



Policy Paper

“The Voice of Manitoba Farmers”

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Agricultural Energy

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The renewable energy industry in Manitoba is in the process of expanding and diversifying into new sectors. The province's farmers are well situated to aid in this process and benefit from these new opportunities if they are provided the right tools and information. The diversity of the province's resource base, geography, and population demographics provides a plethora of opportunities but also means that industry development will require a variety of unique support programs. This paper establishes KAP's vision of how renewable energy industries should develop in the province and it outlines the support needed regarding energy conservation in agricultural production.

Local Ownership

KAP believes that the development of the renewable energy industry in Manitoba must follow a number of overall principles to ensure that farmers and their communities benefit from these new ventures. Farmer ownership, and policies to facilitate this ownership, is needed to ensure that ventures accrue benefits back to the local community. Strong local ownership in conjunction with strategic alliances with other stakeholders will help to prevent these ventures from takeovers by larger, outside interests. KAP believes that government should prioritize funding for community owned ventures but also encourage outside investment in large scale operations.

Government Funding

There is a need for provincial support of these initiatives through effective policies, programs, and incentives, including the maintenance and expansion of a green loan program. Government backing allows farmers to invest in new ventures with the confidence that they are supported and share financial risks. It is important that government programs and other initiatives continue to improve Manitoba's competitiveness when compared to other jurisdictions and marketplaces.

As public funds are invested into the renewable energy industry through programs and incentives, it is critical that there is a strong evaluation framework in place. KAP believes that governments must be able to report on how many dollars were spent and where, whether the program design was suitable, and what the impacts were.

Impact on Livestock Sector

As agricultural based energy industries continue to grow in Manitoba and globally, KAP believes it is important for government and other stakeholders to consider potential impacts from the perspective of livestock producers. The connection between grains and alternate energy is often quite clear, but the inter-relationship between crop based energy production and livestock has a number of complexities that must be considered.

While the livestock sectors can use some of the by-products of renewable energy production, more research and development is needed to make more usable feedstocks. At the same time, livestock producers may be in the position of having to compete with the energy market for the grains that they use as feed for their animals. In years where livestock margins are tight or feedstock prices are high, this creates a financial burden on producers that should be addressed. Other jurisdictions have created programs designed to assist livestock producers' transition to an environment with increased alternate energy production, and this may be a beneficial approach to take in Manitoba as well.

The province must also consider how the disposal of specified risk materials (SRMs) and manure fits into its alternate energy plan, as they do present some opportunities. The costs of SRM disposal and manure storage and disposal are relatively high and they must be dealt with to minimize environmental risks. The use of SRMs in biodiesel production or through incineration to create energy may be alternatives that address these issues. There is potential for expanding the use of manure as a partial replacement for energy intensive synthetic fertilizers as well as using manure for biogas capture and energy production. In both cases, producers are currently hesitant to invest significant amounts of money in technology that is unproven in Manitoba's unique climate and geography. Provincially funded research and pilot projects can be the catalyst to the further adoption of these technologies in Manitoba. KAP recommends that government develop a practical and adequately funded infrastructure plan to address the needs of these emerging value-added industries.

Biodiesel

KAP supports mandated biodiesel usage to develop the critical mass in Manitoba that is needed for growth in demand and investment.

Farmers must have the ability to support community biodiesel facility initiatives, without excluding them from the opportunity to build larger facilities in conjunction with larger industry players. KAP believes that government incentives should be implemented to encourage grower ownership of production facilities, with the level of incentive varying on the size of the facility. To that effect, we believe that large biodiesel production facilities that do not have significant producer ownership should have reduced support levels.

There is room in Manitoba's biodiesel market for a diverse range of facilities. Whether large or small, KAP believes that high quality standards like ASTM D 6751 must be in place to ensure that small-scale or community-based plants can sell their products to larger facilities and a broader market.

Biomass

There are emerging opportunities in Manitoba for several sources of biomass to kick-start the province's green economy. The potential for production of biomass such as switchgrass and other sources appears to be positive as they are well suited to growth in the provinces with no known concerns relating to disease control or the length of growing season. However, the consistent market demand in significant volumes to warrant production does not currently exist.

