

## POTENTIAL FUNDING SOURCES FOR RESEARCH RELATED TO CARBON DIOXIDE CAPTURE AND ENHANCED OIL RECOVERY

This memorandum was requested to provide information regarding potential revenue sources that could be used to fund research relating to carbon dioxide (CO<sub>2</sub>) capture and the use of carbon dioxide in enhanced oil recovery. The revenue sources considered in this memorandum include revenues generated from the oil extraction tax, oil and gas gross production tax, coal severance tax, and coal conversion tax.

Revenue generated from the oil extraction tax is allocated to the common schools trust fund, foundation aid stabilization fund, state disaster relief fund, tax relief fund, general fund, legacy fund, strategic investment and improvements fund, political subdivision allocation fund, oil and gas research fund, resources trust fund, and tribal governments. Estimated distributions of oil extraction tax revenue for the 2015-17 biennium include \$123.45 million to the common schools trust fund, \$123.45 million to the foundation aid stabilization fund, \$8.58 million to the state disaster relief fund, \$175.83 million to the tax relief fund, \$197.12 million to the general fund, \$400.99 million to the legacy fund, \$47.9 million to the strategic investment and improvements fund, \$4.81 million to the political subdivision allocation fund, \$6.25 million to the oil and gas research fund, \$246.9 million to the resources trust fund, and \$201.09 million to tribal governments.

Revenue generated from the oil and gas gross production tax is allocated to the abandoned well reclamation fund, North Dakota outdoor heritage fund, state disaster relief fund, legacy fund, tax relief fund, strategic investment and improvements fund, political subdivision allocation fund, oil and gas research fund, oil and gas impact fund, general fund, oil- and gas-impacted political subdivisions, and tribal governments. Estimated distributions of oil and gas gross production tax revenue for the 2015-17 biennium include \$10.13 million to the abandoned well reclamation fund, \$19.62 million to the North Dakota outdoor heritage fund, \$6.06 million to the state disaster relief fund, \$409.69 million to the legacy fund, \$124.17 million to the tax relief fund, \$71.28 million to the strategic investment and improvements fund, \$3.4 million to the political subdivision allocation fund, \$3.75 million to the oil and gas research fund, \$74.3 million to the oil and gas impact fund, \$102.88 million to the general fund, \$541.69 million to oil- and gas-impacted political subdivisions, and \$100.29 million to tribal governments.

Revenue generated from the coal severance tax is allocated to the coal development trust fund, lignite research fund, and counties. Estimated distributions of coal severance tax revenue for the 2015-17 biennium include \$6.31 million to the coal development trust fund, \$1.1 million to the lignite research fund, and \$14.9 million to counties.

Revenue generated from the coal conversion tax is allocated to the lignite research fund, general fund, and counties. Estimated distributions of coal conversion tax revenue for the 2015-17 biennium include \$2 million to the lignite research fund, \$42.73 million to the general fund, and \$11.4 million to counties.

The oil and gas research fund could be used as a funding source for research related to CO<sub>2</sub> capture and use of CO<sub>2</sub> in enhanced oil recovery. The oil and gas research fund was established in 2003 and is funded by 2 percent of the state's share of oil and gas gross production tax and oil extraction tax revenues, up to \$10 million per biennium, pursuant to North Dakota Century Code Section 57-51.1-07.3. All money deposited into the oil and gas research fund is appropriated as a continuing appropriation to the Oil and Gas Research Council to be used for the purposes stated in Section 54-17.6-02, which include promoting environmentally sound exploration and production methods and technologies, developing the state's oil and gas resources, and supporting research activities relating to oil and natural gas exploration and production. The amount of oil and gas gross production tax and oil extraction tax revenues allocated to the oil and gas research fund could be increased to provide for additional funding for research related to CO<sub>2</sub> capture and use of CO<sub>2</sub> in enhanced oil recovery.

The lignite research fund is another source that could be used to fund research related to CO<sub>2</sub> capture and use of CO<sub>2</sub> in enhanced oil recovery. The lignite research fund is funded through an allocation of 70 percent of the taxes deposited in the coal development trust fund and by a separate and additional coal severance tax of 2 cents per ton of coal or commercial Leonardite severed for sale or industrial purposes pursuant to Section 57-61-01.5. The lignite research fund also is funded through an allocation of 5 percent of all coal conversion tax revenues allocated to the general fund pursuant to Section 57-60-14, effective through July 31, 2018. Money deposited in the lignite research fund may be used for the purposes defined in Chapter 57-17.5, which include the provision of grants or loans for the purpose of conducting research relating to lignite. The amount of coal severance tax revenue allocated to the lignite research fund could be increased and the amount of coal conversion tax revenue allocated to the lignite research fund could be extended beyond July 31, 2018, to provide for additional funding for research related to CO<sub>2</sub> capture and use of CO<sub>2</sub> in enhanced oil recovery.