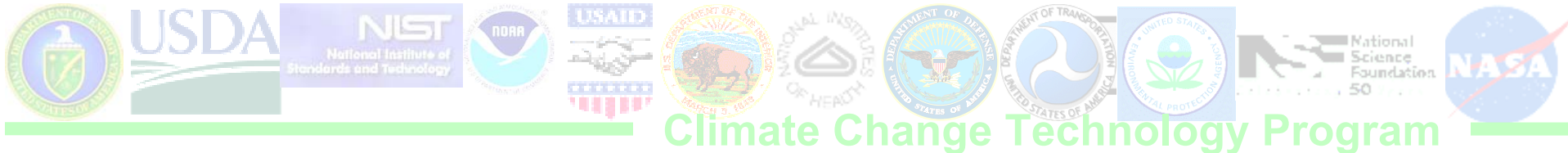


Climate Change Technology Program: Progress and Linkage with CCSP

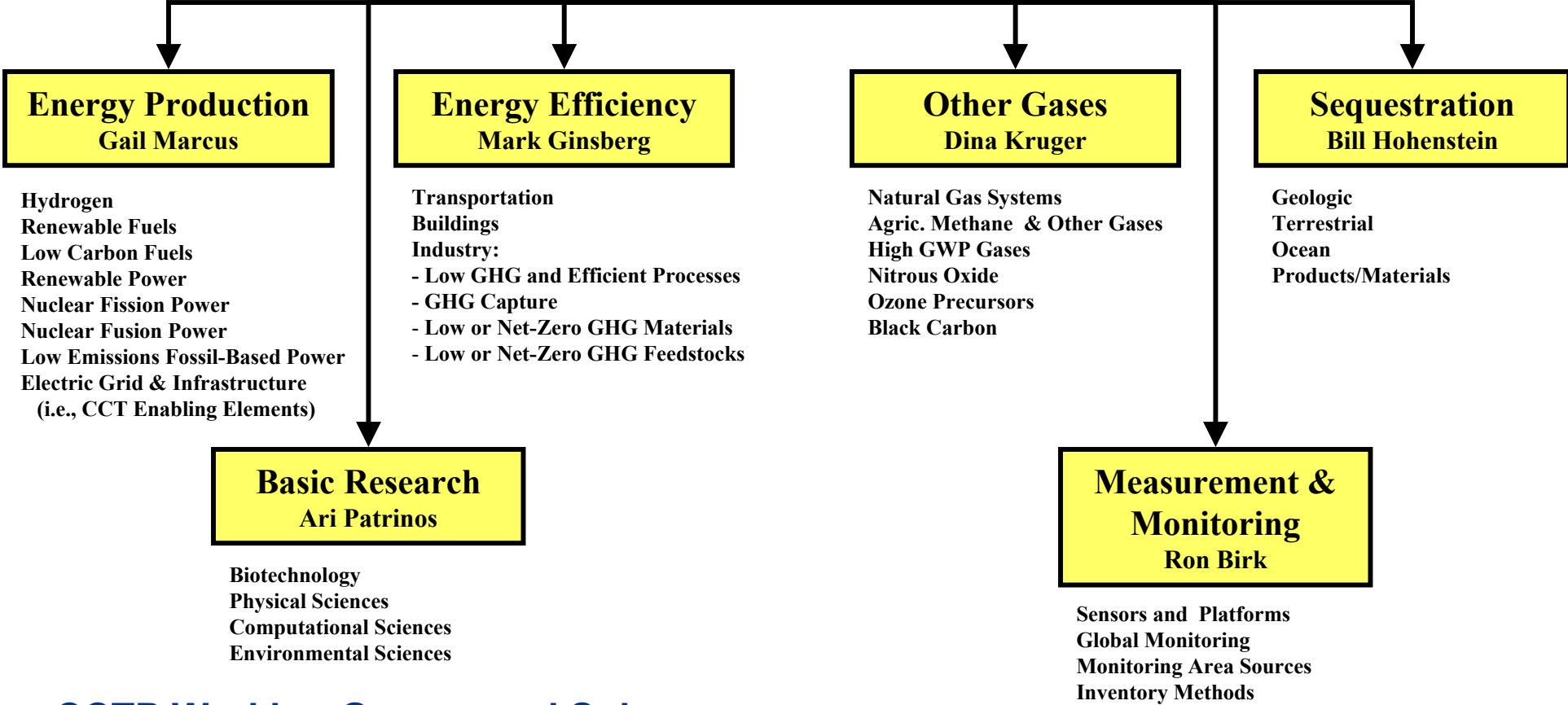
**Dave Conover, Director
Climate Change Technology Program
U.S. Department of Energy
David.Conover@hq.doe.gov**

