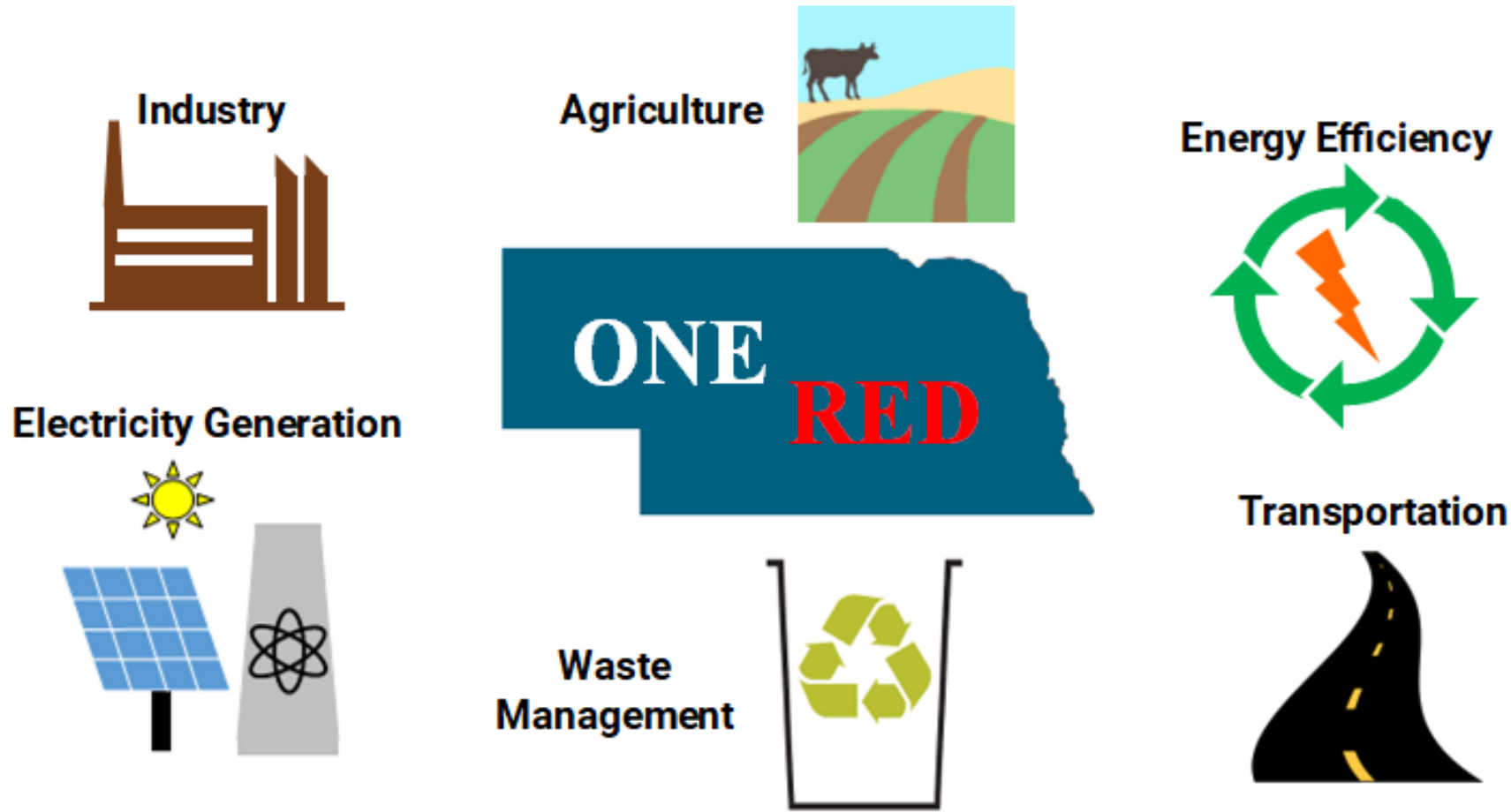


# ONE RED

## *Opportunity for Nebraska: Reducing Emissions & Decarbonization*



Planning and Programs to Reduce Greenhouse Gas Emissions in Nebraska

NEBRASKA  
DEPT. OF ENVIRONMENT AND ENERGY

NDEE has adopted

**ONE RED**

*Opportunity for Nebraska:  
Reducing Emissions & Decarbonization*

as the acronym and name for our program that is administering the planning and implementation grant funding from EPA's Climate Pollution Reduction Grant Program.

