



MUNICIPAL DISTRICT OF GREENVIEW No. 16

GREENVIEW INDUSTRIAL GATEWAY COMMITTEE MEETING AGENDA

Wednesday, April 13, 2022

T.B.A. – Immediately following
the Policy Review Committee
Meeting

Council Chambers
Administration Building
Valleyview, AB

-
- | | | | |
|----|--------------------|--|---|
| #1 | CALL TO ORDER | | |
| #2 | ADOPTION OF AGENDA | | |
| #3 | MINUTES | 3.1 Greenview Industrial Gateway Committee Meeting Minutes held Wednesday, March 9, 2022. | 2 |
| #4 | DELEGATION | | |
| #5 | BUSINESS | 5.1 Ecostrat Inc., Woody Biomass Report | 6 |
| #6 | CLOSED SESSION | 6.1 Privileged Information
(Section 27, FOIP)

6.2 Privileged Information
(Section 27, FOIP) | |
| #7 | ADJOURNMENT | | |

Minutes of a
GREENVIEW INDUSTRIAL GATEWAY COMMITTEE MEETING
MUNICIPAL DISTRICT OF GREENVIEW NO. 16

Greenview Administration Building,
Valleyview, Alberta on Monday, March 9, 2022.

#1
CALL TO ORDER
PRESENT

Chair Winston Delorme called the meeting to order at 1:19 p.m.

Ward 9	Reeve Tyler Olsen
Ward 8	Deputy Reeve Bill Smith
Ward 1	Councillor Winston Delorme
Ward 2	Councillor Ryan Ratzlaff
Ward 3	Councillor Sally Rosson
Ward 4	Councillor Dave Berry
Ward 5	Councillor Dale Smith
Ward 6	Councillor Tom Burton
Ward 7	Councillor Jennifer Scott
Ward 8	Councillor Christine Schlieff
Ward 9	Councillor Duane Didow

ATTENDING

Chief Administrative Officer	Stacey Wabick
Director, Community Services	Michelle Honeyman
Director, Infrastructure and Planning	Roger Autio
Director, Corporate Services	Ed Kaemingh
Executive Director, Industrial Development	Kyle Reiling
Manager Communications and Marketing	Stacey Sevilla
Recording Secretary	Wendy Holscher

ABSENT

#2
AGENDA

MOTION: 22.03.10 Moved by: REEVE TYLER OLSEN

That the Greenview Industrial Gateway Committee adopt the March 9, 2022, Greenview Industrial Gateway Committee Meeting Agenda as amended.

- Move agenda item 6.3 Disclosure Harmful to Business Interests of a Third Party ahead of 6.1 Privileged Information

CARRIED

#3 MINUTES

3.0 MINUTES

MOTION: 22.03.11 Moved by: COUNCILLOR SALLY ROSSON

That the Greenview Industrial Gateway Committee adopt the January 10, 2022, Greenview Industrial Gateway meeting minutes as amended.

- Change Councillor Olsen to Reeve Olsen

CARRIED

BUSINESS ARISING

#4 DELEGATIONS

4.0 DELEGATIONS

#5 NEW BUSINESS

5.0 NEW BUSINESS

5.1 FIRST NATIONS MEETINGS

FIRST NATIONS MEETINGS

MOTION: 22.03.12 Moved by: COUNCILLOR DALE SMITH
That the Greenview Industrial Gateway Committee recommend Council authorize Administration to arrange Greenview Industrial Gateway Introduction meetings with the communities recognized on the AOIC list (Sturgeon Lake Cree Nation, Gift Lake Metis Settlement, Horse Lake First Nation, Sucker Creek First Nation) as well as other indigenous communities that may be impacted.

CARRIED

APPT TO INTRO MEETINGS

MOTION: 22.03.13 Moved by: COUNCILLOR SALLY ROSSON
That the Greenview Industrial Gateway Committee recommend Council appoint 4 members consisting of the Greenview Industrial Gateway Chair, Reeve, Chief Administrative Officer and the Greenview Industrial Gateway Executive Director to attend the Indigenous Communities Greenview Industrial Gateway Introduction Meetings.

