

CCSIP R&D Business Plan: Leveraging Canadian and Californian Research Leadership to Create a Bilateral R&D Center for Energy-Efficient Carbon Capture

With the recent United Nations Climate Change Conference in Copenhagen, there is increasing international attention on the rising amounts of carbon dioxide (CO₂) in our atmosphere and the acceleration of global warming.

Electrical power utilities that depend on fossil fuel production generate extensive CO₂ emissions. They often use dated industrial processes to capture and store CO₂. Inefficient and costly, these processes sometimes require as much as 25 percent of the energy produced by the electrical utility.

New technologies that reduce the cost and energy requirements for carbon capture and storage (CCS) are not only essential for large-scale applications of this technology—they are required to capitalize on the emerging global CCS market.

To seize this opportunity, researchers at the University of California Berkeley, the University of Waterloo and the Alberta Research Council are establishing a California-Canada Research Center for carbon capture.

With support from CCSIP, the team will develop a business plan that defines research priorities, cooperative R&D models, and long-term funding requirements.

Once established, the bilateral center will form a hub for complementary science, engineering and economic forecasting expertise, enable participating researchers to collaborate on novel CCS projects, and pursue related market opportunities.

The application of jointly developed technologies promises to deliver economic and social benefits to citizens in both Canada and California.

