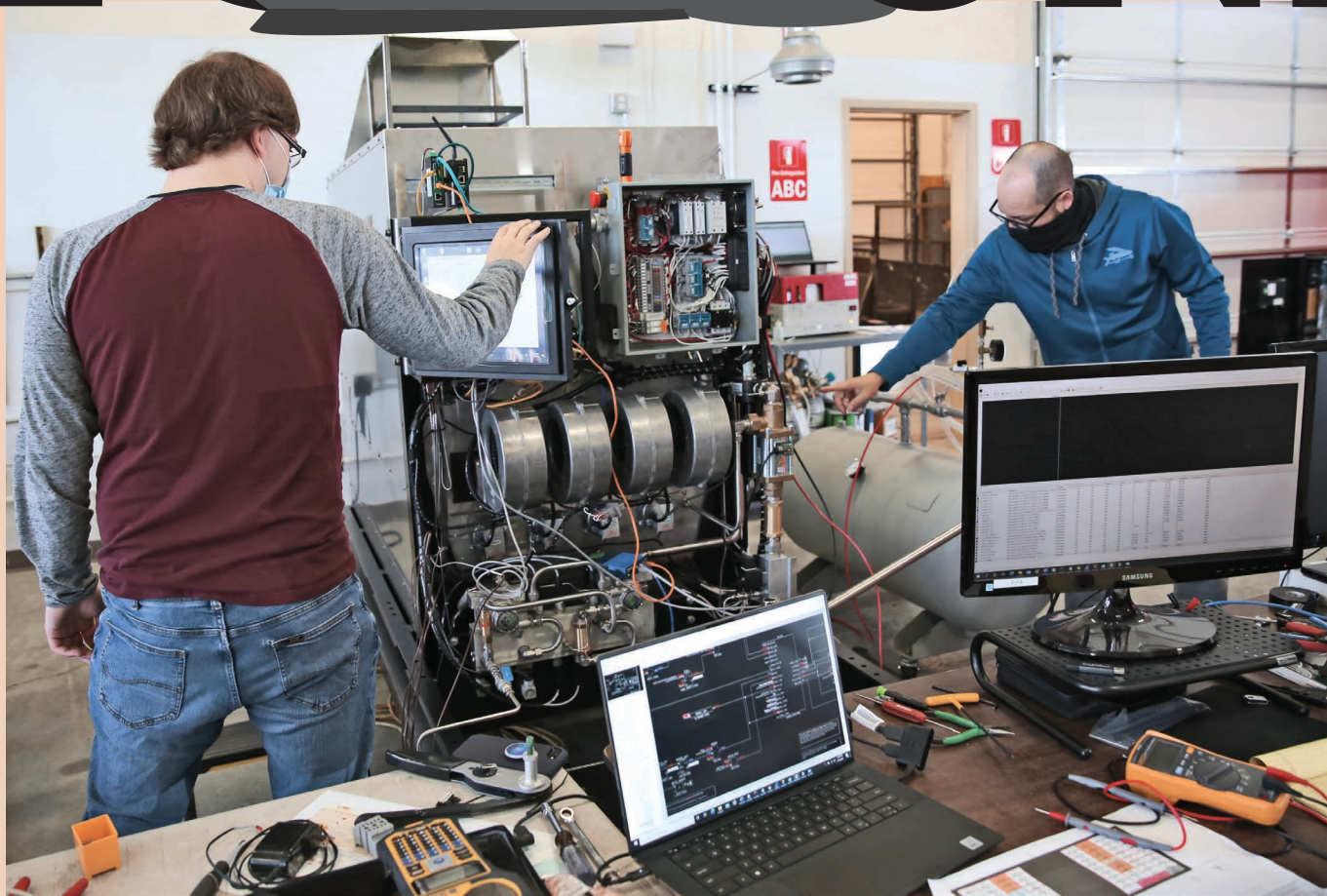


Bend company aims to power the

BIG ONES



From left, Morgan Edlund, a University of Oregon student, and Josh Tibbits, an Oregon state University-Cascades graduate, work on a M13 Methanol to Hydrogen Generator Monday.