CARRIED

5.2 DIRECTOR REPORT

DIRECTOR REPORT

MOTION: 22.03.14 Moved by: COUNCILLOR JENNIFER SCOTT
That the Greenview Industrial Gateway Committee accept the Greenview Industrial Gateway Month report for information, as presented.
Absent: Councillor Burton

CARRIED

CLOSED SESSION

6.0 CLOSED SESSION

MOTION: 22.03.15 Moved by: COUNCILLOR CHRISTINE SCHLIEF
That the meeting go to Closed Session, at 2:21 p.m. pursuant to Section 197 of the Municipal Government Act, 2000, Chapter M-26 and amendments thereto, and Division 2 of Part 1 of the Freedom of Information and Protection Act, Revised Statutes of Alberta 2000, Chapter F-25 and amendments thereto, to discuss Privileged Information with regards to the Closed Session.

CARRIED

6.3 DISCLOSURE HARMFUL TO BUSINESS INTERESTS OF A THIRD PARTY

6.1 PRIVILEGED INFORMATION

6.2 PRIVILEGED INFORMATION

OPEN SESSION

OPEN SESSION

MOTION: 22.03.16 Moved by: COUNCILLOR DALE SMITH
That, in compliance with Section 197(2) of the Municipal Government Act,
this meeting come into Open Session at 3:10 p.m.
Absent: Councillor Burton, Councillor Rosson

CARRIED

CERILON GTL

MOTION: 22.03.17 Moved by: COUNCILLOR DALE SMITH
That the Greenview Industrial Gateway Committee recommend Council
authorize Administration to enter into a Memorandum of Understanding
agreement with Cerilon GTL Inc.
Absent: Councillor Burton, Councillor Rosson

CARRIED

SIDE GROUP

MOTION: 22.03.18 Moved by: COUNCILLOR RYAN RATZLAFF
That the Greenview Industrial Gateway Committee accept the
presentation from the Side Group for information, as presented.
Absent: Councillor Burton, Councillor Rosson

CARRIED

GOLD CREEK RELOAD

MOTION: 22.03.19 Moved by: COUNCILLOR CHRISTINE SCHLIEF
That the Greenview Industrial Gateway Committee accept the report on the
Gold Creek Reload (GCR) Proposal for information, as presented.
Absent: Councillor Burton, Councillor Rosson

CARRIED

GOLD CREEK RELOAD SUPPORT

MOTION: 22.03.20 Moved by: REEVE TYLER OLSEN
That the Greenview Industrial Committee recommend that Council direct
Administration to review options in an effort to support the Gold Creek
Reload.
Absent: Councillor Burton, Councillor Rosson

CARRIED

**#7
ADJOURNMENT**

7.0 ADJOURNMENT

ADJOURN

MOTION: 22.03.21 Moved by: COUNCILLOR DAVE BERRY
That the Committee adjourn this Greenview Industrial Gateway Meeting
at 3:13 p.m.
Absent: Councillor Burton, Councillor Rosson

CARRIED

RECORDING SECRETARY

CHAIR



REQUEST FOR DECISION

SUBJECT:	Ecostrat Inc., Woody Biomass Report		
SUBMISSION TO:	Greenview Industrial Gateway Committee	REVIEWED AND APPROVED FOR SUBMISSION	
MEETING DATE:	April 13, 2022	CAO:	MANAGER:
DEPARTMENT:	CAO SERVICES	GM:	PRESENTER: KR
STRATEGIC PLAN:	Development	LEG:	

RELEVANT LEGISLATION:

Provincial (cite) – N/A

Council Bylaw/Policy (cite) – N/A

RECOMMENDED ACTION:

MOTION: That the Greenview Industrial Gateway Committee recommend Council authorize Administration to award a contract to Ecostrat Inc., Toronto, Ontario for a Woody Biomass Report in the amount of \$14,740.00, with funds to come from the Greenview Industrial Gateway.

BACKGROUND/PROPOSAL:

Administration has received numerous requests from potential developers regarding information on woody biomass in the vicinity of the Greenview Industrial Gateway. The firm Ecostrat Inc. specializes in assisting in providing technical information in regard to biomass that may assist companies in determining if the Greenview Industrial Gateway would be a suitable location to develop.