The ONE RED program is developing plans and programs to leverage federal funding to strengthen all sectors of Nebraska's economy while reducing harmful air pollutant emissions through **voluntary actions and financial incentives**.

# NDEE Team for ONE RED Development

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**Kara Valentine**  
Deputy Director  
for Planning & Aid  
and Inspection &  
Compliance



**Sarah Starostka**  
Planning and Aid  
Division Admin.



**Randy Smith**  
Air Quality  
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Federal Aid  
Administrator



**Sam Fleagle**  
Environmental  
Specialist



**Hank Robinson**  
Aksarben Foundation  
Full Value Ag Initiative

# Climate Pollution Reduction Grant Program (CPRG)

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## **PHASE 1: \$3 million Planning Grant - activity beginning March 2023**

**Priority Climate Action Plan (PCAP)** – was due and completed March 1, 2024

- Identified high-impact, implementation-ready, near-term GHG reduction measures
- Plan provided eligibility for CPRG implementation grant

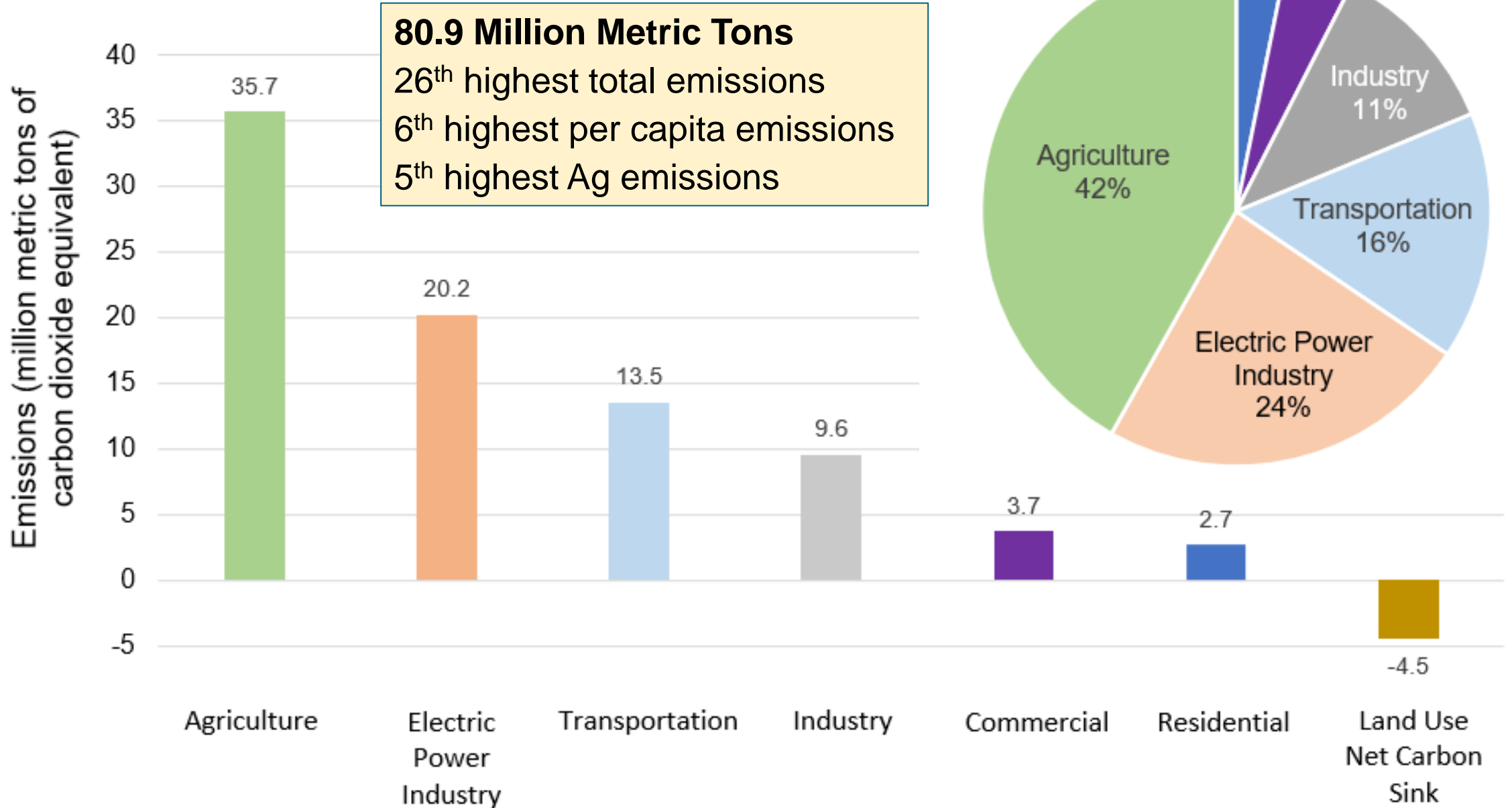
**Comprehensive Action Plan (CAP)** – due December 1, 2025

