

# VANGUARD RENEWABLES®

## HARNESSING THE UNTAPPED ENERGY POTENTIAL OF AMERICA'S HEARTLAND



### THE OPPORTUNITY

Surging global demand for lower-carbon marine fuels creates a golden opportunity for the United States to cement its leadership as the preeminent supplier of global liquefied natural gas — if it moves decisively now.

The global market for sustainable marine fuel is projected to grow from \$13 billion in 2024 to \$836 billion by 2034. By 2050, LNG could make up half of all maritime fuel. Bio-LNG, a drop-in fuel derived from renewable natural gas, will be essential in making LNG the preferred fuel for the maritime industry. Blending bio-LNG with conventional LNG enables maritime operators to meet international emissions requirements using existing vessels and infrastructure.

### AN UNTAPPED RESOURCE

New research has uncovered a previously untapped RNG source, primarily in Midwestern states. The region's economically viable agricultural waste (livestock manure and crop residues) and food waste provide enough feedstock to produce approximately 1,580 trillion Btu (British thermal units) of RNG — more than eight times the current RNG market.

This would enable farmers to generate \$1.1 billion to \$2 billion in additional revenues each year, with farms ranging from small dairy operations to large producers drawing on a new revenue source to substantially bolster their financial resilience.

### CAPTURING THE OPPORTUNITY

Capturing the full value at stake will require coordinated action from policymakers, farmers, agricultural associations, private investors, and local communities. A successful push will increase both production and export capacity — giving the U.S. another lucrative channel to extend its global LNG leadership.

### IMPACT AT A GLANCE

**\$2 TRILLION–  
\$3 TRILLION**

cumulative GDP impact by 2050

**390,000–680,000**

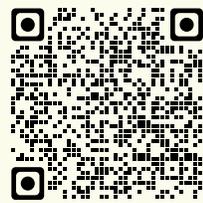
new American jobs

**\$1.1 BILLION–  
\$2 BILLION**

annual new revenue for farmers

**1,580 TRILLION  
BTU**

untapped RNG potential (8x current market)



This is an excerpt from new research published by Vanguard Renewables, which includes detailed economic analysis, state-level data, and policy recommendations. The full white paper is available at [vanguardrenewables.com](http://vanguardrenewables.com).