Ecostrat Inc. understands that Greenview Industrial Gateway (“GIG”) is looking to leverage its access to woody biomass from crown lands (e.g. forest residuals) and other infrastructure-related supply chain advantages to help attract biobased “deal-flow” and support new biobased economic development.

The goal of this “BDO Zone Rating Designation - Greenview Industrial Gateway, AB” is to enable GIG to leverage its biomass resources as a powerful engine for bio-based economic development.

It will accomplish this goal by:

1. **carrying out the due diligence work** to provide GIG with an ‘A’ or ‘AA’ BDO Zone Rating.
2. **supporting the issue** of the BDO Zone rating, and
3. **promoting economic development activities post-issue** to accelerate the quantity of serious inbound inquiries from accredited bio-project development companies and investors looking to construct new biofuel, renewable chemical, biogas or bioproduct manufacturing plants in BDO Zones.

All ratings activities will be carried out within the framework of the Standards for Biomass Supply Chain Risk. Ecostrat's team of Risk Rating Analysts will assess, score, rate key feedstock and infrastructure risks and other project "success attributes" and draft the BDO Zone Rating. Ecostrat's BDO Zone Project Team will work with GIG to issue and support the BDO Zone rating and carry out other post-rating economic development activities.

The Bioeconomy Development Opportunity (BDO) Zone Initiative (www.bdozone.org) is a certification and regional risk rating program that accelerates biobased project development in economically distressed communities.

BDO Zone ratings do this by carrying out credible, technical evaluations on feedstock and infrastructure risk, and then enabling communities to effectively and easily signal and promote key feedstock and infrastructure "success" characteristics to biobased developers and investors around the world. 'AA' or 'A' rated BDO Zones identify the best areas for low-risk bioeconomy project development.

BDOZoneCONNECT supercharges project dealflow to BDO Zones by putting local economic developers "in the room" with hundreds of bio-based project developers and investors looking to locate new plants in BDO Zones.

BDO Zone Ratings help materially de-risk investment in new bioeconomy production plants for project developers and investors. By doing so, they drive regional economic development, enabling local communities to harness their natural resources to support biobased manufacturing and renewable energy production.

Administration recommends engaging Ecostrat Inc. to prepare a preliminary biomass report for the sum of \$14,740.00. The proposed report will be of great assistance in providing Greenview Administration with the applicable information that in turn can be made available to potential investors.

BENEFITS OF THE RECOMMENDED ACTION:

1. The benefit of the recommended motion is that the Committee will be provided with the benefits of Ecostrat providing a preliminary report that will be available to potential investors.

DISADVANTAGES OF THE RECOMMENDED ACTION:

1. There are no perceived disadvantages of the recommended action.

ALTERNATIVES CONSIDERED: N/A

FINANCIAL IMPLICATION:

The cost of the preliminary report from Ecostrat Inc. is \$14,740.00, with funds to come from the Greenview Industrial Gateway Budget.

STAFFING IMPLICATION:

There are no staffing implications to the recommended motion.

PUBLIC ENGAGEMENT LEVEL:

Greenview has adopted the IAP2 Framework for public consultation.

INCREASING LEVEL OF PUBLIC IMPACT

Inform

PUBLIC PARTICIPATION GOAL

Inform - To provide the public with balanced and objective information to assist them in understanding the problem, alternatives, opportunities and/or solutions.

PROMISE TO THE PUBLIC

Inform - We will keep you informed.

FOLLOW UP ACTIONS:

There are no follow-up actions to the recommended motion.

ATTACHMENT(S):

- BDO Zone Rating Designation Report

BDO Zone Rating Designation

Greenview Industrial Gateway, AB

Prepared For:
**Greenview Industrial
Gateway**

Prepared By:
Ecostrat Inc.



Submitted:
February 25th, 2022

1: INTRODUCTION

Ecostrat understands that Greenview Industrial Gateway (“GIG”) is looking to leverage its access to woody biomass from crown lands (e.g. forest residuals) and other infrastructure-related supply chain advantages to help attract biobased “deal-flow” and support new biobased economic development.

