

Steve Hedrick
President and Chief Executive Officer
MATRIC

Thank you for the opportunity to be here today.

My name is Steve Hedrick, and I am President and Chief Executive Officer of MATRIC. We're a strategic innovation partner that provides deep, uncommon expertise and research and development infrastructure to solve the most challenging problems in the areas of science and technology. And we're proudly based in South Charleston, WV.

I'm also a West Virginia native. We're a special breed. As have many Americans, we've been through good times and bad. And seemingly more bad. But we've shown resilience. And I'm a firm believer, whether you're running a business, running a state, or running a country, a certain level resilience, is a pivotal component of success.

One of the greatest ancient historians who chronicled nearly 30 years of war and tension between Athens and Sparta, Thucydides, once said...

"The bravest are surely those who have the clearest vision of what is before them, glory and danger a like...and yet not withstanding...go out to meet it."

And when we think about why we're here today, we're talking about this region, our state, the future. The gift - of Energy - below our feet. We are prepared to go out and meet the most challenging demands that our country can face, and do so from a position of authority.

And what generates that position of authority - that creation of value - is manufacturing, which is, without a doubt, the cornerstone of West Virginia's future. However, for the more than six years, it seems we've focused so hard on downstream manufacturing from that which is available to us in the natural gas liquids in our shale gas. We talked about the necessity for ethane crackers and downstream manufacturing. And, while we've seen affirmative announcements and apparent progress, we've yet to see this opportunity become a reality.

I'm here today to tell you, we need to realize our own **new reality**. Because, frankly, if we don't, we'll never get out of this rut.

So, how do we do this? There are two clear actions we must take.

First, now is the time to invest in innovation and R&D. We must. Innovation and R&D are keys to high tech jobs in the state of WV. There is an opportunity for the Appalachian Basin to be the nation's hub for innovation. For example, today the West Virginia Regional Technology Park is an innovation hub for industry and can offer resources for the petrochemical industry to re-emerge in West Virginia, Ohio, Pennsylvania and Kentucky. But we need more of this! Now is a great time for the petrochemical industry to invest in technology, innovation and R&D. We need to invest now in order to prepare for the future. Because today is not like it was 50 years ago. We don't have the luxury of simply relying on low energy prices. The reality is that we need to

rely on instability of the marketplace. We must be predictable in the face of uncertainty. How do we do this? Through innovation.

The second is infrastructure. We cannot take advantage of the Utica, Rogersville and Marcellus shale opportunity without infrastructure to support the demands and needs of the associated industries, to the benefit of our region and our country.

The infrastructure requirements associated with new build-outs must be delivered by multiple parties. It won't be easy. It won't be cheap. We'll need cooperation and support from the federal and state governments, private equity, and existing business platforms. All to their mutual benefit.

However, you may have heard Shell's announcement earlier this month with its intentions to build a three-state ethane pipeline system to feed its Monaca, Pennsylvania cracker. This clearly demonstrates the necessity for specific infrastructure for Shell to be successful, and they cannot wait for public-private partnership to make this happen for the full expansion of infrastructure that is necessary. However, let me be clear, this doesn't begin to satisfy the need for infrastructure for the petrochemical industry to expand...and increase the demand side of the highly valuable and readily available natural gas liquids from the Utica, Marcellus and Rogersville Shales. And, more specifically, this announcement does not satisfy the need for ethane offtake for our natural gas industry. There is simply too much ethane available for this single investment to advantage our nation to its maximum potential. This cracker from Shell and its associated pipeline has an estimated capacity of 100,000 barrels per day. Rather than exporting the additional ethane available via pipeline to the gulf coast, or to Europe, or to Asia, or to Canada; it could be utilized here in the Appalachian Basin, here in America, to maximize the value potential of our raw materials.

Moreover, Shell's pipeline system is even more validation that an Appalachian Storage Hub is needed more than ever in this region. According to *Natural Gas Intelligence*, ethane accounts for more than 50 percent of the typical NGL barrel in Appalachia...and with exports now leaving Marcus Hook near Philadelphia, ethane production has been increasing in the region. In fact, midstream MPLX's CEO Gary Heminger recently said, "with incremental ethane takeaway projects and the projected completion of a regional cracker facility, we anticipate reaching full utilization of our existing facilities." In other words, we need more infrastructure and companies like Shell need more elasticity in supply chain in order to maximize the benefit of ethane available to us.

I propose that the corridors naturally created by the Ohio and Kanawha Rivers should be utilized as a platform for a substantial pipe system that will support the distribution of key raw material and intermediate constituents, including but not limited to methane, ethane, ethylene, propane, propylene and chlorine. All of which are significant building blocks to the chemical industry, and hence to our society.

We, therefore, must have substantial underground storage of the highest-value and broadly-used raw materials - specifically ethane, ethylene and propane...and create a built-for-purpose Appalachian Storage Hub. This can be safely and efficiently done in naturally occurring underground caverns, in depleted natural gas extraction points or even in depleted salt domes. And, I'm sure you won't be surprised to learn that the brightest minds in geological formations are currently studying the best location for the Appalachian Storage Hub. This important work is already underway.

Because it is time for this to be done, to be done right, to enable growth and prosperity for our citizens, our economy and our way of life. It is time for leadership, for boldness, for decades of incredible value creation, for a generational opportunity to be brought to fruition.

I urge you show your resilience, and reinvest in our great nation through innovation and infrastructure to secure the success of another generation. I urge you to - as Thucydides once wrote - to go out to meet this challenge, and assure investment in innovation and infrastructure by the public sector, by the federal government and supporting state governments who have the courage to do so as well.

We should all do our part to make this happen, and each of you can count on me and on MATRIC to do our part. Thank you.

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