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EXCLUSIVE: Raven Petroleum taps geothermal company, general contractor for South Texas refinery

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Raven Petroleum is moving forward with plans to build a refinery in deep South Texas after tapping a general contractor to build it and a geothermal company to provide 100 percent green energy to power it and send emissions deep underground.

The Woodlands-based company has chosen Houston-based general contractor BASIC Equipment to handle the proposed refinery's engineering procurement and construction needs, while Austin-based geothermal company Thermal Energy Partners will provide 100 percent renewable power and carbon sequestration capabilities.

Raven Petroleum Managing Director [Christopher Moore](#) was at the South Texas Energy & Economic Roundtable office in San Antonio on Wednesday afternoon to sign memorandums of understanding with representatives from both companies to move the proposed project forward.

"We're willing to go the extra mile, the extra effort and expense to create a model refinery with the latest technology available to accomplish our goal of being the cleanest refinery ... period," Moore said.

Last year, Raven Petroleum announced plans to build an \$500 million refinery off State Highway 359 near Hebbronville. Moore told the Business Journal that his company expects to file an application for a [Texas Commission on Environmental Quality](#) permit at the end of the first quarter. The company



CARLOS JAVIER SANCHEZ | SABJ

chose BASIC Equipment and Thermal Energy Partners to address safety and environmental issues.

"This not only addresses many of the local environmental concerns, but also our concerns," Moore said.

BASIC Equipment President and CEO [Thomas Balke](#) told the Business Journal that his company has helped to build multiple refineries and that the Raven Petroleum project will include a number of safety features.

"We've got a lot of experience with containment in our designs," Balke said. "The designs we'll be working will have concrete and sealed containments. If there is a spill, it will be recovered and pumped back into a tank so it can be reprocessed. We won't be excavating and cleaning dirt, we'll have everything in the containers."

Thermal Energy Partners CEO [Bruce Cutright](#) told the Business Journal that the proposed refinery's site is in a "sweet spot" for geothermal energy. Cutright said early cycles of geothermal power will rely on high-temperature brackish water from deep underground while later cycles will rely on the refinery's own carbon dioxide emissions for power.

Cutright's company has designed a system where the refinery's emissions are captured and pumped deep underground where carbon dioxide will become "supercritical" from the pressure and heat. The supercritical carbon dioxide will then be used as fuel source for the geothermal power plant's turbines.

"We're excited that this is going to be in Texas to show that carbon dioxide is not a problem," Cutright said. "It's going to revolutionize the production of geothermal energy."

South Texas Energy & Economic Roundtable President [Omar Garcia](#) said refinery project is example of balancing economic development with the environment.

"This technology is further proof that whether you're an operator, service company or a refinery, there is premium put on safety and the environment," Garcia said. "This is cutting edge technology."

A coalition of landowners and environmentalist named "South Texans Against the Refinery" has come out in opposition of the proposed project citing safety, noise and pollution concerns.

"Very little information has been presented to the public, very little information has been disseminated to the public and there has been no input taken from the public," STAR Coalition spokeswoman [Tricia Cortez](#) said.

Cortez told the Business Journal that bringing BASIC Equipment and Thermal Energy Partners aboard came as a surprise but her group will continue to monitor the proposed project and provide public input once the refinery's application is filed with the TCEQ.

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