

## Proposal Cover Sheet

Organization Information	
<b>Name of Applicant Agency:</b>	GRAIN Ecosystem, INC.
<b>Agency Address:</b>	GRAIN Ecosystem, Inc. 44 School Street Suite 505 Boston, MA 02108
<b>Agency Telephone:</b>	(617) 410 - 3265
<b>Agency Website:</b>	www.graineecosystem.com
<b>Agency UEI #</b> <small>(see <a href="https://sam.gov/content/duns-uei">https://sam.gov/content/duns-uei</a> for more information and to obtain your UEI):</small>	<b>H52QW533QKH7</b>
<b>Contact Person Name and Title:</b>	Contact: Jason E. Dodier, Co-Founder & Chief Commercial Officer Email: jason@grain.ecosystem.com   Phone: (401) 218-8207
<b>Contact Person Telephone:</b>	Phone: (401) 218-8207
<b>Contact Person Email Address:</b>	Email: jason@grain.ecosystem.com
<b>Total Amount Requested:</b>	\$20,000.00

### Proposal Checklist:

- Completed cover sheet
- Project narrative (maximum 10 pages)
- Project budget
- Company Financial Information

## **Proposal to the City of Minneapolis**

### **Biochar Carbon Dioxide Removal (CDR) Certification Consultant**

**Submitted by :Grain Ecosystem, Inc.**

www.graineecosystem.com

Contact: Jason E. Dodier, Co-Founder & Chief Commercial Officer

Email: jason@grain.ecosystem.com | Phone: (401) 218-8207

Date: December 23, 2025

### **Executive Summary**

Grain Ecosystem is pleased to submit this proposal to serve as the Biochar CDR Certification Consultant for the Minneapolis Health Department's new biochar production facility.

We bring a unique blend of technical, digital, and market expertise that spans the entire carbon-removal value chain, from life-cycle assessment to registry submission, digital MRV, and credit monetization with a laser focus on biochar and the North American market since the beginning.

Our team is actively developing and certifying biochar projects under leading registries, with a focus on Puro.earth, Isometric, Verra, and Climate Action Reserve, supporting partners across the value chain leveraging similar waste streams to this project. Grain's proprietary *dMRV Build & Operate* software, backed by Schneider Electric Ventures, Time Magazines most sustainable company in the world, provides continuous, auditable data for carbon credit validation and verification.

The City's facility, producing 500+ tons of biochar per year from woody biomass, represents a model circular-economy asset. Grain Ecosystem will ensure that its climate value is fully realized through successful registration, audit, and sale of high-integrity CDR credits while building a replicable template for other municipalities.

### **Scope of Services**

Grain Ecosystem will provide full-cycle consulting and digital MRV support to guide the City through assessment, registry selection, certification, and credit issuance as we have done for dozens of customers in the United States.

#### **1. Initial Assessment and LCA Modeling**

- Review facility design, feedstock sourcing, pyrolysis parameters, and projected output.
- Input data into Grain's *LCA Module* (aligned with Puro.earth Biochar Methodology v.3.0) to estimate potential CDR yield and permanence.

- Deliver a baseline LCA report identifying the expected tCO<sub>2</sub> removed per ton of biochar.

## **2. Registry Selection and Eligibility Guidance**

- Compare registries (Puro.earth, Isometric, Verra, Climate Action Reserve) on criteria of cost, MRV rigor, audit frequency, and market demand.
- Recommend an optimal registry pathway and submit eligibility assessment.

## **3. Project Design Document (PDD) Development**

- Draft and compile a registry-specific PDD and supporting annexes (including feedstock procurement, process flow, and biochar end-use).
- Facilitate City review and registry pre-approval process.

## **4. Audit Preparation and Coordination**

- Act as City's representative with the selected third-party auditor
- Manage data exchange, coordinate onsite visits, and corrective action responses to ensure a smooth verification cycle.

