

dynaCERT expands into the FreightTech industry with new software offering

Decision to enter the FreightTech industry seen as an “evolution of services that fit very naturally with dynaCERT”

dynaCERT Inc. (TSX: DYA | OTCQX: DYFSF | FRA: DMJ) is best known for their Carbon Emission Reduction Technology (CERT) for use with diesel engines. Their flagship product is HydraGEN™, an electrolysis unit that produces H₂ and O₂ gases to optimize the diesel fuel burn, resulting in a 6-19% increase in fuel economy and a 50%+ reduction in emissions.

With most fleet and logistics companies now using software to monitor their fleet’s activities and performance, dynaCERT has added a new service option called HydraLytics™ to its proprietary suite of FreightTech software applications. The company sees this as a supplementary evolution of services that fit very naturally with *dynaCERT*’s fuel-saving and emission-saving know-how. HydraLytics™ not only monitors the standard variables but offers much more, especially in relation to fuel economy, driver performance, and greenhouse gas emissions monitoring. The new FreightTech solution reports the data in a simple and understandable mobile application, and provides recommendations for important fleet optimization such as fleet management, route planning, driver safety, and load management.

HydraLytics™ Telematics system is a win-win for both fleet operators and dynaCERT

dynaCERT’s HydraLytics™ measures fuel savings in real time. While it is designed to work with dynaCERT’s HydraGEN™, it will be available to all potential customers and not restricted to just HydraGEN™ users. In an announcement this

week dynaCERT explains how, in combination with dynaCERT's software developer Corsario Ltd. and its marketing arm GP LogiX Inc., it plans to greatly expand the scope of applications to respond to the growing industry needs of logistics companies, and the broader trucking management software ecosystem.

The new addition of HydraLytics™ is a big plus for fleet operators. It means they can better monitor more variables, especially those in relation to fuel efficiency and emissions. It is also a big win for dynaCERT, as HydraLytics™ users can see for themselves the value proposition of dynaCERT's products such as HydraGEN™. It also means a subscription service revenue stream for dynaCERT.

HydraLytics™

For End-User Verification

- With dynaCERT's HydraLytics™ Telematics system, end-users can view in "real time":
 - Visualize on their computers & phones:
 - Day-to day fuel savings
 - Reductions in Greenhouse Gas Emissions
 - Compare:
 - Fleet performance
 - Driver performance
- Not only is this convincing for all end-users, such as truck fleets, but it can be audited and does not rely on prior independent third-party validation
- HydraLytics™ proves to users the value proposition of DYA products



Source

Usually the biggest expense for fleet operators is fuel and labor. dynaCERT's HydraLytics™ allows operators to better monitor both fleet fuel efficiency and driver performance. Monitoring can be done live with real time data on either a PC or smartphone.

"The delivery of our solution is through a managed service,

where, not only is the raw data available to the user, but the software monitors industry-based Key Performance Indicators comparing real time data streams to industry averages and reporting areas of deficiency”, says dynaCERT. “Our FreightTech solution reports the data in an easy to use and easy to understand mobile application as well as providing recommendations on numerous matters such as fleet management, route planning, driver safety, and load management.”

Marketing of HydraLytica™ by GP LogiX Inc. is already gaining traction with a number of companies already utilizing the software platform. These include Day & Ross, Ottaway Motor Carriers, Drisco Carriers (based in the USA) and Stevens Brothers Trucking (based in the USA).

Several new deals for HydraGEN™

In the past two months dynaCERT has continued to successfully commercialize their HydraGEN™ technology. This includes:

- September 8, 2020 – A deal to equip diesel powered vehicles of the City of Woodstock (Ontario) with Carbon Emission Reduction Technology.
- August 31, 2020 – A JV with Alltrucks GmbH & Co. KG. Alltrucks intends to introduce and promote marketing, installation and servicing of dynaCERT’s HydraGEN™ product line to the established network of Alltrucks. Alltrucks offers a Pan-European workshop concept for maintaining and repairing commercial vehicles of all types and brands. Alltrucks has one of the largest workshop networks in Europe with 700 workshops in 12 countries.
- August 20, 2020 – dynaCERT receives purchase order to complement COVID-19 safety package for trucking industry.

dynaCERT also continues to commercialize their products with 25+ dealers globally, and is currently improving and expanding

their manufacturing facility to triple capacity.

dynaCERT's global business model



Global Business Model

\$60,000,000 of R&D and other expenditures over 16 years	Major Cap-Ex already expended
DYA sells assembled product	Product assembled by DYA in Toronto eventually Mexico, Germany, India
DYA's cost of production	50% of wholesale price
DYA profit margin	100%
Fast ROI price per unit (wholesale)	USD \$5,000
Low DYA overhead	
Global dealer network	Ensures local sales & service

Source

With about one billion diesel engines on the road, dynaCERT continues to evolve and grow new products that are both effective and in demand for the diesel trucking industry as it moves forward into a greener and more energy efficient future.

