

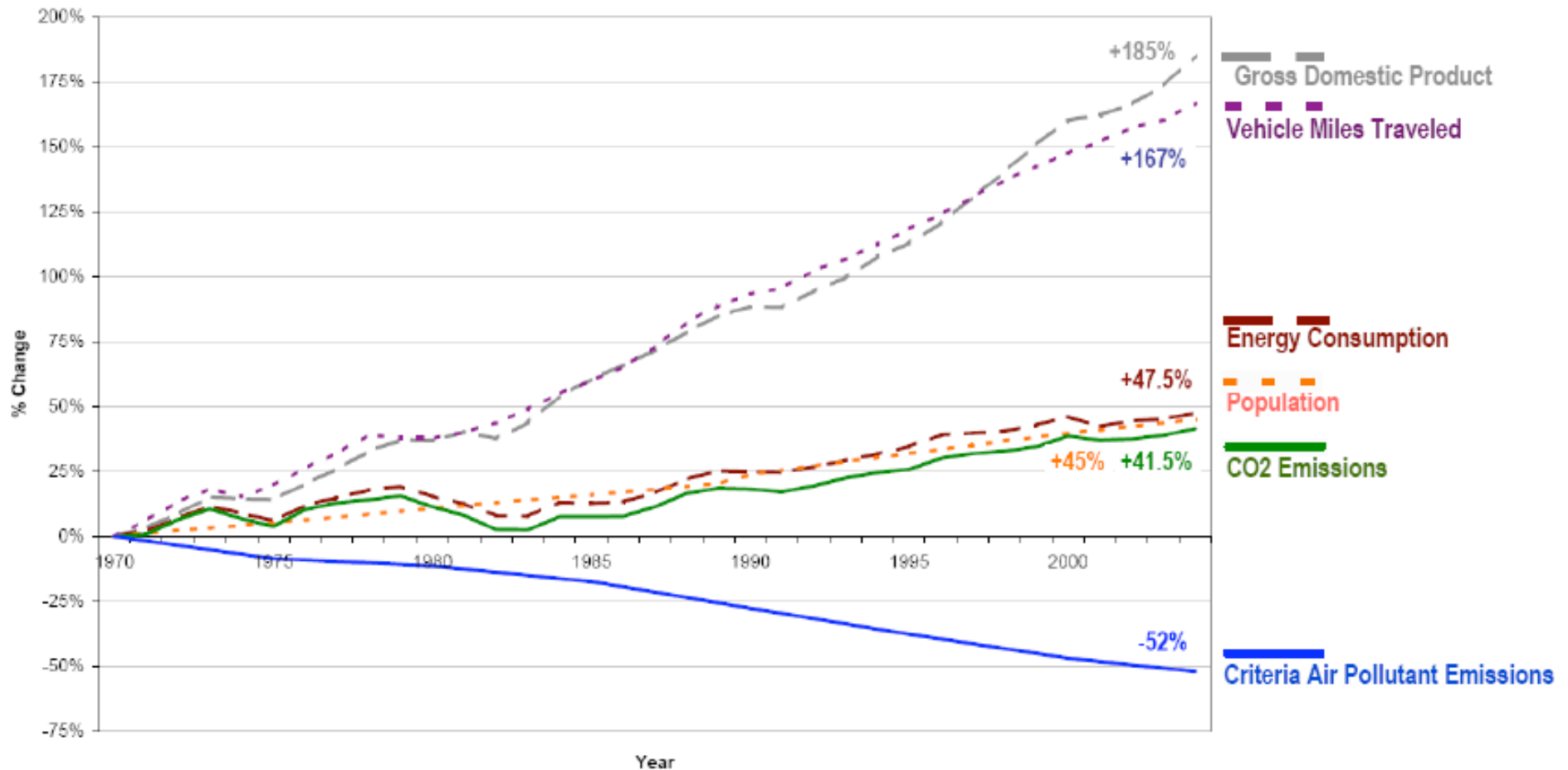


Energy and Climate Policy

**Hon. James L. Connaughton
Chairman
Council on Environmental Quality**

April 2007

Real Environmental Results in the U.S.



