TOM PENDERGAST

What questions do you have about the future of Ohio's Economy and workforce?

Why don't local economic development agencies focus on expanding plastics-manufacturing in their communities? The tri-state region of OH/PA/WV is the only area in the world that exports ethane and propane. We convert none of it to polyethylene and polypropylene, the raw materials for most plastics. Instead, we send our ethane and propane to KY, Ontario, TX, LA, Scotland, Norway, Sweden, Austria, India and, beginning next year, China. Yet, 35% of plastics manufacturers in the western hemisphere are concentrated west of the Ohio River. 31 such companies are in Licking County and most of them get their polyolefin pellets from Texas, 900 miles away. Expressions of interest in Foreign Direct Investment in Ohio's ethane resources totaling about \$260 billion have been received from China Energy, Oriental Energy, the Nanshan Group and the State of Qatar. No one seems to be interested in recruiting plastics manufacturers from China or Qatar even though I have identified well over 100 such firms. And, the U.S. Department of Commerce has a staff of 13 in China dedicated to helping economic development entities secure inward investments. They are very, very responsive. Yet economic development entities at the local level such as Grow Licking County, and the local Chamber are not responsive. I cannot understand why. Our local schools also seem oblivious to the needs of the re-emerging plastics industry especially, chemistry, physics and supporting STEM subjects. I don't get it.

What do you think Ohio's future economy might look like?

In the upper Ohio Valley, Shell Chemical Appalachia is building a \$6 billion ethane cracker to produce polyethylene and a propane dehydrogenation unit to produce polypropylene. PTT Global Chemical was planning to build a similar plant in Belmont County. Instead of a \$6 billion cracker, they have expanded the scale to a \$10 billion plant. These represent the largest single FDIs in the history of Pennsylvania and Ohio. [Honda investments have been larger overall, but began with a smallish motorcycle plant.] Clearly, these companies recognize the strategic value of our prolific, inexpensive ethane and propane resources and their close proximity to a large end-user market in the United States and Canada, both stable democracies. Two important plastic-consuming sectors are automotive (Toledo Jeep, Lordstown GM and Marysville Honda) and aerospace (Cincinnati GE, Milacron and Cleveland Transdigm, NASA). There are many other such sectors in Ohio like food processing, cosmetics and pharmaceutical/medical devices . . . So plastic manufacturing is bound to play a prominent role in Ohio's future economy.

Anything else you'd like to share?

Antero Resources, operating mainly in Ohio, is the largest producer of natural-gas liquids (NGLs or ethane, propane, normal and iso-butane, pentanes and natural gasoline) in the U.S. followed by Range Resources and EQT (which itself is the largest producer of natural gas in America). Exploration and development of Ohio's NGL resources is continuing. Every year, our NGL production expands. I closely monitor NGL production around the world (Qatar, Iran, Kuwait, Canada, Australia, Russia,

Papua New Guinea, Saudi Arabia, mainly). In most countries, the percentage of NGLs produced from wells is no more than 6%. Ohio's wells typically produce around 15% NGLs. Just two months ago, Pin Oak Energy Partners of Akron began producing wells with an NGL output of from 25% to 47%. That is phenomenal. It suggests that further exploration and development in Ohio will be most promising.