

CEQ 19



U.S. Climate Change Policy

Dr. Harlan Watson
Senior Climate Negotiator and Special Representative
U.S. Department of State

US – Germany Bilateral Meeting
Berlin, Germany
August 12, 2005



U.S. Climate Change Policy Overview

- **Integrated into the broader context of development agenda:**
 - **Alleviation of Poverty;**
 - **Rule of Law;**
 - **Investment in People; and**
 - **Stable Economic Institutions.**
- **Reaffirms the U.S. commitment to the United Nations Framework Convention on Climate Change (UNFCCC).**
- **Recognizes the need to take near-term actions, while maintaining economic growth that will improve the world's standard of living.**
- **Grounded in the reality that addressing climate change will require the sustained effort by all nations over many generations.**
- **Promotes advances in climate science and accelerated development of transformational energy technologies.**

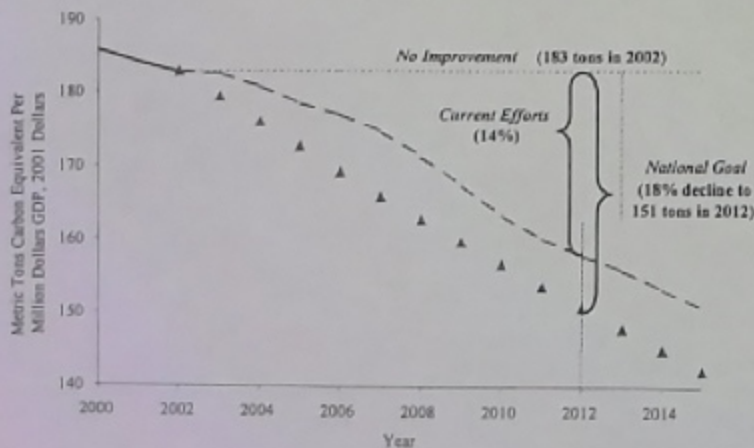
U.S. Climate Change Policy Components



- **Slowing the Growth of Net Greenhouse Gas (GHG) Emissions.**

- **National Goal: Reduce GHG Intensity by 18% Over 10-Year Period (2002-2012).**

Reduce GHG Emission Intensity 18% Between 2002-2012



- **Laying the Groundwork for Current and Future Action: Investments in Science and Technology.**

- **Climate Change Science Program (~\$2 billion/year)**
- **Climate Change Technology Program (~\$3 billion/year)**