- Quantified GHG reduction measures in all sectors; short-term & long-term scope
- Near-term (2030) and long-term (2050) estimates of GHG reductions & targets
- Analysis of benefits statewide and to low-income disadvantaged communities
- Workforce planning analysis

## **PHASE 2: Implementation Grants**

- \$4.3 billion available nationwide for competitive grants to states and large metro areas to implement measures in their PCAP

# Nebraska Greenhouse Gas Emissions by Economic Sector, 2021



# Nebraska's First **Statewide** Climate Action Plan

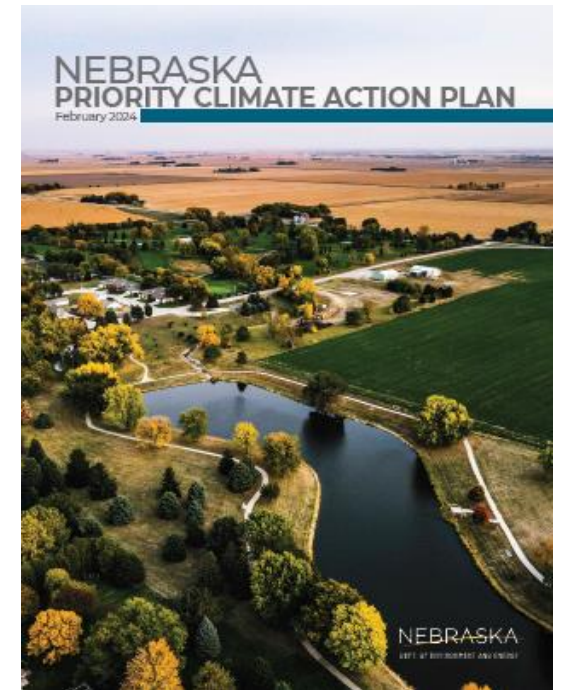
To develop the Nebraska Priority Climate Action Plan (PCAP), NDEE consulted with many stakeholders across the state: other state agencies, public utilities, agriculture and industry experts, environmental groups, and many private citizens.

The plan identified 12 ***voluntary, incentive-based measures*** to reduce greenhouse gas (GHG) emissions throughout the state. ***No new regulations or mandates are proposed in the plan.***

The plan proposed high-impact, readily-implemented measures touching all economic sectors:

- *Agriculture*
- *Industry*
- *Commercial & Residential Buildings*
- *Energy Production*
- *Transportation*
- *Waste & Wastewater*


These measures would also yield other environmental, public health, and economic benefits.



