**Brewing a greener beer could lead to big savings**

*A beer maker in Dartmouth has found a way to save money and help the environment by reducing use of a gas critical to the brewing process.*

By Jon Tattrie, Climate Story Network

Josh Herbin of Portland Street’s North Brewing, says carbon dioxide has no colour, taste, or smell, but he can go through 1,350 pounds of it every week during the summer.

“All that bubbling that’s happening here all the time, that’s CO₂ being generated from the yeast,” he says, pointing to a four-metre-tall steel tank with a cone-shaped bottom.

CO₂ carbonates fermented beer and flushes out the oxygen. It cleans new beer cans before pumping the beer into the cans. Carbon dioxide also pushes beer through taps at bars and restaurants.

“We might fill 60,000 cans a month on this thing and it’s purging each of those cans for six seconds with CO₂, which is a lot,” Herbin says.

About 70 per cent of the CO₂ he buys gets vented out of the tanks as waste. He knew that larger breweries captured that gas and reused it, and wondered if he could do the same.

He contacted Liam Cook of Navigate Energy, a new company designed to help small-business owners find grants and funding for green projects in Nova Scotia.

“We help simplify clean energy projects for the business community,” Cook says.

From his previous work in the environmental sector, Cook says he knew that businesses often grab the “low-hanging fruit” and make easy changes, like installing energy-efficient lighting, but struggle with more substantial changes that require major financial investments and multiple contractors.

“Once you’re looking at more than a single solution, it does start to become more of a project manager role that’s required,” Cook says. “We really saw that niche in the business community, ideally with the ones who are paying their own utility costs. With that hand-in-hand support, I help them find the solutions they need and help them secure the funding that’s going to make those solutions possible for them.”

Cook says the brewery’s biggest utility cost wasn’t oil, electricity, or water, but the CO₂ trucked to the business every week.

He connected North Brewing with the Halifax Climate Investment, Innovation and Impact Fund (HCi3) and helped secure a $25,000 grant. The brewery also got letters of support from other craft breweries, including Tatamagouche, Two Crows, and Propeller.

North Brewing used the funding to install a new system that captures the off-gassed CO₂.

“I don’t think it would be aggressive to say we could cut our CO₂ use in half,” Herbin says. He installed the new system in October and will monitor and share the results.

The system was made with off-the-shelf parts and can be scaled up — two key components of the grant.

“We want it to be an open-source thing. Once we do the research and make the report, other people can install something like this for themselves,” Herbin says.

Cook says businesses can often get funding for 60 to 80 per cent of the project cost and zero-percent financing for the rest. He finds the funding and the grants and helps business owners navigate the process with contractors.

Herbin says it’s a big improvement for his decade-old business. He’s looking at solar power for the next advance.

“Beer is an agricultural product: it’s grain, hops, yeast, and water. And right now, all the components of beer are being threatened by climate change,” he says. “If we get to the place where we can’t grow grain and hops, that’ll spell doom for the industry.”

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*The Climate Story Network is an initiative of Climate Focus, a non-profit organization dedicated to covering stories about community-driven climate solutions.*