

Alternatives Abound

Technology, Fuel Sources Open Possibilities

Sometimes technology moves ahead, leaving many of us to play catch up. In the case of alternative fuels, this couldn't be more accurate. Compressed and liquefied natural gas-powered fleet trucks, bi-fuel engines (starting on gasoline and switching over to natural gas), and electric and plug-in hybrid vehicles are now real solutions for rising fuel costs.

However, upgrades – particularly in infrastructure – are necessary before these fuels are viable options for every business and city, and potentially the public.

The Indiana Chamber of Commerce's *Indiana Vision 2025* long-range economic development plan points to a superior infrastructure as a major driver of economic growth and success. To remain competitive, Indiana needs to (among other things) create and implement a plan to become a net exporter of energy, diversify the energy mix, implement energy conservation strategies and develop new fiscal systems to support infrastructure projects and continued economic growth.

"Having superior infrastructure will continue to leverage our competitive edge with a great portion of the United States' marketplace," offers Cam Carter, Chamber vice president of economic development and federal affairs.

Cheaper, cleaner

Around the state: Cummins Westport is building compressed natural gas (CNG) engines. Honda Manufacturing

Monarch Beverage, Indiana's largest beer and wine distributor, is in the process of converting 85% of its fleet to compressed natural gas (CNG) and has built an on-site fueling station – a total investment of about \$20 million.



of Indiana in Greensburg is manufacturing Civic hybrid models. General Motors in Fort Wayne is producing Chevrolet Silverado HD and GMC Sierra bi-fuel pickup trucks.

Monarch Beverage in Indianapolis – the largest beer and wine distributor in the state – began converting 85% of its fleet to CNG last year. It partnered with Cummins, Citizens Energy and Proliance Energy on the project.

Vice President of Operations Fred Dufour listed several reasons for the company's switch.

"It's cleaner burning; there is a lot less particulate matter and general emissions waste. It's domestic; it's cheaper," he notes. "There is a difference in fuel prices: diesel is \$3.85 a gallon; natural gas is \$1 a gallon.

"When we first started looking at it, our annual spend on importing fuel (as a nation) was \$460 billion a year. We took the approach that if we could off-set our portion of that as close as we can – if everybody does that – it would make a big impact," he recalls.

"All the data lined up that between 2015 and 2018, we were at a high risk of our diesel and gasoline prices being \$5 to \$7 a gallon."

He says the company looked at every option available, but that CNG kept "staring him in the eye" as the direction in which to invest.

Monarch tested out three trucks with Cummins Westport's CNG engines and quickly made up the incremental costs on all three tractors. Dufour shares that between equipment costs and the price of building an on-site CNG fueling station, Monarch will end up investing about \$20 million in the changeover, and company officials anticipate a two-and-a-half-year payback.

Clayton-based Ray's Trash Services has also introduced three CNG-powered trucks.

"We're responding to our customer base and are interested in being greener, having better fuel efficiency and savings, and being a good steward," says Calvin Davidson, Ray's trash project manager. "It's the right thing to do."

Davidson notes that the company doesn't have "the luxury of swapping out the equipment" altogether, but plans to change more trucks in the future as older models are decommissioned.

'No silver bullet'

While Monarch has built its own fueling station on-site, Ray's Trash purchases fuel from a private source.



Calvin Davidson of Ray's Trash Services mentions "being greener, fuel efficiency, and being a good steward" as reasons for the Clayton-based company to launch three CNG-fueled trucks.

"Ease of access and convenience is key to any decision like this – having fuel accessible would be important in any decision of this magnitude. We've looked into our own fueling stations; it's quite expensive," Davidson adds.

Kellie Walsh, executive director of the Greater Indiana Clean Cities Coalition, says her organization helps businesses around the state find what works for them in the effort to build up that infrastructure.

"We say there is no silver bullet, but there are many silver BBs," she asserts. "All these fuels and technology have their proper niches and it makes sense in the right operation. ... That's what the Clean Cities program is for, to help find the right fit for the fleet, help them find other fleet partners."

Walsh explains, however, that strategic planning of the infrastructure is necessary as it's unlikely for alternative fuel stations to be as common as gas stations.