Demand for dynaCERT clean technology drives company forward

Cashed up, ramped up production line, and senior listed

Vehicle emissions are universally recognized as an environmental concern, especially diesel emissions which the WHO has linked with causing cancer. Governments all over the world are continually tightening their emission standards. In 2020 both Europe and China made significant moves to reduce vehicle emissions. Once company in particular has the potential to be winner from the huge trend to reduce diesel emissions.

dynaCERT Inc. (TSX: DYA | OTCQX: DYFSF) manufactures, distributes, and installs its Carbon Emission Reduction Technology (CERT) for use with diesel engines. Their flagship product is HydraGEN™, an electrolysis unit that produces H₂ and O₂ gases to optimize the diesel fuel burn, resulting in a 6-19% increase in fuel economy and a 50%+ reduction in emissions.

Founded in 2004, dynaCERT has spent the last 16 years developing their patented technology and has only recently begun to commercialize it on a large scale. dynaCERT's technology can be used in diesel engines in on-road vehicles, reefer trailers, off-road construction, power generation, mining and forestry equipment, marine vessels, heavy equipment, and railroad locomotives.

dynaCERT's HydraGEN™ unit installed on a semi to reduce emissions and boost efficiency



Source: Company investor presentation

dynaCERT recently completed an oversubscribed equity raising at C\$0.68 (included a half warrant per share raised, exercise price of \$1.00 for a period of 24 months). Demand was such that the raise was upsized to \$8,367,400. The funds will be used to finance raw materials and manufacturing and assembly costs to create and deliver finished goods as well as for working capital and general corporate purposes. Five major firms in the Canadian financial community participated in dynaCERT's over-subscribed, over-night-marketed, equity financing.

dynaCERT receives two stock market exchange upgrades in two months

dynaCERT now trades on a market cap of C\$218m. As a result of their success dynaCERT has recently been upgraded on not one,

but two exchanges. In July dynaCERT was upgraded from the TSX Venture Exchange (TSXV) to the main board TSX in Canada. This follows their June upgrade to the OTCQX from the OTCQB Venture Market in the USA.

Commenting on the US upgrade, the company said:

“The OTCQX Market is designed for established, investor-focused U.S. and international companies. To qualify for OTCQX, companies must meet high financial standards, follow best practice corporate governance, and demonstrate compliance with applicable securities laws. Graduating to the OTCQX Market from the OTCQB Market marks an important milestone for companies, enabling them to demonstrate their qualifications and build visibility among U.S. investors.”

Moving forward quickly: dynaCERT re-opens and upgrades their HydraGEN™ assembly plant on August 4, 2020

In a July 30, 2020 dynaCERT announced that their assembly line had been retrofitted with a new semi-automated assembly system, “to provide improved high standards instate-of-the-art technical specifications” able to maintain a capacity of 100 units per day or 2000 units per month with a single 8-hour shift per day. dynaCERT said that their new capacity “is expected to be capable of tripled production of **6,000 units per month** using three shifts per day.”

dynaCERT has the following global partners/dealers:

- MOSOLF is one of the largest truck servicing companies in Europe with installations & 23 showrooms throughout Europe. They have distribution channels in Germany, France, Netherlands, Belgium, Luxembourg, Poland, Czech Republic.
- Farhi Holdings – A distributor for Brazil & Israel.
- H2 Tek – Has a focus on mining with mining projects in: Canada, USA, Peru, Chile, Brazil, Paraguay, Uruguay, Argentina, Russia, Mongolia, and Australia.

- KarbonKleen was awarded the exclusive dealership rights in the trucking industry in the USA until December 31, 2024 (subject to certain quotas of a minimum of 150,000 HydraGEN Technology units over a little more than 3 years). On May 9, 2020, it was announced that KarbonKleen achieved a purchase order for 3,000 HydraGEN™ Technology units. KarbonKleen also has financing for a Mexico assembly with an MOU for 1,000,000 units.

dynaCERT's sales and revenue now have the ability to rise rapidly boosted by added cash reserves, their upgraded production facility, and a growing sales pipeline from their large and growing network of dealers. dynaCERT now has ~40 dealers around the world selling their products to small and large truck owners, fleets, and government organisations that use diesel engines. With a billion diesel engines in the world, dynaCERT's green emission technology is in big demand. Last week dynaCERT expressed that unlike many industries, they were well positioned for growth even in these challenging times:

"The Company has re-emerged from the global COVID-19 economic slowdown with a cleaner and stronger balance sheet, having more than adequate cash reserves, a very strong balance sheet with approximately \$18,000,000 in cash and virtually no significant debt, a better Assembly Plant, an improved R&D facility, significant Product improvements and a continued backlog of previously announced purchase orders. The Sales Department of the Company continues to maintain existing dealer relationships and has added new dealers where global marketing continues to be active."