The goal of this “*BDO Zone Rating Designation – Greenview Industrial Gateway, AB*” is to enable GIG to leverage its biomass resources as a powerful engine for bio-based economic development.

It will accomplish this goal by:

1. **carrying out the due diligence work** to provide GIG with an ‘A’ or ‘AA’ BDO Zone Rating,
2. **supporting the issue** of the BDO Zone rating, and
3. **promoting economic development activities post-issue** to accelerate the quantity of serious inbound inquiries from accredited bio-project development companies and investors looking to construct new biofuel, renewable chemical, biogas or bioproduct manufacturing plants in BDO Zones.

All ratings activities will be carried out within the framework of the [Standards for Biomass Supply Chain Risk](#). Ecostrat’s team of Risk Rating Analysts will assess, score, rate key feedstock and infrastructure risks and other project “success attributes” and draft the BDO Zone Rating. Ecostrat’s BDO Zone Project Team will work with GIG to issue and support the BDO Zone rating and carry out other post-rating economic development activities.

The BDO Zone Program: Overview

The Bioeconomy Development Opportunity (BDO) Zone Initiative (www.bdozone.org) is a certification and regional risk rating program that accelerates biobased project development in economically distressed communities.

BDO Zone ratings do this by carrying out credible, technical evaluations on feedstock and infrastructure risk, and then enabling communities to effectively and easily signal and promote key feedstock and infrastructure “success” characteristics to biobased developers and investors around the world. ‘AA’ or ‘A’ rated BDO Zones identify the best areas for low-risk bioeconomy project development.

BDO ZoneCONNECT supercharges project dealflow to BDO Zones by putting local economic developers “in the room” with hundreds of bio-based project developers and investors looking to locate new plants in BDO Zones.

BDO Zone Ratings help materially de-risk investment in new bioeconomy production plants for project developers and investors. By doing so, they drive regional economic development, enabling local communities to harness their natural resources to support biobased manufacturing and renewable energy production.

“AA” AND “A” BDO ZONE RATINGS DRIVE REGIONAL ECONOMIC DEVELOPMENT

BDO Zone Ratings help leverage local biomass feedstock advantages to create new jobs.

‘AA’ or ‘A’ ratings drive deal-flow and distinguish BDO Zones from other areas.

Credible, standards-based technical evaluations of bio-project “success attributes”.

Provide a market-making platform that connects ‘A’ and ‘AA’ rated BDO Zones to developers and investors worldwide.

2: COMPANY PROFILE

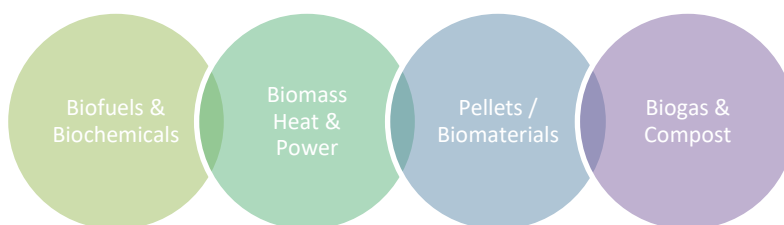
Ecostrat is a North American leader in assessing, developing, optimizing, and managing biomass supply chains. We have led the development of the *US and Canadian National Standards for Biomass Supply Chain Risk (BSCR)* (see below 3.2 Case Studies: Project 1) and are now focused on ‘ratings case studies’ to help develop and calibrate the BSCR Risk Ratings methodology and protocols.

Our approach has been developed and refined over a decade working closely with leading investment banks, lenders, investors and developers in the biomass industry to deliver clear, actionable insight that enables confident decision-making on the part of investors. Through the development of the BSCR Standards, Ecostrat has consolidated this knowledge into a standardized tool that can be used to evaluate projects against the most up-to-date risk rating criteria, advancing the state-of-the-science of biomass feedstock risk and enabling credible communication of feedstock risk to investors, project developers and greentech companies.

