



# The Growing Strength of the U.S. Heartland's Bioeconomy

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# Global Leaders in Agriculture

2.2 billions gallons of Ethanol produced annually

- Two wet mill corn Processing facilities
- 22 dry mill corn processing facilities

## #3 Corn Production

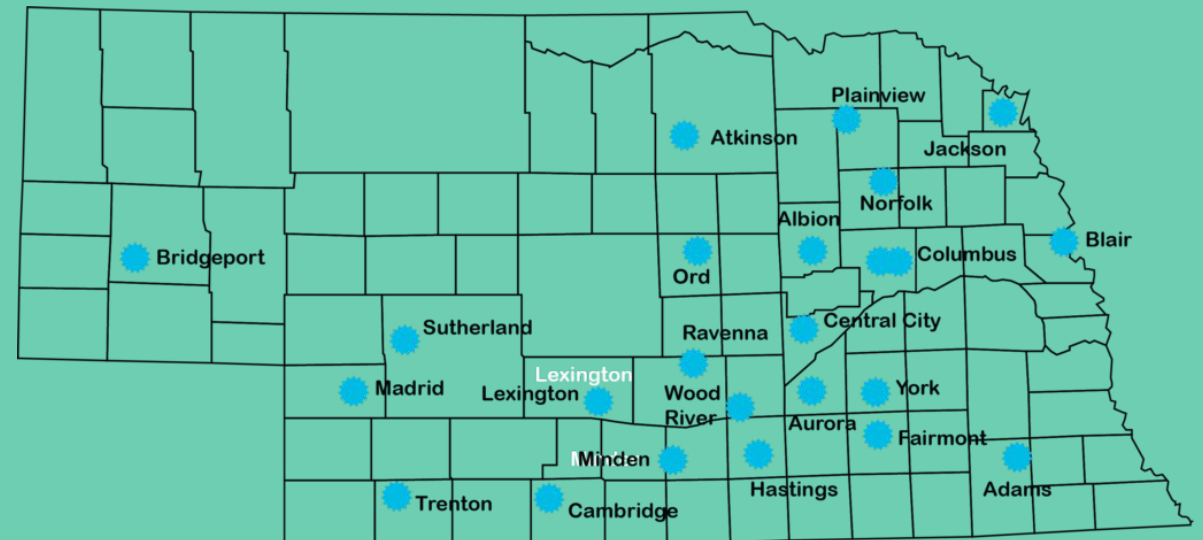
- > 90% US corn grown is used for animal feed
- < 10% US corn grown is directly used for human food
- \$0.10 lower per bushel compared to multi-region average

22 dry mill corn processing facilities producing:

- Ethanol
- Corn distillers oil
- Wet or dry distillers grain
- Yeast protein
- Biogenic CO2

2 wet mill corn processing facilities producing:

- High Purity Sugar
- Starch
- Ethanol
- Corn Oil
- Germ meal
- Gluten meal
- Gluten feed
- Biogenic CO2



Potential for clean sugar production with retrofits

# Renewable Energy

## Omaha Public Power District

- 35% retail energy sales are renewable. 32% wind
  - Currently building out an additional 600MW of solar power.
  - Goal: Net Zero by 2050
- Average industrial rate: 6.97 cents/kWh (19.1% below the national rate)
- Ranked #1 in the nation by US News and World Report for power grid reliability.

## How to arrange 100% renewable energy

- OPPD currently offers rate 261M, which provides the opportunity for a 100% renewable energy structure for large customers seeking 20+ MW. This is currently being used by both Meta and Google in their Nebraska operations.
- OPPD is flexible to explore creative options for renewable generation and use by companies.

