

RESILIENT DESIGN FOR AGRICULTURE

CIVIL

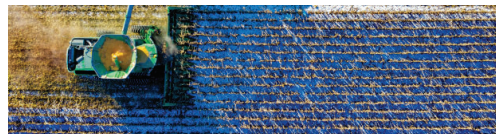
STRUCTURAL

MECHANICAL

ELECTRICAL

INDUSTRIAL

DGH has taken a proactive step in helping Manitoban Farmers access funds through the Government of Canada's Agricultural Clean Technology Program (ACT). By helping farmers access the funds available through ACT, DGH has been able to contribute to Manitoba's climate resilience and economic resilience. Our analysis of farming operations has assisted crop producers shift to manure injection for crop fertilization, which mitigates the risks associated with both Greenhouse Gas (GHG) and odor emissions from farming operations. Furthermore, manure injection



eliminates the risk of contamination to water sources that is associated with traditional land application of manure.

By shifting from land application of manure to the injection of manure into the soil, farmers can reduce machine hours by using hoses to pump manure from lagoons to fields rather than transporting it by trucks. By reducing the use of trucks for transportation, crop producers can decrease the need for specialized training for farm employees, decrease fuel consumption, reduce wear and tear on roads, and contribute to road safety.

OUR SERVICES

Using DGH's services, a typical Manitoban farm can gain significant efficiencies by converting its operations to use manure injection. The forecasted savings achieved based on DGH's analysis and recommendations for a typical farm in Manitoba could include:

- ✓ A 62% reduction in tractor- and machine-hours, resulting in decreased maintenance costs
- ✓ A 72% reduction in person-hours required for seeding crops

- ✓ A 48% reduction in fuel consumption
- ✓ And a 52% reduction in GHG emissions

While there are costs associated with converting a farming operation to use manure injection these costs may be easily recouped over a short period of time through decreased maintenance and fuel costs. By injecting manure into the soil rather than using land application, farmers can also decrease the total amount of manure required per acre and the need to purchase commercial fertilizers.

Did You Know?

Farmers can offset the costs by accessing funding through the ACT program

Farmers can also offset the costs by accessing funding through the ACT program. A significant factor that leads to resiliency is the ability to continue operations when faced with challenges brought on by climate change and other factors that might impact operations. By reducing fuel consumption and maintenance costs now, you are better prepared for sudden increases in fuel costs resulting from natural disasters and supply chain disruptions in the future.

Beyond the reductions in operating costs afforded by the injection of manure for crop fertilization, the reduction in odor and the reduction of GHG emissions will improve the public perception of farming operations. Shifting away from the land application of manure will help crop producers continue to be seen as good neighbours.

Don't forget to click the like button and follow us on LinkedIn and Instagram for more updates on how DGH is working to create climate resiliency.

DGH

<https://www.instagram.com/dghengineering>

<https://www.linkedin.com/company/dgh-engineering>

Contact Information

DGH Engineering Ltd.
12 Aviation Boulevard
St. Andrews MB R1A 3N5
Canada

T: 204-334-8846

E: dgh@dghengineering.com
www.DGHengineering.com