## **5. Digital Monitoring, Reporting & Verification (dMRV)**

Beyond meeting registry compliance requirements, the City expressed interest in understanding the broader capabilities of Grain's MRV platform and how it could integrate into their operational and reporting systems.

Grain's Digital MRV (dMRV) Build & Operate platform is designed to serve as the core data capture, monitoring, and verification system for biochar projects, aggregating continuous process data (feedstock input, biochar output, energy use, and emissions metrics) directly from equipment sensors, control systems, or operator logs.

Our platform creates a traceable digital record from feedstock receipt to carbon credit issuance, enabling verification under leading standards such as Puro.earth, Isometric, Verra and Climate Action Reserve. Data is stored in a secure, auditable environment and structured for both compliance and internal performance analytics.

Importantly, Grain's dMRV is built for interoperability. It can sync with municipal or partner systems such as SCADA, ERP, or sustainability dashboards, allowing the City to visualize environmental performance in real time and streamline future reporting for greenhouse gas inventories, circular economy metrics, or ESG disclosures.

In short, Grain's platform is not just a compliance tool, it's a digital backbone for climate accountability, giving the City of Minneapolis a scalable, verifiable, and transparent way to measure and manage the impact of its biochar infrastructure.

## 6. Credit Issuance and Transaction Support

- Support issuance of verified credits and initial listing on registry marketplace (Puro Connect or Verra Registry).
- Provide advisory on pricing and counterparty selection for first credit sale (e.g., corporate buyers in compliance or voluntary markets).

Deliverables: LCA Report | Registry Selection Memo | PDD | Audit Support Package | dMRV Dashboard | Final Credit Issuance Report.









### Experience and Capacity

Grain Ecosystem is a U.S.-based climate infrastructure developer specializing in biochar and waste-to-value projects. Our team includes engineers, MRV specialists, and carbon market experts with a collective track record that includes dozens of biochar sites assessed and certified or in the certification process since 2023, and dozens currently going through the process.

Our Digital MRV Platform was developed for real-time carbon data logging and audit readiness.

**Key Personnel (will be personally involved to ensure the success and execution of this scope of work)**


## LEADERSHIP

OPERATOR	ENGINEER	SALES	CARBON	FINANCE	COMPLIANCE
					
<b>Ryan Letourneau</b> CEO	<b>Matt Boujonnier</b> CTO	<b>Jason Dodier</b> CCO	<b>Alicia Klepfer</b> Carbon Expert	<b>Mark Moseley</b> Customer Success Lead	<b>Liz Ernst</b> Carbon Delivery Lead
3x business builder	25 years of AI, Data & software development	Secured \$100M+ in project financing	+10 years developing carbon projects	20+ years finance, analytics, product leadership.	7+ years LCA and corporate sustainability experience.
+10 years finance, transformed \$2bn business	5 patents	Led annual sales of \$300m	Masters in Green House Gas Accounting	2 years developing a biochar facility	MSc in Sustainable Energy Science
					

## References

### 1. Atlas Pallet Corporation

Maxwell F. Ross, MBA – President  
50 Old Mill Street, Harrisville, RI 02830

 (401) 568-2900

 [max@atlaspalletri.com](mailto:max@atlaspalletri.com)

### 2. Green Development LLC / Quonset Soil Solutions

Jacqueline Petrocchi – Business Development, Research & Policy Associate


O: (401) 244-7676 ext. 136 | M: (908) 295-9688

 [www.green-ri.com](http://www.green-ri.com)

### 3. Rhode Island Commerce Corporation

George Panichas – Senior Advisor to the President & CEO

315 Iron Horse Way, Suite 101, Providence, RI 02908

 (401) 265-6176

 [george.panichas@commerceri.com](mailto:george.panichas@commerceri.com)

### Budget Summary (Reference: Attachment D Project Budget Template)

Category	Description	Amount (USD)
Personnel	Project Lead + MRV Engineer (350\$/hour)	\$17,500
Software Licensing	Grain dMRV Build & Operate SaaS deployment for City facility	\$ Included
Travel & Audit Support	One onsite audit coordination trip + auditor liaison costs	\$ 2,500
Admin & Overhead	Documentation, insurance, reporting	-
<b>Total</b>		<b>\$20,000</b>

## **Conclusion**

Grain Ecosystem offers the City of Minneapolis a complete, proven solution to achieve biochar CDR certification efficiently, transparently, and with long-term credibility. By combining policy expertise, digital infrastructure, and on-the-ground project execution, we can ensure that the City's biochar facility becomes a benchmark for municipal-scale carbon removal.

