

Abstract

Driving Down the Road from Hydraulic Fracturing to Off Earth Resource Mining: Some Challenges Ahead.

For the past 65 years, resource harvesters in the United States have successfully conducted Hydraulic Fracturing experiments and have implemented commercial operations. It is only during the past decade, that we have witnessed, by virtue of sophisticated developments in mining technology and harvesting techniques, coupled with the tenacity of the human spirit, an exponential growth in economically viable large scale operations using Hydraulic Fracturing. Long term US energy independence and downward pressure on energy pricing structures are two possible outcomes of the Hydraulic Fracturing revolution. The implications of these possible shifts are presently filtering into the mindset of power elites worldwide.

Ten years ago, US energy independence pulled out of domestic sources would have been perceived as science fiction. Under diligent stewardship, the virtues of patience and perseverance have altered the energy roadmap.

So too will time vindicate the patient and perseverant collective human spirit that is pushing for harvesting resources that are off planet Earth. Presently viewed as science fiction, space mineral resource harvesting is a tantalizing possibility which may prove to be the ultimate driver for vibrant and self-sustaining off Earth development.

As genuine profits materialize from the space mineral resource enterprise, the nascent private space industry will gain a secure footing and will broaden its support among traditional institutional and mature investment vehicles that recognize value in this aspect of humankind's destiny.

Investment in the enterprise of space is not an exercise for the faint of heart. Agile and innovative pioneering and emerging companies will set the pace in growing their share of existing markets and, perhaps, more importantly, creating new markets as well.