### **'Behind the Meter' generation**

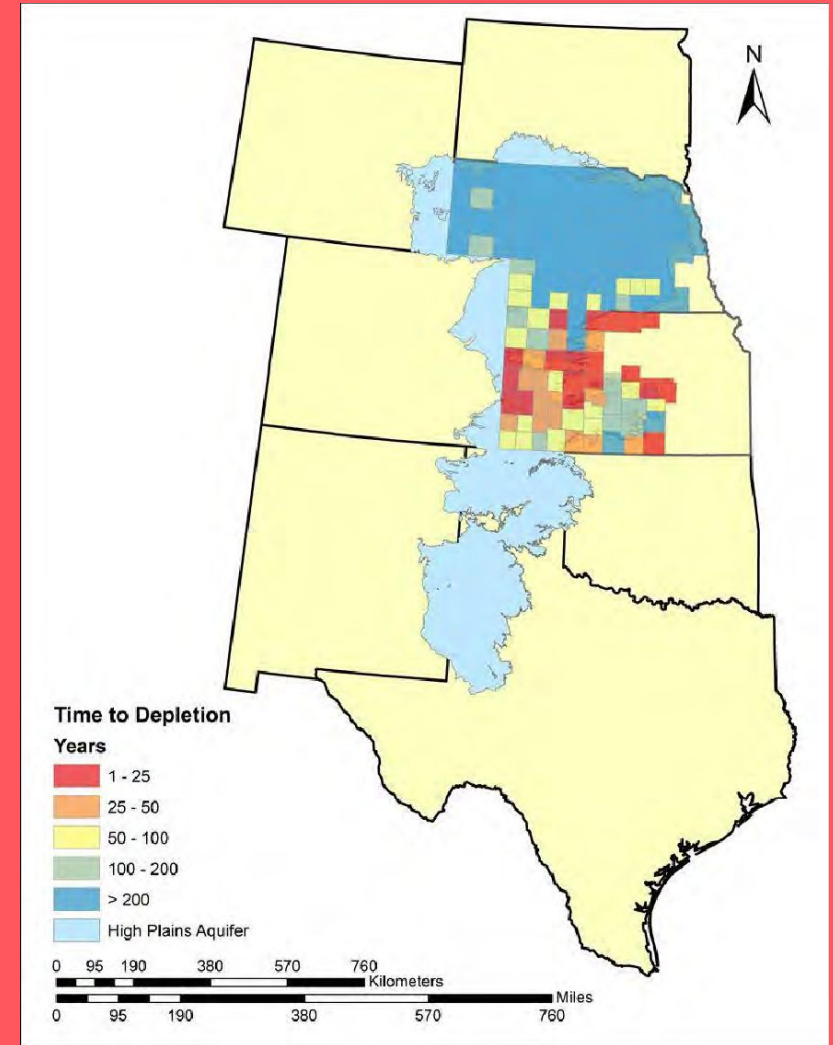
- OPPD welcomes companies to generate their own renewable energy 'behind the meter,' and can help prospects with expertise and guidance.
- OPPD has worked with companies like LinkedIn and Valmont Industries to build 'behind the meter' solar generation for their locations.



# Commitment to Conservation

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- Using modern techniques to minimize inputs & tillage
  - Conserving the water, top soil, and soil health while increasing productivity
- National leader in water management
  - Stayed within 1% of predevelopment levels
  - U.S. Department of Homeland Security 2015 study predicted stable water levels for at least the next 200 years



Why Nebraska?

# TALENT

## Overview

- #6 "Best States for Education" (U.S. News and World Report, 2019)
- 31% Bachelor's Degree or Higher
- 28,000+ College Grads Per Year
- 38% Growth in STEM Degrees since 2006
- New Fermentation Major at University of Nebraska Lincoln dedicated for the industry.
- Right to work state.
- 69% Labor Force Participation.