Source: Environmental Protection Agency

Domestic Initiatives Since 2001

\$35 Billion Federal Climate Budget

Bi-Partisan Support; More Than Any Other Country

Partnerships

- Nuclear Power 2010
- Improved NRC Process for Nuclear Power
- Climate Vision (15 Industry Sectors)
- Climate Leaders (100+ Company Leaders)
- Smartway Transportation Partnerships
- Energy Star and Natural Gas Star
- Federal Energy Management Programs

Mandates

- Federal Fuel Economy (“CAFE”)
 - 15% Increase in Light Trucks Through 2011
- Federal Renewable Fuels (“RFS”)
 - 7.5 Billion Gallons By 2012
- Federal Appliance Efficiency
 - 40 Standards (15 From EPCRA 2005)
- State Renewable Power (“RPS”)
 - 24 States; 80% of Generation
 - Going from 5.6GW, now 14.6GW, to 32GW
- Building Codes- Federal Facilities & States
 - DOE Model Code 30% Improvement

Incentives

- About \$10 billion – EPCRA 2005
- Clean Coal Investment Tax Credit (\$1.6B + leveraging over \$10B Private capital)
- Loan Guarantees (power and fuels)
- Up to \$3400 Tax Credit for Efficient Vehicles
- Up to \$4000 in Home Solar Incentives
- Biological Sequestration part of \$40+ Billion 2002 Farm Bill Conservation Programs

Technology

- Renewable Power: Advanced Solar and Wind
- Nuclear Power: Generation IV and Fusion
- Coal: Low Carbon Research; Future Gen Zero Emissions Coal & Hydrogen Power Plant; Regional Carbon Capture & Storage Program
- Fuels: Cellulosic Ethanol, Bio-Diesel, Hydrogen
- Vehicles: Plug-in Hybrids, Hydrogen Fuel Cell
- Zero Energy Home Research

International Initiatives Since 2001

More Cooperative and Faster; Need Regardless of Kyoto

Global Action Programs

- Asia-Pacific Partnership (6 Nations)
 - Accounts for 50% of emissions
 - Nearly 100 actions
- G-8 Dialogue (13-20 Nations)
 - More than 40 programs
- Methane to Markets (18 Nations)
 - 180+ million tons reduced by 2015
- Renewable Energy and Efficiency (17 Nations)
- 12+ Bilateral Agreements on Technology and Lower Emissions
- Tropical Forest Conservation
- Stopping Illegal Logging

Technology Advancement

- Carbon Capture and Storage (22 Nations)
- Future Gen Coal (5+ Nations)
- Hydrogen (17 Nations)
- Global Nuclear Energy Partnership (6+ Nations)
- Gen IV Nuclear (10 Nations)
- Fusion Energy (7 Nations)
- Global Earth Observation (64 Nations)
 - Recommended by National Academy of Sciences

Major New Initiatives This Year

State of Union “Twenty in Ten”

- **Alternative Fuels Standard**
 - Replace 15% projected annual gasoline use in 2017 with renewable and alternative fuels
 - Mandate use of 35B gallons of alternatives
 - Nearly 5 times 2012 target in current law
- **Corporate Average Fuel Economy (CAFE) Reform Program**
 - Displace 5% of projected annual gasoline use in 2017 with new mandatory rules
 - Produce 8.5 billion gallons in fuel savings over the next 10 years
 - New car standards; extend light truck rules
 - Specific targets should be set by experts at the National Highway and Traffic Safety Administration based on feasibility, safety, and benefit/cost assessment

Executive Order

Strengthening Federal Environmental, Energy and Transportation Management

- Reduce Oil Consumption in Vehicles – 2%/year
- Increase Use of Renewable Fuels - 10%/year
- Use More Renewable Power
- Improve Energy Intensity by 3% per year or 30% by 2015. This is 50% stronger than what is called for in EPAct 2005