Our ambition extends beyond a single certification cycle. We see this project as the foundation of a multi-year partnership, one that positions Minneapolis as a national leader in turning organic waste into climate infrastructure. Through our collaboration, the City can not only achieve its initial registry and verification goals but also create a replicable model for other Minnesota municipalities, counties, and regional utilities.

Grain's Digital MRV (Monitoring, Reporting & Verification) platform is designed to grow with the City's vision. As new feedstocks, facilities, and end-use applications emerge, our system can integrate seamlessly, capturing data across multiple sites, automating reporting, and maintaining audit readiness across registries like Puro.earth, Climate Action Reserve, Verra, and Isometric. In doing so, Minneapolis will have a scalable and verifiable digital backbone to measure progress against its broader climate and sustainability goals.

We view this engagement not simply as a consulting assignment, but as the beginning of a strategic alliance, a partnership that leverages Grain's deep experience in carbon markets, life-cycle analysis, and infrastructure deployment to help the City turn biochar production into a durable, revenue-generating, and community-strengthening asset.

Together, we can make Minneapolis a model for how cities decarbonize, electrify, and create circular value at scale, proving that what starts as local innovation can grow into national leadership in carbon removal.

**Attachment**  
**Project Budget Template**

<b>PERSONNEL</b>		
<b>Budget Item</b>	<b>Description/Justification</b>	<b>Amount</b>
Personnel	Project Lead + MRV Engineer (50\$/hour)	\$17,500.00
Software Licensing	Grain <i>dMRV Build &amp; Operate SaaS</i> deployment for City facility	Included
Travel & Audit Support	One onsite audit coordination trip + auditor liaison costs	\$2,500.00
Admin & Overhead	Documentation, insurance, reporting	Included
<b>TOTAL DIRECT COSTS</b>		<b>\$20,000.00</b>
<b>ADMINISTRATIVE COSTS (up to 15% of direct costs)</b>		
<b>TOTAL BUDGET (not to exceed \$30,000)</b>		

# Delaware

The First State

Page 1

I, CHARUNI PATIBANDA-SANCHEZ, SECRETARY OF STATE OF THE STATE OF DELAWARE, DO HEREBY CERTIFY "GRAIN ECOSYSTEM, INC." IS DULY INCORPORATED UNDER THE LAWS OF THE STATE OF DELAWARE AND IS IN GOOD STANDING AND HAS A LEGAL CORPORATE EXISTENCE SO FAR AS THE RECORDS OF THIS OFFICE SHOW, AS OF THE SIXTEENTH DAY OF DECEMBER, A.D. 2025.

AND I DO HEREBY FURTHER CERTIFY THAT THE ANNUAL REPORTS HAVE BEEN FILED TO DATE.

AND I DO HEREBY FURTHER CERTIFY THAT THE SAID "GRAIN ECOSYSTEM, INC." WAS INCORPORATED ON THE FIRST DAY OF JULY, A.D. 2022.

AND I DO HEREBY FURTHER CERTIFY THAT THE FRANCHISE TAXES HAVE BEEN PAID TO DATE.



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You may verify this certificate online at [corp.delaware.gov/authver.shtml](http://corp.delaware.gov/authver.shtml)

A handwritten signature in black ink, reading "C. P. Sanchez".

Charuni Patibanda-Sanchez, Secretary of State  
Authentication: 205630083

Date: 12-16-25