

## KEVIN DOME CO<sub>2</sub> STORAGE PROJECT OVERVIEW

<b>Description</b>	In July 2011, Montana State University's Big Sky Carbon Sequestration Partnership (BSCSP) was awarded a grant from the U.S. Department of Energy (DOE) for a large scale carbon dioxide (CO <sub>2</sub> ) storage project in north central Montana. The project will include an underground geologic feature called the Kevin Dome. This dome covers roughly 700 square miles and contains naturally occurring carbon dioxide (CO <sub>2</sub> ) that has been trapped in place for millions of years. This project will inject and monitor 1 million tons of CO <sub>2</sub> .
<b>Project Goals</b>	The overall goal is to demonstrate that Kevin Dome is a viable and safe location for regional CO <sub>2</sub> emissions. Our team also aims to maximize state and community benefits by gathering regionally important information, such as geology, during the life of this project.
<b>Status</b>	This eight year project began in late July 2011 and is scheduled for completion in 2019. Currently, we are working on site characterization which includes: project permitting, seismic surveying, environmental monitoring and geologic modeling and analysis.
<b>Cost</b>	The total project cost is \$85 million. The U.S. DOE is funding \$67 million (roughly 80%) and the private sector is contributing \$18 million.
<b>Source of CO<sub>2</sub></b>	The CO <sub>2</sub> will be produced from a naturally occurring reservoir at Kevin Dome.
<b>Project Duration</b>	The project began in 2011 and will be completed in 2019.
<b>Public Involvement</b>	We welcome community input and local knowledge. Our staff will have continuous interactions with local communities throughout the life of this project. We will regularly engage with landowners, groups, elected officials and other citizens to keep them informed of project activities and findings. We also plan to address comments and concerns of local citizens. Our website, regular newsletters and general meetings aim to keep the community informed about project status and details.
<b>Infrastructure to be built</b>	For this project, BSCSP will drill three to five CO <sub>2</sub> production wells, build a six-mile pipeline to transport the CO <sub>2</sub> to the injection site, drill one injection well and four monitoring wells.
<b>Site Selection</b>	BSCSP conducted a previous study at Kevin Dome. Information gained from this research indicates that Kevin Dome has great potential to be large scale carbon storage site. <ul style="list-style-type: none"><li>• There is an abundance of naturally occurring CO<sub>2</sub> that has been safely stored in place for millions of years;</li><li>• The dome is made porous rock that can provide great injection sites for additional CO<sub>2</sub>;</li><li>• Private sector partners are likewise interested in this area because of oil and gas development activities, and provide us with a special collaborative opportunity;</li><li>• There is a long history of oil and gas development. This allows us to use well data from over 8000 wells that have been drilled near the site.</li></ul>
<b>Regulations</b>	Permitting for all activities will be managed by Montana State University, Bison Engineering, and U.S. DOE. This project is required to comply with numerous state and federal laws and obtain permits from several state and federal agencies. These permits and regulations help to protect human health and the environment. BSCSP has started the permitting process and is working with the appropriate state and federal agencies to obtain all permits necessary for project success.
<b>Website</b>	For more information about the program and the site, please visit: <a href="http://www.bigskyco2.org/research/geologic/kevincharacterization">http://www.bigskyco2.org/research/geologic/kevincharacterization</a> or contact us by email at <a href="mailto:bigskyco2@montana.edu">bigskyco2@montana.edu</a> . You can also reach by phone at 406-994-3800.

LOCAL COMMUNITY BENEFITS	POTENTIAL EXAMPLES
<b>Economic</b>	<ul style="list-style-type: none"> <li>• At least eight years of project-related sales revenue for Toole County</li> <li>• Opportunities for service providers</li> <li>• Greater understanding of local resources that may support future projects</li> </ul>
<b>Project Recognition</b>	<ul style="list-style-type: none"> <li>• Promotion of energy research initiatives through various media such as educational films and news outlets</li> <li>• Attraction of visitors such as high-profile elected officials and other members of the public</li> </ul>
<b>Community Learning Opportunities &amp; Public Database</b>	<ul style="list-style-type: none"> <li>• Internship opportunities for youths</li> <li>• K-12 student and teacher involvement</li> <li>• Free, public workshop(s) and conference each year with regional networking opportunities</li> <li>• Increased local knowledge of carbon capture and storage processes through open house(s), community meetings, site tours, newsletters and website pages</li> </ul>
<b>Community Voice</b>	<ul style="list-style-type: none"> <li>• Regular open houses and community meetings throughout the life of the project</li> <li>• Website, newsletters and other outreach tools with community highlights</li> </ul>
<b>Valuing Community Resources</b>	<ul style="list-style-type: none"> <li>• Unprecedented data collection on local geology, air, water, soils, economics and regulations surrounding carbon capture and storage in Toole County</li> <li>• New maps and graphics that may support community initiatives</li> <li>• Project design and schedule will work to minimize disturbance to crops, the environment and local activities</li> </ul>
<b>Website</b>	<p>For more information about the program and the site, please visit: <a href="http://www.bigskyco2.org/research/geologic/kevincharacterization">http://www.bigskyco2.org/research/geologic/kevincharacterization</a> or contact us by email at <a href="mailto:bigskyco2@montana.edu">bigskyco2@montana.edu</a>. You can also reach by phone at 406-994-3800</p>

UNIVERSITIES	PRIVATE COMPANIES	NATIONAL LABORATORIES
Montana State University	Schlumberger Carbon Services	Lawrence Berkeley National Lab
Barnard College	Vecta Oil & Gas Ltd.	Los Alamos National Lab
Columbia University	Altamont Oil & Gas Inc.	Idaho National Lab
Washington State University	SR2020 Inc.	
Oregon State University	Bison Engineering	