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Douglas County RFEI#29-94 (Equipment Proposal)
Biomass/Biochar Facility – Chipping Equipment Proposal

COMPLETE SOLUTIONS WASTE TO ENGERY & BIOCHAR PROPOSAL

NO. 202506-03 – FEEDSTOCK PROCESSING EQUIPMENT

Complete Solutions Consulting International Inc.
310 Circle Drive, St. Albert, Alberta, Canada

June 12, 2025

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1.0 Quotation Summary

Complete Solutions Consulting International Inc. (CSCI) submits this quotation to Douglas County (DC) for the supply of equipment for processing raw feedstock for use in biochar equipment, previously quoted. CSCI will work with DC to assist in the design. The complete system will be designed for the purpose of consuming raw logs under 10" & 17" (both options included) and arborist biomass.

A CSCI representative will be on site to supervise the set up, start up, and commissioning on the same trip as the Biochar Equipment as quoted in **202505-001**. Additional trips as required will be in addition to this pricing.

Barring disruptions beyond its control, CSCI will be ready to ship the equipment deliverables at the manufacturer's site within 48 weeks of the date it receives the Customer's Milestone 2 payment as outlined in Section 5.1. Delivery dates will be confirmed upon Milestone 2. Pricing is valid until **July 28, 2025.**

This proposal is limited to the supply only of grinding and chipping equipment for the purposes of converting raw woody biomass into acceptable sizes for conversion into Biochar.

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June 12, 2025

Douglas County
301 Wilcox Street
Castle Rock, CO, USA

ATTN: Holly Carrell

RE: Douglas County – Waste to Energy & Biochar
CSCI Quote No. 202506-03 – Sustainable Waste to Energy – Feedstock Processing Equipment

Dear Holly,

Please see below and the attached back up documentation for the pricing as requested for wood feedstock chipping and shredding for use with the BET31-PRD. This equipment will be required for the processing of raw materials into appropriately sized feedstock for the PRD equipment.

~~**9.9" Diameter Log Chipping System** **$584,245.02 USD**~~

~~System has one input into the chipper. All materials are fed through the chipper. Discharge is into a single location in a pile.~~

~~Part 1 – Long Leadtime:~~ ~~$338,639.52 USD~~

- ~~VHT 250-1050 Drum Chipper (250kw)~~ ~~**(up to 9.9" dia.)**~~
- ~~Allen Bradley Controls (with VFD's for Chipper and Integration)~~
- ~~Drum Chipper Lifting Base~~

~~Part 2 – Shorter Leadtime:~~ ~~$245,605.50 USD~~

- ~~Vecoplan Vibratory Infeed Conveyor with Metal Detection~~
- ~~Vecoplan VKU-1000 Chain Conveyor w/ Hardox Floor~~
- ~~Installation Supervision~~
- ~~Start-Up~~

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17" Diameter Log Chipping System **$787,962.72 USD**

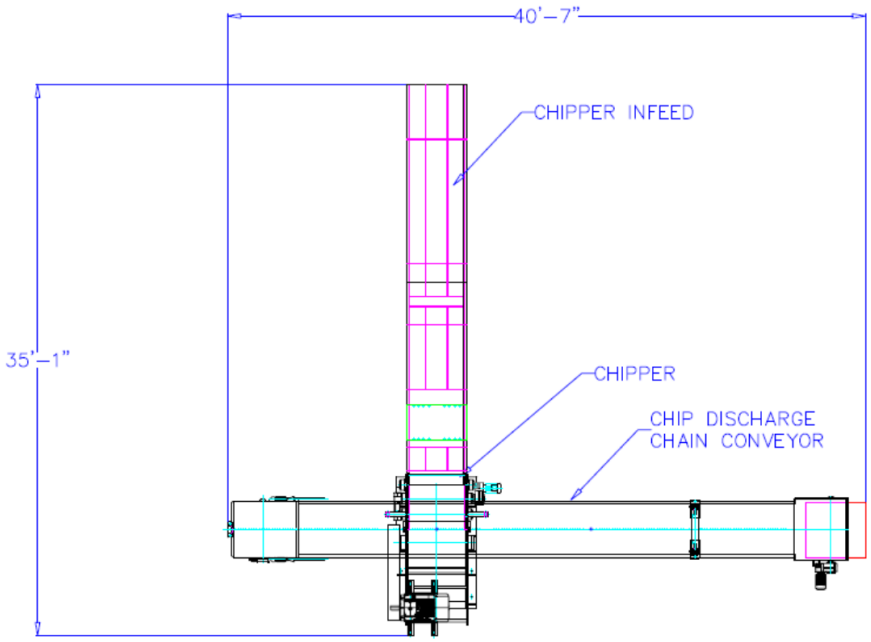
System has one input into the chipper. All materials are fed through the chipper. Discharge is into a single location in a pile.

