

pulshn.io

“ElevateIP has been fundamental”

When an aircraft takes off, it burns a lot of fuel working to oppose gravity, and ultimately wastes a lot of resources to make a big exertion of energy possible. An Ottawa clean-tech company is developing a system that hybridizes this process by using aerodynamics and clean batteries, thereby reducing emissions.

“It reduces emissions between 15 and 30 per cent,” says *pulshn.io*’s Co-Founder and CEO Gem Venturino.

Pulshn.io creates meaningful, patented ideas and specializes in designing and building technical innovation for the real world. Its team of engineers, veterans and aerospace experts builds in next-generation hybrid systems —from thrust augmentation to UAVs (advanced hybrid unmanned aerial vehicles) —for the aerospace, marine and logistics sectors.

Why Choose the ElevateIP Program?

It was *pulshn.io*’s innovation that drove the company to seek the services of ElevateIP through Invest Ottawa (IO).

“ElevateIP has been fundamental and has provided business-critical grants to us,” Venturino explains.

“It was the first government agency to totally support our technology and business. We’ve had such a productive and collaborative relationship to further our technology and IP protection together. A lot of clean-tech aerospace happens in the United States, but we’re keen to stay in Canada and keep our IP Canadian [to help] enhance Canada’s role in the clean-technology ecosystem globally. Invest Ottawa has really propelled that and enabled us to move that forward.”

The ElevateIP program supported *pulshn.io* with its IP strategy — providing technical expertise, strategies for development and financial support. The company will continue to work with Invest Ottawa’s IP team as long as it’s permitted.

IP and Future Business Growth

Venturino says the program has set the company up for more successes.

“It will enable us to seek private investment because venture capitalists and private equity like to make sure their investments are protected,” she says.



Gem Venturino

Co-Founder and CEO of pulshn.io

The other factor is that aerospace and clean-tech industries are very competitive. They are dominated by major players, posing a challenge for smaller companies to break into the ecosystem, which is why IP protection is crucial. It can help companies such as *pulshn.io* to differentiate themselves when entering the market.

pulshn.io’s plan is to seek private investment in the second quarter of 2026, in its first seed round.

“We run a consultancy business that provides technical and business support to major OEMs [original equipment manufacturers] in North America and Europe so we bootstrap fund ourselves that way,” Venturino says. “We generate about \$500,000 a year and we’re supported by broader government funding as well.”

Venturino says it’s a major selling point for the company that IO supports it.

The company will also soon have an aerodynamic design for its zero-emissions UAV and, as a policy, *pulshn* hires and recruits female master’s and PhD students because Venturino feels it’s important to enable women to work in the field.

“We have a majority female PhD and master’s engineering team,” she says.

Invest Ottawa is a recipient of Federal Government funding under ISSED’s ElevateIP program.