



## Scope of Work

- FEED Study
- Value Engineering
- Geotechnical Analysis
- Material-Handling Systems Engineering
- Structural Engineering
- Mechanical Engineering
- Electrical Engineering
- Procurement & Subcontract Management
- Dome Construction
- Tunnels Construction
- Material-Handling Systems Installation
- Explosion Relief Installation
- Additional Steel & Concrete Construction
- None    Some    All



In an area where hurricanes are prevalent, these domes were engineered to withstand high winds.



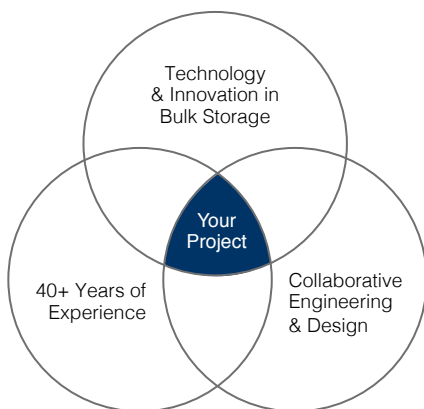
A tunnel and hopper system was built under the Dome-Silo™, offering 75% live reclaim.



The air form surrounding the entire dome prevents water and moisture access, preserving the product.

## Storage & Reclaim

- 2 Domes: 51.8m (170ft) Wide x 48.8m (160ft) Tall
- 90,000 Metric Tons (Total), Wood Pellets
- 1 Tunnel, 75% Live Reclaim



## Overview

At the end of 2016 the Dome Technology team completed two DomeSilos™ for biomass manufacturer Enviva at Port of Wilmington, North Carolina. With the likelihood of hurricane in mind, the pair of domes was engineered to withstand high winds. The domes will store pellets produced from Enviva's Sampson plant, as well as additional regional wood-pellet production facilities that may be built in the future.

"Enviva is the biggest wood-pellet producer in the world. It's just a joy to work with such a large, progressive company," said Dome Technology sales manager Lane Roberts. In the past five years Dome Technology has built four total domes for Enviva. The first two were constructed between 2011 and 2012 at the Port of Chesapeake in Virginia. The domes, which are nearly identical to those at the Port of Wilmington, stand 47.9 meters (157 feet) high and 53.6 meters (176 feet) in diameter and feature systems that continuously monitor and control interior temps.

Domes provide ideal conditions for storing wood pellets. The airform surrounding the entire dome prevents water and moisture access. The dome's insulated nature reduces heating and cooling of the walls and air inside, preventing condensation from forming on the interior. Concrete, rebar, and insulation provide humidity control and moderate externally generated temperature fluctuations. For storage on a port, domes can be engineered with innovative foundation systems that provide ample support on soil near the water.

According to Enviva Senior Vice President Norb Hintz, the company has been pleased with Dome Technology's work. "We appreciate the high-quality workmanship, professionalism and attention to detail demonstrated by their staff," he said.

"For nearly four decades we've relied on a collaborative approach with companies—they're in the driver seat, and we help navigate. In every project Dome Technology incorporates innovative technology to maximize storage capacity and system performance with an economical solution," Bradley Bateman, CEO, Dome Technology.



Read more about this project at: [link.dometechnology.com/7375](http://link.dometechnology.com/7375)