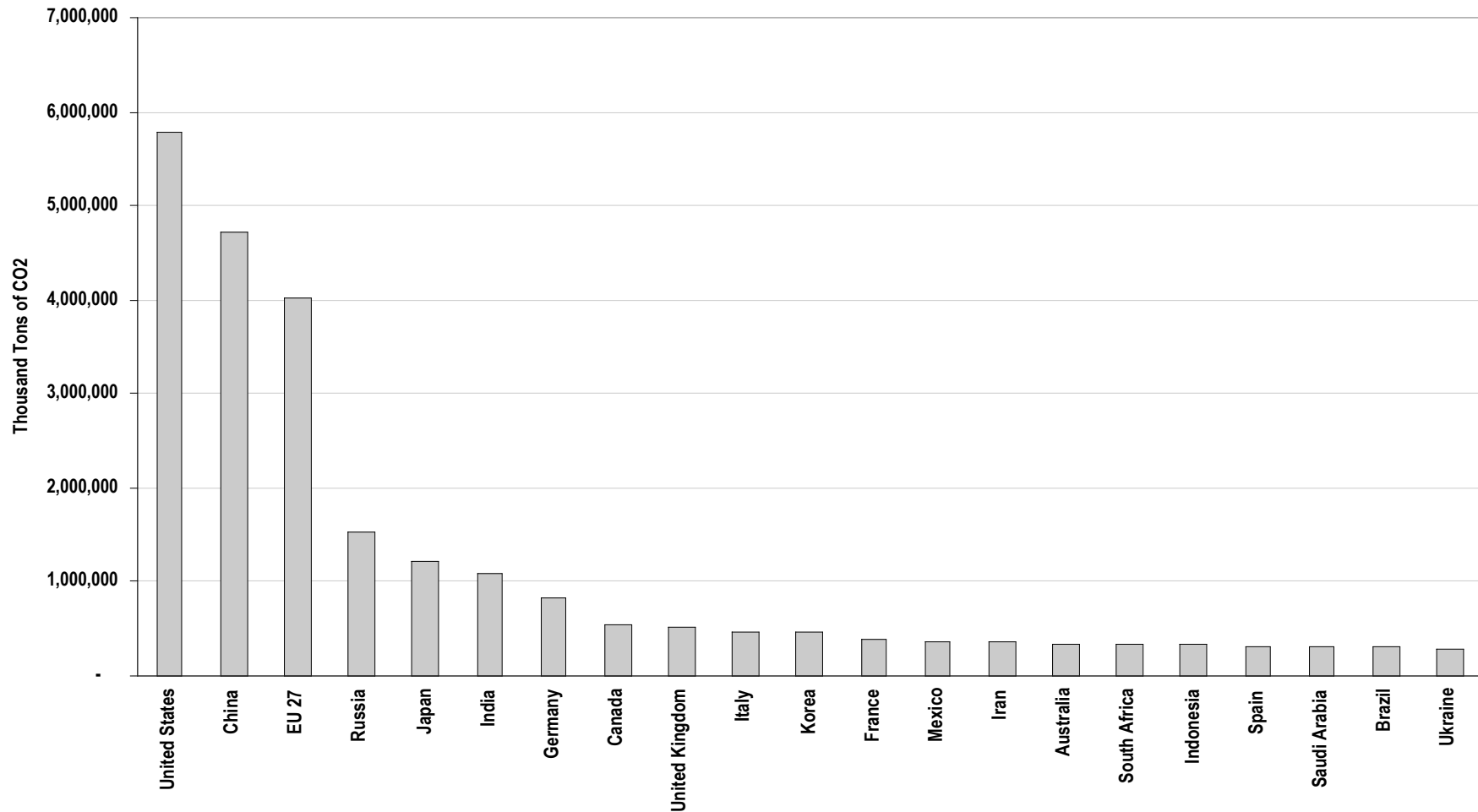
Farm Bill Conservation

- Portion of \$50+B for Sequestration
- \$1.6B in New Funding for Energy Innovation
- \$2B in Loans for Cellulosic Ethanol Plants

2008 Budget

- \$2.7 B for the Advanced Energy Initiative
- Hydrogen Fuel
- Advanced Batteries for Plug
- Bio-Diesel
- New Ethanol Production Methods