"You don't look at them the same as a retail fuel station. They're not going to be on every corner," she acknowledges. "Having them more strategically placed and making sure you have two or three in a city and corridor access is key."

In March, the coalition celebrated the opening of a CNG corridor along Interstate 65 with renewable compressed natural gas stations in Fair Oaks and Sellersburg. The corridor will eventually stretch from Chicago to Orlando and will allow more than 90 million gallons of milk (Fair Oaks is home to 30,000 cows producing 280,000 gallons of milk each day) to be transported with a CNG truck fleet.

Indy making headlines

Reducing costs and protecting the environment serve as the impetus for some that make the switch to alternative fuels. Others – like Indianapolis Mayor Greg Ballard – have a different motivation: national security.

Ballard signed an executive order in December that will require all new or leased vehicles to be electric or plug-in hybrids for the city's non-police fleet (automakers are continuing to work on the technology for police cruisers to have the power needed in alternative fuel engines). Ballard has outlined steps to have the entire fleet (including those police cruisers) move to electric or plug-in hybrid by 2025, something no one else has done.

"We're so dependent on foreign oil for our quality of life; that leads to a lot of compromised strategic decision-making. It leads to wars. It leads to spending \$85 billion annually to protect the oil infrastructure around the world, let alone the wars that have been going on since 1991," Ballard contends.

Ballard was a Marine officer in the Gulf War and saw firsthand how foreign oil interests compete with national security.

"The supply of oil is not a free market; it's controlled by people who don't have our best interests at heart and want to do us harm. That's the point of all this," he affirms.

Technology has stepped up to provide quality vehicles that could lead to a solution. But everyone – including other countries – needs to step up and take this on as well, Ballard adds.

"Energy independence is the wrong term, I think energy choice is the right term ... this has to be bigger picture," he exclaims. "I'm just getting tired of the government spending this money. I'm tired of troops going overseas, separating from their families, getting killed, in defense of this dependence on foreign oil. If you have to do it (rely on foreign oil), that's one thing, but we don't have to do it anymore and it's time to move off of it."

Playing catch-up

As with any emerging technology, policy to support

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Indianapolis Mayor Greg Ballard, who fought as a Marine in the Gulf War and saw the impact that foreign oil interests have on the country's national security, has a first-of-its-kind proposal in switching the entire city fleet of vehicles to alternative fuels.

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the advances is often behind the times.

The federal Highway Trust Fund is the main source of revenue for the government's surface transportation programs and its biggest revenue source is the federal gas tax. As vehicles become more fuel efficient – and heavy-duty fleets are switching to alternative fuels – less money is being collected from the federal fuel tax (the amount, 18.4 cents per gallon, has not been adjusted in 20 years) for transportation infrastructure improvements.

“The future is now. We've kicked the can down the road without making hard decisions. Technology innovation has outpaced the policy response to it and its possibilities. We need to be anticipatory as to what the future will look like,” Carter demands.

Locally, House Bill 1324, authored by Rep. Randy Frye (R-Greensburg), was introduced to offer incentives for purchasing heavy-duty natural gas vehicles that exceed 33,000 pounds. The legislation (it was amended and its ultimate fate was determined following our publication deadline) would also collect state gross retail taxes on natural gas, propane and butane fuels for transportation.

Dufour says Monarch is behind equitable tax

collection, even though passage of the bill would cost the company more money.

“We are completely on board with the agreement the state needs tax revenue. We think it should be equivalent to diesel,” he explains.

Carter agrees, “In the framework of the *Indiana Vision 2025* plan, we want to get as close as possible to a user-fee model. The principle is, if you use road infrastructure, you pay for it.”

INFORMATION LINK

Resources: Cam Carter, Indiana Chamber of Commerce, at www.indianachamber.com

Kellie Walsh, Greater Indiana Clean Cities Coalition, at www.greaterindiana.org

Mayor Greg Ballard, city of Indianapolis, at www.indy.gov

Fred Dufour, Monarch Beverage, at www.monarch-beverage.com

Calvin Davidson, Ray's Trash Services, at www.raystrash.com

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