# From PCAP to Implementation Grant

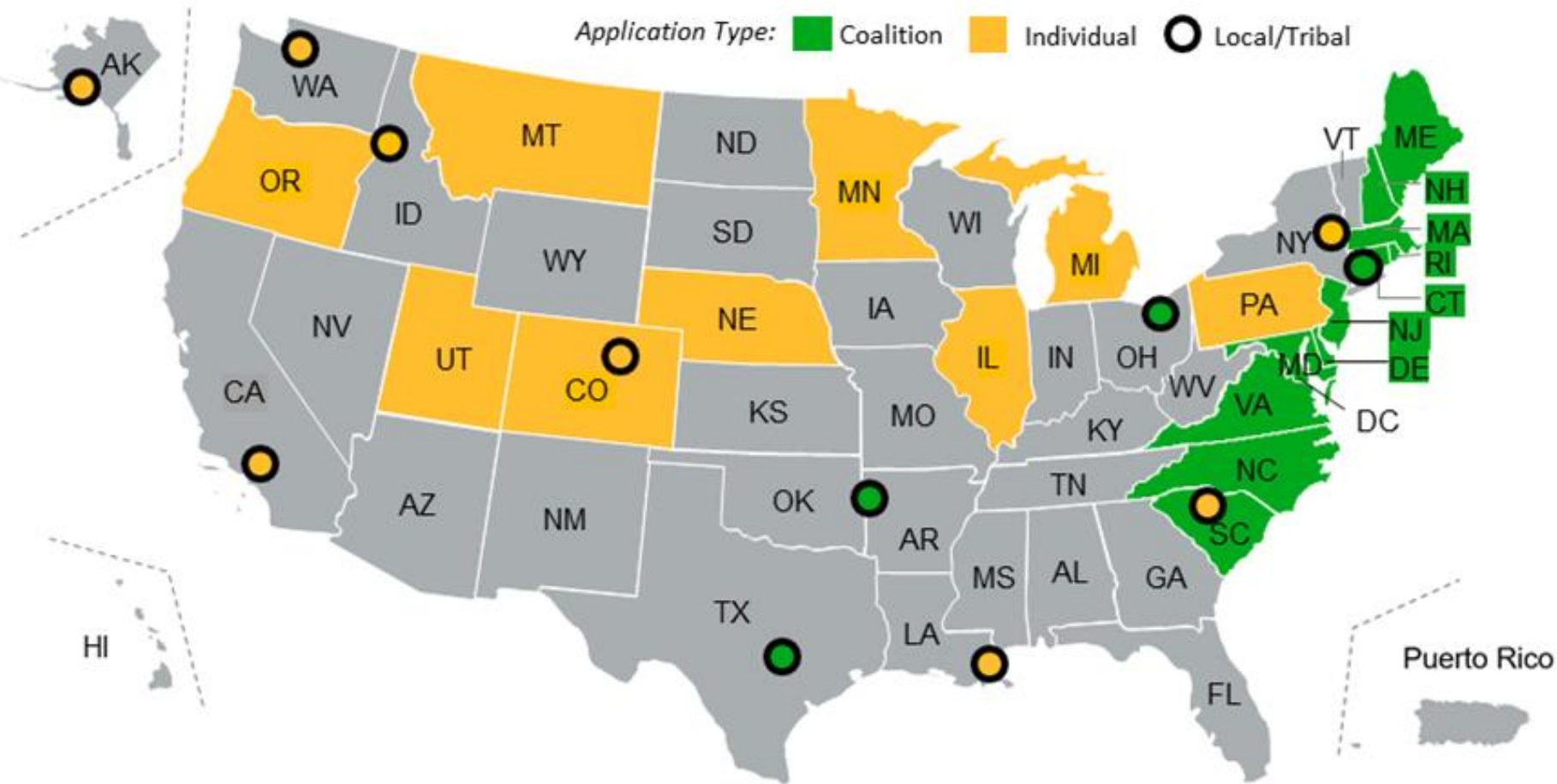
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NDEE had to carefully consider which PCAP measures to include in the CPRG Implementation Grant application. We considered:

- Overall size of the funding request & is other funding available?
  - GHG reductions and cost-effectiveness
  - Ease/difficulty of implementation and input from stakeholders
  - Measures that can extend and strengthen existing programs
  - Benefits to urban and rural areas
  - Support for low-income and disadvantaged communities
  - Co-benefits (reductions in other air pollutants or nitrate pollution in groundwater)
  - Measures addressing GHG emissions in hard-to-tackle sectors
  - *Eight PCAP measures were brought forward for the Implementation Grant*
- 

# Nebraska's (CPRG) Implementation Grant: **\$307 million**

Expected to reduce GHG emissions by ~26 million metric tons (cumulative) by 2030



July 2024:

EPA announced that Nebraska is one of 25 applicants out of 300 that will be awarded implementation grant funds.

Nebraska will receive \$307 million (90% of request) to implement 8 measures over the next 5 years.



# ONE RED Greenhouse Gas Reduction Measures



Energy Efficiency and Electrification



Agriculture



Solar Projects



Waste Management



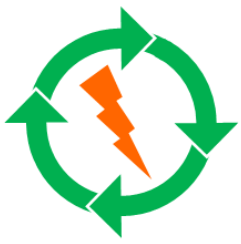
# Energy Efficiency and Electrification

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## Energy Efficiency and Electrification Upgrades for Non-Residential Facilities

- Provide funding to public utilities to expand existing energy efficiency programs for industrial, commercial, municipal, and agricultural facilities
- Funding for efficiency improvements in natural gas-fired equipment
- Incentives could cover up to 50% of project costs.
- **Reduce GHG emissions by 536,393 metric tons by 2030**

