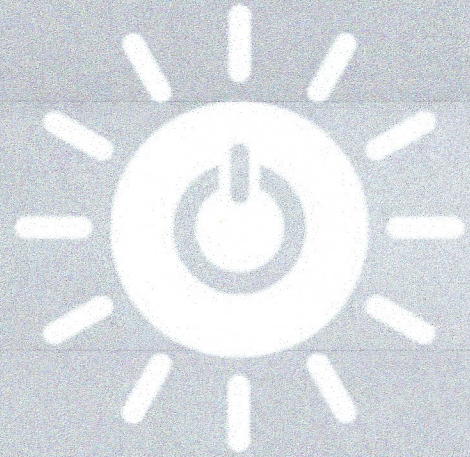




Goal 7:

Ensure access to affordable, reliable, sustainable and modern energy for all.



The Energy Revolution

February 2020 | Edith Newton Wilson

The Energy ~~Transition~~ Revolution

What's in a name? Should we call it a transition? A convergence? A transformation? A revolution? A tipping-point? A paradigm shift?

Consider that perhaps the name is largely irrelevant, except to sell conference tickets. There's a radical shift afoot that affects the business model for global energy delivery and consumption. And with it comes with a wealth of opportunities for energy geoscientists, as well as an obligation for every professional society to help its members prepare for the future.

It's Our Job

Whether it's sequestered in hydrocarbon molecules for millions of years or converted by silicon to electricity or stored for the short term using inherent and enhanced properties of metals – it's all energy for our consumption that is ultimately sourced from the sun. Still, every resource used to build the energy supply

chain comes from the ground.

That's where we shine as energy geoscientists.

We've spent the last century ensuring access to affordable, reliable, sustainable and modern energy for all. We love this business, and we intend to spend the next hundred years accomplishing the same goal. We'll get to engage in new frontiers and embrace the improved efficiency and economics that accompany the energy technology explosion. The hometown of AAPG, Tulsa, Okla., bears the tag line, "A New Kind of Energy." Solar and battery businesses are booming, and soon northeastern Oklahoma will be home to the densest electric vehicle charging network in the nation. According to the latest briefing from the University of Texas Energy Institute, Texas is positioned to lead in the use of geothermal for baseload power supply.

News stories cross our desks daily that highlight innovative renewable energy projects, advances in material science for energy storage, sustainability in the use of critical minerals and global proliferation of livable cities.

AAPG hosted two thought-provoking Energy Transition Forums this fall – one in Edinburgh, Scotland, and one in Cartagena, Colombia. At both events, traditional energy providers met with students, utility executives, researchers, academics and renewable energy professionals. We began the conversation of how we can translate what we do so well – finding the materials needed to deliver energy and getting them to market efficiently – to the new economy. For the first time in the 25 years I've been an AAPG member, I was the oldest person in the room at the Encuentro de Sostenibilidad y Energía at Hotel Las Americas, where students and young professionals flocked to the Latin America and Caribbean Region's inaugural event. LACR has also created a funding contest for projects in sustainable energy development that is designed with these young scientists in mind. Global expansion of this riff on the successful Imperial Barrel Award concept would help us to grow and retain members, as students look to experienced professionals for leadership in a changing world.

Opportunities to Come

The Energy Minerals Division will sponsor three sessions at the AAPG 2020 Annual Convention and Exhibition in Houston ACE that directly address emerging energy concepts, including natural gas hydrates, critical minerals for energy storage, and lunar, Martian and geothermal resources. EMD will also host a special interactive session highlighting recent observations and findings from our technical committees.

The Division and Environmental Geoscientists/EMD luncheon returns to Tuesday, June 9, in the heart of the meeting. We are honored to have Morgan Bazilian, director of the Payne Institute at the Colorado School of Mines, as our guest speaker. Bazilian is a noted scholar and former World Bank specialist in energy systems and markets. His discussion of "The Coming Energy Transformation: Drivers, Consequences, and Implications for Geopolitics" is sure to generate a fascinating conversation. Don't forget to add the luncheon ticket to your registration, and check LinkedIn for the latest news on Dr. Bazilian's compelling research.

Post-conference, you won't want to miss the field trip led by EMD Energy Technology and Economics Chair Jeremy Platt and Natalie Reagan of Enterprise Products to explore "The New World of Energy in Texas" with a visit to the Mont Belvieu NGL Hub.

Change is the new normal. How lucky that we've been nurtured by the petroleum industry. We are trained risk-takers, innovators and idea generators. If it comes from the ground and is related to energy, we'll use our skills and talents to find it, produce it and supply it sustainably and economically.

In keeping with this year's theme, the final EMD president's column in the May EXPLORER will address the Earth's changing climate and the implications for AAPG and EMD members in the coming decade.

Explorer Division Column EMD ([Click to View Column Archives](#))

The Energy Minerals Division (EMD), a division of AAPG, is dedicated to addressing the special concerns of energy resource geologists working with energy resources other than conventional oil and gas, providing a vehicle to keep abreast of the latest developments in the geosciences and associated technology. EMD works in concert with the Division of Environmental Geosciences to serve energy resource and environmental geologists.

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