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Unconventional resource teams are "all hands on deck" at URTeC 2018

By EMILY QUERUBIN, ASSOCIATE EDITOR on 7/24/2018

HOUSTON -- The adoption of new technologies for enhanced oil recovery (EOR), and its impact on America's growing shale sector, was a primary topic of discussion during Monday's plenary session at the Unconventional Resources Technology Conference (URTeC) in Houston, Texas. The conference—which is sponsored by the Society of Petroleum Engineers (SPE), the American Association of Petroleum Geologists (AAPG), and the Society of Exploration Geophysicists (SEG)—is in its sixth year. The opening session, titled "The Shale Revolution–Getting Down to Business," featured several industry leaders and experts, who shed light on the state of the industry and where it is headed.

Following introductory remarks, Steve Winberg, assistant secretary for fossil energy at the U.S. Department of Energy, was introduced as the first speaker. Winberg stressed that "government and industry should work together" to secure America's energy future. According to the International Energy Agency (IEA), the U.S. is on track to become the world's top oil producer next year. Winberg said that becoming a net exporter has been "one of government's true investment success stories." "Government can't, and should not, work in a vacuum. We need *your* input, and we value it," he said. "It really is all hands on deck."

Occidental Petroleum President and CEO Vicki Hollub then took the stage to discuss "Finding Success in the Resources Arena." She examined the company's strategies for advancing an historically conventional position to become a successful competitor in unconventional resources. As the largest oil producer in the Permian basin, Occidental is leveraging the use of data analytics to optimize its asset portfolio. The company has established a corporate-wide data analytics team, as well as a low-carbon ventures team. Hollub explained that the company is making environmental stewardship a priority, citing climate change as the "biggest issue facing our industry today."

Scott Tinker, director of the Bureau of Economic Geology and state geologist for Texas, examined the politics of shale, including the environmental and economic impacts of U.S. shale development. Tinker analyzed energy trends, including those under debate by industry analysts, and how they affect the ability to predict shale's future. Shale resources are vast, he said, but reserves are small. Ultimate production from shale resources reportedly accounts for less than 10% of the resources in place. Additionally, Tinker said that, while environmental impacts from shale are very real, CO_2 emissions in the U.S. have been reduced ~20%—due largely to shale gas superseding coal in power generation.

Closing the session was Bernstein Research Senior Analyst Bob Brackett. He discussed the "Anthropocene," an industry term used by geologists, defining the effects of human civilization on the Earth's geology, biology and climate. He juxtaposed the term with, what he called, the geological "Fracocene," an age during which the global energy sector is being influenced by North American shale production. Brackett examined a

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"Fracocene" scorecard, grading the industry in terms of returns on capital, returns of capital, growth, technology, longevity, discipline and riskiness.

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