

14. BRIEFING FROM ALIGN RENEWABLE NATURAL GAS

Dominion Energy and Smithfield Foods have entered into a joint partnership, Align Renewable Natural Gas, to develop a renewable natural gas project in Sussex, Surry, Southampton and Isle of Wight counties.

In simple terms, they're planning to capture the methane gas that's produced by hog manure generated from 20 of Smithfield's farms located in the 4-county region. Three (3) of those 20 farms are located in Southampton County at Dory. The captured methane will be piped to a central conditioning facility to be constructed near an existing natural gas pipeline south of Dendron. The methane will be refined at this conditioning facility before delivery to the existing gas distribution system.

This will be a \$500 million joint venture and is currently planned for completion by late 2022.

I've invited representatives from Align RNG to your meeting, but have not received their confirmation at this writing. If they're unavailable on 11/23, we'll plan to defer the discussion subject to their availability.

Align Renewable Natural Gas (Align RNG) Partnership in Virginia

Project Overview

Align RNG is the largest renewable natural gas partnership in the nation, established by Dominion Energy and Smithfield Foods to transform the future of sustainable energy and agriculture through innovation that begins right here in Virginia. Our project in Waverly, VA will produce clean energy for consumers and result in fewer emissions for the climate.

- New, covered digesters on Smithfield's hog farms will treat manure, capture and remove methane and other greenhouse gas (GHG) emissions from the farms and surrounding communities, then transport the resulting biogas to a central location to be treated and converted into energy.
- A similar project developed by Align RNG in Utah is successfully operating today.
- Align's first Virginia project involves 20 farms in Sussex, Surry, Southampton, and Isle of Wight counties.

RNG's Environmental Benefits

These projects reduce GHG emissions, particularly methane, by capturing and converting it into energy to power VA homes and businesses.

- RNG is clean energy made by capturing methane, in this case from hog farms. It is one of the cleanest energy sources in the U.S. because it removes more GHGs from the atmosphere than it releases when used by consumers – making it carbon-beneficial.
- Over the next 10 years, Align's national RNG initiatives will collectively reduce GHG emissions by the equivalent of taking half a million cars off the road or planting 40 million new trees each year.
- Align's model produces RNG using a three-step process:
 1. Capturing manure from the farm: As hog manure breaks down, it produces methane gas. Instead of allowing methane to enter the atmosphere, it's captured in an anaerobic digester.
 2. Converting methane to RNG: The methane captured from multiple farms is sent to a central conditioning facility, where it's refined to 99% pure methane, the same as traditional natural gas.
 3. Delivering to homes and businesses: The RNG is then put into an existing distribution system to serve homes, businesses, power plants and other gas consumers

Align's Economical Benefits

This initiative signals to other industries that the region is investing in 21st-century opportunities given the natural resources, central location and qualified workforce, and is a region they should consider investing in.

- An estimated \$500 million will be spent through 2028 in various states to further:
 - Diversify local economies in the region;
 - Create new jobs – short term and long term; and
 - Make hog farming more sustainable.
- Local economies will see diversified growth through new business investments in the region.

- This model invites sustainable growth to local communities and the hog-farming industry.
- Allowing clean energy sources like RNG to reinvigorate the hog-farming industry will fuel local economies with new and innovative investments.
- An investment in RNG will bolster local tax bases, driving greater economic development and sustainability.

Align's Community Benefits

The overall initiative will place Virginia at the forefront of clean energy innovation as a front runner in RNG production and as an agricultural provider of RNG.

- This initiative will not expand hog farming, but instead, make it more sustainable and provide a new source of clean energy for consumers to utilize through an array of applications such as home heating and powering businesses.
- This first project in VA will provide enough energy for 2,823 homes annually.



FARM TO ENERGY

Harnessing clean energy from our nation's hog farms for the good of the environment, consumers and local communities.

Dominion Energy and Smithfield Foods have teamed up to transform the future of clean energy and sustainable agriculture. Through our Align RNG joint venture, we're turning methane from our nation's hog farms into clean energy for consumers. It's called renewable natural gas, or RNG. It reduces emissions for the environment, provides clean energy for consumers and brings sustainable farming to local communities.

What is Renewable Natural Gas?

When hog manure breaks down, it produces methane, which is a powerful greenhouse gas. By keeping methane out of the atmosphere and turning it into clean energy, we significantly reduce emissions from our nation's farms. In fact, we capture more emissions from farms than are released when consumers use the gas. Better than zero-carbon, it's actually carbon-beneficial!

