

# How NASDAQ listed Zentek is a 'wow' company with enormous potential to tap into several multi-billion dollar industries.

Every once in a while investors will come across a 'wow' company. This is a company that just wows you with their performance and their stock price.

For me the 'wow' company of the last year is Zentek Ltd. (NASDAQ: ZTEK | TSXV: ZEN). Just take a look at the stock chart below, showing the stock rising a staggering 9.7x over the past approximately year and a half. The good news for investors is that the recent pullback allows for a better entry price than when the stock peaked at C\$6.50.

Zentek Ltd (TSXV: ZEN) 5 year stock price chart



Source: Yahoo Finance

Today I give a brief summary of Zentek for new investors and an update on their progress in 2022.

### **Zentek's business summary**

Zentek describe themselves as “an IP development and commercialization company focused on next-gen healthcare solutions in the areas of prevention, detection and treatment.” I prefer to think of them as a nanotechnology and graphene company (they were formerly known as ZEN Graphene Solutions) that has expanded into multiple areas of commercialization; particularly into the healthcare sector with a product for prevention, detection and treatment of numerous pathogens.

Areas/products of commercialization for Zentek include:

- **ZenGUARD™** – A patent-pending ‘graphene-silver coating’ shown to have 99% antimicrobial activity, including against COVID-19. The coating can be used for PPE applications (including nitrile gloves, gowns, footwear coverings and surgical caps) and also in air purifiers. According to Zentek: “ZenGUARD™-coated masks removed 98.9% more bacteria and 97.8% more virus compared to a typical ASTM Level 3, 3-ply uncoated, resulting in over 99.99% BFE and VFE ratings.” ZenGUARD™ has Health Canada approval (Medical Device Establishment License, “MDEL”) and production facilities are being readied for first orders. Zentek is commercializing ZENGuard™ with mask manufacturer Trebor Rx, but can also work with other manufacturers.
- **Pathogen Detection Technology** (aptamer-enabled) – A low cost, rapid, saliva testing, scalable technology to detect numerous pathogens, initially to be used for COVID-19 testing.
- **Antimicrobial therapies** – In-vitro testing shows 99.9%

effectiveness against bacteria, fungi and viruses.

- **Air conditioner filter coating** – Zentek has experimented with past partners to use graphene oxide coated filters to help remove moisture from the air and make air conditioners up to 75% more energy efficient.
- **Icephobic graphene coatings** – Potential to significantly increase safety for vehicles such as drones, aircraft, ocean vessels, wind turbines, and other applications where, in cold weather climates, there is the potential for ice to accrete on surfaces. An ‘icephobic’ surface repels ice build up.
- **Others** – Graphene tires, graphene in concrete, fuel additives (potential to reduce GHG emissions from diesel and bio-diesel fuels by as much as 10%), and graphene for batteries.

## **Zentek’s latest news and progress in 2022**

Zentek announced on February 18, 2022 the development of graphene-wrapped silicon anodes. Zentek CEO Greg Fenton stated: “Not only were the researchers able to demonstrate good performance with laboratory-scale half-cells, the performance was also validated with commercial lithium iron phosphate cathodes suggesting they could be a drop-in solution for enhancing already available battery technologies. We look forward to continuing our support of their research and development to potentially bring this technology to market. The company has begun discussions with a potential industry partner.”

As reported on February 28, 2022, Zentek’s Guelph production facility is now fully licensed and permitted for ZenGUARD™ production and substantially all equipment has been received to ramp-up industrial scale capacity. First orders have been received and the ZenGUARD™ international patent is due shortly. As reported on January 13, Zentek has entered into a binding letter of intent with GMAF Circular Medico ApS to produce and sell ZENGuard™-enhanced GMAF trademarked

recyclable surgical masks.

With regards to the Pathogen Detection Technology, Zentek continues to work to bring the product to market as soon as practicable, which will require having a working prototype prepared, having conducted baseline studies, and having made applications to regulatory bodies.

With regards to Zentek's icephobic coatings, they are currently undergoing full flight trials on a specially equipped research aircraft under real world ice-forming weather conditions.

## **Zentek's new manufacturing facility in Guelph, Ontario, Canada is set for commissioning shortly**

### **Manufacturing Centre**

1123 York Rd,  
Guelph, Ontario, N1E 6Z1

Zentek's Manufacturing Centre is 25,680 square feet of a newly built industrial zoning space in Guelph, Ontario. Zentek has successful ramp up from bench scale production to pilot scale capacity, which currently exceeds the amount required to coat 30 million masks per month. The engineering work on Zentek's industrial plant, which has an estimated capacity to coat the equivalent of 800 million masks per month, is completed and is now in the procurement stage. Zentek expects the build out, and commissioning of the plant will be completed during Q1, 2022. This facility will give us the scale we need for our current obligations and for the demand we expect to have in the future.



Source: Zentek website

### **Closing remarks**

Zentek really is a 'wow' company with enormous potential to tap into several multi-billion dollar industries. Focusing on pathogens (viruses, bacteria, fungi) prevention, detection, and treatment is simply staggering. Then there are multiple other applications for Zentek's products, the most recent being graphene-wrapped silicon anodes that can potentially be used to create better EV batteries and the icephobic coatings

opportunity.

In terms of commercialization, Zentek is already advancing with ZenGUARD™ in terms of a production facility and orders, with the ZenGUARD™ patent due very soon and production from Zentek's new Guelph facility set to begin very soon.

Finally, Zentek is now getting the exposure it deserves with a NASDAQ listing that began on March 22, 2022, under the ticker "ZTEK". Not surprisingly the stock rose 25.93% on March 23.

Zentek has C\$32 million in cash, no debt, and looks like being a 'wow' company again in 2022. Stay tuned.

*Disclosure: The author is long Zentek (TSXV: ZEN).*