





## Memorandum of Understanding

This Memorandum of Understanding (MOU) describes a coordinated effort between the Governors of the states of Alabama and Mississippi (States) and their designees to explore emerging energy resources in the States. The Governors recognize the need for a comprehensive geologic and engineering assessment of the States oil sands resources and an analysis of the legal and regulatory frameworks applicable to resource development. The Governors understand the significance of the potential oil production from these resources and recognize the employment and economic development opportunities that development presents for the people of the States and the Southern States Energy Board region.

Oil sands generally occur as natural mixtures of sand, clay, water, and bitumen, a heavy oil. When extracted from the subsurface, the bitumen is separated from the sand and upgraded to a refinery-ready crude oil. The State of Alabama has the third largest oil sands resource in the United States, which may extend into the State of Mississippi. The Hartselle Sandstone exists from north-central and northwest Alabama into northeastern Mississippi. The potential for future oil extraction operations of this formation's surface and subsurface hydrocarbons have been the focus of attention for many years. Based on evaluations in the 1980s, the total subsurface reserves are estimated to be 7.5 billion barrels, 350 million barrels of which are located within 50 feet of the surface.

The Governors support a comprehensive geologic and engineering assessment of the oil sands resources in the States to be conducted as a joint effort between the Geological Survey of Alabama/State Oil and Gas Board, the Mississippi State Oil and Gas Board, the Mississippi Development Authority, the Mississippi Office of Geology, and the Southern States Energy Board. This assessment may include, but is not limited to, an inventory of existing core and well logs for data collection; identification of data gaps; acquisition and interpretation of additional data; detailed geologic reservoir modeling; a refined estimate of oil reserves; and an inventory of existing and new infrastructure needed to support the industry. Further, the Governors support a thorough analysis and comparison of the existing legal and regulatory frameworks applicable to oil sands resource development in the States and request recommendations for resolving any legal or regulatory barriers to commercial deployment across the geographical boundary between the States. As necessary and within their authority, the Governors hereby agree to work cooperatively to address the recommendations and resolve any identified barriers.

Forty-seven percent of non-OPEC imports of crude to the United States originate in Canada. The largest commercial oil sands operations are ongoing in the Canadian Province of Alberta, which supplied the United States with 15 percent of its crude imports in 2011. Over 906 U.S. companies supply equipment, parts, and services to companies in Alberta, and 40 percent of these suppliers are located within Alabama, Mississippi, and other jurisdictions within the Southern States Energy Board region. The Canadian Consulate General in Atlanta, Georgia, and the Government of Alberta hosted Southern States Energy Board members and geologists from Alabama and Mississippi in Alberta in 2012 for a series of meetings and tours highlighting the oil sands operations in the Province. The Governors encourage continued collaboration and knowledge-sharing on technical, legal, regulatory, and environmental best practices between the Geological Survey of Alabama/State Oil and Gas Board, the Mississippi State Oil and Gas Board, the Mississippi Office of Geology, and the Southern States Energy Board and the Canadian Consulate General in Atlanta, Georgia, the Government of Alberta, and Canadian universities and research facilities.

The Governors recognize that a partnership between the States, the energy industry, and major utilities can have a positive impact on the successful exploration for, and development of, these resources. To the extent practicable, the Governors will call on industry, in cooperation with state officials, to provide scientific assessment, technical expertise, and environmental stewardship to foster the potential for oil sands development.

This MOU demonstrates the Governors' willingness to explore the potential for oil sands resource development in the States and asserts the Governors' support of conducting the work outlined herein. This MOU shall not create any obligations or legal relationships that are binding or enforceable at law or in equity.

Set forth this 27<sup>th</sup> day of July, 2013 by:

State of Alabama

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Robert Bentley, Governor

State of Mississippi

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Phil Bryant, Governor