Editorial

Nothing Ventured, Nothing Gained

Today's painfully high energy prices have sparked a discussion and debate about our seemingly ever-expanding appetite for oil and gas. The mounting evidence of climate change largely caused by fossil fuel combustion links our energy economy to a global crisis. The real issue, in fact, is that our energy economy lacks the diversity it needs to respond to the inevitable economic, political, and environmental shocks that history has demonstrated will frequently occur. The good news is that recent investments in vital areas of energy R&D, technological advances, new policy mechanisms to diversify energy markets, and an increasingly bullish financial sector could all be garnered to usher in a new age of energy independence. What is remarkable is how many innovations have taken place despite the lack of market opportunity afforded to new entrants into the energy sector and in light of the inherent economic, geopolitical and environmental risks associated with their ventures to develop energy solutions.

"Not since the early 1980s, when oil reached its all time high of $90/bbl in today's dollars and precipitated a doubling in the nation's energy efficiency has there been such marked investment in alternative energy technologies, said Samuel Bodman, U.S. Secretary of Energy at last month's Annual Energy Efficiency Forum held in Washington, DC, and hosted by the U.S. Energy Association and Johnson Controls, Inc. "Energy is key to national security, independence and competitiveness," he continues. Our energy economy must reflect the evolving tools and opportunities needed to make it more secure and to encourage competition and provide insurance against real or created supply scarcity. An excellent mechanism already exists in the Renewable Energy Portfolio Standard (RPS), where states set a minimum requirement for clean energy production within any given market. Already 17 states and the district of Columbia have adopted varying forms of this policy. "Mandating market access for solar, wind, biomass, and environmentally friendly hydropower and tidal technologies not only reduces the environmental burden of energy production, but it also gives investors confidence that the energy industry is generating options and opportunities, and is therefore worthy of investment,"said Bodman.

In Pennsylvania, for instance, $10 million has been invested in new cleaner energy projects, such as coal gasification (*CEP*, June, pp. 6–10), coal-to-liquids and biofuels such as Ethanol 85 (E85). The first E85 filling station is soon to open up in Lititz, PA, selling E85 at $1.75/gal. "Federal government must offer incentives to make these changes happen, including policies to support R&D tax credits (*e.g.*, for more cellulose-based research), a cap-and-trade system that includes all markets, and the creation of a Strategic Energy Fund," said Bodman. In addition, with recent oil prices above $70/bbl, a program to extract oil from our nation's vast oil-shale reserves has been revived (pp. 7–10). Better than 800 billion bbl/oil may be recoverable from these oil shale deposits — more than triple the proven oil reserves of Saudi Arabia. The willingness of these companies to accept the risk of failure is the catalyst for change.

Speaking of change, *CEP*'s editor-in-chief and publisher, Kristine Chin, will be taking maternity leave at the end of the month, and I will assume her responsibilities as editor-in-chief until she returns. During this time, I will be taking a few risks of my own — editorially. Your feedback is important and I encourage you to share your thoughts by sending an email to cepedit@aiche.org.

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