ABSTRACT

Industry and AAPG have recently turned attention to global super basins (IHS Markit). AAPG alone has held 12 super basin themed events with 4000 attendees. Key geologic fundamentals of these basins include robust petroleum systems, multiple reservoirs, abundant seals and trap configurations. We will discuss how basin architecture leads to actionable insights. Above ground issues like well-established infrastructure, resources, information, community, service sector, access, and favorable regulations are also key to the commercial success of super basins.

The Gulf of Mexico is one of the world’s greatest petroleum provinces. It is a prototype for both onshore and offshore super basins. Onshore basins with unconventional resources are benefitting from engineering breakthroughs in stimulation and recovery. Offshore basins with conventional resources are being revitalized below salt and other barriers by enhanced seismic imaging. Geoscience plays a key role in this revitalization and GCAGS and AAPG members are leading the way.

Historically the greater GOM continues to remake itself with new and renewed plays. Selected representative onshore revitalized plays typify GOM renewal. Examples include: Eagle Ford Shale, Haynesville (LNG) game changer, Austin Chalk, and the Chicontepec sub-basin, Mexico. Offshore revitalized plays and emerging areas include: Northern GOM subsalt, slope mini basins, Paleocene and Eocene Wilcox sedimentary packages, a growing area for Norphlet dunes, and Mexican discoveries.

Geography and demography portend a bright future for the GOM. At the cross roads of technology and fundamental resources, this super basin contains one of the greatest resources of all: a highly experienced and well-trained workforce that is future facing and includes leading universities, students, and young professionals.