We are comprised of two groups:

Biomass Advisory Group

The *Ecostrat Advisory Group* is a leading North American advisory firm focused exclusively on assessing, validating and optimizing biobased supply chains for projects across the following sectors:



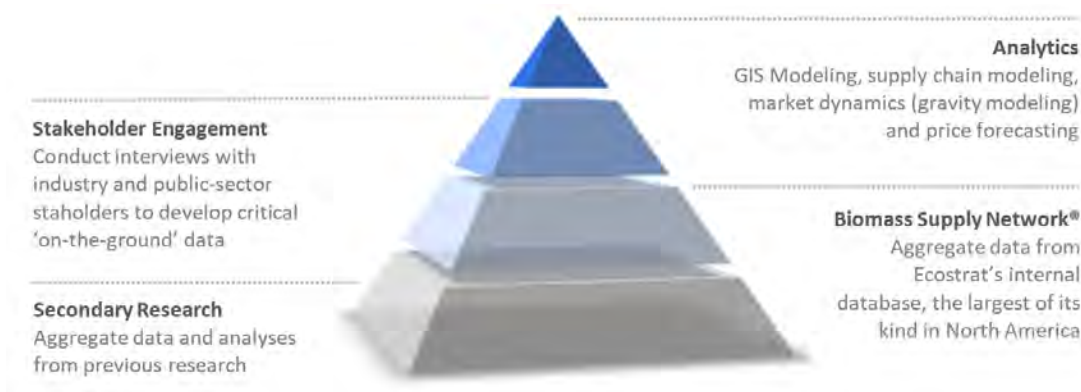
Founded in 2008, our Biomass Advisory Group has prepared +250 Biomass Supply Assessments and Risk Assessments for leading project developers, power utilities, financial institutions, investment funds, engineering companies, US National Labs, governments and First Nations across North America. Our trusted approach has been developed and refined over a decade working closely with our clients and industry experts to ensure our reports provide clear, actionable insight and the necessary data and analysis required to understand and mitigate risk.

Methodology:

Our trusted methodology combines industry-leading data collection methods and analytics to deliver clear, actionable results. Central to our methodology is sourcing and aggregating point-source data obtained directly from biomass generators and end-use markets and other industry and public-sector stakeholders. From this primary data, and with supporting data sourced from secondary sources, our analysts use industry-leading analytics to accurately model total biomass generation, material flows and market dynamics (i.e. availability of biomass as a function of price).

Information Capital:

Our proprietary *Biomass Supply Network*[®] is the largest and most comprehensive database of biomass availability, pricing and markets in North America. The *Biomass Supply Network*[®] is the result of over 12 years of aggregating and curating transactional market data from both suppliers and users of biomass. The *Biomass Supply Network*[®] enables best-of-kind analyses regarding biomass generation, availability and price, markets, key players, logistics, risks, and sensitivities.



Biomass Supply Group

Founded in 1997, our *Biomass Supply Group* is a North American leader in sourcing, aggregating and supplying biomass. Over 20+ years in the biomass industry, we have developed a deep understanding of the biomass supply value chain, from point of generation through to delivery of the final product and, as a result, are able to offer long-term, fixed-price supply contracts.

We currently move ~500,000 tons of biomass on an annual basis within North America, servicing a wide range of markets, including heat and power, solidification, anaerobic digestion ("AD"), animal bedding, land application, soil amendment, compost, mulch, and wood pellet.


3: QUALIFICATIONS

3.1: PAST CLIENTS




3.2: SELECTED RECENT EXPERIENCE


Project 1: National Standards for Biomass Supply Chain Risk

Client:	
Facility Type:	All bioenergy technology platforms
Location:	USA
Description:	<p>Ecostrat, working together with Idaho National Laboratory (INL), and NRCAN has been leading the program to develop the Biomass Supply Chain Risk Standards for the United States and Canada for over 6 years.</p> <p>Objectives:</p> <p>The primary objective of this project was to develop a framework of standards and certification protocols to allow companies in the biomass sector to clearly demonstrate the risk of their feedstock supply chain. The quantitative risk assessment architecture will provide the framework for the development of a set of standards, indicators, guidelines, and recommended methods and tools to quantify supply chain risks and to rank and rate those risks on an objective and accepted scale.</p> <p>Impacts and Outcomes:</p> <p>The project outcome was a published and validated framework of standards and a certification protocol that will provide the major credit rating agencies, commercial lenders, and bioenergy investors with a common and recognized means to evaluate and quantify the supply chain risks of bioenergy projects. The impact of this project is accretive and immediately transferable across the full spectrum of the biobased industries: the benefits will impact bioenergy, advanced biofuels, biobased heat and power, and pellet production, among others. The standardized and certified risk assessment process reduced the level of uncertainty that is a primary cause of low bioenergy project credit ratings and higher commercial debt costs. The ultimate goal was to unlock significant development potential in the bioenergy space and increase the rate of development of bioenergy projects in North America.</p>


