

Please note: The following guidelines may be updated from time to time.

All applicants must complete at least one of the “D” schedules.

- If applying for more than one bioenergy product, complete the applicable D schedule for each product.
- Not all sections occur in every D schedule – question and schedule numbers are referenced in the “Section on Form” column
- The program is intended to support commercial bioenergy production. This is confirmed by meeting eligibility requirements, subject to Alberta Energy’s discretion where eligibility requirements do not fully address a particular facility or product.

	SECTION ON FORM	TIPS FOR APPLICANTS
	Facility or Project Name Schedules D1-D5	Provide the “Facility or Project Name” that is entered on the Application Form under Item 4 (Facility or Project).
	Date of Application Schedules D1-D5	Provide the date that is entered at the top of the Application Form.
1.	Production Status Schedules D1-D5	Schedule D forms must be complete for producing facilities. If development of a facility is not sufficiently advanced to respond to some questions, completion of the applicable “D” schedule will be a condition of approval prior to qualifying to receive credits on bioenergy production.
2.	Production Technology Schedules D1-D5	Name the manufacturer (e.g., Bioenergy Manufacturers Inc.) and the production process (e.g., Fatty Acid Methyl Esterification (FAME)). An attachment is optional to provide more detail on the production technology (e.g., product description published by the manufacturer).
	Facility Interconnection Question 3 in Schedule D4 (Electricity)	To be eligible under the BPCP, electricity generation from biomass must be interconnected to the Alberta electric system and have a nominal capacity that is greater than one Megawatt. Applicants must provide proof of interconnection into Alberta’s electric system, a link to a copy of the application, or a copy of the application for an interconnection, if available at the time of applying under the BPCP.
	Generating Capacity Question 4 in Schedule D4 (Electricity)	To be eligible under the BPCP, in addition to interconnecting to the Alberta electric system, the system generating electricity from biomass must have a nominal capacity that is greater than one Megawatt. An attachment is optional to provide more information on the generating capacity and how it has been determined.

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<p>Cogeneration – Waste Heat – Standalone Heat – Minimum Heat Output – Single Family Dwelling</p> <p>Question 3a – 3e in Schedule D5 (Heat)</p>	<p>These questions are to confirm the eligibility of the manner in which the heat is produced, and minimum output of 50,000 Gigajoules per year as an eligibility requirement.</p> <p>Attachments are required to describe and illustrate heat production from biomass through cogeneration or waste heat recovery. An attachment is optional to further describe and illustrate a standalone heat production system using biomass.</p>
<p>Initial Measurement</p> <p>Question 3 in Schedules D1, D2 and D3 (Biofuels, Gas Products, Biomass Pellets/Biocarbon)</p> <p>Question 4 in Schedule D5 (Heat)</p>	<p>This information is requested to confirm whether the initial unit of measure is different from the unit of measure used to calculate credits.</p>
<p>Conversion and Standardization Factors</p> <p>Question 4 in Schedules D1, D2 and D3 (Biofuels, Gas Products, Biomass Pellets/ Biocarbon)</p> <p>Question 5 in Schedule and D5 (Heat)</p> <p>Question 7 in Schedule D4 (Electricity)</p>	<p>This information is requested to confirm consistency of assumptions in measuring and converting units of measure.</p> <p>For Schedule D1, D2, D3, an attachment is optional to elaborate on calculations and standard assumptions.</p> <p>For Schedule D4, an attachment is required to support calculation of net usable electricity generated from biomass. The attachment must be signed by a professional engineer. Deductions from electricity generated include (but are not limited to): electricity generated from natural gas and other non biomass-inputs; and/or parasitic load, or the quantity of electricity consumed to generate electricity from biomass.</p> <p>For Schedule D5, non biomass-inputs into heat production are to be deducted based on calculations and metering of other inputs. Also, calculations of heat require measurement of activity level (volume or mass flow) and heat enthalpy. Attachment(s) must be signed off by a professional engineer.</p>
<p>Point of Measurement</p> <p>Question 5 in Schedules D1, D2, D3 and D4 (Biofuels, Gas Products, Biomass Pellets/ Biocarbon, Electricity)</p> <p>Question 6 in Schedule D5 (Heat)</p>	<p>For Schedules D1, D2 and D3, an attachment is optional to illustrate point of measurement in the facility’s bioenergy production and distribution system.</p> <p>For Schedule D4 and D5, an attachment is required to illustrate the point of measurement in the facility’s bioenergy production and distribution system. The attachment must be signed off by a professional engineer.</p> <p>For the purposes of the BPCP, the bioenergy product should be measured at the point of metering for or by purchaser or, if the bioenergy product is not sold, then at the point of input for final end use where there are no additional offtakes.</p>
<p>Measuring Equipment</p> <p>Question 6 in Schedules D1, D2, D3 and D4</p>	<p>An attachment is required to confirm the equipment.</p> <p>For Schedule D4, equipment used for measuring electricity generation must be acceptable to the Alberta Electric System Operator (AESO) and</p>