**3.5x more concentrated in biochemical manufacturing**



**5.9x more concentrated in ag chemical manufacturing**





# Nebraska Renewable Chemical Tax Credit Program

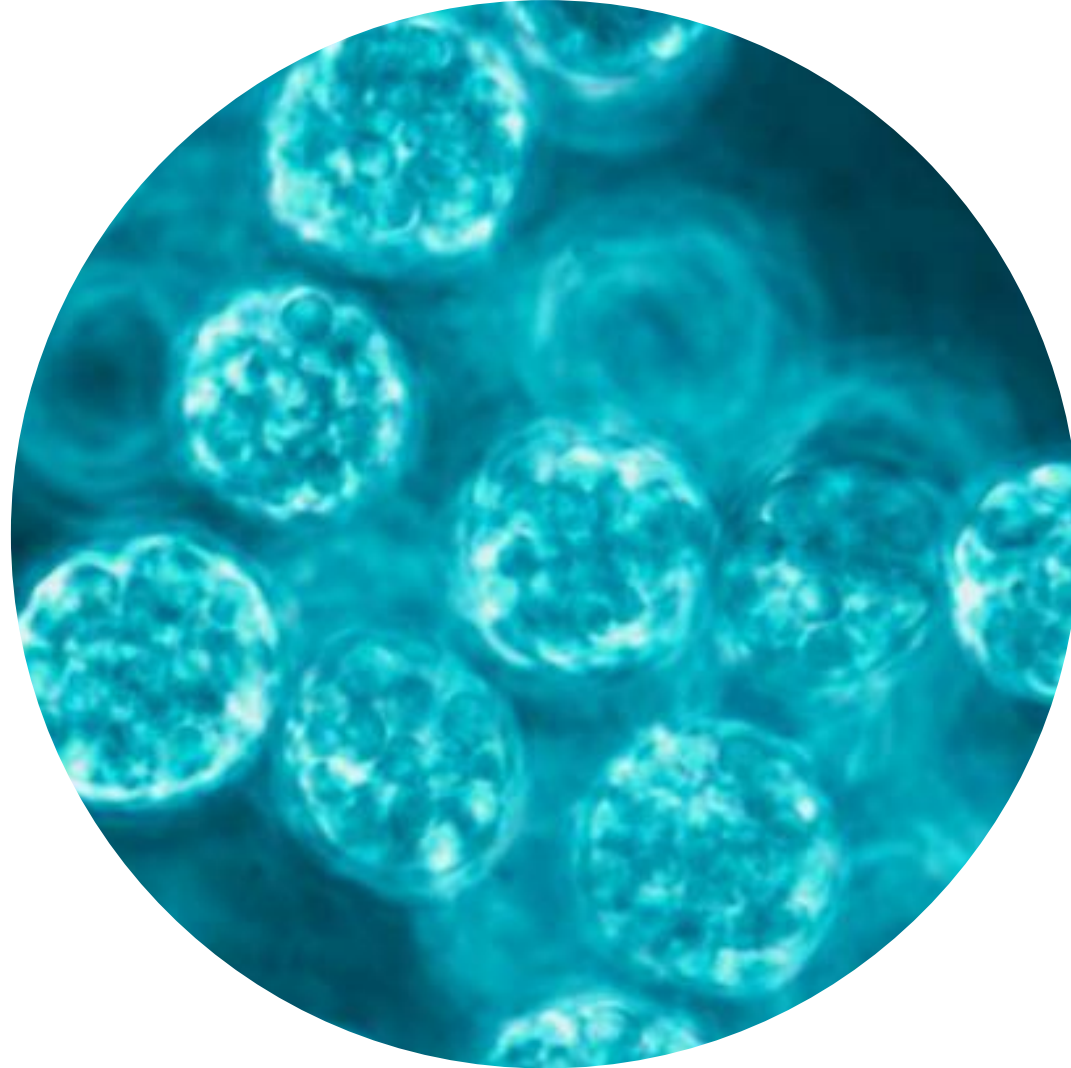
Nebraska incentivizes the development of renewable chemicals intended to stimulate the vibrant biotechnology and bioproducts sector.

- Eligible businesses may receive 7.5c per gallon of renewable chemical produced, up to \$1.5 M in refundable tax credits per year.
- Eligible Business include:
  - Companies that produce at least 1 million pounds of renewable chemicals in Nebraska during the calendar year.
  - Be physically located in Nebraska

