QUESTIONS AND ANSWERS:
MANITOBA BIOMASS ENERGY SUPPORT PROGRAM

Q1: Why a Manitoba Biomass Energy Support Program (MBESP)?

A1: Manitoba is committed to reducing greenhouse gas emissions (GHG) from coal burning. Coal is more GHG intense and its use releases more GHG gases than other fossil fuels or biomass. The MBESP is intended to provide financial assistance to coal users and biomass processors as they transition towards bio-based energy systems and supply chains.

Q2: Why use biomass?

A2: Renewable biomass fuels are considered “carbon neutral” because the carbon that is released into the atmosphere when they are burned is reabsorbed when new biomass is grown. Manitoba has 3 to 5 million tonnes of biomass available annually in excess of the amount required for soil management and livestock. Utilizing a portion of locally available biomass would reduce the import of fossil fuels, reduce economic leakage, and assist in the development of renewable industry and jobs in rural Manitoba.

Q3: What is the Manitoba Biomass Energy Support Program?

A3: The Manitoba Biomass Energy Support Program provides support to Manitobans in the transition to the processing and use of biomass for heating in place of coal. There are two components to the program, (1) a Capital Incentive to assist users and processors of approved biomass to undertake infrastructure development and upgrades; and (2) a Research and Development Grant to support innovative activities that advance the biomass sector. The Research and Development Grant was first introduced into the program in 2014.

Q4: What is the Manitoba Biomass Energy Support Program’s Capital Incentive?

A4: the program’s Capital Incentive will assist coal users in upgrading capital and infrastructure required to burn qualified biomass. The incentive is also available for biomass processors to develop or expand their biomass processing facilities.

- Successful applicants may be eligible for cost-shared supports of up to $50,000 each, to a maximum of 50 per cent of the total cost. Applications will be considered on a first-come-first-serve basis.
• The intent is to provide support for capital and/or infrastructure upgrades that are required to effectively manufacture or consume biomass fuel, including expansion of existing or development of new capacity.
• Eligible facility or equipment upgrades may include storage, conveyors, size-reduction equipment (e.g. tub grinder, hammer mill, chipper), densifiers (e.g. pellete, cuber, extruder, etc.). Ineligible equipment includes general-use farm equipment, such as tractors, brush cutters, front-end loaders, etc.
• Eligible biomass processors and users have carried out capital and/or infrastructure upgrades during the period from April 1, 2017 to March 31, 2018.

Q5: What is the Manitoba Biomass Energy Support Program, Research and Development Grant?
A5: This component was first introduced into the Manitoba Biomass Energy Support Program in 2014/15 to support research and development activities that advance biomass processing and product development technology, and accelerate the adoption of innovations in biomass processing and use. The maximum government contribution to a project will be determined by (a) the project’s ability to meet the programs goals and objectives; and, (b) such contribution not to exceed the maximum amount for the program. Projects conducted by private individuals or businesses will require a minimum 25% contribution (cash and/or in-kind) from the applicant.

Q6: What are eligible biomass sources?
A6: Eligible biomass materials include agricultural residues, forestry residues and purpose-grown crops purchased for use as fuel for heating, for example:

• agricultural residue such as wheat straw, corn stover, flax straw, and
• agri-processing by-products such as flax shives, sunflower hulls, oat-hulls,
• compacted biomass such as wheat chaff pellets and oat hull pellets;
• forestry residues such as hog fuel, forestry operations residues, salvaged timber;
• purpose-grown crops, such as switchgrass, willow crops, poplar crops.

Q7: What biomass sources are excluded?
A7: Excluded products include (but are not limited to):

• charcoal products
• peat
• wood from standing green forests
• waste as defined under the Environment Act
Q8: Is sales tax payable on Biomass?

A8: Biomass products made 100% from wood, wheat, flax, oats, barley, sunflower, hemp or corn, when purchased for use as a fuel for heating or cooking, are exempt from Manitoba retail sales tax. Charcoal products are not exempt from this sales tax.