Project 2: North America Multi-Criteria Site Selection Study

Client:	
Location:	North America
Facility Type:	Biochemicals
Description:	<p>Our client had a need to understand pulpwood supply conditions across North America and to determine sites amenable to new project development from a feedstock supply perspective.</p> <p>Ecostrat developed a composite geospatial (“heat map”) analysis utilizing GIS-based data rendering and modeling based on multiple feedstock supply criteria, including:</p> <ul style="list-style-type: none"> • Forest inventories; • Growth and removals; • Historical and forecasted pulpwood pricing; • Existing demand for Pulp, OSB, and Pellet Mills. <p>The output was a ranked list of top sites for development.</p>


Project 3: Multi-Site Comparative Biomass Supply Assessment

Client:	
Location:	Southeast USA
Description:	<p>Cellulosic Biofuels</p> <p>Our client had identified five (5) sites in the southeast US that were targeted for development of biorefineries and had a need to understand how they ranked from a feedstock supply perspective. All biomass had to qualify as Renewable Biomass under the Renewable Fuel Standard (RFS) program.</p> <p>For each site, Ecostrat developed analyses of qualifying pulpwood supply and demand, including standing forest volumes, growth and removals, demand from major competitors (i.e. pulp and paper, OSB, etc.) and forecasted pricing to 2030.</p> <p>Based on the results for each site, Ecostrat provided a ranking of top sites for development.</p>

Project 4: Investment Due Diligence

Client:	 NRG YIELD
Location:	Confidential
Facility Type:	Biomass Power
Description:	<p>Ecostrat conducted a detailed assessment of biomass fuel availability and price for an operating utility scale power plant as part of an acquisition due diligence.</p> <p>The Study assessed the availability and price of low-cost biomass, including clean (untreated) C&D wood, green waste, sawmill residuals and harvest residues (slash and unmerchantable wood) based on a literature review, outreach to local industry and public-sector stakeholders, including public-sector research agencies, transfer stations, tree service companies, loggers, haulers and sawmills, and analyses of competing markets.</p>

Project 5: Multi-Site Biomass Supply Assessment and Price Forecast

Client:	
Location:	5 Plants: Michigan and New England
Facility Type:	Biomass Power
Description:	<p>Ecostrat conducted a detailed assessment of woody biomass fuel availability and price for the owner of five (5) operating utility-scale power plants. Specifically, this Study provided an independent review of each plant's feedstock supply base, including a review of existing suppliers and supply contracts, and an analysis of biomass availability, pricing and supply dynamics in each woodshed.</p> <p>Data collection: Ecostrat hosted meetings with procurement managers at each plant, obtained historical procurement (volume and price) data from each plant, obtained and analyzed inventory and harvest data, conducted secondary research, and surveyed suppliers, competitors and other local stakeholders.</p>

3.3: KEY PROJECT PERSONNEL

Jordan Solomon – President & CEO

CV:

Jordan R. Solomon has held the position of President and CEO of Ecostrat for over 20 years where he oversees the biomass supply chain risk consulting group and the biomass feedstock supply group. He is a recognized North America thought leader in biomass feedstock supply, markets, analytics, and risk. His responsibilities include new project origination, markets development and commercialization, corporate strategy and team support. His areas of expertise include biomass contracting, financing, and risk mitigation.



Jordan currently leads the 6-year project funded by the US Department of Energy (BETO) and NRCAN to develop the *US and Canadian National Standards for Biomass Supply Chain Risk*.