To address this barrier, KAP recommends that the province release the results of a feasibility study it commissioned on converting one or both of its hydro generating plants in Selkirk and Brandon to biomass burning plants. These plants would create an immediate market for biomass pellets and would be reliable and sizeable enough to warrant farmers' entrance into biomass production. KAP believes that the provincial analysis should also evaluate the potential benefits to farmers as well as the environmental benefits of adopting this renewable energy source.

An increased focus on biomass would provide a productive use for buffer strips that may be required to meet any future nutrient management or water protection regulations. It may also encourage an increase in forage acres on fragile or erodible land by creating a market for crops. The management of crop residue also continues to be an issue in Manitoba, and a strong biomass industry may create a new market for its disposal.

The creation of managed marshlands and grasslands to utilize nutrients is also a relatively new concept in Manitoba, with limited involvement from producers and communities to date. By encouraging the move into biomass energy production, the province may also facilitate the use of municipal waste water spring releases to stimulate production as part of managed marshlands or grasslands. These could be harvested to safely incinerate in the biomass plants, while also removing more significant amounts of nutrients that currently add to the concerns surrounding Lake Winnipeg.

Ethanol

KAP supports the current mandate for ethanol in Manitoba which establishes some conditions for community involvement in ethanol facilities, and this may assist smaller producers with the marketing and sale of their denatured ethanol. We believe that this creates the opportunity for smaller scale producers to become involved in the ethanol industry, without having to establish independent distribution and marketing chains, which is often cost-prohibitive.

KAP believes that there will be opportunity in the future for ethanol production as technology advances, specifically in the area of cellulose-based ethanol production. This could create additional markets for straw, switchgrass, and poplar trees. KAP encourages government and other stakeholders to follow developments in this area to determine a practical approach for the province.

Wind/Solar Energy and Electricity Production

KAP believes that wind and solar energy development on agricultural land must be built on good local discussions to ensure it is suitable for area residents and the farming community. There is a role for the provincial government to ensure that timely and accurate information is available to farmers, to assist them in their evaluation and decision-making process relating to land-use contracts for energy production.

Manitoba Hydro and the Manitoba government have called for expressions of interest for wind development, with emphasis on 10 megawatts or more. KAP believes that it is in smaller megawatt projects where farmers and rural communities can become active participants and can generate a significant amount of energy from renewable sources.

Standardized purchase prices similar to other regions in Canada and in the United States is critical to the development of renewable resourced based electricity production projects. A feed in tariff (FIT) program, standard offer contract (SOC), or standardized purchase power agreement (PPA) can provide opportunities for greater revenues based on project size, technology, resource type, and level of community ownership. Greater revenues across a variety of project types and sizes will make this fledgling sector of Manitoba's energy industry more viable and better positioned to meet future market demands.

Energy Consumption in Agriculture

In addition to the potential for agricultural producers to participate in producing energy in the future, KAP recognizes that modern agricultural production is energy intensive. Because of economic and environmental concerns KAP recognizes that efficient allocation of energy resources is critical to the long term sustainability of agriculture in Manitoba. KAP believes government, private industry and agricultural producers should work together to develop and adopt innovative solutions to reduce energy consumption in agriculture.

Summary of Recommendations

General:

- Facilitate farmers ownership and provide benefits to local communities by providing increased levels of funding to locally owned ventures but not discouraging outside investment.
- Government must provide funding and project support to help mitigate risk to entrepreneurs.
- Evaluative framework for funding projects must be in place.

Livestock:

- Impact on livestock industry must be considered as demand for feedstock rises.
- Programs to help livestock industry adopt effective and productive manure and SRM management technologies must be funded.

Biodiesel:

- A mandate to foster growth in demand is critical.
- Support programs are needed for projects of varying scale and size.
- Standards are needed to guarantee quality of product to buyers.

Biomass:

- Increasing level of demand, including through conversion of Manitoba Hydro generating facilities is critical.
- Use of marshland and riparian area management for generating biomass provides other environmental benefits.

Ethanol:

- Mandate is important to increase demand.
- Cellulosic ethanol can provide opportunity in alternative crop production and should be encouraged.

Wind/Solar:

- Information for landowners and communities is important.
- Smaller scale production can offer a greater level of community involvement.
- Manitoba Hydro should develop a standardized purchase price system for renewable energy production similar to those in other regions.

Energy Consumption in Agriculture:

- Efficient use of energy in agriculture is critical to the long term economic and environmental sustainability of agriculture in Manitoba.