

KAP Submission to the Public Utilities Board on Efficiency Manitoba's 2020/23 Plan

January 24, 2020

Keystone Agricultural Producers (KAP) is Manitoba's general farm policy organization, representing and promoting the interests of thousands of agricultural producers in Manitoba. Our membership consists of over 4,000 members and 25 commodity groups who set our organization's policy through a grassroots governance structure. We speak up on the issues that matter to Manitoba farmers and we effect the changes needed for farmers to remain profitable, sustainable, and globally competitive. We do this by working with governments, industry and stakeholders on overarching issues that affect all farmers.

On behalf of KAP, please accept the following comments regarding Efficiency Manitoba's 3-Year Energy Efficiency Plan.

KAP's unique perspective, as representatives of farmers, who also make up a significant proportion of the rural population, is an important element for consideration as the PUB reviews Efficiency Manitoba's plan.

Agriculture is a key economic driver in Manitoba. According to Manitoba Agriculture and Resource Development, primary agriculture and food manufacturing contributed 5.7% to Manitoba's GDP in 2017 and created employment opportunities for 36,800 Manitobans.

Agriculture in Manitoba is diverse and while it is an energy-intensive industry, different segments of our industry have different electrical and natural gas demands based on their unique needs. This is best illustrated in Figures A7.5, A7.6 and A7.7 in Efficiency Manitoba's plan.

As an example, hog farms make up 28% of Manitoba Hydro's primary agriculture customers, though they represent nearly 60% of the agricultural market's average electricity use and over 70% of the agricultural market's average natural gas use.

Comparing this to field crop combination farms, which make up just over 10% of Manitoba Hydro's primary agriculture customers and represent 4.7% and 0.9% of the agricultural market's average electricity and natural gas use respectively, we see that hog farming is a much more energy intensive segment of the agricultural sector.

FIGURE A7.5 MANITOBA AGRICULTURAL MARKET

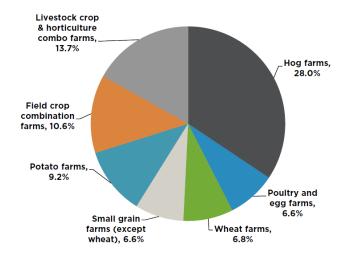


FIGURE A7.6 MANITOBA AGRICULTURAL MARKET - AVERAGE ELECTRICITY USE

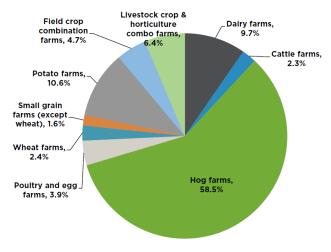
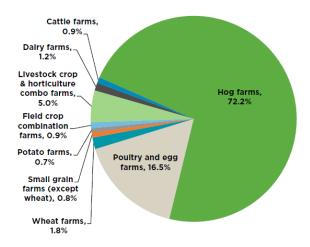


FIGURE A7.7 MANITOBA AGRICULTURAL MARKET - AVERAGE NATURAL GAS USE



Source: Efficiency Manitoba 2020/23 Efficiency Plan Submission

This is because confined livestock operations rely on temperature controlled and properly ventilated production buildings or barns to raise healthy animals. Livestock producers may also use other technologies in their operations that require hydro such as automatic feeding, watering and heating systems.

Additionally, cleaning and sanitization equipment may run on electric power and are important components of a confined livestock operation in that proper sanitization limits risks related to disease and biosecurity.

Another example of agriculture's diverse and unique needs is the potato sector, which represents 9.2% of Manitoba Hydro's primary agriculture customers. The province's potato sector has the second highest average electricity use after hog farms (at just over 10%), yet the lowest average natural gas use (at 0.7%).

The reason for this is that potatoes require significantly more water than an oilseed or cereal crop and farmers use irrigation pivots to ensure that their crops receive adequate moisture during the right times in the growing season. These pivots are electrically powered. The water pumps used to bring water from its source into the pivots are also run on electricity.

As we have pointed out, the diversity of energy requirements in Manitoba's agricultural industry is significant. Our policy recognizes that agriculture is an energy intensive industry and states that access to stable and reasonably priced energy is critical to the long-term success of the industry.

If government seeks to modify the use of any energy source by agricultural operations or rural residents, it must consider fuel source availability, price, and environmental impact before implementing policy changes. Farmers are price takers in the global marketplace, and it is the impact to their bottom line that will drive their decision making in terms of energy usage at the end of the day.

Overall, KAP supports Efficiency Manitoba's mandate to achieve electrical energy and natural gas savings through energy efficiency programming. Farmers are always looking for ways to make their operation more efficient, and energy-saving initiatives that will reduce energy bills and help farmer's bottom-lines would be welcomed by our industry.

We appreciate Efficiency Manitoba distinguishing agriculture as its own customer segment in the plan, which recognizes these unique needs and energy consumption patterns, and for including KAP as a representative of the agriculture customer segment in the Efficiency Manitoba Advisory Group.

However, we do feel that there are special considerations for the agricultural sector that may affect the industry's energy usage in the coming years and will therefore have a bearing on Efficiency Manitoba's savings targets for the agriculture customer segment. Below, we highlight two such considerations as examples.

First is the impact of weather changes on agricultural practices. The 2019 harvest clearly demonstrated the impact that challenging weather can have on agricultural operations. Significant rains in the fall, coupled with a Thanksgiving weekend snowstorm meant that many farmers had to rely on grain drying to deal with the damp harvest. The ability to dry grain is important from an economic, a harvest management and a food safety perspective. Storing damp grain can lead to quality losses or mold which in turn could lead to a producer receiving a lower price for their crop, or at worse render the crop unmarketable due to food safety concerns.

Grain dryers, in use today on many grain farms across the province, require natural gas, propane and electricity, and there are currently no alternative management techniques available to producers to deal with wet crops.

Changes in cropping patterns, resulting from weather changes and improved genetics, will also impact the use of grain dryers going forward. For instance, it is projected that corn, a crop that is suited to warmer climates and commonly dried before storing, will become increasingly popular on the prairies as temperatures rise.

As weather changes continue, farmers will become increasingly reliant on production techniques like grain drying to mitigate these impacts and this will lead to increased energy demands.

Second, is the impact of changing animal welfare requirements. For example, in the egg industry, producers are moving to enriched housing, which allows for more space for chickens in their barns. In fact, in 2016, the Egg Farmers of Canada announced an industry-wide transition away from conventional housing, that would see all egg production in enriched housing, free-run, aviary or free range by 2036. One of the impacts of this increased space is that the chicken no longer can keep as warm from their collective body heat and therefore, barns require increased energy use for heating.

As production techniques and consumer requirements evolve, so will farmers' energy demands.

As a final thought, we note that our organization has been provided with direction from our members to develop a plan to expand natural gas capacity in rural Manitoba to provide economic and competitive benefits to producers, the agricultural sector and Manitoba as a whole. As this will have a bearing on Efficiency Manitoba's natural gas savings targets for the

agricultural industry, it leads us to question whether Efficiency Manitoba's mandated savings targets have enough flexibility to account for specific instances where reductions in natural gas and electricity may not necessarily lead to beneficial outcomes for the agricultural sector.

To conclude, we would like to reiterate our support for Efficiency Manitoba's energy savings targets. The agricultural sector looks forward to participating in energy efficiency programming that will help reduce their energy costs and environmental footprint.

We also recognize that there are factors beyond producers' control that will impact their energy demands going forward.

On behalf of KAP, thank you for your consideration of this submission. We appreciate the opportunity to share agriculture's perspective on Efficiency Manitoba's plan.