Q9: What are the quality requirements?

A9: Manitoba strongly encourages program participants to use the highest quality biomass fuel available. Applicants for the Consumer Support component should provide documentation from the supplier that details supplier name and address, the type of biomass and its constituents, sizing, moisture content, ash content, and calorific energy content. Program participants must also comply with any and all regulations related to the processing, handling and/or combustion of biomass, including air emissions, safety, health, labour, etc.

Q10: Is there a test facility for biomass?

A10: There are several test facilities in Canada that have the capability to evaluate the quality of biomass, including Winnipeg’s ALS Environmental (Niakwa Road) and Central Testing Laboratory Ltd. (Lagimodiere Blvd).

Q11: Who is eligible to participate in the Manitoba Biomass Energy Support Program?

A11: Eligible applicants for the Capital Incentive are those who have a demonstrated necessity for the installation of new or expanded capital equipment and/or infrastructure required to effectively begin or expand the consumption and/or processing of biomass fuel.

Eligible applicants for the Research and Development Grant include industry and commodity development organizations serving agriculture and related industries in Manitoba and Canada; diversification centres; not-for-profit organizations; cooperatives; Agribusiness; and, agriculture producers.

Q12: What is the application deadline for the Manitoba Biomass Energy Support Program?

A12: Applications must be received at the MB Ag office, Unit 13 - 59 Scurfield Blvd. Winnipeg, Manitoba by September 1, 2017. Applications and awards will be considered and assigned on a first-come-first-served basis as funding permits.

Q13: How does the energy of biomass compare to coal?

A13: The energy in biomass can be compared on a BTU basis. The following are some approximate heating values; the actual energy content will vary by sample, source, density, and moisture.
<table>
<thead>
<tr>
<th>Fuel</th>
<th>Heating Value</th>
<th>Moisture Content</th>
</tr>
</thead>
<tbody>
<tr>
<td>Propane</td>
<td>19,940</td>
<td>-</td>
</tr>
<tr>
<td>Flax Straw</td>
<td>8,587</td>
<td>Dry</td>
</tr>
<tr>
<td>Hemp Biomass Cubes</td>
<td>8,289</td>
<td>12%</td>
</tr>
<tr>
<td>Switchgrass Cubes</td>
<td>7,929</td>
<td>13%</td>
</tr>
<tr>
<td>Willow Biomass</td>
<td>7,739</td>
<td>20%</td>
</tr>
<tr>
<td>Wheat Straw Cubes</td>
<td>7,713</td>
<td>11%</td>
</tr>
<tr>
<td>Wheat Straw</td>
<td>7,680</td>
<td>Dry</td>
</tr>
<tr>
<td>Wood (cordwood)</td>
<td>6,900</td>
<td>20%</td>
</tr>
<tr>
<td>Flax Straw</td>
<td>6,635</td>
<td>20%</td>
</tr>
<tr>
<td>Coal (lignite)</td>
<td>6,500</td>
<td>12%</td>
</tr>
</tbody>
</table>

**Q14: Where can I buy biomass fuel?**

**A14:** Biomass processing in Manitoba continues to grow. Below is a list of current biomass suppliers:

- Emerson Milling (oat hulls) - Emerson
- Nestibo Agra (sunflower hulls) - Deloraine
- Biovalco (biomass cubes) - La Broquerie
- SWM Intl (flax shives) - Carman
- Richardson Milling (oat hulls and pellets) - Portage La Prairie
- Finmac Lumber (wood chips) - Winnipeg
- Lerial Enterprise (wood chips) - La Broquerie
- St. Boniface Pallets (wood chips) - Winnipeg
- Prairie Pellet Company (pellets) – Elm Creek
- Feedmax (pellets) - Killarney

**Q15: Where can I find more information about the emissions tax on coal and coal ban?**