

NEWS

PlantSwitch makes the move to Sanford, bringing jobs and compostable plastics

PLANTSWITCH

PLASTICS

STARTUP SPOTLIGHT

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PlantSwitch compost comparisons

by Jen McFarland — October 16, 2023

Editor's note: *Startup Spotlight* is a regular part of TechWire's *Startup Monday* lineup.

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SANFORD — Dillon Baxter moved to Sanford in July of this year. For many, the heat of summer would be an uncomfortable welcome. Fortunately, Baxter is from Texas.



PlantSwitch co-founders Dillon Baxter and Max Blandin

"No, this is awesome," he said of the NC summer temperatures. "Much better."

That's good news since Baxter, CEO and co-founder of [PlantSwitch](#), is moving his company to the area. PlantSwitch is a new kind of plastics company – one that creates materials from plant waste, generating a solution that is compostable, high-performing, and cost-effective.

- **WRAL COVERAGE:** [Area innovators hope to reduce the unnerving amount of microplastics Americans consume](#)

In choosing the right location for a new home base, Baxter looked for access to agricultural residues, a business-friendly area, and nearby access to ports to minimize transportation costs.

"Close to Raleigh, easy to get to the airport, and a lot of good golf around here," Baxter continued, enumerating the area perks. "[Sanford] has welcomed us with open arms."

THE PLANTSWITCH SEED

"Good golf" might sound secondary but it's an important component of PlantSwitch history. Baxter and co-founder Maxime Blandin played on the golf team together at SMU.

In his senior year, Baxter was exposed to the biopolymer industry, which involves the use of natural sources in synthetic substances. Blandin brought experience with a family-run distribution company, and the two officially started PlantSwitch in 2020.



War on plastics: Recycling isn't answer – it's time for different materials, says Duke prof

Even though the number of environmental pledges have greatly increased in the last five years, most firms have largely avoided tackling the root of the problem – namely, the excessive use of plastic in the first place, a Duke professor says.

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Baxter noted that the market for biopolymers in replacement of single-use plastic is traditionally very expensive. Many of the substances used to create plastics are the same as those used for food products, such as corn starch, generating competition and raising costs. PlantSwitch invested in R&D early, hoping to find better sources for their raw materials.

What they found is agricultural byproducts, the leftovers of major agricultural production that currently don't have much use.



PlantSwitch resin pellets

"So they're cheap," said Baxter. "They're essentially free."

The company uses the cellulose in the materials for their core component and converts that into plastic-alternative materials. Right now, those are pellet-shaped balls used for injection-molding processes that can create a multitude of single-use products. It's a great solution, PlantSwitch is already looking ahead to other opportunities.

"We're working on [resin] grades for thermoforming, which is exciting. We're also working on some durable composites for other industries that aren't single-use," Baxter explained. "Our goal is to create a comprehensive portfolio we're able to replace the vast majority of plastic products."

NEXT STEPS

Baxter can't disclose what's in store, but he can confirm that the company has new partnerships and testing underway, with plans to expand production in the first quarter of 2024.

"These are some of the largest manufacturers and brands in food service, CPG (consumer packaged goods), and cosmetics."

The company is also busy settling into their new digs in Sanford. A recent \$7.6 million bridge round of financing covered most of the costs for their new plant, which will also be the home to a research & development facility. The company now has six engineers on staff, plus their CTO, Robert Jerman, and Baxter is adamant about funding additional research.

"We felt like this has been a little bit of an under-funded or under-emphasized area and so we're looking to change that," he explained. "This [facility] will really serve as the hub of innovation, research, and development for turning these agricultural byproducts into plastics moving forward. We're really excited about the next few months of getting the facility operational and all the exciting initiatives for further IP."

The plant itself will employ 20-25 initially, with up to 50 staff once at scale. The commercial facility, itself previously a plastics factory, is a 52,000-square-foot building with the capacity to handle more than 50 million pounds of resin annually.

FUNDING THE FUTURE OF PLASTICS

Fundraising hasn't been an issue for the company since its 2020 start. A strong \$3.25 million dollar seed round delivered early support in 2021. In addition to this year's \$7.6 million bridge round, the company also landed a \$4.94 million USDA grant earlier this year, part of the Partnerships for Climate-Smart Commodities initiative. The company has also previously received \$3 million in non-dilutive debt financing.

On the horizon, Baxter says he expects to look at a Series A round in mid-2024.

Baxter seemed unconcerned about the recent NC budget that has [stopped local governments from enacting bans on "auxiliary containers", including plastic cups or utensils](#). Some NC cities and municipalities including Asheville, Boone, and Durham had been considering such bans, which might have driven more use of PlantSwitch products.

"I obviously would love to see single-use plastics banned. But I also want to make sure that the legislature is thoughtful about [the change]," said Baxter. "Hopefully, by showing that here in NC we're making a truly viable alternative to single-use plastics we can help change their mind on how to get rid of these waste-generating materials."