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<p>(Biofuels, Gas Products, Biomass Pellets/ Biocarbon, Electricity)</p> <p>Question 7 in Schedule D5 (Heat)</p>	<p>Measurement Canada.</p> <p>For Schedule D5, equipment used to measure heat must be manufactured by a third party in accordance with applicable North American or international technical standards for that equipment such as but not limited to the American National Standards Institute, ISO or the Instruments Society of America.</p>
<p>Equipment Calibration</p> <p>Question 7 in Schedules D1, D2 and D3 (Biofuels, Gas Products, Biomass Pellets/ Biocarbon)</p> <p>Question 8 in Schedule D4 (Electricity) and D5 (Heat)</p>	<p>Complete this information to confirm by whom and how often the measuring equipment is checked and calibrated. System checks may be performed by technical and operating staff.</p> <p>Calibration should be conducted by a qualified organization (e.g., Measurement Canada) or a professional engineer.</p> <p>An attachment is optional to explain processes for calibration and measurement system checks in more detail.</p> <p>If the application is approved, Alberta Energy may require a change in current practice as a condition of approval.</p> <p>On a go forward basis, calibration by a third party is preferred.</p> <p>Attaching the last calibration certificate or an acceptable equivalent is optional, although it will be required with the first production invoice</p> <p>In the case of electricity meters, a receipt of letter confirming that last date that the meter was exchanged as required by Measurement Canada is an acceptable alternative to a calibration certificate.</p>
<p>Inventory</p> <p>Question 8 in Schedules D1, D2 and D3 (Biofuels, Gas Products, Biomass Pellets/Biocarbon)</p>	<p>This question pertains to solid, liquid and gas bioenergy products to confirm timing of sale and distribution in relation to production.</p> <p>For credit invoicing purposes, the production date is considered to be the date sold, consumed or removed from the facility.</p>
<p>Product Standards</p> <p>Question 9 in Schedules D1, D2 and D3 (Biofuels, Gas Products, Biomass Pellets/Biocarbon)</p>	<p>Liquid biofuels, gas products and biomass pellets or biocarbon must be produced in accordance with fuel quality standards acceptable to Alberta Energy. For ethanol and renewable diesel, applicants must demonstrate 25 percent fewer emissions than the equivalent fossil fuel, consistent with the emission reductions required for renewable fuels supporting compliance with the Renewable Fuels Standard Regulation under the <i>Climate Change and Emissions Management Act</i> (Alberta). Standards for other liquid biofuels such as methanol and pyrolysis oil must be an ASTM or CGSB standard for that product as a fuel product. For example, methanol standards for use as windshield wash are not acceptable.</p> <p>Standards for gas products are typically the established standards for the fuel gas market, i.e., typically the natural gas market. The applicant may, however, identify customer specifications for use as a fuel product.</p> <p>Standards for biomass pellets and biocarbon must be for a fuel product with a minimum high heating value of 16.5 Gigajoules per kilogram. Alberta Energy will consider customer specifications for using the product as a fuel. However,</p>

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	specifications for other uses such as soil amendments are not accepted.
<p>Quality Testing</p> <p>Question 10 in Schedules D1, D2 and D3 (Biofuels, Gas Products, Biomass Pellets/Biocarbon)</p>	<p>Provide this information for Alberta Energy’s consideration and approval.</p> <p>If the application is approved, Alberta Energy may require a change in current practice as a condition of approval.</p>
<p>Testing Service</p> <p>Question 11 in Schedules D1, D2 and D3 (Biofuels, Gas Products, Biomass Pellets/Biocarbon)</p>	<p>Provide this information for Alberta Energy’s consideration and approval.</p> <p>If the application is approved, Alberta Energy may require a change in current practice as a condition of approval.</p>
<p>Sales and Consumption</p> <p>Question 9 in Schedule D4 (Electricity) and D5 (Heat)</p>	<p>This question confirms the point of sale, consumption or distribution of the electricity generated from biomass.</p> <p>An attachment is optional to further explain where the generated electricity is used or sold.</p>
<p>Comments</p>	<p>Use this area of the form to provide any other necessary comments.</p>