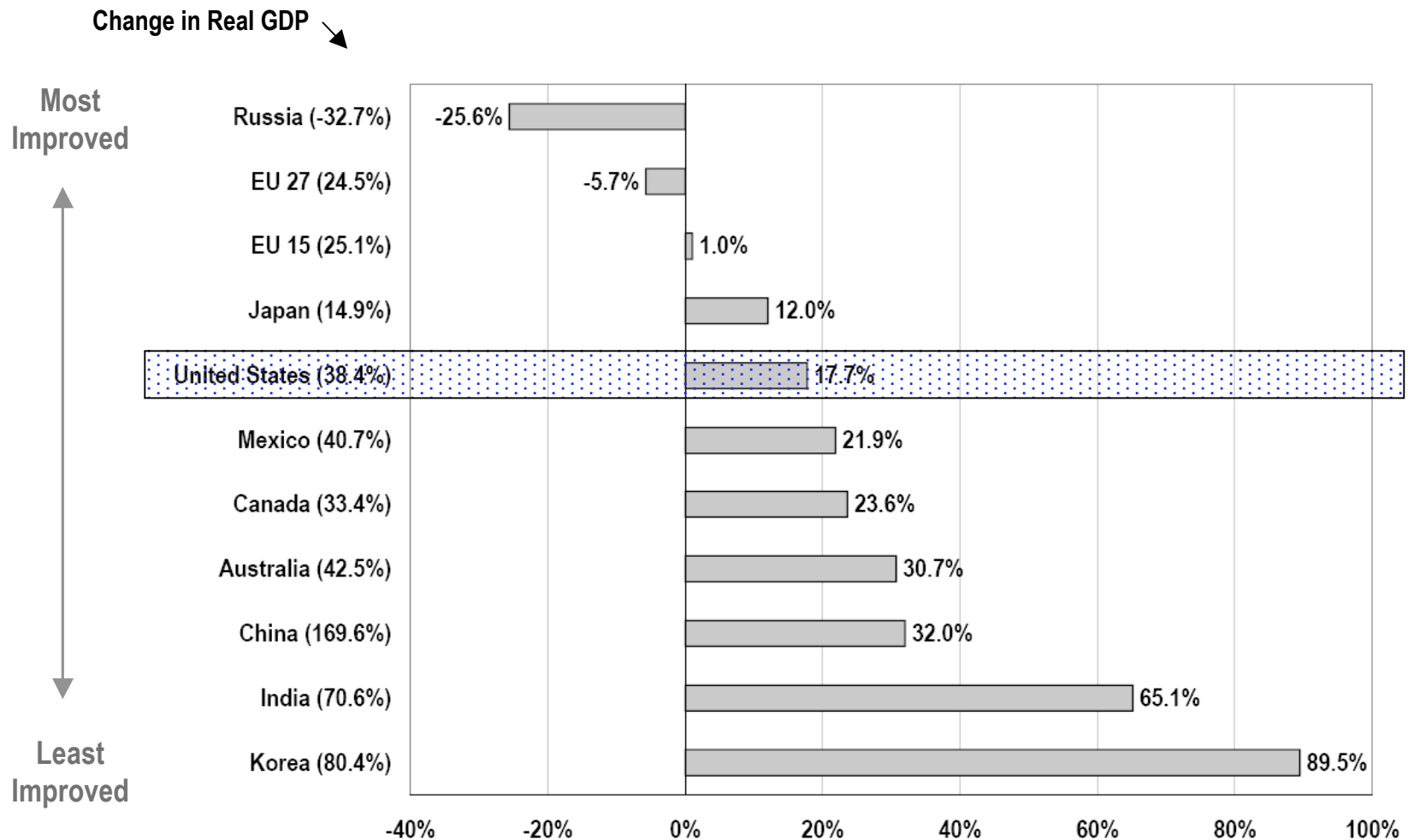
Total CO₂ Emissions from Fossil Fuel Combustion: 2004



Data Source: International Energy Agency, CO₂ Emissions from Fuel Combustion, 2006.

Produced using energy balances and the default methodologies and emission factors from the Revised 1996 IPCC Guidelines for National Greenhouse Gas Inventories.

