

Attachment B. 2019 HeatSmart Mass: Pricing, Cost Adders, and Equipment Form - Central Biomass Heating

Instructions: Biomass Installers should fill out Tab 7: Biomass Equipment and Pricing Proposal and Tab 8: Biomass Cost Adders

Section 1: Biomass Equipment & Installer Workmanship Warranty

Warranty (Clarify standard installer Workmanship Warranty and the Equipment Warranty)	Installer Workmanship warranty: 2 years from the date of commissioning the Central Biomass Heating system.
	Equipment Warranty: See Addendum 3 - Caluwe Inc - Warranty Windhager BioWIN pellet boiler

Section 2: Biomass Equipment Pricing

Residential Boiler

Base System Equipment	<p>Please complete the tables below detailing your proposed discounted fixed-fee costs for standard installation of central biomass heating system. These per-unit-installed costs should include all equipment and non-equipment costs associated with the typical installation scope of work (e.g. labor, permitting, etc.).</p> <p>For direct comparison of system pricing between installers, please assume the following in pricing provided:</p> <ul style="list-style-type: none"> -119 gallon thermal storage tank -Connection to an existing hot water distribution system (if upgrades or a new distribution system is required that would be a cost adder) -3 ton prefabricated pellet storage bag located indoors <p><i>Fees associated with additional material and labor for non-standard installations (adders) should be detailed in the Biomass Cost Adders tab. Any additional non-standard cost adders beyond those provided should also be included.</i></p>
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Manufacturer	Model Number	Capacity	Fuel Type	Installed cost per Unit	Deposit Required at Contracting (if applicable)

KICK-START RESIDENTIAL PRICING INITIATIVE:

Applicable ONLY for the FIRST Windhager BioWIN 10kW (34,120 BTU/hr) OR 15kW (51,180 BTU/hr) Pellet boiler install contract in EACH of the 2 communities Arlington/Winchester & Marshfield

Prerequisites: pellet boiler for oil boiler swap, connection to existing brick or clay lined chimney, connection to existing zoned hydronic baseboard heating distribution system and a 3 ton pellet storage

Pellet boiler heat output size will be determined based on the manual J Heat Load calculation for the house and boiler size can NOT exceed manual J heat Load calculation

Preference will be given to potential customers below the 80% MA-Income-Base-Level, then to potential customers in the 80%-120% level

>>> Start of sign-up time frame and length of sign-up time frame as well as other possible conditions can and will be discussed with communities: Arlington/Winchester & Marshfield

Windhager	BioWIN100	34,120 BTU/hr (10 kW)	wood pellets	\$13,500	\$250.0
Windhager	BioWIN150	51,180 BTU/hr (15 kW)	wood pellets	\$13,500	\$250.0

REGULAR RESIDENTIAL PRICING:

Windhager	BioWIN100	34,120 BTU/hr (10 kW)	wood pellets	\$16,500	\$500.0
Windhager	BioWIN150	51,180 BTU/hr (15 kW)	wood pellets	\$16,500	\$500.0
Windhager	BioWIN260	88,710 BTU/hr (26 kW)	wood pellets	\$18,500	\$500.0
Windhager	BioWIN350	119,412 BTU/hr (35 kW)	wood pellets	\$21,000	\$500.0
Windhager	BioWIN600	204,720 BTU/hr (60 kW)	wood pellets	\$24,000	\$500.0

SMALL SCALE Commercial/Institutional PRICING (up to 120,000 BTU/hr)

Windhager	BioWIN100	34,120 BTU/hr (10 kW)	wood pellets	\$17,500	\$500.0
Windhager	BioWIN150	51,180 BTU/hr (15 kW)	wood pellets	\$17,500	\$500.0
Windhager	BioWIN260	88,710 BTU/hr (26 kW)	wood pellets	\$19,500	\$500.0
Windhager	BioWIN350	119,412 BTU/hr (35 kW)	wood pellets	\$22,000	\$500.0

Notes: (Please note any other standard assumptions.)	None
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Instructions:

Please provide costs for the adders below and indicate whether you expect it to be a high use adder. Costs for adders can be given as a range. If you do not plan to offer an adder for a project factor, you may keep it blank. Applicants can list other adders under the "Other" section heading. If selected, an Installer may alter the list of approved cost adders during the course of the HeatSmart Mass program upon review and pre-approval by MassCEC's technical consultant.

Factors	Adder (\$)	Adder units (if applicable)	High use adder? Please indicate if over 50% of systems will require this adder (Y/N)	Notes on Cost Adder
Fuel Storage				
Upgrade to 4 ton prefabricated bag (versus 3 ton)	\$1,000	1	N	Single pellet probe
Upgrade to 5 ton prefabricated bag (versus 3 ton)	\$1,500	1	N	Single pellet probe
INDOOR Site-built fuel storage bin 3 TON	\$0	1	Y	Windhager 3-probe change over unit included
INDOOR Site-built fuel storage bin 4 TON	\$300	1	Y	Windhager 3-probe change over unit included
INDOOR Site-built fuel storage bin 5 TON	\$600	1	N	Windhager 3-probe change over unit included
OUTDOOR Prefabricated metal fuel storage BIN 3.5 TON (square green)	\$1,500	1	N	Outdoor bin located within 10' of pellet boiler
OUTDOOR Prefabricated metal fuel storage BIN 3.5 TON (square green)	\$2,500	1	N	Outdoor bin located between 10' and 20' of pellet boiler
On-site wood chip drying	NA	NA	NA	NA
Infrastructure Upgrades				
Class A metal Chimney - INSIDE building envelope - up 25 Feet tall	\$4,000	1	N	
Class A metal Chimney - INSIDE building envelope - >25 Feet tall	\$5,000	1	N	
Class A metal Chimney - OUTSIDE building envelope - up 25 Feet tall	\$3,000	1	N	
Class A metal Chimney - OUTSIDE building envelope - >25 Feet tall	\$4,000	1	N	
20A electrical breaker upgrade	\$350	1	Y	
Boiler feed valve/backflow prev	\$350	1	N	
Distribution System Upgrades				
Neatly re-organize copper piping near boiler (per zone)	\$175	1	Y	Price is per zone. Price is only for the installation of the copper tubing. Does not include any new zone valve or circulators
Insulate existing or new near boiler zone piping (3/4" or 1") (per zone)	\$65	1	Y	Price is per zone. Most of the time the near boiler zone piping is not insulated
Install new zone valve	\$165	1	N	Price is per zone.
Install new zone circulator Taco007	\$270	1	N	Price is per zone and includes isolation valves
Install new zone circulator Grundfos Alpha 15-55	\$370	1	N	Price is per zone and includes isolation valves
DHW coil integrated in thermal storage tank + 4,500 W electrical element (for backup or summer mode)	\$1,295	1	N	Vaughn
65 Gal Heat Pump DHW heater	\$2,895	1	N	Vaughn model S65WHPT3838I
Hydro-Air unit 60,000 BTU/hr	\$2,500	1	N	For use of pellet boiler with a hot air distribution system
Hydro-Air unit 100,000 BTU/hr	\$3,000	1	N	For use of pellet boiler with a hot air distribution system
Hydro-Air unit 140,000 BTU/hr	\$3,500	1	N	For use of pellet boiler with a hot air distribution system
General				
Metering equipment	NA	NA	NA	NA
Subscription to metering data platform	NA	NA	NA	NA
Windhager Webservice with phone app.	\$350	1	N	Connects with your mobile phone; receive pellet boiler status updates or info messages
Other				