- **Promoting International Cooperation.**

Actions to Meet 10-Year GHG Intensity Reduction Goal

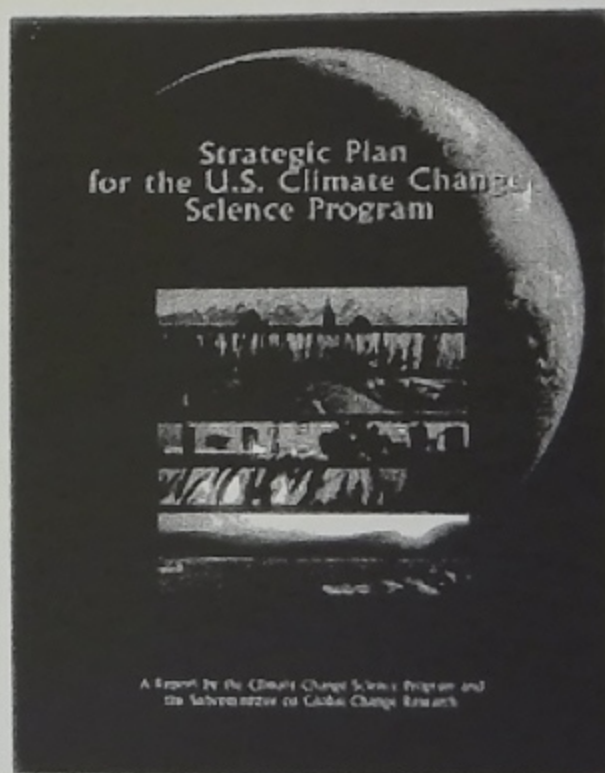


- More than 60 Federal programs designed to help reduce emissions by more than 500 million metric tons of carbon-equivalent through 2012.
 - Fuel Economy Standards
 - Energy Efficiency Standards
 - Renewable Energy/CHP Tax Incentives
 - Hybrid/Fuel Cell Vehicle Tax Incentives
 - Clean Air Rules
 - Biological Sequestration
 - Nuclear Plant Relicensing
 - Nuclear Power 2010
- Numerous U.S. Department of Energy (DOE) and U.S. Environmental Protection Agency (EPA) voluntary programs to help consumers and corporations reduce their GHG emissions.
 - Climate VISION
 - SmartWay Transport Partnership
 - Climate Leaders
 - Voluntary Reporting of Greenhouse Gas Program
- U.S. Fiscal Year 2005 budget of more than \$5.2 billion and Fiscal Year 2006 budget request of nearly \$5.5 billion for climate change programs and energy tax incentives strongly supports the near-term objective and as well future actions through major investments in science and technology.

Climate Change Science Program (CCSP)



- **World's Largest Climate Change Scientific Research Program**
- **~ \$2 Billion/Year**
- **Goals**
 - **Improve knowledge of climate and environment**
 - **Improve quantification of forces driving changes to climate**
 - **Reduce uncertainty in projections of future climate changes**
 - **Understand sensitivity and adaptability of natural and manmade ecosystems**
 - **Explore uses and limits of managing risks and opportunities**

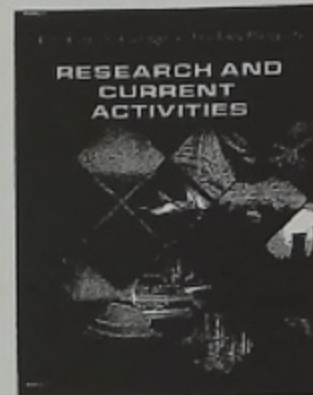


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Climate Change Technology Program (CCTP)



- Ambitious Program of RD&D
- ~ \$3 Billion/Year
- Goals
 - Reduce emissions from energy use and infrastructure
 - Advance CO₂ capture and sequestration
 - Reduce emissions from non-CO₂ gases
 - Enhance measurement & monitoring
 - Bolster the contributions of basic science



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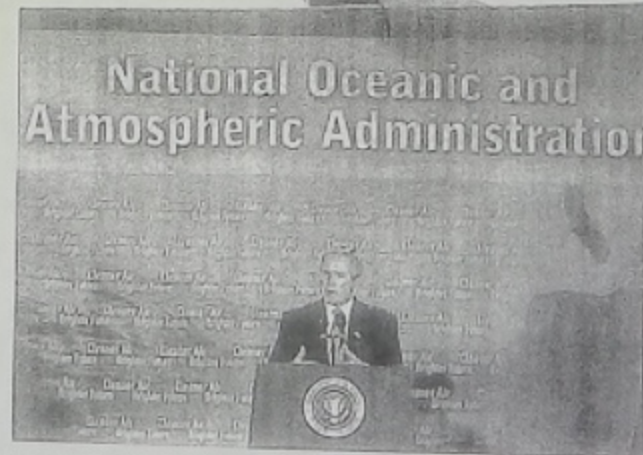
Technology Options for the Near-, Mid-, and Long-Term

- Transportation
- Buildings
- Infrastructure (Grid)
- Industry
- Low-emissions fossil-based power and fuels
- Hydrogen
- Renewable energy and fuels
- Nuclear fission
- Nuclear fusion
- Geologic sequestration
- Terrestrial sequestration
- Ocean sequestration
- Methane emissions
- Other High GWP Gases
- Tropospheric Ozone Precursors and Black Carbon
- Measurement and Monitoring

International Cooperation



- *“I am today committing the United States of America to work within the United Nations framework and elsewhere to develop with our friends and allies and nations throughout the world an effective and science-based response to the issue of global warming.”—President Bush, June 11, 2001*
- *“I will intend to work with nations, especially the poor and developing nations, to show the world that there is a better approach, that we can build our future prosperity along a cleaner and better path.”—President Bush, February 14, 2002*

