

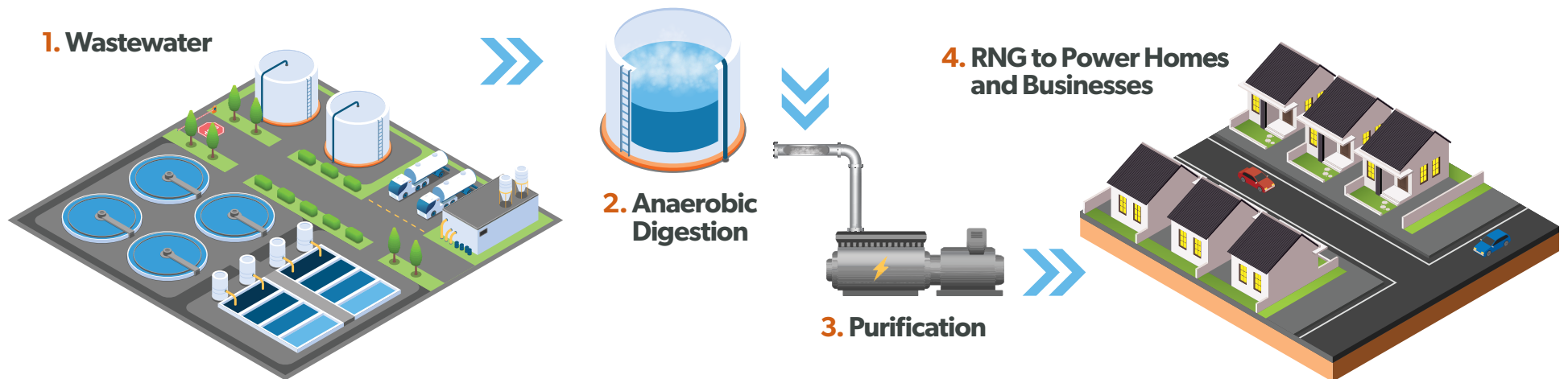
# Transforming Wastewater into Energy

**Smithfield**

*Good food. Responsibly.*



Smithfield Foods, Duke Energy, and OptimaBio have teamed up to transform wastewater into renewable natural gas (RNG) that will provide reliable renewable energy while reducing greenhouse gas emissions in North Carolina. This groundbreaking \$14 million project will utilize the wastewater system at the world's largest pork processing facility in Tar Heel, North Carolina, to create enough renewable energy to power more than 2,000 homes and businesses annually.



## 1. Wastewater

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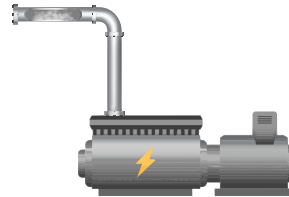
Smithfield's Tar Heel facility leverages a three million gallon-per-day wastewater treatment system that collects waste resulting from pork processing.



## 2. Anaerobic Digestion

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Anaerobic treatment systems break down the nutrients within the wastewater, producing a biogas called methane.



## 3. Purification

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The methane is captured and transported to a conditioning facility, where it is cleaned and converted into pipeline-quality RNG.

## 4. RNG to Power Homes and Businesses

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Once refined, RNG is delivered to Duke Energy, where it is used to produce electricity to power homes and businesses in North Carolina.