**ALGAE OIL**

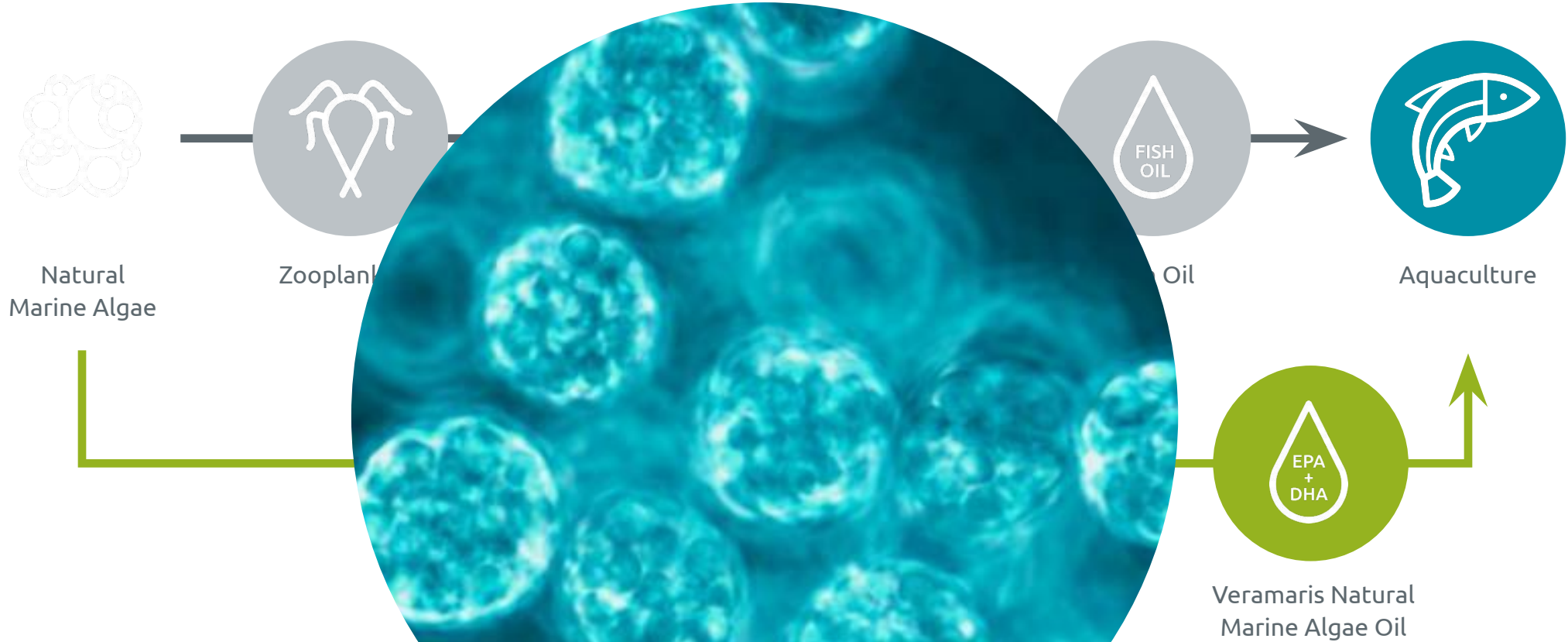
# THIS IS WHAT WE PRODUCE IN NEBRASKA

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# ALGAE SECURES

# YOUR EPA & DHA OMEGA-3 SUPPLY



**Straight from natural marine algae to EPA & DHA Omega-3 to the fish farm**

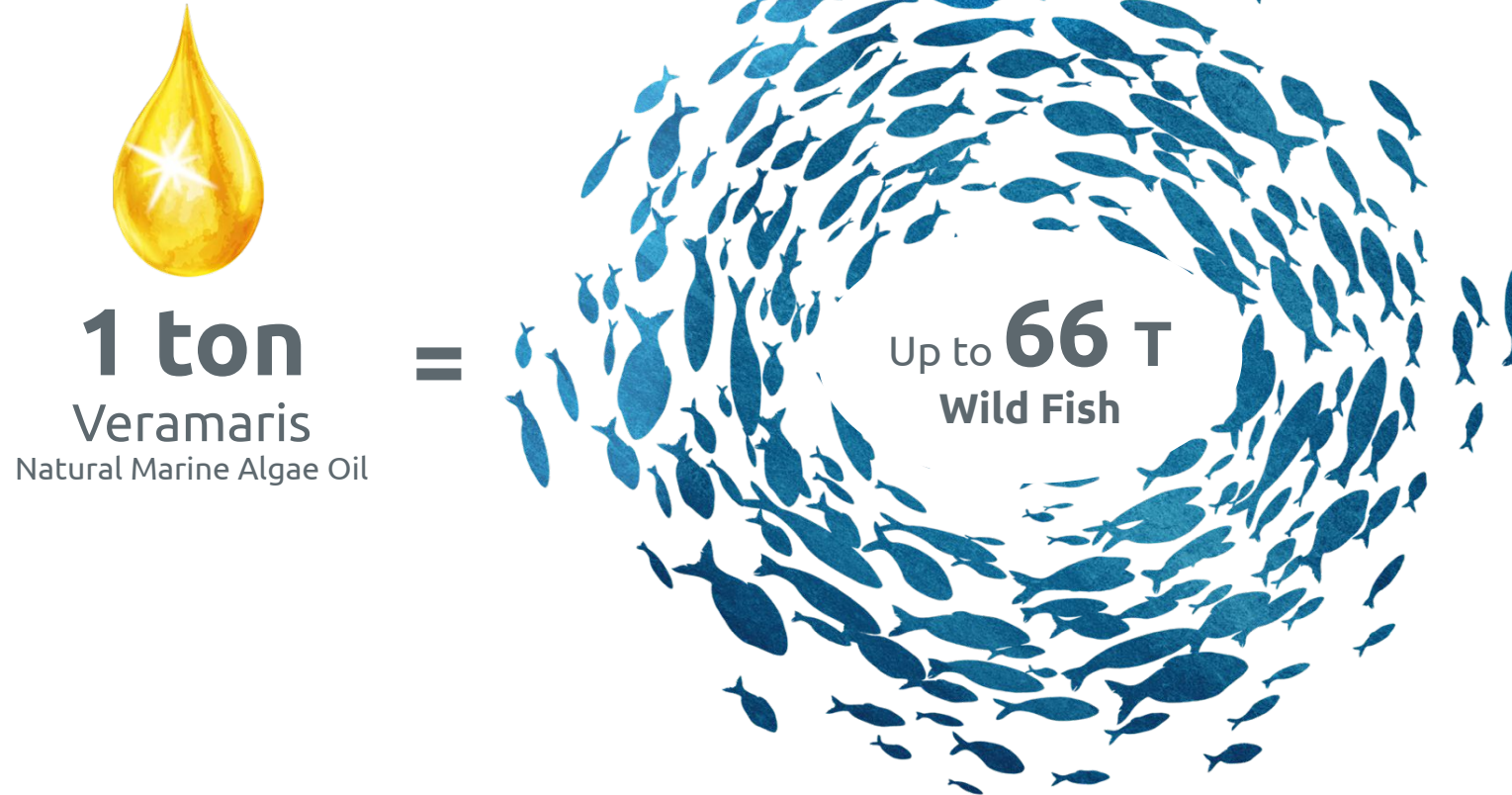
Natural marine algae are significant producers of EPA and DHA in nature



## BIODIVERSITY

# CREATING IMMEDIATE SUSTAINABILITY IMPACT

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## HOW IT'S MADE?

# ALGAE & SUGAR ARE TWO MOST IMPORTANT INPUT INGREDIENTS

### Uniquely rich microalgae

**6,500 different microalgae** were researched, catalogued, and patent protected, to identify the very best. Thanks to proprietary biotechnology (**non-GMO**), involving a process of selection and cultivation, Veramaris **natural marine algae** are elevated to **superior EPA & DHA levels**.

### Corn sugar from Nebraska

Veramaris is using **locally sourced corn sugar** for its production process coming from 16 local counties. Corn is a **critical carbon source** for the production.

### Supportive ingredients

Salts  
Nutrients  
Acids  
Vitamins  
Water

### Large-scale fermentation

Veramaris microalgae passes through **several fermentation stages** before landing into one of **5 large-scale fermenters**:

- Lab fermentation
- Seed fermentation
- Scale-up fermentation

# WIN-WIN COOPERATION BETWEEN DSM & EVONIK

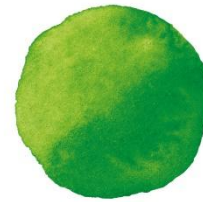
## JOINED FORCES OF 2 BIOTECH LEADERS

### Processes

Specialist in developing industrial biotechnology processes.

### Large-scale fermentation

Know-how in operating large-scale manufacturing of fermentative amino acids.



**Veramaris**  
50:50 Joint  
Venture

### Algae cultivation

Specialist for the cultivation of marine organisms including algae

### R&D

Biotechnology capabilities in development and operations

# VERAMARIS IN BLAIR, NE

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\$ 200m investment | 6,500 proprietary strains of natural algae | 150 patents