NEXE Innovations

When Vancouver-based NEXE Innovations needed to scale up its compostable coffee pod production, the company sought a location close to large markets with deep manufacturing expertise, an experienced workforce, and a supportive local government. NEXE Innovations found all of this and more in Windsor, where it opened its new vertically integrated production facility in 2022.

Headquarters	6845 Hawthorne Dr, Windsor, ON, N8T 3B8
Year Established	2015
NAICS	311920 - Coffee and tea manufacturing
Employees	50
Major Expansions	2022
Exports	-
Parent Company	-
Other Locations	British Columbia

When Vancouver-based NEXE Innovations needed to scale up its compostable coffee pod production, the company sought a location close to large markets with deep manufacturing expertise, an experienced workforce, and a supportive local government. NEXE Innovations found all of this and more in Windsor, where it opened its new vertically integrated production facility in 2022.

NEXE Innovations is, at its core, a fully compostable materials manufacturer. Founded in 2015, the company leveraged 3D printing technologies and research partnerships to develop a single-serve coffee pod which can fully compost in a little over a month. The proprietary fully compostable pod is designed to replace single-serve plastic pods, tens of billions of which end up in landfills every year. In order to meet the growing demand for high-quality coffee in single-serve pods even as governments mandate the elimination of single-use plastic products, NEXE is set to scale up production of its fully compostable single-serve coffee pods at its Windsor plant over the next two years.

> Windsor and southwestern Ontario offer manufacturing expertise and talent–especially in automation and injection molding.

While NEXE's roots and core innovations originate in British Columbia, the company chose Ontario, and

specifically Windsor, as the location for its flagship manufacturing facility. As President and co-founder Ash Guglani notes, Windsor and southwestern Ontario offer manufacturing expertise and talent–especially in automation and injection molding–both of which are less abundant in British Columbia.

The proximity to large markets in Canada and the United States also factored into NEXE's decision to locate in Windsor, where the company acquired a recently-vacated former automotive powertrain component manufacturing facility once operated by Federal-Mogul. Guglani lauded the support that NEXE received from Invest WindsorEssex related to site selection and the often daunting list of tasks associated with bringing its compostable materials manufacturing facility to life.

Coffee pods were conceived of by Nestle and brought to market in Europe in the mid-1980s. Originally marketed as a luxury good, the popularity of coffee pods grew in Europe, and later Japan, throughout the 1990s. However, in North America, which at the time was experiencing a boom in specialty coffee and 'coffeehouse' culture, the market for coffee pods remained negligible.

> NEXE's core innovation–and primary source of competitive advantage–is the compostable plant-based resin it uses to make coffee pods.

The demand for coffee pods grew substantially in North America in the past decade. As Nestle's original patents began to expire, such U.S.-based companies as Sara Lee and Green Mountain Coffee Roasters (a predecessor of Keurig-Dr. Pepper) aggressively entered the market. Since then, coffee pods and their namesake (e.g. Keurig, Nespresso) machines have become a staple in kitchens and offices across the continent.

Coffee pods offer convenience and choice with fewer grounds, but also brought with them environmental challenges related to disposal. Witnessing these challenges, manifested as trash cans full of used pods, inspired NEXE's co-founders to leave their existing careers to develop and commercialize the company's patented fully compostable materials. Darren Footz, NEXE's Chief Executive Officer, is a serial entrepreneur and the innovative mind behind the company's fully compostable material technologies. Footz learned the coffee business during his time as president of a local Vancouver coffee brand, which he helped grow from a local artisanal roaster to a national brand in the five years prior to founding NEXE. Guglani, who spent more than a decade working in capital markets with a national investment bank in Vancouver, is NEXE's President. He serves as the company's finance, marketing, and operations lead, and these days is focusing intently on establishing NEXE's new Hawthorne Drive facility.

> The company's Windsor facility will integrate all aspects of the production of pods, coffee, packaging, and labelling under one roof. This is unique among its competitors.

NEXE's core innovation–and primary source of competitive advantage–is the compostable plant-based resin it uses to make coffee pods. Yet as NEXE grew and evolved, it began to develop other competitive

advantages as the company addressed challenges associated with single-serve coffee pods. One of these challenges focused on product quality–specifically taste and flavour. Where single-serve coffee pods were originally marketed in Europe as a luxury good, they had become commodified to a great degree in North America. The other challenge is related to supply chains. Such challenges were prevalent across Canada's manufacturing sector throughout the pandemic.

The solutions to these two challenges for NEXE involve vertical integration. The company's Windsor facility will integrate all aspects of the production of pods, coffee, packaging, and labelling under one roof. This is unique among its competitors, which are more likely to outsource different elements of production, sometimes relying on suppliers as far as China for key materials and components. The end result is that NEXE is better able to monitor product quality (which is especially important for its artisanal private label customers), the environmental footprint associated with production is reduced, and the company maintains greater control over its intellectual property.

NEXE is looking forward to learning more about the potential for collaborations with Ontario-based ecosystem partners related to manufacturing and clean technology as it scales up operations in Windsor.

NEXE's intellectual property underlies the company's business model and is a testament to its ongoing commitment to R&D. Some of this R&D took place in collaboration with the University of British Columbia, and during the development phase, NEXE was able to test the compostable material at the Surrey Biofuel Facility, the first closed-loop organic waste facility in North America. Other elements were supported by funding from the federally-funded Innovative Solutions Canada and from InnovateBC. This has led to more than 20 patent applications and recently, NEXE was granted a patent on how the filter is constructed within the pod. This is a distinct competitive advantage as NEXE's single-serve fully compostable pods can hold 2-3 grams more coffee grounds compared to other single-serve options, which allows the company to provide higher quality and bolder-tasting coffee. NEXE is looking forward to learning more about the potential for collaborations with Ontario-based ecosystem partners related to manufacturing and clean technology as it scales up operations in Windsor.

Initial construction, hiring, and production of NEXE-branded products began early in 2023. Further renovations, machinery installations, and workforce development will occur throughout the year, which is expected to be a pivotal point in the company's future. NEXE is especially optimistic about the role that local talent will play in supporting the company's growth, and values employees who are self-driven, committed, and obsessed with product and process innovation. In exchange for that commitment and innovation, NEXE's goal is to establish a company culture where employees want to come to work, and that purposefully and productively integrates technology and people.

When operating at scale, which may come as early as 2024, NEXE will employ up to 50 people and have the capacity to produce approximately 500 million fully compostable equivalent coffee pods annually. The company looks forward to exploring business opportunities with Ontario's growing network of artisanal and craft coffee roasters and contributing to the Government of Canada's mandate to reduce single-use plastics by 2030.