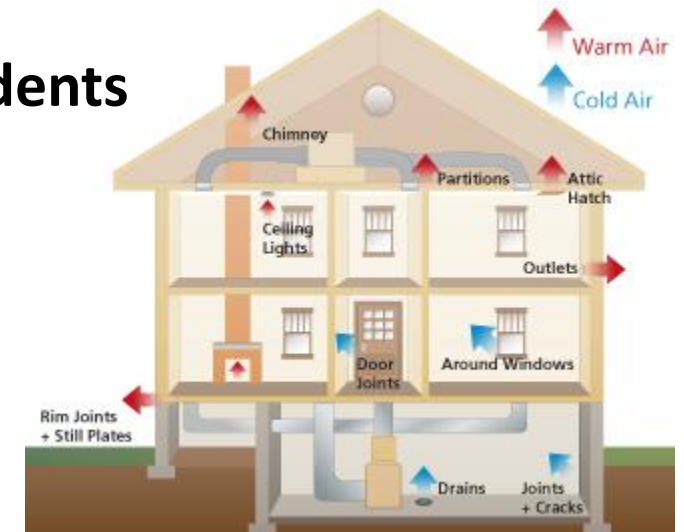




# Energy Efficiency and Electrification

## Residential Pre-Weatherization Program for Low-Income Residents

- Provide funds to address critical home repairs to make homes eligible for the Weatherization Assistance Program
- Enable 75 additional homes to be weatherized per year at no cost to residents
- **Reduce GHG emissions by 13,103 metric tons by 2030**



## Incentives for Irrigation Well Conversion from Diesel to Electric

- Replace 50 diesel engines per year with electric motors
- Reimburse 60% of project costs up to \$23,000
- **Reduce GHG emissions by 14,291 metric tons by 2030**





# Solar Projects

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## Incentives for Micro-Solar Arrays for Critical Infrastructure in Low-Income Rural Communities

- Add 4 MW of solar by 2030 at water/wastewater facilities
- Reduce energy costs for 8 to 20 low-income communities & reduce fossil fuel generation
- Up to 100% of costs covered.
- **Reduce GHG emissions by 9,183 metric tons by 2030**





# Solar Projects

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## Funding for Solar Projects on Unused/Contaminated Land, Ag & Industrial Facilities, and Parking Lot/Feedlot Solar Canopies

- Add 7.2 MW solar capacity, reducing fossil fuel generation
- Won't displace other productive uses
- Up to 60% of costs covered
- **Reduce GHG emissions by 12,180 metric tons by 2030**





# Agriculture

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## Measures to Reduce Emissions in Agricultural Production:

- Establish a Carbon Intensity (CI) Score Registry
- Provide Incentives for Regenerative Agriculture Practices
- Provide Incentives for Precision Agriculture Systems
- **Reduce GHG emissions by 25 million metric tons by 2030**

Interlocking measures aim to encourage practices that promote soil health, reduce application of nitrogen fertilizer, store carbon in the soil, and reduce equipment passes through fields.

The CI Score registry would provide growers with an established performance metric to track the impact of sustainable farming practices and gain premium pricing for their crops.