Part 1 – Long Leadtime: $542,357.22 USD

- VHT 250-1050 Drum Chipper (250kw) **(up to 17" dia.)**
- Allen Bradley Controls (with VFD's for Chipper and Integration)
- Drum Chipper Lifting Base

Part 2 – Shorter Leadtime: $245,605.50 USD

- Vecoplan Vibratory Infeed Conveyor with Metal Detection
- Vecoplan VKU-1000 Chain Conveyor w/ Hardox Floor
- Installation Supervision
- Start-Up



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Screening System Cash Allowance **$ 20,000.00 USD**

- Final selection to be completed in discussion with DC.
- Simple screen at the discharge point of the chipping equipment is the current design intent.

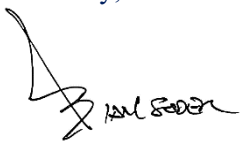
Clarifications:

- All Taxes / Duty / Tariffs are additional to this pricing.(See Appendix B)
- Additional equipment options must be installed at the same time as the BET-PRD UNIT equipment. Additional trips will be extra to this pricing (see Appendix F)
- Storage of equipment when ready for delivery, if site is not ready, will be additional.
- Freight / Hoisting / Assembly & Handling.
- See Appendix A-I for additional clarifications and information.
- Screener for twigs and branches are excluded from this proposal. Pricing and final design is pending.

Pricing is subject to all terms and conditions included in this proposal and is only in effective until July 28, 2025.

We look forward to working with you on your upcoming project.

Sincerely,



Ian Soder, CET, GSC
Complete Solutions

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Proposal acceptance in full, please execute the following in acceptance:

Douglas County
301 Wilcox Street
Castle Rock, CO, USA

Signature:_____

Name: Holly Carrell

Title:_____

Complete Solutions Consulting International Inc.
310 Circle Drive
St. Albert, AB T8N 7L5

Signature:_____

Name: Ian Soder

Title: Director

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2.0 Appendix A - Basis of Quotation

1. This equipment is intended to process raw logs up to 9.9” or 17” diameter, and arborist chipped materials into a common feedstock for the BET31S-PRD equipment from CSCI.
2. Vecoplan US will be the equipment manufacturer and vendor to CSCI for this screening, grinding, and shredding equipment.
3. Performance, throughput, components, and layout are all contingent upon the option selected by the DC.
4. Vecoplan will be the on-site specialist during the set up and commissioning on these pieces of equipment.
5. Long lead equipment is broken down for both options, ordering these first will allow for schedule and pricing security. The shorter lead time equipment can be ordered once funding sources are confirmed for the overall project.
6. Screener will need to be added to the discharge location of the chipped materials for removal of branches or twigs that may get through the system. Details and design of this portion will follow after meetings with DC and CSCI.

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3.0 Appendix B – Additional information:

Below are action and information items for Douglas County as they work through this project with Complete Solutions and other Stakeholders. These items are identified to ensure a full picture of issues to consider while developing the overall project.

