

dynaCERT is trying to help us all breathe a little easier

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For a long time, I've felt that hard core environmental "saviours" have been so myopic that we will never find success in reducing global carbon emissions. The reason I make this statement, which may upset some people, is that many are beating the drum of zero fossil fuels tomorrow and say it's the only path to success. I'm sorry folks, it's just not reality.

For starters, humans have this innate desire to survive. And for the bulk of humans living above 35° North Latitude (which includes a large % of Americans, all Canadians, virtually all of Europe and a decent chunk of Asia), that just isn't going to happen unless we all revert to burning wood to stay warm in winter. There just isn't enough renewable or low carbon options (like hydro and nuclear) to keep us alive. At least for the foreseeable future. That's why it frustrates me when interim solutions like converting all coal fired power to natural gas get shot down. It's a step in the right direction that almost everyone would accept as a means to the end.

Where am I going with this? EVs also aren't going to be providing 100% of our transportation needs anytime soon. It is going to take time to build out the infrastructure to manufacture all those replacement vehicles, as well as acquire all the resources that go into them. But what if there was a low-cost, easy to install solution for every single diesel engine on the planet that would reduce all greenhouse gas emissions, reduce particulate matter (the black smoke you see billowing out of the exhaust pipes) and also reduced fuel consumption. I personally believe that should almost be required

as a stop gap measure until we can build our next generation of transportation alternatives. And the best part is, the input is distilled water and the system runs off the vehicle's battery. Yes, we are still burning diesel fuel but you can feel less guilty about your same day Amazon delivery or the organic fruit you buy at the grocery store in the dead of winter.

The company that has come up with this ingenious solution is [dynaCERT Inc.](#) (TSX: DYA | OTCQX: DYFSF). dynaCERT manufactures and distributes carbon emission reduction technology with a patent-pending electrolysis system that creates hydrogen and oxygen on-demand and supplies these gases through the air intake to enhance combustion. The technology is designed for use with many types and sizes of diesel engines used in on-road vehicles, reefer trailers, off-road construction, power generation, mining, and forestry equipment.

And the best part is, it doesn't rely solely on carbon credits or other environmental regulations that may or may not be put into law to be a viable solution for all those tractor trailer operators out there. The addition of hydrogen and oxygen acts as a combustion enhancer, combusting the available diesel fuel more completely, faster and hotter. This results in a more complete burn in the power stroke meaning fuel is consumed more efficiently, provides more power, which in turn leads to less fuel being required to create the same amount of energy. In addition to increased torque and reduced fuel costs, by maximizing the burn, dynaCERT's [HydraGEN™](#) system helps engine oil last longer, which is a material maintenance cost for fleet operators. These factors alone should make this a very easy sell to potential customers.

However, we all know the world is doing everything it can to reduce greenhouse gas emissions. It's only a matter of time before actual, tangible improvements are going to be required or

regulated. And this is where the HydraGEN™ technology really shines (assuming the regulation doesn't immediately move to zero emissions). Validated through both on-road and accredited 3rd party testing, results include:

- Up to 88.7% reduction in NOx produced
- Up to 46.7% reduction in CO produced
- Up to 9.6% reduction in CO₂ produced
- Up to 57.1% reduction in THC produced (no, not that THC, primarily unburnt hydrocarbons)
- Up to 55.3% reduction in particulate matter (no black smoke)

THE BENEFITS OF HYDRAGEN™ TECHNOLOGY

Validated through both On-Road and accredited 3rd party testing by the PIT Group in Montreal, TÜV NORD in Germany, and performance testing, our HydraGEN™ Technology produced results of:

- 6% to 19.2% reduction in fuel consumption
- Up to 88.7% reduction in NOx produced
- Up to 46.7% reduction in CO produced
- Up to 9.6% reduction in CO₂ produced
- Up to 57.1% reduction in THC produced
- Up to 55.3% reduction in particulate matter (no black smoke)
- Increased engine power and torque
- Extended engine and oil life (lower maintenance costs)
- Reduction of Diesel Exhaust Fluid (DEF) usage by 30%
- Reduction of Diesel Particulate Filter (DPF) replacement period by 30%

Our HydraGEN™ Technology is designed for all types and sizes of diesel engines used in on-road vehicles, reefer trailers, off-road construction, mining and forestry equipment, power generation, marine vessels and railroad locomotives.

Through the use of our HydraGEN™ Technology, dynaCERT seeks to help the world Drive Change for a Better Future.

Up to
19.2%
reduction in fuel consumption

NOx BY **88.7%** CO BY **46.7%** THC BY **57.1%**
emissions reductions for greenhouse gases (NOx, CO, THC)

Up to
55.3%
reduction in particulate matter (no black smoke)



Source: dynaCERT Inc. [website](#)

The technology ticks a lot of boxes. It's hard to imagine why this wouldn't be on every diesel powered tractor trailer on the planet. Which might explain the [big news last week](#), where the

Company received an order for 3,000 units from an oil & gas logistics company in Guyana. Even more importantly, dynaCERT has received full payment for the initial 93 HydraGEN™ HG-2 Units for delivery commencing immediately. A few more announcements like this could really start getting investors to pay attention to dynaCERT.

dynaCERT Inc. trades at a market cap of C\$97 million.