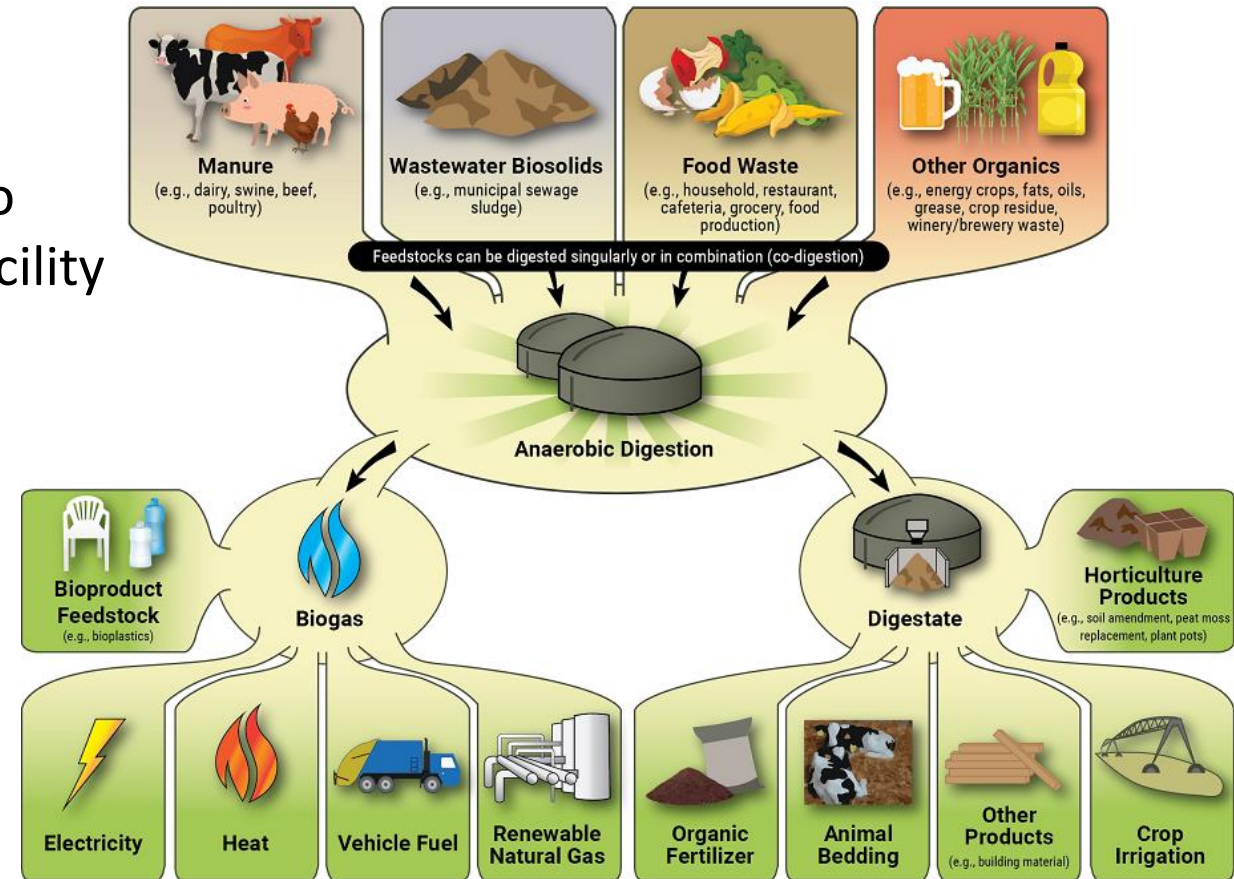




# Waste Management

## Establish Hub-and-Spoke Anaerobic Digester/Biogas Hub for Agricultural Waste

- Site biogas cleaning facility near existing natural gas pipeline
- Anaerobic digesters at nearby animal ag operations process cattle and hog manure to generate biogas to deliver to the cleaning facility
- Resulting renewable natural gas reduces the use of fossil fuel natural gas
- Remaining solids (digestate) would be applied to cropland to reduce use of nitrogen fertilizer
- Up to 70% of costs covered
- **Reduce GHG emissions by 261,907 metric tons by 2030**





# Waste Management

## Incentives for Production and Use of Biochar to Reduce Organic Waste and Sequester Carbon in Soil

- Biochar produced from wood or other organic waste can be applied as a soil amendment to improve soil health and store carbon
- Biochar can be produced from waste from Emerald Ash Borer infestations or invasive red cedar from pasture lands
- 80% of costs covered up to \$800,000.
- Funds to City of Lincoln to complete biochar facility
- Up to 3 additional biochar production facilities by 2030
- Reduce GHG emissions by 12,050 metric tons by 2030



Total Estimated Greenhouse Gas Reductions for All Measures:

25 million metric tons by 2030

160 million metric tons by 2050



# Other Benefits / Next Steps

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## **Other Benefits**

The CPRG grants focus on greenhouse gas reductions.

But many of these measures will have other benefits:

- Reduced emissions of nitrogen oxides (NO<sub>x</sub>), sulfur dioxide, and particulates
- Reduction in nitrates in surface and groundwater
- Less impact by pollutants on public health
- Economic & jobs benefits to communities across Nebraska, both urban and rural

## **Next Steps**

- Grant award expected mid-October
  - Design and open incentive programs over the next 6 to 12 months
  - Begin stakeholder outreach this fall to consider long-term measures for the Comprehensive Action Plan
  - Complete Comprehensive Action Plan by December 2025
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## Further Information

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**ONE RED**

*Opportunity for Nebraska:  
Reducing Emissions & Decarbonization*

**Program website:** <http://dee.ne.gov/ndeqprog.nsf/onweb/cprg>

The ONE RED portion of the Department website includes several pages:

- Program home page
- Priority Climate Action Plan
- Comprehensive Action Plan
- Implementation Grant
- Contact Information

Check the website frequently for information as plans & programs develop.