Action Required:

- **Payments** – Pay invoices on time to ensure project timelines
- **Engineering** – Any engineering for the project and equipment
- **Installation** – Crew to install equipment
- **Media** – Include Complete Solutions in media events

Information / Assumed:

- **Payments**
  - All Taxes / Duty / Tariffs.
  - Milestone payments to CSCI per clause 5.1.
- **Engineering**
  - Overall system integration engineering with project equipment components.
  - All permits as required for the site area, including engineering if required.
  - Additional power as required for all equipment – requirements will be clarified once equipment is selected.
  - Overall engineering for each component integration and with the building systems.
  - A compacted surface or foundation engineered to carry system weight.
  - See other areas of proposal for additional clarifications.
- **Installation**
  - Freight / Hoisting / Assembly & Handling.
  - This equipment must be installed at the same time as the BET-PRD UNIT equipment. Additional trips will be extra to this pricing.
  - Electrical work, such as site Interconnects, Terminations, additional feeds, etc.
  - Miscellaneous metals, including stands, hoppers, and deflectors as required.
  - Daily Operations of the overall system including all checks, maintenance based on Manufacturers requirements.
  - Hoisting equipment for unloading and set up equipment on site. Crane/forklift/telehandler with operators on site to be utilized for unloading and set up of equipment.
  - Labour and equipment required for the set up of all equipment, with the supervision of CSCI(Vecoplan) personnel.
  - DC and CSCI will both maintain proper insurance as required for the project work.
- **Media / Public Relations**
  - DC will include CSCI during media communications related to the project and provide access to CSCI for BD & PR activities.

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4.0 Appendix C - CSCI Inputs

1. Overall project support relating to site layout, the implementation of equipment and the delivery to site. Client is ultimately responsible for design.
2. Remote (zoom/teams) support for system integration between the equipment manufacturers (PRD / Vecoplan / Feed Bins) and DC design and construction group for overall system.
3. Supervision on installation during the same trip for the PRD equipment set up and commissioning (202505-01). Additional trips for this equipment will be extra.

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5.0 Appendix D - Financial

5.1 Payments Schedule

This quotation is based on DC electronically wire transferring milestone payments into the CSCI account as follows. All numbers are before applicable taxes.

- **10% Deposit required by July 28, 2025 to lock in pricing.** Initial deposit is completed at time of wire transfer, not from invoice date.
- Additional 45% required by August 28, 2025, or sooner, to start manufacturing and confirm delivery date, completed upon wire transfer, not from invoice. Pricing is subject to change for this unit if payment not received by this date.
- Manufacturing progress due payable 90 days after payment 2 is received.
- Unit inspection progress will allow release of equipment from the manufacturer, completed upon wire transfer, not from invoice. Client is invited to inspect equipment prior to shipping at their own cost.
- All numbers are in USD.

Payment Schedule – Based on 17" Full Order		
	Description	**Payment**
	TOTAL COST:	**$ 787,962.72**
1	Initial Deposit **(10%)** by July 28, 2025	$ 78,796.27
2	**Manufacturer Deposit (45%)** by August 28, 2025	$ 354,583.22
3	90 Days after Manufacturing Deposit **(25%)**	$ 196,990.68
4	Unit Inspection and prior to Freight **(15%)**	$ 118,194.41
5	Equipment Delivered **(3%)**	$ 23,638.88
6	Commissioning Complete **(2%)**	$ 15,759.25
		$ 787,962.72

5.2 The Warranty

All warranties from the equipment provided through CSCI will be **direct from Manufacturer to DC**. CSCI will support as we are able, however, the warranty will be carried directly between the equipment manufacturer and DC.

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12-month BET system parts replacement from date CSCI deliverables are commissioned on site. Warranty applies to mechanical, electrical and control components (breakers, sensors, motors, actuators, and like). Wear materials (e.g. high temperature envelope linings) are excluded.

Owner pays cost of transport of replacement parts from supplier's address to Owners project site, and installs replacement parts.

Once Client confirms equipment required, each manufacturers warranty will be provided.

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6.0 Appendix E - Other Conditions