**The National Academies
Committee to Review the CCSP Strategic Plan
Washington, D.C.
August 25, 2003**

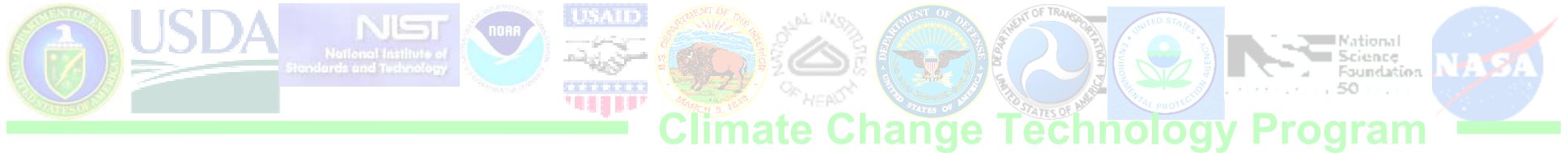


Climate Change Technology Program

Climate Change Technology Program
Director: David Conover
Deputy Director: Robert Marlay
 DOC, DOD, DOE, DOI, DOS, DOT, EPA, HHS, NASA, NSF, OMB,
 OSTP, USAID, USDA

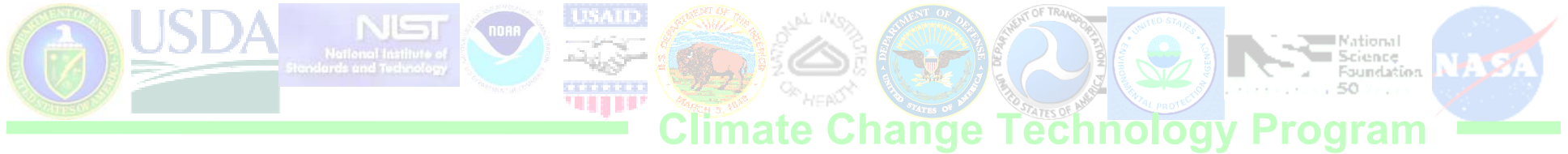


CCTP Working Groups and Subgroups




CCTP/CCSP Linkage - Why?

- **For CCTP, CCSP Can:**
 - Guide and Pace Overall Strategy by Reducing Uncertainty
 - Illuminate Technology Risks and Benefits
 - Inform Modeling and Portfolio Analyses
- **For CCSP, CCTP Can:**
 - Help Create a Robust Set of Technological Options
 - Improve Technology Performance and Reduce Costs
 - Inform Modeling and Identify Research Needs
- **Together, We Can:**
 - Clarify Risks and Benefits of Action
 - Reduce Costs of Various Courses of Action
 - Narrow the Gap Between Perceived Benefits and Costs



CCTP/CCSP Linkage - How?

