

## Biography:



John Marano

President

JM Energy Consulting, Inc.

John J. Marano is an independent consultant and principal of JM Energy Consulting, Inc. specializing in:

- Process technology for the production and conventional and alternative fuels and chemicals and on CO<sub>2</sub> capture, sequestration and beneficial re-use
- Technology assessment and process development related to climate change mitigation, adaptation and intervention
- R&D program planning through technology demonstration

Government-sector clients include: National Labs, ARPA-E, DOE Policy, EIA and EPA. Private-sector clients include tech developers, E&C firms and financial institutions. Dr. Marano is also a judge for the NRG COSIA Carbon XPRIZE and instructor at the University of Pittsburgh.

Prior to forming his consultancy, he was a process engineer in the oil and gas industry and at the National Energy Technology Laboratory, and holds a Ph.D. - Univ. of Pittsburgh and M.S. & B.S. degrees from Univ. of Toledo; all in Chemical Engineering.

**Title:**

Taking the FUN Out of Carbon Capture, Utilization & Storage

**Abstract:**

The worst consequences of climate change are still perceived by many as in the Future, Uncertain and Negative. This natural, but short-sighted view, fosters apathy toward taking immediate and meaningful action. However, by Identifying and implementing approaches that result in Immediate, Certain and Positive outcomes, lethargy can be replaced by real progress. CO<sub>2</sub> utilization is one such approach.

In this presentation, I will compare CCS and CCU; identifying their similarities and differences. I will then describe how CCU and CCS could be used as complimentary strategies to expedite meaningful reductions in industrial CO<sub>2</sub> emissions. I will close with a discussion of the many different goods and services one might consider for the beneficial reuse of CO<sub>2</sub> emissions, and give you my thoughts on which ones might be the most promising in the near term.