Share price rises 369% in the last year, ZEN Graphene announces a diesel fuel additive that improves the performance of diesel fuel

written by InvestorNews | June 3, 2021

The wonder material graphene has a rapidly growing array of end uses ranging from strengthening composite materials to the graphene battery. It is even used in face masks and protective clothing with additives to help protect against COVID-19. But did you know that graphene can be used as a fuel additive to enhance the performance of diesel fuel.

ZEN Graphene Solutions Ltd. (TSXV: ZEN) ("ZEN") recently announced that "it has developed a stable diesel fuel additive which **increased the performance of diesel fuel by up to 10%** in initial testing."

The implications for this are enormous. Diesel car sales in Europe last year made up 28% of new car sales. If ZEN's graphene-based additive can improve fuel performance/economy then it means less diesel is used, which is better for reducing diesel emissions.

ZEN is still in the early stages with testing and additional research is currently underway with university partners. This means investors will need some patience on this opportunity. On the plus side the graphene-based additive can be easily added to diesel, biodiesel, and syndiesel. ZEN also sees significant potential opportunity in gasoline and aviation fuels. Now that

would also be another huge potential market given there is around 1.42 billion cars on the planet, forecast to rise to 2 billion by 2035.

ZEN CEO, Greg Fenton, stated:

"Energy and fuel are crucial to global economic prosperity, but also represent our biggest challenge from an environmental standpoint. With global market estimates for diesel fuel alone near $1 trillion, the size of the challenge to reduce emissions from this level of demand is massive, but so is the opportunity for novel solutions to help us be more efficient in our usage."

More about ZEN Graphene Solutions ("ZEN")

ZEN is currently focused on three primary areas of commercialization with a significant R&D pipeline and substantial upside potential:

1. Health – ZENGuard™ and ZEN's antimicrobial compound as a therapeutic and healthcare product.
2. Advanced Materials
3. Clean Technology

Graphene commercialization opportunities being pursued by ZEN Graphene Solutions

Source: ZEN company presentation

ZEN is commercializing their graphene technology in several ways including:

- A graphene biocidal coating ('ZENGuard™') used in face masks, surgical gloves, personal protective equipment (PPE), and air filtration systems. ZEN is already

partnering with Trebor on a 100M mask agreement. ZEN has previously discussed plans to be producing their biocidal coating for 800 million masks a month by November 2021. This may be delayed due to Health Canada (HC) requiring further information into the safety of graphene. ZEN says it will "work collaboratively with HC to further reinforce and validate its safety profile. We expect the current review to be concluded in an expedited manner." It should also be noted that the final results received from Nucro-Technics on skin irritation and sensitivity confirmed ZENGuard™ did not lead to any irritation or sensitivity.

- A graphene compound used to fight against viruses (98% effective against COVID-19), bacteria, and fungal infections. Also used against antimicrobial-resistant bacteria.
- ZEN's graphene can reduce air conditioning energy requirement by 75% by removing moisture from the air, the air conditioning unit uses less energy and requires less maintenance.

Regarding the latest news on ZENGuard™, ZEN CEO, Greg Fenton, stated:

"ZEN and Trebor have submitted the additional information requested by Health Canada and are fully committed to working diligently and collaboratively to ensure ZENGuard™ enhanced personal protective equipment (PPE) can make its way to those who need it most as quickly as possible."

And regarding production of ZENGuard™ the Company stated: "ZEN remains committed to previously disclosed timeline and capacity estimates; Senior Chemical Engineer hired as Plant Manager overseeing capacity ramp-up and ongoing ZENGuard™ production."

Closing remarks

ZEN has so many opportunities going for it that it can be hard to keep up. The recently completed non-brokered private placement means ZEN's current liquidity is approximately C$5.3 million, which will be needed to ramp up production of graphene to meet just some of these exciting applications.

ZEN Graphene Solutions trades on a market cap of C$234 million and is having a banner year with the stock price up 369% over the past 12 months. Given this track record and the huge markets ZEN is targeting I would not bet against ZEN in 2021.

Disclosure: The author is long ZEN Graphene Solutions Ltd. (TSXV: ZEN).