Hydrogen fuel cell technology from Element 1 is ready to hit the market

BY SUZANNE ROIG • The Bulletin

Element 1 founders Robert Schluter and Dave Edlund know a lot about hydrogen gas — and the Bend entrepreneurs are about to share that with the world.

After more than a decade, the pair are ready to market their hydrogen fuel cell technology, which can power ships, trains and stationary applications like cellular networks, data centers and hospitals that rely upon a steady supply of power. The technology uses methanol to create hydrogen through a process that avoids the need for large tanks to store hydrogen, which is a clean source of energy.

“It’s really cool,” said Schluter. “The fuel cell produces electricity by using hydrogen. It’s cost-effective and only produces electricity, so it’s very clean.”

And it’s much lower in cost because the fuel cell generator

technology can produce a kilowatt of hydrogen for \$3 to \$4, whereas a kilowatt of hydrogen can go for as much as \$16.

Element 1 was founded in 2010 and has now turned into a firm employing about 18 people developing and selling advanced hydrogen generation technology from its Bend headquarters on Plateau Drive and tapping into young talent at Oregon State University-Cascades. It’s exactly the kind of company that spurs economic diversity in the Central Oregon economy, said Roger Lee, Economic Development for Central Oregon CEO.

“That’s what is promising about Element 1,” Lee said. “It’s the talent. It’s easy for us to



Dean Guernsey/Bulletin photos

Dave Edlund, from left, and Robert Schluter, founders of Element 1, display a golf cart powered by methanol and water feedstock.

say ‘look at this company, they know the industry and they’re on to something.’ It’s a natural for economic development for us.”

In March the company signed a letter of intent with Ardmore Shipping Corp. and Maritime Partners LLC to deliver the company’s technology that turns

methanol-to-hydrogen technology to the marine sector.

The company’s hydrogen purification technology converts methanol and water liquid feedstock — very dense in hydrogen molecules — into pure fuel-cell grade hydrogen by using heat, pressure and catalysts.

See **Element 1** / C3

New to trading stock? Longtime investor offers some tips

On Jan. 28 of this year, the stock of a waning video game retail company called GameStop briefly traded at \$483 per share. Two weeks earlier, the stock was trading at just \$20 per share.

Insane, right?

That may be, but wildly fluctuating stock prices, and the traders that cause them to do so, are not new to the stock market. Nor are the dreams of large paydays on the back of stocks that provide riches overnight.

FACTS ON FINANCE

By William Valentine



Given the rising popularity of stock trading, thanks to GameStop and the likes, it seems now is a good time for me to pass on some tips to aspirant traders. While my career has been that of an investor, not a trader, I have picked up some concepts that should help you with your trading.

Tip No. 1: Never trade during amateur hour

It’s a well-understood fact among my professional peers that the market activity that takes place during the first 60 to 90 minutes of the day is mostly that of novice traders, buying and selling at a frenetic pace. We call this “amateur hour.” These early risers are seemingly trying to get ahead of the rest of the marketplace as volume picks up throughout the day.

However, if you watch how

a stock trades during the day, you’ll notice that whatever happens in the first hour and a half is often erased over the course of the trading day. In fact, there are studies that show that whether buying or selling, you’ll get better pricing if you wait until amateur hour is over. Exactly how and why amateur hour exists, and why it produces the effect it does, is a mystery to me. But I don’t have to understand the dynamics of amateur hour to appreciate the wisdom of avoiding it.

Tip No. 2: Set a sell target

Whether you’re buying a stock for a short-term gain (the objective of the trader) or a longer-term gain (the objective of an investor), one of the most important things you must do to enhance the probability of maximizing your investment return is to set a sell “target.” A sell target is a price, or set of prices, that if triggered, will cause you to sell the stock. It’s often said that the hardest part of trading and investing is not deciding which stock to buy,

but rather, which point to sell them.

Let’s say you buy a stock at \$50 per share. You might set one target to get you out if things go well at, say, \$75. You might set another target if things work against you, at, say \$35. The reason these targets are important is that they take emotion out of the trade. Too often, when a stock you buy at \$50 gets to \$75, you start to convince yourself it’s on its way to \$100.

See **Stock** / C2