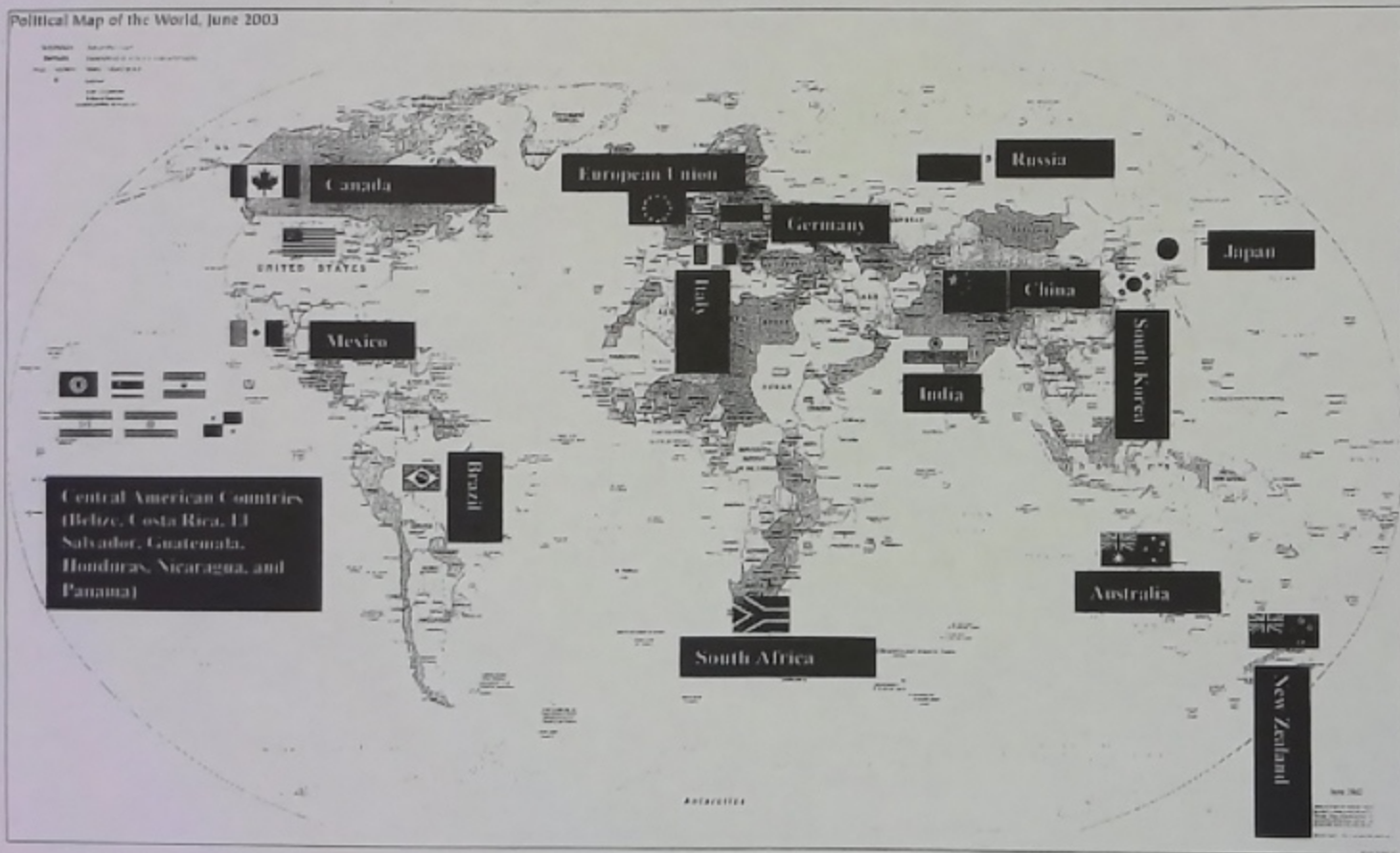


Principles for Effective International Action



- **Action must focus on broad development agenda, not climate change alone:**
 - **Promote economic growth**
 - **Reduce poverty/meet basic human needs**
 - **Enhance energy security**
 - **Reduce pollution**
 - **Mitigate greenhouse gas emissions**

U.S. Climate Change Bilaterals



Courtesy George W. Bush Presidential Library

Innovative International Partnerships



- *Carbon Sequestration Leadership Forum (CSLF)*—18 members: Focused on CO₂ capture & storage technologies.



- *International Partnership for the Hydrogen Economy (IPHE)*—17 members: Organizes, coordinates, and leverages hydrogen RD&D programs.



