Donald L.Gautier[1]: (1) U.S. Geological Survey

Consequences of the disparity in geographic distribution of global gas petroleum systems and demand centers

From a global perspective, natural gas is more abundant than oil. In spite of an inventory of more than 6000 TCF of proved reserves chasing a world demand of about 100TCF/year, additions to reserves of natural gas consistently exceed annual production. However, the world's greatest gas petroleum systems are not geographically close to the demand centers in the United States, Europe and Japan and thus many gas resources are stranded. In the high demand, but low supply areas each has responded to the locally tight supply situation differently. In spite of having essentially no local natural gas resources or production, Japan currently enjoys some of the cheapest natural gas supplies in the world as a result of negotiated long-term contracts for LNG. In Europe, the proximity to the large gas petroleum systems of Russia, North Africa and the Middle East give pipeline supplies there a strong competitive advantage. Thus, Europe will continue to increase its consumption of natural gas delivered via pipeline. In the U.S. a strong tradition of entrepreneurial activity, coupled with a reluctance to construct LNG facilities or new pipelines from the Arctic has resulted in sustained high prices. As a result, natural gas is being increasingly displaced in the future marketplace through fuel substitution by coal for electricity generation.