Trends in Total CO₂ Emissions from Fossil Fuel Combustion: 1990-2000

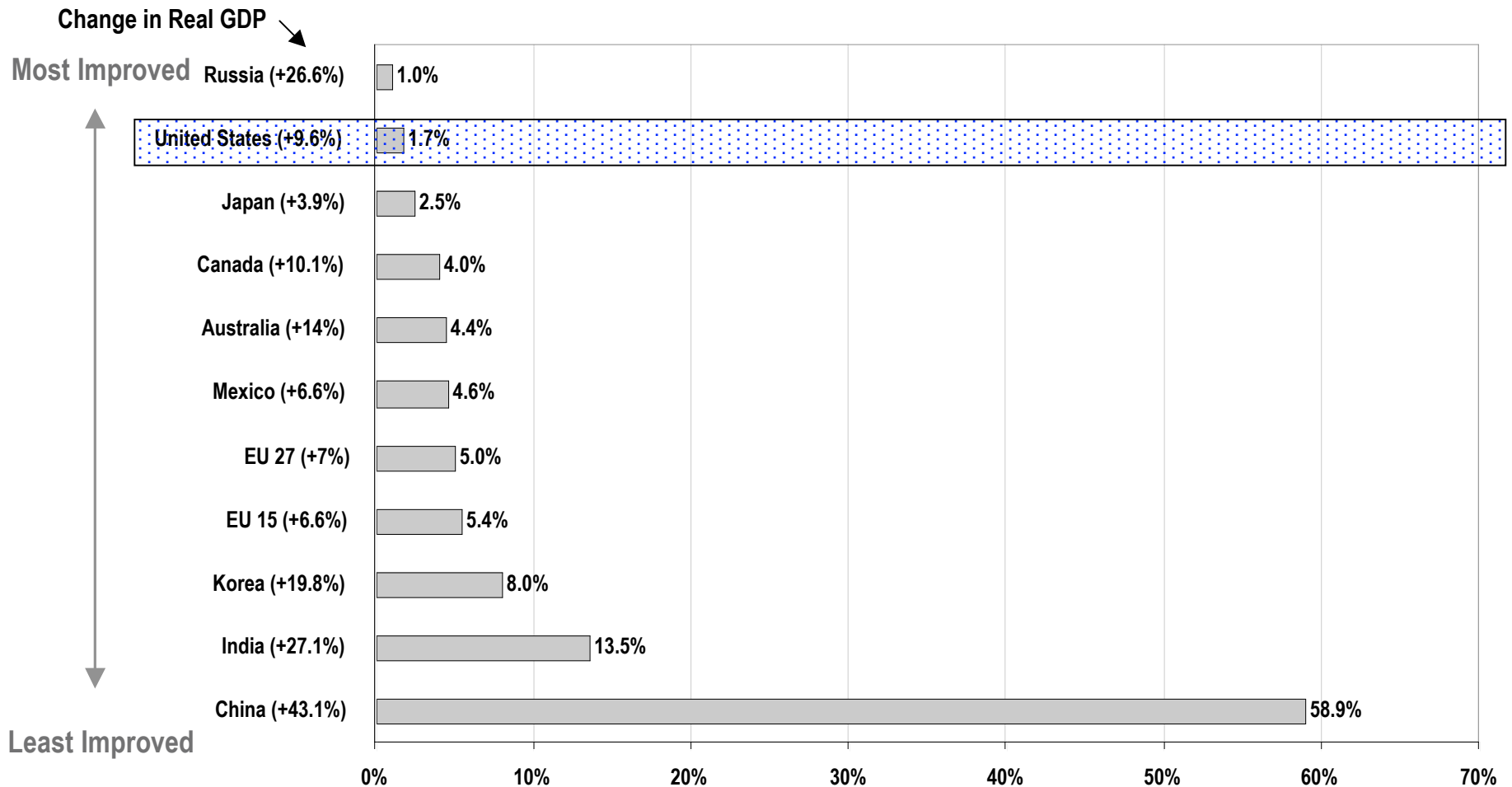


Data Source: International Energy Agency, CO₂ Emissions from Fuel Combustion, 2006.

Produced using energy balances and the default methodologies and emission factors from the Revised 1996 IPCC Guidelines for National Greenhouse Gas Inventories.

* Energy data for 1990 and 1991 for Russia are not available, so the IEA has estimated emissions for these two years based on their relative shares of former USSR.

