

Introducing Penelope

Named by Chowan Middle School student Anne-Marie Shook after Edenton's own Penelope Barker, Penelope is one of 45 wind turbines generating homegrown clean energy as part of the Timbermill Wind project.

Energy Generation

Penelope can generate enough power in a single spin to supply an average North Carolina home for over 4 hours or charge your phone **more than 1,300 times!**

Over the course of a year, this turbine will produce enough homegrown clean energy to power the equivalent of **more than 1,000 homes** annually.

About Penelope

- Turbine Designation: T-12
- Turbine Model: **Vestas V150 4.2 MW**
- Tower (Hub) Height: **345 ft**
- Total (Tip) Height: **591 ft**
- Blade Length: **242 ft**
- Blade Weight: **55,115 lbs**
- Rotor Diameter: **492 ft**
- Swept area: **190,209 ft² (over 4 acres)**
- Required Wind Speed for Operations: **3.0 m/s (~7 mph)**
- Top Speed: **12 RPM**
- Nacelle weight: **286,601 lbs**
- Tower Section Weight (per section): **Up to 187,000 lbs**

Special Features

- Full feathering of blade pitch for aerodynamic braking
- Trailing-edge serrations on blade to reduce noise



DID YOU KNOW?

The average Timbermill Wind turbine will generate enough energy to offset the energy used to construct it in less than 8 months. Over its lifetime, each wind turbine will generate up to 30 times more energy than was used to manufacture, install, and operate it.



Naming the Turbine: About Penelope Barker

A loyal patriot of the American Revolution, Penelope Barker organized the famous Edenton Tea Party, the first recorded women's political demonstration in America. Barker rallied 50 women in Edenton, North Carolina, to sign a resolution boycotting British tea in response to the 1773 Tea Act. Passed by Parliament, the Act granted the British East India Company a monopoly in the colonies and was the latest in a series of taxes and policies that colonists fiercely resented. **We're proud to honor this important historical figure as part of Timbermill Wind!**