Added to this was a note that the Company's products can now be offered to numerous markets in Dubai and other parts of the UAE and the Middle East.

Strong growth in dynaCERT's revenue

Breakdown	TTM	12/30/2019	12/30/2018	12/30/2017	12/30/2016
Total Revenue	1,374	1,065	91.62	246.08	0
Cost of Revenue	358.892	304.8	85.009	102.58	-
Gross Profit	1,015	759.827	6.611	143.5	-
> Operating Expenses	12,006	13,036	9,427	6,683	5,048
Operating Income or Loss	-10,991	-12,276	-9,421	-6,539	-5,048
Interest Expense	70.021	58.335	85.769	42.952	33.652
Total Other Income/Expenses Net	-329.774	-337.622	-1,907	-41.014	205.705
Income Before Tax	-11,345	-12,666	-11,413	-6,623	-4,876
Income from Continuing Operations	-11,345	-12,666	-11,413	-6,623	-4,876
Net Income	10,307	-12,666	-11,413	-6,623	-4,876
Net Income available to common s...	-11,345	-12,666	-11,413	-6,623	-4,876
Basic EPS	-	-0.04	-0.04	-0.03	-0.02

Source: Yahoo Finance

Closing remarks

dynaCERT is making all the right moves in leveraging the increasing demand to reduce diesel emissions and to improve fuel economy. The Company is rapidly growing their distribution networks and achieving impressive sales, increasing revenues, successfully raising over C\$8m in an oversubscribed/overnight equity raise, recently upgraded by two stock exchanges, and have upgraded their assembly plant to meet demand (full capacity is now a potential 6,000 units/month). Even legendary mining investor Eric Sprott is onboard and owns a 8.66% share of the Company.

The trend is becoming very clear that dynaCERT is on track to become a much larger company as the demand for their emissions reducing technology is enormous. As economies of scale kick in so should profits. For investors, dynaCERT is still looking reasonably priced assuming the forecast future revenues are achieved.

Cleantech: The Essential Investment



Those who are in the majority today, globally, of policy making believe that the climate is changing due to human activity

(anthropogenic causation) and they also at the same time believe that humanity cannot adapt to such changes (as it has, in fact, always done when no human agency was involved or contemplated in such

changes) are once again now listening to and sounding an alarm that ***if investment patterns in energy production do not change immediately then the earth's average annual temperature will rise by 2 degrees centigrade in the near term no matter what else we do in the future.***

A leading authority at Oxford University, Professor Cameron Hepburn, Professor of Environmental Economics based at INET Oxford and the Smith School in the UK, has just published a paper in which he makes two statements that need our attention:

1. "Investors putting money into new carbon-emitting

infrastructure need to ask hard questions about how long those assets will operate for, and assess the risk of future shut-downs and write-offs,” and

2. “For policy makers who think of climate change as a long-term future issue this should be a wake-up call. Whether we succeed or fail in containing warming to 2°C is determined by what we do now, not in future decades.”

If this carbon investment reduction alarm is taken seriously by the world’s political and financial elites, then there will need to be a permanent policy shift in governmental participation in energy investments with regard both to the types of investments and the quantity and length of time of the capitalization of pollution.

China is well underway in adapting its investment patterns to support the alarmist view of climate change, but I think that this is due more to the immediacy of China’s vast industrially caused pollution than any adherence to a global climate change emergency-orthodoxy. The result is the same though: The concentration of investment in China into low carbon energy production and storage.

I am discussing today how the climate change alarm is being acted upon in China and how it **MUST** be acted upon in the rest of the world if the projected worst case scenario is to be avoided. **This does not mean that I believe in climate change alarmism, but it does mean that I accept it as a powerful societal force that is driving policy making globally.**

I believe that the majority of the world’s leaders now believe that they must act and that they will have to adopt the Chinese low carbon investment model to do so.

This will require outside of China a regulation of capitalism such as never before been attempted other than in the failed models of fascism and Soviet Communism, both of which resulted in vastly increased pollution. But to be fair neither model

contemplated such an eventuality.