Helping the Environment, Consumers and Local Farms

- **Fewer Emissions for the Environment** – RNG significantly reduces emissions from our nation's farms, which makes our air cleaner and protects the climate.
- **Clean Energy for Consumers** – RNG combines the environmental benefits of renewables with the reliability of natural gas to meet the 24/7 clean energy needs of consumers.
- **Sustainable Practices for Local Farms** – RNG helps local farmers adopt additional sustainable farming practices that are good for the community and the environment.

Fewer Emissions for the Environment

Over the next 10 years, Align RNG will reduce annual greenhouse gas emissions from hog farms by more than 2.5 million metric tons. That's the same as:

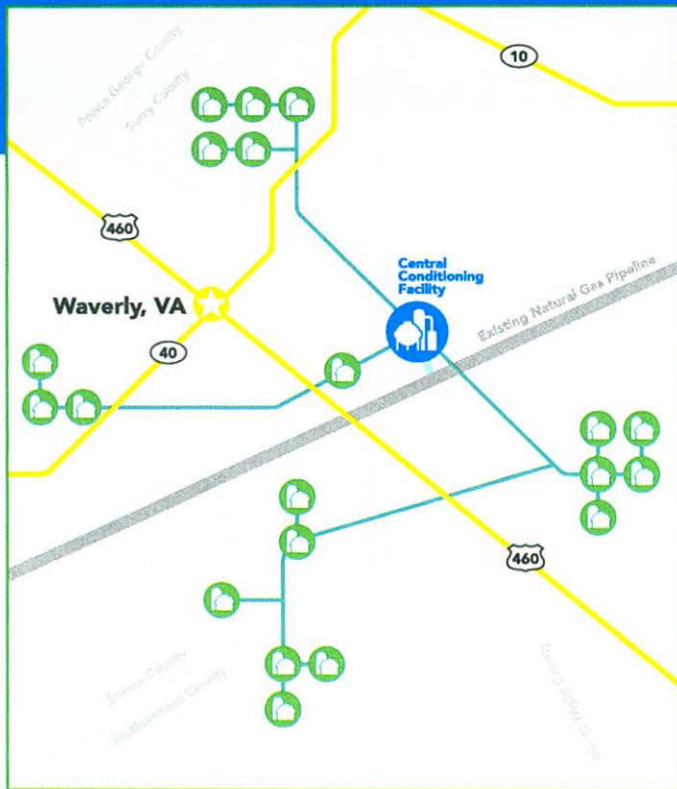


Planting
40 Million
new trees



Removing
500,000
cars from
the road

WAVERLY PROJECT



Align RNG is developing projects across the country, including one in Virginia's Gateway Region. Located in Sussex, Surry, Southampton and Isle of Wight counties, the Waverly project will produce enough clean energy to heat 2,800 homes from a network of 20 farms.

- **Farms:** 20
- **Environmental Benefit:** Each year, the project will reduce the same amount of greenhouse gas emissions as:
 - Taking 22,000 cars off the road
 - Planting 1.7 million new trees
- **Projected Completion Date:** Fall 2022

How does Renewable Natural Gas Work?

1 Capturing methane from the farm

As hog manure breaks down, it produces methane gas. Instead of allowing methane to enter the atmosphere, it's captured in an anaerobic digester.

