

## **CHAPTER STRUCTURE OF THE STATE OF THE CARBON CYCLE REPORT**

**EXECUTIVE SUMMARY [authors: SOCCR Coordinating Team]**

**Chapter 1. Introduction to the Report's Purpose, Scope, and Structure: What is the carbon cycle and why should we care? [authors: SOCCR Coordinating Team]**

### **PART I: THE CARBON CYCLE IN NORTH AMERICA**

**Chapter 2. How do North American carbon sources and sinks relate to the global carbon cycle? [authors: Chris Field (Carnegie Institution), Burke Hales (Oregon State University), Jorge Sarmiento (Princeton University), and others]**

**Chapter 3. What are the primary carbon sources and sinks in North America, how are they changing and why? [authors: Steve Pacala (Princeton University), Steve Wofsy (Harvard University), Ken Davis (The Pennsylvania State University), Burke Hales (Oregon State University), Skee Houghton (Woods Hole Research Center), Pieter Tans (NOAA Climate Monitoring & Diagnostics Laboratory), and others]**

**Chapter 4. What are the options and measures that could significantly affect the carbon cycle? [authors: Erik Haites (Margaree Consultants, Inc.), Ken Caldeira (Carnegie Institution), Patricia Romero Lankao (Metropolitan Autonomous University – Xochimilco), Adam Rose (The Pennsylvania State University), Tom Wilbanks (Oak Ridge National Laboratory)]**

**Chapter 5. How can we improve the application of scientific information to decision support for carbon management and climate decision-making? [authors: Lisa Dilling (University of Colorado/NCAR), Ron Mitchell (University of Oregon), David Fairman (Consensus Building Institute, Inc.)]**

### **PART II: ENERGY, INDUSTRY, AND WASTE MANAGEMENT ACTIVITIES**

**Overview of Part III: *Title* (to be determined); [author: Gregg Marland (Oak Ridge National Laboratory)]**

**Chapter 6: Energy Extraction and Conversion [author: Gregg Marland (Oak Ridge National Laboratory)]**

**Chapter 7: Transportation [author: David Greene (Oak Ridge National Laboratory)]**

**Chapter 8: Industry and Waste Management [author: Mark Jaccard (Simon Fraser University)]**

**Chapter 9: Buildings [*author(s) not yet confirmed*]**

### **PART III: LAND AND WATER SYSTEMS**

**Overview of Part III: *Title* (to be determined); [author: Skee Houghton (Woods Hole Research Center)]**

**Chapter 10. Agriculture, Grassland, Shrubland and Arid Lands [authors: Keith Paustian (Colorado State University), Rich Conant (Colorado State University)]**

**Chapter 11. Forests [authors: Mark Johnston (Saskatchewan Research Council), Jennifer Jenkins (University of Vermont), Richard Birdsey (USDA Forest Service), Elisabeth Huber-Sannwald (Institute for Scientific and Technological Research – San Luis Potosi)]**

*Introduction and Summary*

*A. Boreal Forests*

*B. Temperate Forests*

*C. Tropical Forests*

**Chapter 12. Carbon Cycle in Permafrost Regions (i.e., Boreal, Subarctic and Arctic Areas) of North America [author: Charles Tarnocai (Agriculture and Agri-Food Canada)]**

**Chapter 13. Non-Permafrost Wetlands [author: Scott Bridgham (University of Oregon)]**

**Chapter 14. Human Settlements and the North American Carbon Cycle [author: Diane Pataki (University of California, Irvine)]**

**Chapter 15. Aquatic Carbon, Coastal Management, and Ocean Basins [authors: Francisco Chavez (Monterey Bay Aquarium Research Institute) and Taro Takahashi (Lamont-Doherty Earth Observatory of Columbia University)]**