- *Generation IV International Forum (GIF)* —11 members: Devoted to R&D of next generation of nuclear systems.



- *Methane to Markets Partnership*—16 members: Recovery and use of methane from landfills, mines, and oil & gas systems.



- *ITER*—6 members: Project to demonstrate the scientific and technological feasibility of fusion energy.



- *Group on Earth Observations* —59 members and more than 40 participating organizations: Design and operational implementation over the next 10 years of a new international, integrated, sustained, and comprehensive Earth observation system, the Global Earth Observation System of Systems (GEOSS).

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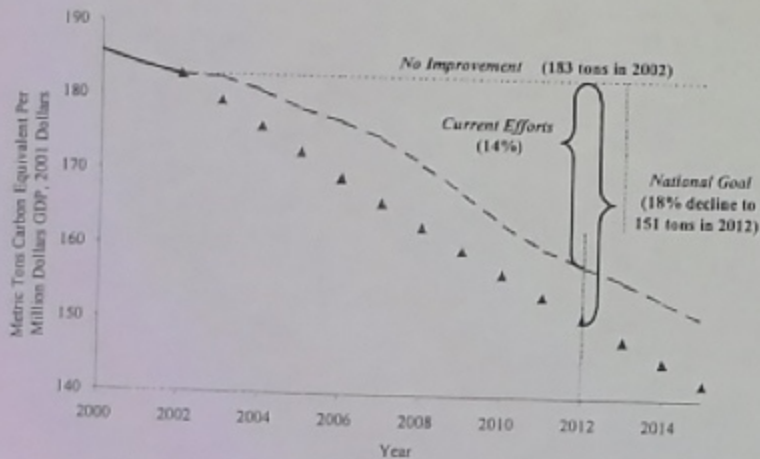
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Reduce GHG Emission Intensity 18% Between 2002-2012