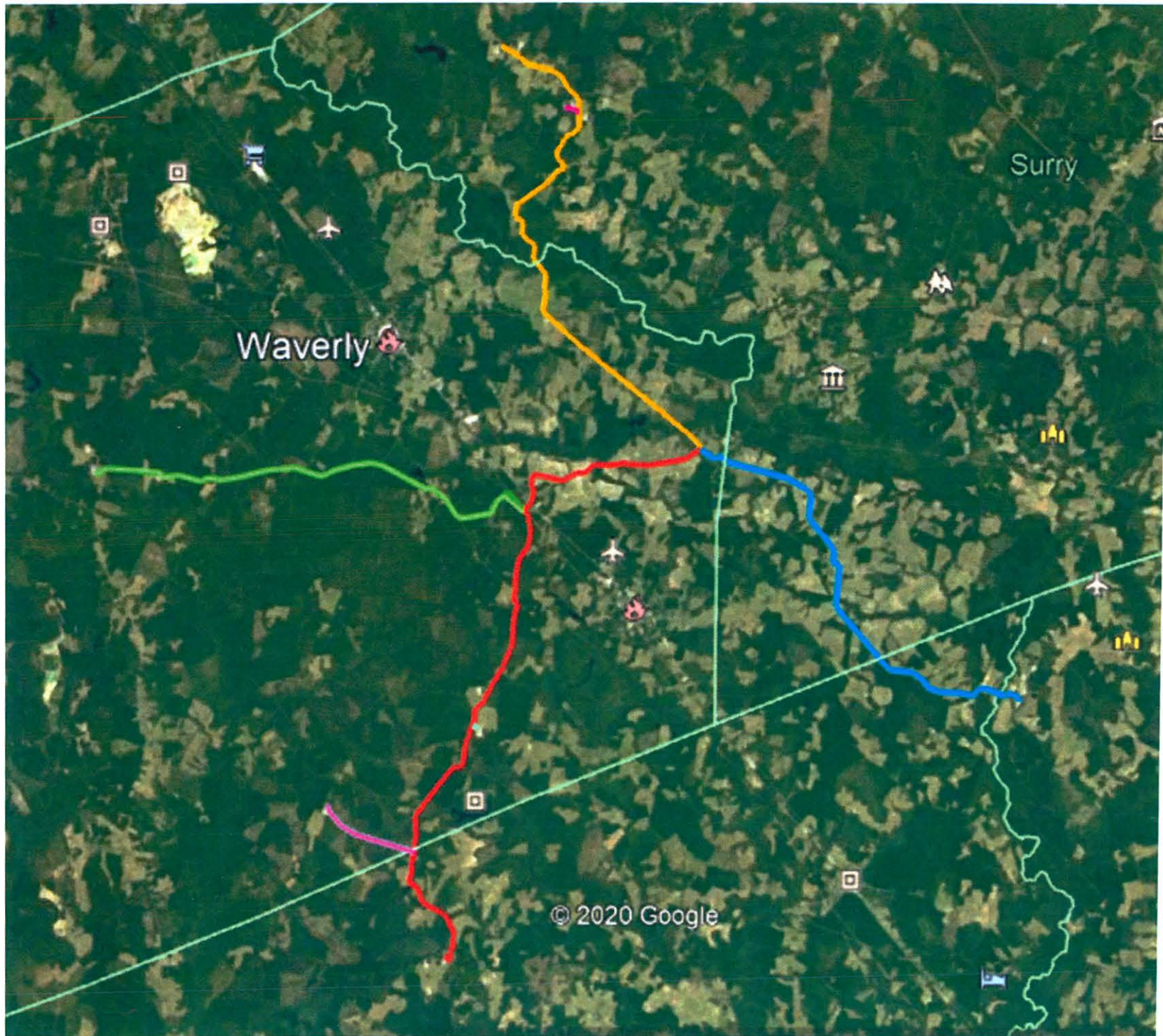
2 Converting methane to RNG

The methane captured from multiple farms is sent to a central conditioning facility, where it's refined to 99% pure methane, the same as traditional natural gas.

3 Delivering to homes and businesses

The RNG is then put into an existing distribution system to serve homes, businesses, power plants and other natural gas consumers.





Align Renewable Natural Gas

Wilmington, Delaware





Reducing GHG Emissions

Reducing greenhouse gas emissions

- RNG is carbon-beneficial because it removes 25 times more emissions from the farm than are released when customers use the gas.
- Over 10 years, Align RNG will reduce greenhouse gas emissions from U.S. farms by the same amount as taking 500,000 cars off the road or planting more than 40 million new trees each year.



EMISSIONS REDUCTION EQUIVALENT TO

500,000

CARS OFF THE
ROAD EACH YEAR OR

40M

TREES PLANTED EACH YEAR

Turning Hog Manure into Clean, Renewable Energy

1

Capturing Methane from the Farm

Methane from hog manure is captured from covered digesters outside the barns and transported to a central conditioning facility.

2

Converting it to Renewable Natural Gas

The methane is cleaned at the conditioning facility to 99% pure methane, the same as traditional natural gas.

3

Delivering RNG to Homes and Businesses

The RNG is then put into existing distribution systems to serve local homes and businesses.



Largest RNG Partnership in U.S.



- Dominion Energy and Smithfield Foods joined forces in 2018 to form a 50/50 joint venture called Align RNG.
- The companies will invest \$500 million over 10 years to capture methane from Smithfield's hog farms and produce enough clean energy to power more than 70,000 homes.
- Initial projects are now under development in NC, UT and VA, with additional projects to come.



\$500M

**JOINT VENTURE
BETWEEN DOMINION ENERGY AND
SMITHFIELD FOODS**