- Unless otherwise agreed, the client remains Prime Contractor/Responsible Party for all Work/Safety on the client's site.
- Manufacturers warranty will be provided as noted in the attached from Biomass Energy Techniques.
- Liquidated Damages and/or Consequential Damages, in any form, will not be accepted by CSCI or Biomass Energy Techniques.
- CSCI does not and will not carry Workers Compensation Coverage. CSCI support for installation is purely supervision, no physical labour is included from CSCI.
- Operation of the system is required to be within the Operations Manual from the manufacturer. Deviation from this may void warranties.
- CSCI maintains access to the equipment for demonstration purposes with coordination through the Client. NDA can be reviewed as required by the Client.
- All emissions testing data will be made available from DC to Complete Solutions International Inc. upon request, for the duration of system operation.
- Feedstock for the BET System has no high hazard contents (including but not limited to: radioactive materials, mercury-fluorescent light bulbs/tubes, arsenic, lead, sulphur, batteries, chlorine-other halogens, and like materials requiring special consideration) that may cause BET emissions to exceed governing authority emissions limits.
- Standard payment terms for DC are Net 30, on progress payments. Deposit and payments per manufacturer schedule are required for manufacturing to proceed and are dated once funds have been transferred. This deposit schedule is based on the total cost of the system, excluding PC Sums. Time frames for the project are based on received payment date, not invoice date.
- Bonding or Surety of any form has not been included in this proposal.

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7.0 Appendix F - Ongoing BET O&M Support

The BET system, excepting automation system software, can be maintained by appropriately qualified contractors; utilizing remote guidance from/consultation with BET representatives where required.

BET system operators should make a "trouble call" to BET whenever they cannot achieve BET system operation consistent with contracted performance.

Owner will allow unrestricted internet access 24/7/365 to its BET automation system so CSCI representatives can, at any time, access the BET system computer and remotely view the same real time information displayed on the site BET automation system monitor. BET will advise Project BET system operators when BET detects a system irregularity.

A CSCI representative(s) will travel to site if/as required for troubleshooting/supporting BET system service personnel. **Costs are as per the attached rate sheet and a separate contract agreement can be made for these services if required.**

CSCI Rate Sheet		
	Description	**Rate**
1	CSCI Technical Support (hourly – remote – minimum 2 hour)	$ 125.00
2	CSCI Technical Support (daily – on site – including travel days)	$ 1,250.00
3	All Business travel (costs + 15% OH&P)	15%
4	All third-party costs as required (cost + 15% OH&P)	15%

Note:

All rates are in USD unless noted otherwise
All pricing & rates are excluding tax unless noted otherwise
All third-party invoices will include a 15% Overhead & Profit
CSCI Rate Sheet pricing valid until December 31, 2025

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8.0 Appendix I: Additional Information

