Keynote address 2

World petroleum resources – where, why, and how much?

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Concepts of recoverable world petroleum resources have remained relatively constant over the past few decades. Numerous authors have suggested ultimate petroleum resources as being about 2,000 BB of oil and 10,000 TCF of gas. We continue to confirm that overall quantity of oil and gas while focusing on 1) the significant contribution to resource quantity that derives from the growth of discovered reserves, 2) the narrow geographic distribution of most of the world's petroleum, and 3) the resultant geographic sources and limits to future production that derive from these resource realities. Perhaps the most important generalization from our work is the REALMS Hypothesis that offers geologic reasons to support the occurrence of about 68% of the world's oil and gas in the Tethyan

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Realm (including most of SE Asia), 23% in the Boreal Realm, 4% in the So. Gondwana Realm, and 5% in the Pacific Realm. Given the geologic limits on resource occurrence, a future production scenario, to the year 2010, suggests a concentration in the Middle East of more than 50% of world crude oil production. Natural gas, being much less mature in its development and more widely distributed, can serve, to some degree, to balance the future distribution of hydrocarbon energy.