It has been announced in China that the General Secretary of the Chinese Communist Party, and therefore the Party, also, have adopted, with Chinese characteristics, the "Supply-side Economics'" policy, which was utilized 30 years ago by both Ronald Reagan and Margaret Thatcher to successfully revive the economies of the USA and the United Kingdom, and that he (President Xi) will utilize its precepts to reform Chinese State Owned Industry to eliminate both zombie companies living only on credit and those with long histories of overcapacity. This is the lead story in the English language version of the China Daily for Sunday, March 27, 2016.

Anyone who still conflates the contemporary version of Chinese Communism with the communism of Joseph Stalin or Mao Zedong is out of touch and wrong. The economic policies of the former Soviet Union, which measured success by total production of goods and services chosen by state bureaucrats rather than by sales or demand by the "market", were a complete failure, and today the grotesque misery from the continuation of those policies persists only in Cuba and North Korea.

Today's stubborn adherents to the American "Progressive" policy of ever increasing but, of course, always benign government intervention and regulation (i.e., control) continue to wear the blinkers of an almost religious fanaticism so that they can avoid admitting that their intellectual antecedents admired Soviet Communism. An unfortunate consequence of this arrogance is a total disregard for and avoidance of any aspects of industrial planning that have actually worked for the Chinese Communist Party and might well be emulated here in the USA to our advantage.

The taint of America's New Deal "industrial planning" (The National Recovery Administration) and of the discredited (as fascism) corporatist states (Germany, Italy, Spain) from the 1930s, followed by the long "cold war" against the Soviet

Union and its central planning,” and finally now by the installation of centrally planned (and so far successful) production and allocation of natural resources in China is seen as the enemy of free-market capitalism and has prevented the US Federal government from adopting a rational approach to domestic self-sufficiency in natural resources and a reduction in “carbon production”.

Resource production equilibrium, which I define as the production of necessary and sufficient resources to maintain and grow (at a reasonable rate) a diversified economy, is a moving target, and it requires that the essential investments to achieve and/or maintain it be speculative with regard to both the necessary volume and the time-frame in which that volume is required. These judgements as they are partially subjective are therefore to a large degree political as well as economic assessments. The accuracy of these types of assessments apparently creates enough of a risk to make such investments, although essential, uninteresting, perhaps even not feasible, to the private economy, which needs to know the time of return on investment.

No one today believes that capitalism and communism are exact opposite positions in the agenda to distribute a country's wealth fairly. But adherence to this black and white view of political economy has severely damaged the future potential of the American economy both to guaranty and to improve the quality of life of the average American, or to safeguard us from the perceived climate change catastrophe.

Politicians mostly select labels on an opportunistic basis, but even the most hardened of American partisans steers clear of any label indicating support for industrial central planning by government.

An Orwellian choice of descriptive terms is ingrained in the vocabulary of the American political class in order to avoid comparison, analysis, and even deconstruction of terms brought

into the vocabulary by a century of progressivism, socialism, and communism.

Thus the political definition of infrastructure has been purposefully and arbitrarily limited to manufactured objects and the distribution of the energy required to build and operate them. Therefore, politicians, since they have no other reference definition, simply cannot understand the details, much less the interconnectivity, of the basic resource infrastructure needed to maintain and construct the mechanical and energy infrastructures.

Just a tiny portion of the amount of money wasted and to be wasted on the politically correct action or projects such as high speed rail to nowhere in California would if properly deployed make America self-sufficient in critical natural resources permanently.

Yet no one in government speaks positively about funding, or national underwriting of, the construction of as environmentally sound as currently possible mines, mineral processing facilities, or cleaner fossil fuel sources. Anyone suggesting such a policy is denounced as a communist, fascist, or even more ludicrously as a "tool of Wall Street" or an advocate of "Big Government." The internal contradiction of such conflicting labels is simply ignored a la Orwell's Newspeak.

The Chinese Communist Party seems to have chosen to revive and continue FDR's new deal as a path to the improvement across the board of the quality of life of every Chinese. The Chinese government states that it has adapted Capitalism as a method of moving the nation first towards a Chinese socialism and then a Chinese Communism.

The USA needs to adopt the necessary aspects of industrial planning in order to reignite economic growth, and to adopt policies towards wealth creation that favor ONLY productive

investment. Financialization may well be the final stage of the evolution of classical capitalism that Karl Marx described and that Thomas Piketty is telling us is causing an unhealthy inequality.

The climate change alarmists say that if we don't act now our future "wealth" will be consumed in repairing the damage from climate change and thus growth will be inhibited or stopped by being starved of productive capital.

The climate change alarmists are now in the majority of policy making positions in most nations.

There has never been a better time to invest in Cleantech.

[Note from the Publisher: Jack Lifton will be participating as a panelist at the Cleantech & Technology Metals Summit – Invest in the Cleantech Revolution on May 10-11th in Toronto, ON. For more information, go to CTMS2016.com]