Actions to Meet 10-Year GHG Intensity Reduction Goal

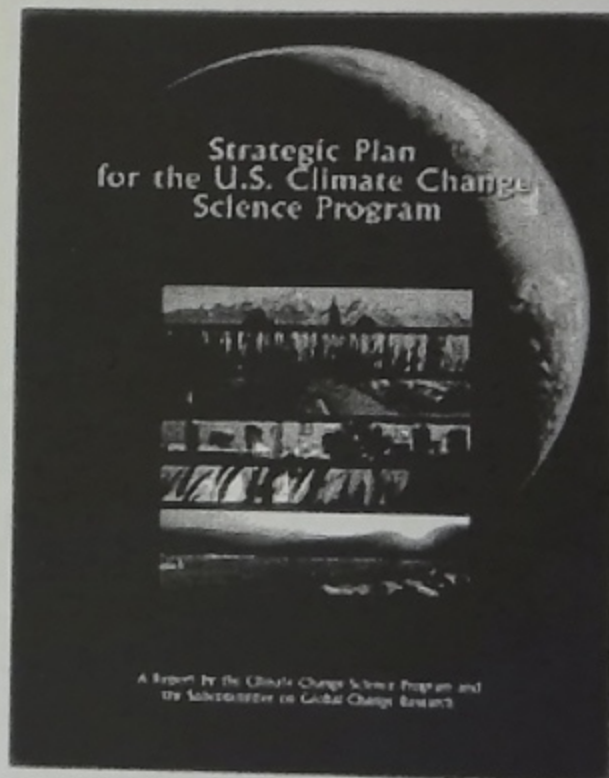


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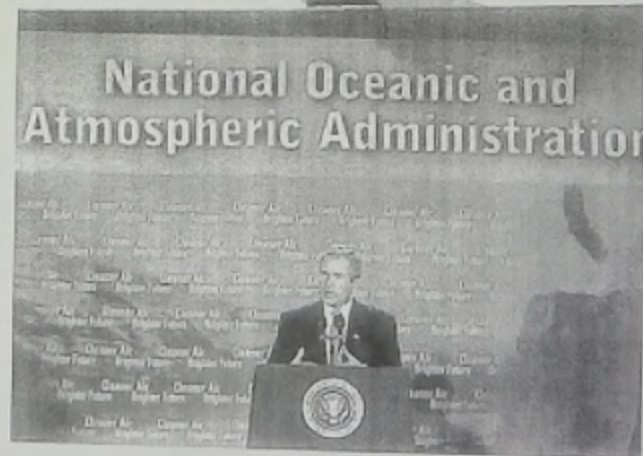
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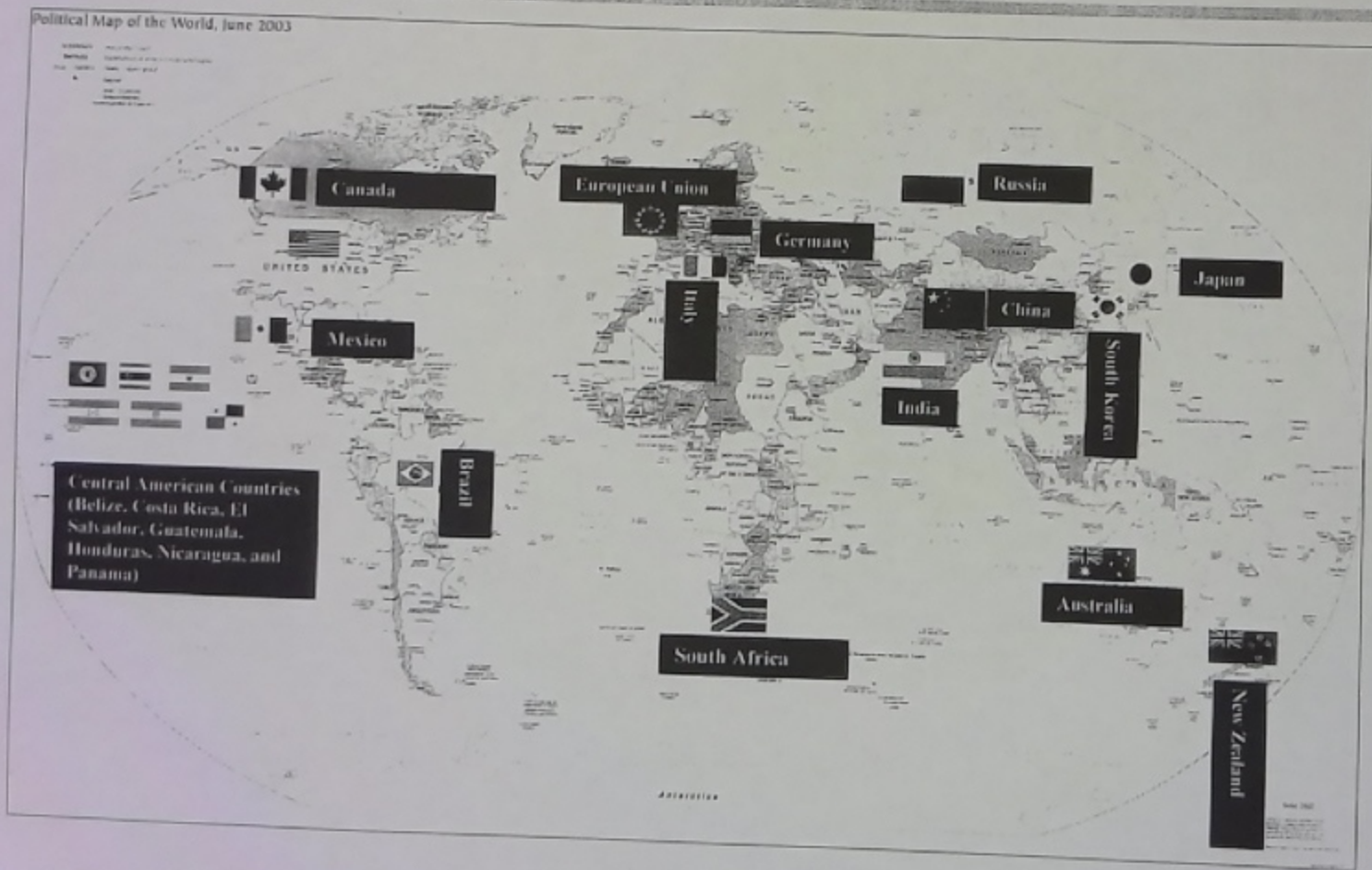


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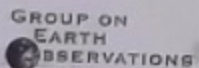
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