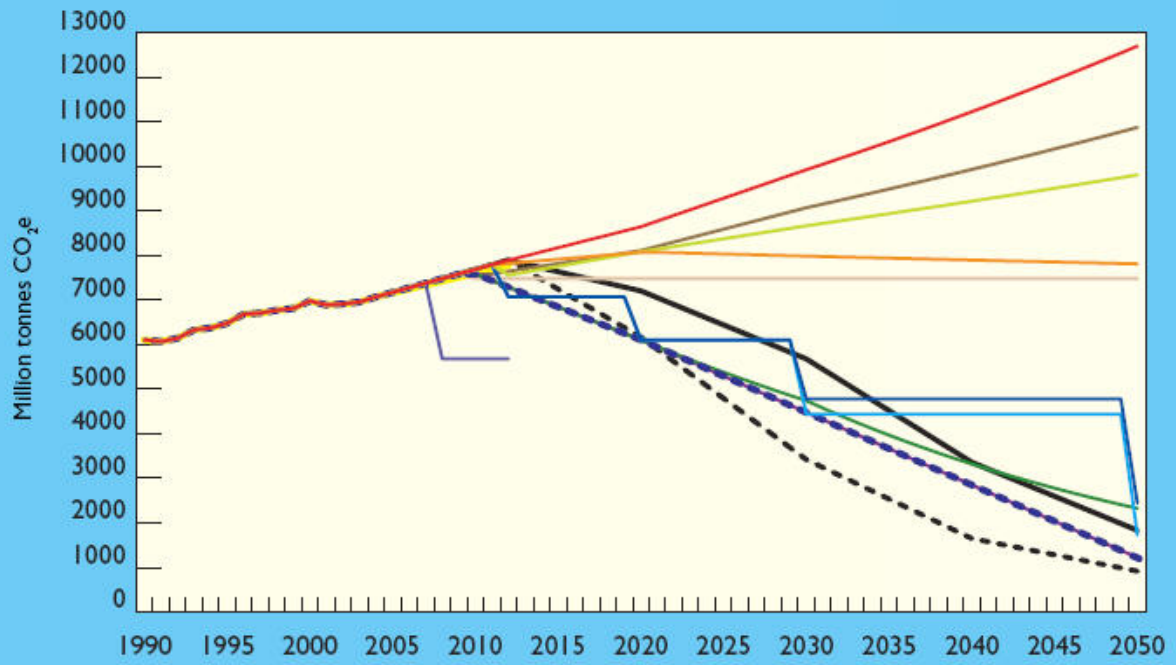
- Conservative Plan
  - Regulatory Framework for Large Emitters
  - Integrated approach on air issues
  - Intensity Based – 18% by 2010; 2% per annum thereafter, and 20% absolute by 2020
  - The four compliance provisions:
    - Technology Fund
    - Offsets
    - Credits for Early Action
    - Limited CDM Access for Industry

Federal Initiatives (US)

- US Administration:
  - Intensity, not far off BAU projections – 18% intensity gain by 2012 from 2002 levels

- Congressional Initiatives
  - Many and numerous:
    - Most absolute targets, focusing on utility sectors
    - Strong international competitiveness concerns
    - Little interest in international offsets
    - Strong interest in technology incentives

1. Climate bills in the 110th Congress. Economy-wide emission caps (and projections) by bill 1990–2050



- Business as usual
- Bingaman discussion draft cap 2007 *
- Bingaman with price cap emissions
- McCain–Lieberman 2007
- Olver–Gilchrest 2007
- Sanders–Boxer–Waxman 2007
- Kerry–Snowe 2007
- Udall-Petri Cap 2006
- Udall-Petri with price cap emissions
- Kyoto Target
- 550ppm stabilisation
- 450ppm stabilisation

*The draft is modelled on recommendations from the National Committee on Energy Policy

Source: World Resources Institute

Linkage Issues

- Canadian provincial and federal actors all strongly interested to coordinate with US initiatives
- Not as clear if this has the attention of US actors (exception of Schwarznegger)
- Clearly led from the top
  - Bureaucrats all scrambling around: what does it all mean and how to coordinate?
- Implications for linking with EU ETS?

Linkage Issues (cont'd)

- Intensity vs. absolute
- Stringency
- Timing Provisions
- Role of offsets
  - What and where
- Price caps
- Technology incentives/funds
- Auctioning vs. Grandfathering
- Credits for early action
- Registry reporting
- State/Provincial – Federal Coordination

Broader Areas of Cooperation (Cont'd)

- Areas for progress:
  - Protocols for offsets
  - Continental approach to energy AND climate change
    - Potential for regional carbon trading systems
  - Integrated approach on energy and climate
  - Trade and investment
  - Biofuels and energy subsidization
  - Transportation
    - Vehicular and air
  - Urban planning
  - Post 2012: Supporting a clean energy future internationally