

## CNG Fleet Case Study

# Snapping Shoals EMC (GA)

## THE SOUTHEAST REGIONAL ALTERNATIVE FUELS MARKET INITIATIVES PROGRAM



### Overview

Snapping Shoals Electric Membership Corporation (EMC) first began adding alternative fuel vehicles to their fleet in 1998. The utility started by purchasing 23 dedicated Ford vehicles, including a combination of F-150s, F-250s, E-250s, E-350s, and Crown Victorias, all of which ran on compressed natural gas (CNG). In 2010, Snapping Shoals converted 11 Chevrolet 1500s and 2500s to run on a bi-fuel CNG system.

### Program Participation

Snapping Shoals EMC did not receive grant money for their CNG initiatives; they identified internal funding to support their efforts. The utility conducted their own research, solicited bids, and completed the vehicle conversions in-house. The vehicle conversion costs were offset through the lower cost of fuel. Equipment for the project was purchased from Atlanta Gas Light.

### Project Motivation and Implementation

At the time Snapping Shoals began converting their fleet, they were covered by the Georgia Clean Fuel Fleet Program which required they meet low emission vehicle purchase requirements. As a utility, they were also subject to the requirements of the Energy Policy Act (EPA Act). In their efforts to meet the requirements, they initially decided to try CNG as a vehicle fuel after considering other options available at that time.

Although Snapping Shoals was prompted by regulatory requirements to implement alternative fuels in their fleet, Director of Fleet Services Jeff Morgan believes it was a good decision for their organization. By deploying CNG, Snapping Shoals has achieved cost savings and lower emissions from the operation of their vehicles.

While pleased with their decision to incorporate CNG into their daily operations, Snapping Shoals EMC did encounter some challenges with their deployment. There was limited vehicle availability during the early stages of Snapping Shoals' efforts. Additionally, the CNG tanks had a somewhat limited lifespan. Replacement was an issue due to costs which could be upwards of \$3,500 each.

### Fleet Facts

**Organization:**

Snapping Shoals Electric Membership Corporation (GA)

**Director of Fleet Services:**

Jeff Morgan

**Conversions Began:**

2010

**Vehicles Converted:**

11

**Estimated Petroleum Displacement:**

290,887 gallons as of March 2014

**Estimated Fuel Cost Savings Approximately:**

\$550,000-\$600,000

**CNG Fueling Infrastructure:**

On-site fast fill fueling, 651 gallons of total storage



## Results

Snapping Shoals' biggest achievement throughout this project is the huge fuel savings; they have saved an estimated \$550,000 - \$600,000 in fuel costs since 1998. Also, since mid-2002, the utility has displaced 236,347 gallons of petroleum. Over the lifespan of their deployment of CNG, Snapping Shoals EMC is estimated to have saved almost 291,000 gallons of petroleum.

Additionally, Morgan has been impressed with how infrequently the CNG vehicles need to be serviced. While gas vehicles require service around every 4,000 miles, the CNG vehicles are typically serviced every 7,000 miles.

## Lessons Learned and Next Steps

Snapping Shoals EMC believes the biggest advice they can offer other fleets looking to implement similar projects is to be aware of how the alternative fuel is stored. Fuel storage was their biggest and most costly issue throughout the deployment. For Snapping Shoals EMC, the solution was a fast-fill station, as this helped decrease the station size and become more valuable.

In terms of future plans, Snapping Shoals eventually would like 75% of their fleet to run on dual-fuel CNG engines, and hopes to implement this soon.



For more information on this and other alternative fuel and advanced technology vehicle programs contact Don Francis, Coordinator for Clean Cities-Georgia, by phone: 404.906.0656 or via email at [don@cleancitiesgeorgia.org](mailto:don@cleancitiesgeorgia.org). Clean Cities-Georgia is a designated Clean Cities Coalition by the U.S. Department of Energy.

For specific information regarding the Snapping Shoals project, contact: Jeff Morgan, Director of Fleet Services. Phone: 770.385.2715 or via email

