The past and future of enhanced oil and gas extraction in the United States

The world is going through a major energy dynamic, with fossil fuel being a major source. Tight oil and gas is now being extracted at a record pace in the Delaware basin in Texas and New Mexico. Both small energy companies now as well as the majors are in the early phases of drilling, completing, and transport oil and gas both for domestic use and export, primarily to Europe. There is a dramatic increase of the United States gap attributable to this export of energy. Pipelines are being expanded and infrastructures of support are rapidly becoming in place. This presentation will include but not be limited to horizontal drilling, staging, water conservation and used water disposal, economics, payback, debt, and investing. Regulatory constraints at the state and federal levels will be a part of the presentation. To put this into current perspective, the major producers of fossil fuel, in order, are (1) the United States (2) Russia and (3) Saudi Arabia. There will be a brief discussion of proven oil and gas reserves, both worldwide and in the United States. The growth of this commodity in the United States, both in the past few years as well as the anticipated production in the near future will be included in this presentation.

Biography

Dr. Davis L. Ford is an Adjunct Professor in the College of Engineering, the University of Texas at Austin, and a Visiting Professor of Petroleum Engineering at Texas Tech University, Lubbock. He is practicing environmental engineer with over forty-five years of experience in the field. In addition, he serves on the faculty at The University of Texas at Austin as an adjunct professor, has published more than one hundred technical papers, has co-authored or contributed to ten textbooks, and written two biographies and co-authored one children’s book. He has lectured extensively throughout the United States and in countries of Europe, South America, and Asia. Ford received his bachelor’s degree in civil engineering at Texas A&M University and his master and doctorate degrees in environmental engineering at The University of Texas at Austin. He is a Distinguished Engineering Graduate of both Texas A&M University and The University of Texas at Austin as well as a Distinguished Alumnus of Texas A&M. Ford was elected into the prestigious National Academy of Engineering (NAE). He has served as president of the American Academy of Environmental Engineers and chairman of the Academy Ethics Committee. His honorary affiliations include Tau Beta Pi, Sigma Xi, and Chi Epsilon. Ford serves on the Board of a publicly-owned oil and exploration company (CWEI, NASDAQ) and the Board of the Texas A&M University Press.

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