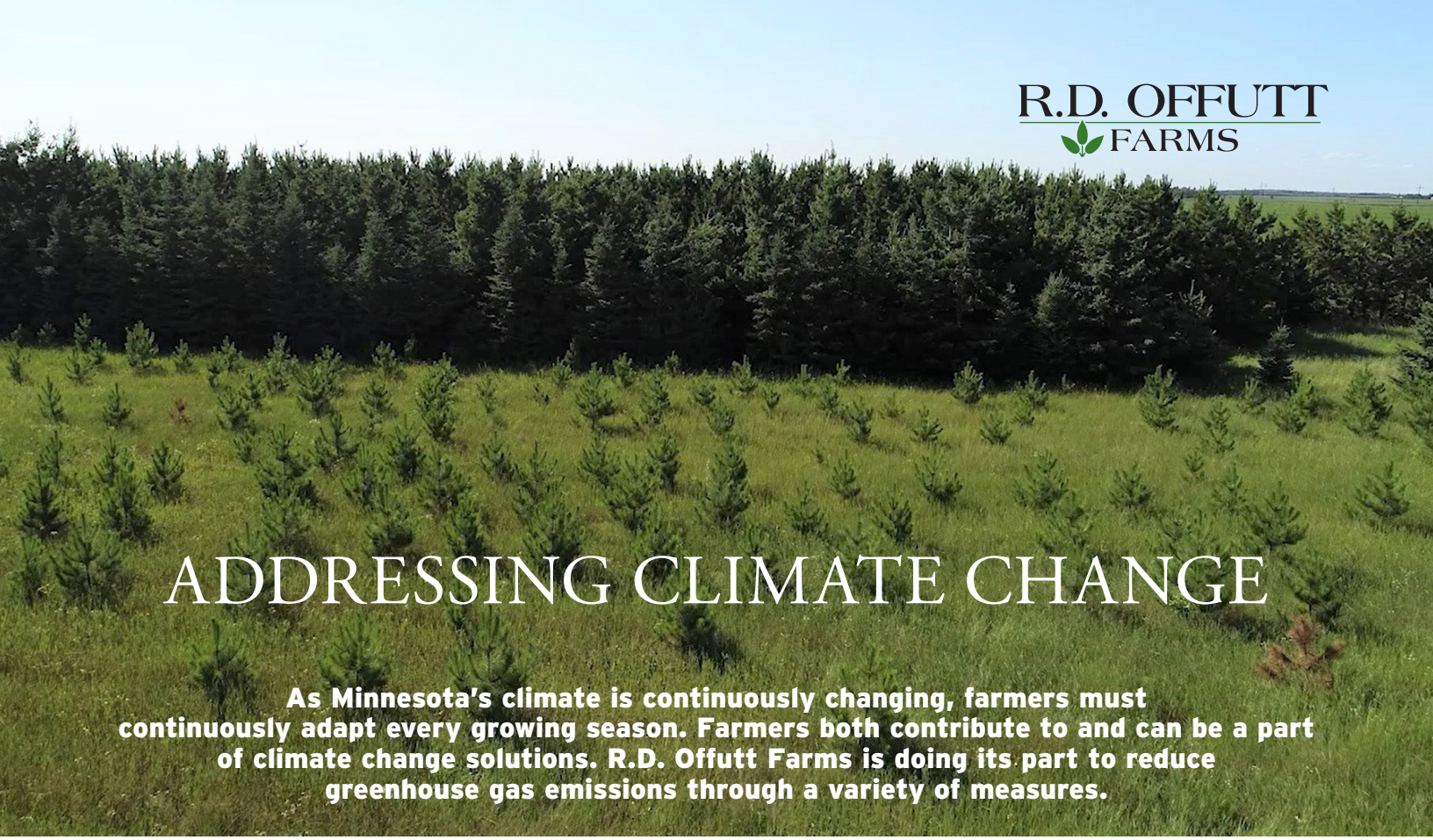

R.D. OFFUTT FARMS

ADDRESSING CLIMATE CHANGE

As Minnesota's climate is continuously changing, farmers must continuously adapt every growing season. Farmers both contribute to and can be a part of climate change solutions. R.D. Offutt Farms is doing its part to reduce greenhouse gas emissions through a variety of measures.

Cover crops: Sustainable farming practices can help mitigate the impact of climate change by using soil and plants as natural carbon sinks. One major way that farms can help with climate change is by planting cover crops, which are crops we grow to improve soil health, not to sell. Not only do cover crops keep the soil healthy by reducing soil erosion and improving water retention, cover crops also capture carbon in the atmosphere. According to the Minnesota Pollution Control Agency, **25 acres of cover crops is equivalent to taking one car off the road.**

Reforestation: The Nature Conservancy cites reforestation as one of the highest opportunities for carbon storage in Minnesota, with a mature tree absorbing about 48 pounds of carbon dioxide per year. **Since 1990, we have planted more than 300,000 trees at our farm in Park Rapids, and our goal is to plant 20,000 trees per year.** Additionally, we manage more than 3,500 acres of natural wooded or forested lands. These trees and forested areas not only capture carbon but also minimize soil erosion by slowing rain and wind.

We planted more than 18,000 acres of cover crops in 2021– removing the equivalent of 720 cars off the road.

Effective tillage practices: We've reduced field passes by implementing GPS auto-steering, reducing overlap, unnecessary tillage and fuel consumption. **We vary our tillage on different soil types, but still meet the needs of our customers.**

www.rdoffuttfarms.com

Supporting the new energy economy: Our farm in Becker, Minn. is adjacent to a proposed Xcel Energy solar development project. Xcel sought our interest in the project and through negotiations, R.D. Offutt Farms is partnering on this renewable energy development, investing 1500 high-quality farm acres to be converted to host solar panels. Xcel notes this project will jump-start the economy by creating jobs and speed the clean energy transition while keeping bills low.

Energy-efficient farm equipment and facilities: In line with keeping our operations highly efficient, we have implemented a number of measures to conserve energy. We have low-emission tractors in our fleet, designed to use less diesel fuel. We have converted diesel-generated irrigators to electric irrigators on every R.D. Offutt Farm, cutting horsepower requirements by 50% to use less energy. Off the field, we have more than 60 potato storage facilities. Each facility uses LED lighting, which is 70% more efficient in energy and longevity than incandescent lighting.

Our new potato storage facility

in Becker, Minn. was constructed in 2017 using energy upgrades to reduce consumption. Upgrades included evaporative cooling, variable frequency drive on ventilation and condenser fans and electronic expansion valves. According to analysis by Agri-Control Technologies, using Cascade Energy's tool, these upgrades provided a 75% reduction in energy consumption (kilowatt/year), with a payback expected within two years.

PUTTING POLLINATORS TO WORK

Pollinators support biodiversity and pollinator populations are a good indicator of overall ecosystem health. R.D. Offutt Farms has planted pollinator habitat on more than 600 acres in Minnesota, with plans to add 200 acres every year.

A University of Minnesota PhD Candidate conducted graduate studies on our pollinator habitat at our Park Rapids farm. His result findings document floral plantings provide multiple benefits:

- ✓ When well established, plantings conserve pollinator numbers,
- ✓ Predators benefit from plantings and prey upon damaging pest species,
- ✓ Floral plantings show promise as a method of ecological intensification.