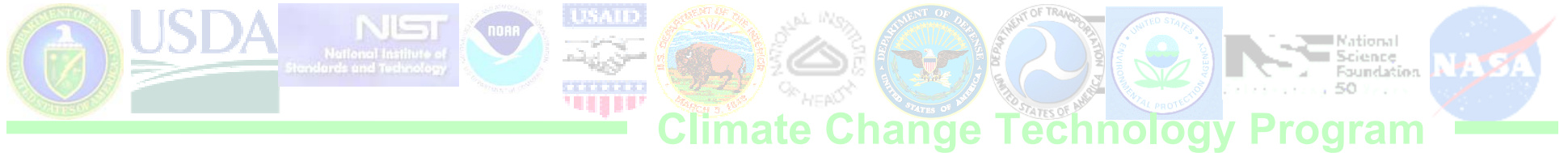
- **Structurally by the President through CCCSTI**
 - Liaison at staff, steering group, and working groups
 - » MM and others
 - Significant individual agency representative overlap
- **Joint Development of Strategic Plans**
 - Interagency comments
 - December 2002 workshop
 - On-going dialogue
- **Leadership at DOC and DOE**



Climate Change Technology R&D Programs

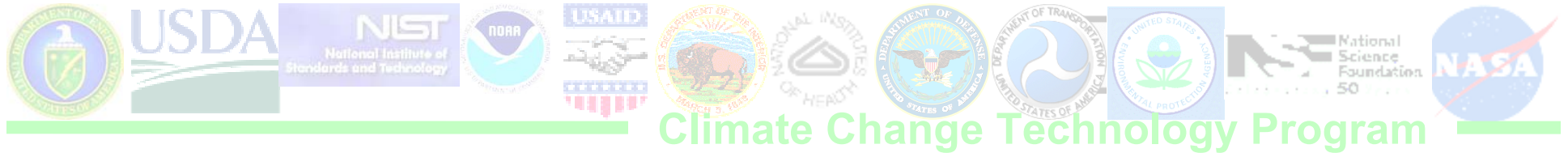
Climate Change Technology Program at CCTP Agencies

Agency	Selected Climate Change-Related Technology R&D Programs
USDA	Carbon Fluxes in Soils and Vegetation, Nutrient Application, Cropping Systems, Forest Management, Livestock and Waste Management
Commerce	Instrumentation, Standards, Ocean Sequestration, CCSP, more
Defense	Aircraft, Trucks, Equipment, Energy Management, Basic Research, Weather
Energy	Energy Efficiency, Renewable Energy, Nuclear, Fusion, Fossil Fuels and Power, Carbon Sequestration, Basic Energy Sciences, Hydrogen, Bio-Fuels
HHS	Environmental Sciences, Biotechnology, Genome Sequencing, Health Effects,
Interior	Land Management, Mining, Sequestration, Geothermal
State	International Science and Technology Cooperation, Oceans, Environment
Transportation	Aviation, Highways, Rail, Urban Mass Transit, Transportation Systems, Efficiency and Safety
EPA	Mitigation, Energy Star, Other GHGs, Methane Emissions, Voluntary Programs
NASA	Earth Observations, Measuring, Monitoring, Aviation Equipment Efficiency
NSF	Geosciences, Oceans, Nanoscience, Nanotechnology, Computational Sciences
USAID	International Assistance, Technology Deployment, Land Use, Human Impacts



Current Climate Change Technology R&D Initiatives

- FreedomCAR
- Hydrogen Fuel Initiative (FreedomFuel)
 - Hydrogen Technology
 - Nuclear-Based Hydrogen Initiative
 - Large-Scale Hydrogen Production From Fossil Fuels
- Fuel Cell Systems
- FutureGEN (Net-Zero Emission FF Power Plants)
- Regional Carbon Sequestration Partnerships
- Carbon Sequestration Leadership Forum (13 Countries)
- Nuclear Power Generation IV (9 Countries)
- International Thermonuclear Experimental Reactor (ITER) (4 Countries)
- National Climate Change Technology Initiative Competitive Solicitation



CCTP 2003 Workplan -- Deliverables

- Input to Fiscal Year 2005 Budget on CCTP Priorities
- Multi-Agency R&D Baseline for FY 2003 (improved climate change technology criteria and cross-cut)
- Scenario Analysis w/Plausible Pathways to L.T. Goals
- Key Technologies and Profiles (~100)
- Climate Change Technology Initiatives Report
- RFI/RFP for NCCTI Competitive Solicitation
- CCTP Web Site (Same Style as USGCRP and CCSP)
- CCTP Strategic R&D Plan
- Technical Workshops & Expanding Public Involvement