Trends in Total CO₂ Emissions from Fossil Fuel Combustion: 2000-2004

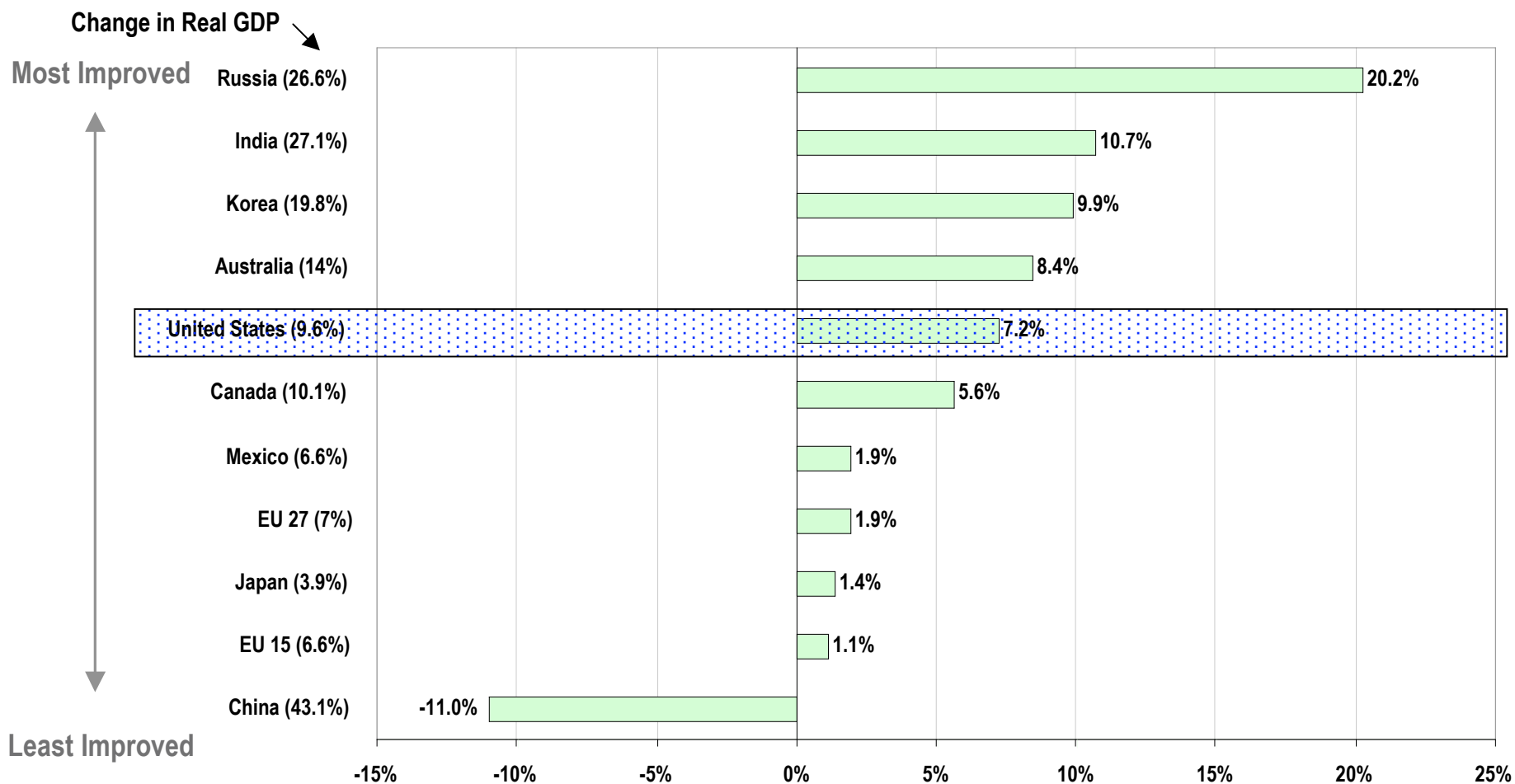


Data Source: International Energy Agency, CO₂ Emissions from Fuel Combustion, 2006.

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Improvements in CO₂ Emissions from Fossil Fuel Combustion GDP Intensity: 2000-2004

CO₂ from Fuel Combustion / GDP (kg CO₂ per 2000 US\$)



Data Source: International Energy Agency, CO₂ Emissions from Fuel Combustion, 2006.

Produced using energy balances and the default methodologies and emission factors from the Revised 1996 IPCC Guidelines for National Greenhouse Gas Inventories.