8.1 Vecoplan Data Sheets.

Drum chipper VTH 450 - 850 B belt drive

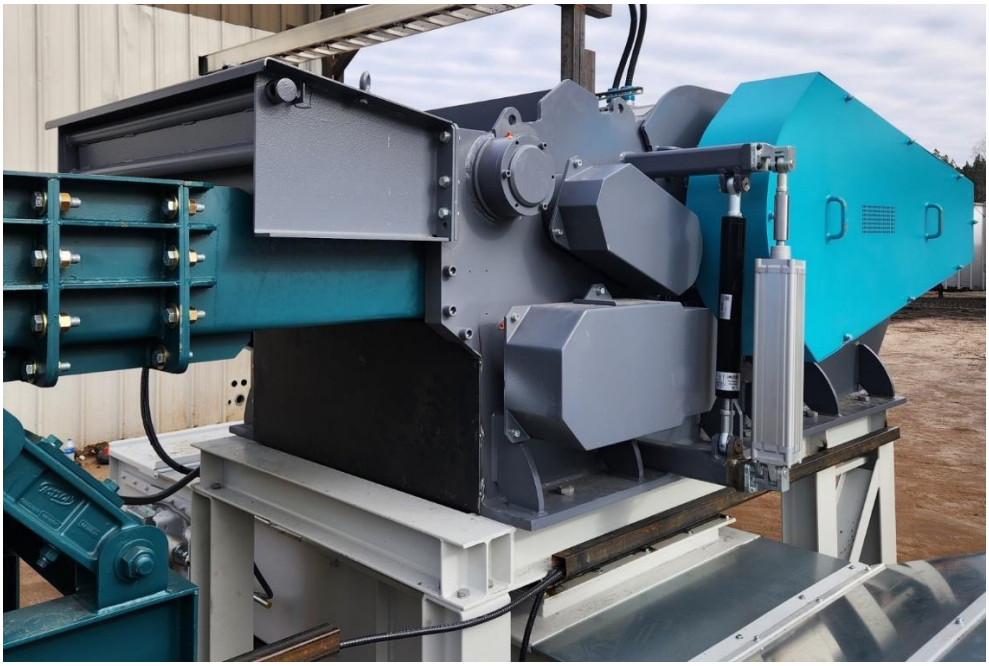

Illustration similar
To chip logs up to 17" (450mm)
Hard- and Softwood
Intake Height . 450 mm
Intake width . 850 mm
Rotor diameter . 1000 mm
No. of chipping knives . 2 off
Chip length approx. . 50 mm
No. of upper rollers . 1 off
No. of lower rollers . 3 off
Throughput capacity approx. 30 t/hour
Driving side . Right hand (standard)
Motor power . 250 kW
Operation voltage . 460 V
Frequency . 60 Hz

The Vecoplan® drum chipper is a robust, reliable and extra high-performance chipper with a short horizontal material feeding device for the production of large throughput capacities of waste-to-energy chips for biomass power plants.
Standard equipment:
• The VTH-machine housing is designed as robust gas shield welded construction with optimized functional machine geometry for powerful and trouble-free operation at maximum machine life. Easy and quick access for maintenance and inspection at machine standstill by hydraulically opening rotor cover with electromechanical safety lock.
• The VTH chipping rotor is statically balanced for low vibration operation. The robust bearing with lowmaintenance spherical roller bearings in steel housings ensures maximum availability. Rotor with one set of chipping knives made of hardened, high-alloy tool steel for highest tool life. The regrindable chipping knives are quick and easily to replace.
• VTH-counter knife unit consisting of a robust and solid counter knife bar with strip cutters of hardened tool steel. Easy replacement and quick adjustment by hydraulically extendible counter knife bar.
• VTH-screen, robust and long-lasting. Quick replacement by swing-out screen basket.

• VTH-material feed horizontally by superimposed infeed rollers. Lower feed rollers with surface-hardened special cut supported in machine frame. The upper feed roller with replaceable spikes for low wear is supported in the upper feed unit. The feed rollers are supported in robust steel flange bearings for long service-life. Reliable protection of all roller bearings against contamination by sealed bearing housings.
Powerful drive of feed rollers via in generously-dimensioned slip on gear motor for a reliable permanent operation. The hydraulic automatic lifting/relief device of upper feed roller assembly guarantees for an improved intake of logs with large diameter. Upper feed unit with hydraulic shock absorbing.
• Central hydraulic unit for opening of rotor hood, replacement of counter knife, lifting of upper feed roller assembly and shock absorbing of upper feed roller assembly.
• Incl. stair top (max. 2 steps) for ergonomic knife replacement.
• Incl. special tools for chipping and counter knife replacement and one machine manual with operation and maintenance instructions.
• Customers responsibilities, unless otherwise agreed:
To protect the machine and especially the chipping tools the input material must be free from contaminations/metal parts. If this can not be ensured, a metal detector is mandatory upstream in the material feeding.
During the operation of the machine there arises a sound pressure level of 105-115 dB(A) depending on the infeed material. Any noise protection measures are to be customer supplied.
• Note: For reasons of warranty and liability, we expressly recommend that the components are installed and commissioned by Vecoplan®, as otherwise warranty claims may be rejected.

Vecoplan VKU Discharge Drag Chain Conveyors

Metal detector tunnel coil MSG 850 Maxi

Illustration similar

Drum chipper VTH 250 - 850 B belt drive

(Illustration similar)

To chip logs up to 10" (250mm)
Hard- and Softwood
Intake Height . 250 mm
Intake width . 850 mm
Rotor diameter . 700 mm
No. of chipping knives . 2 off
Chip length approx. . 50 mm
No. of upper rollers . 1 off
No. of lower rollers . 3 off
Throughput capacity approx. 20 t/hour
Driving side . Right hand (standard)
Motor power . 260HP – 160KW (@50HZ)
Operation voltage . 460 V
Frequency . 60 Hz

The Vecoplan® drum chipper is a robust, reliable and extra high-performance chipper with a short horizontal material feeding device for the production of large throughput capacities of waste-to-energy chips for biomass power plants.
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Vecoplan VKU Discharge Drag Chain Conveyors

Inline Metal Detection