

It's cool to be part of the energy solution

I think many of us grasp that our nation is facing a huge energy challenge, but I had yet to hear it articulated in such a compelling way as in some recently published testimony before the Senate Committee on Energy and Natural Resources. The messenger was Norman Augustine, retired chairman and CEO of Lockheed Martin Corporation.

Augustine testified in his capacity as a member of the American Energy Innovation Council, an independent and informal group of seven of the industry's elite who have come together to lend a voice to the national discussion about a problem that affects us all; as he put it, the provision of energy.

Specifically, Augustine points out that energy issues permeate the challenges we face in the U.S., including the impact the uncertain availability and cost of energy has on our economy; the hazards of energy-related

pollution on the environment; and the role of constrained and manipulated energy supplies as a source of armed conflict. He goes on to assert that the provision of safe, clean, affordable and sustainable energy is one of our foremost challenges, one that also greatly affects solutions to our other national problems.

The rest of the council's membership roster lends significant credibility to the concern Augustine relays: Bill Gates, chairman and former CEO of Microsoft; Jeff Immelt, chairman and CEO of GE; John Doer, partner at Kleiner Perkins Caufield & Byers; Ursula Burns, chairwoman and CEO of Xerox; Charles Holliday, chairman of Bank of America and former chairman and CEO of DuPont; and Tim Solso, chairman and CEO of Cummins, Inc.

One of the significant issues on the council's collective mind is the need for more vigorous public commitment to energy technology development. The current American investment in energy innovation is a fraction of a per-

cent of our total energy bill, a pittance compared to investments in most other sectors and to the billions we send abroad to pay for imported energy.

The consequence of this underinvestment often is an inability for the innovations our scientists and engineers conceive to get far enough in development to attract private investment and ultimately be brought to market. It makes sense from an investor's standpoint. Their job is to maximize their investment by minimizing risk. To do that, they tend to only invest in technologies that have been through proof-of-principle testing, verification of market utility, and commercial-scale demonstration.

With each step more expensive than the last, the removal of uncertainty needed to attract critical commercialization-enabling investment leaves many promising technologies to sit on a laboratory shelf. And as that continues to happen, other nations are beating us to the punch.

So how do we get ourselves out of this impossibly precarious position? We have to enable commercialization-

focused innovation. We have to gain additional public and private investment, and be strategic and streamlined in our technology development and transfer processes.

At Pacific Northwest National Laboratory, this critical shift is happening. In the Tri-Cities, we have ample opportunity to be a key player in the new energy game.

When you read or hear about the richness of our renewable energy base; land, facilities, equipment, assistance programs, and other resources available in and around the Tri-Cities Research District to new and existing businesses; and the award-winning energy innovations coming out of PNNL and its many collaborative endeavors, I hope you'll see it with a new sense of gravity, pride, and call to action. That we, here in the Tri-Cities, can be part of the solution to one of our nation's most encompassing challenges.

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