As head of Ecostrat's Biomass Advisory Group, Jordan directed development the *Biomass Supply Network*® the largest proprietary biomass supplier and market database in North America.

As head of the biomass supply group for over two decades, Jordan has overseen development and operation of biomass supply chains for over 5,000,000 tons of biomass. He has negotiated, structured supply chains, financed and executed bulk shipments of biomass within North America and overseas to Europe and Asia. In 2003 Jordan led the team that executed the first bulk vessel shipments of wood pellets from the Port of Trios Rivières, PQ, Canada for then-nascent European biopower industry. In 2004 he established the export chip market from the North America to Turkey by de-risking the wood fiber supply chain and sending the first full vessel shipment of woodchips for the composite board market, an overseas market which now intakes over two million tons of chips per annum (with almost a million tons from Canada). In 2014, he led the team that established the supply chain and oversaw the shipment of 225,000 tons of wood fiber from the US south overseas to Daewoo North America.

He has previously served on the Board of *First Asset Renewable Power Flow-Through Limited Partnership* as a Director of *First Asset Power Funds Inc. (I, II, III, IV)*. He currently sits on the public company Board of Directors of the public Special Purpose Acquisition Corporation (SPAC) *Dundee Acquisition Ltd.* (TSX: DAQ.UN) and on the *Bioenergy Feedstock National User Facility Advisory Board* (Idaho National Laboratory / US Department of Energy).

Jordan holds a B.A. Honors (Eng. Phil.) from University of Western (1989) and a Masters in Environmental Studies with a specialty in *Environmental Consumption Behaviors and Marketing Strategy* from York University (1994).

Marcin Lewandowski – Director, Analytics & Risk

CV:

Marcin Lewandowski is the Director of Risk and Analytics, Biomass Advisory Group. Marcin has over a decade of experience in domestic and international logistics sectors. Marcin oversees Ecostrat's consulting practice as well as its organic substrate supply division. He has managed dozens of consulting projects for clients including Shell, Coca-Cola, JP Morgan, and Macquarie Bank. Currently, Marcin is responsible for developing US National Biomass Supply Chain Risk Standards to promote markets, development and investor confidence in the bioenergy sector.



Marcin holds BA in Geographic Analysis from Ryerson University, Masters of Forest Conservation from the University of Toronto, and Masters of Disaster and Emergency Management from York University. He has focused his studies on computer modeling of supply risk in the natural resource sector, from GIS analyses of timber inventories to advanced simulations of forest fiber supply chains. Marcin is a Committee Member – Political Action Committee on Natural Resources, Ontario Progressive Conservative Party; Committee Member – Forestry Graduate Education Committee; and Chairman, Forestry Alumni Association for the University of Toronto.

Azim Shamshiev – Head of Predictive Analytics

CV:

Azim Shamshiev combines a background in environmental science with several years of project management experience and a diverse set of skills in advanced statistical modelling and geo-spatial analysis.

As Head of Predictive Analytics, Azim carries out a wide range of analytics and modelling tasks including high-level statistical analysis, time series forecasting, gravity modelling and feedstock supply risk modelling using Monte Carlo simulations. He is proficient in several scripting languages such as Python, SQL and SAS. He also leads biomass supply assessment projects on renewable fuels.



Azim holds a Bachelor's degree in regional economics from the National University of Uzbekistan, a Master of Science in Environmental Science from the University of Manchester and Ph.D. in Environmental Science and Policy from Central European University.

He is an IBM-certified data science professional with an advanced diploma in data science and application from the Metro College of Technology. He also holds a Specialization in GIS, Mapping and Spatial Analysis from the University of Toronto.

Azim is keen on applying machine learning models and spatial analysis tools to tackle complex environmental problems. His IBM capstone segmented Toronto's neighbourhoods based on sustainability indicators using K-means clustering algorithm.

4: SCOPE OF WORK

4.1 BDO Zone Region¹

For the purposes of this BDO Zone Designation, sources of supply located within a 120-km drive distance of Greenview Industrial Gateway, Alberta and potential competing markets within a 240-km drive distance will be included in the analysis (the “BDO Zone region”).

4.2 Rating Activities

Carrying out the BDO Zone Rating will require multiple interviews with relevant GIG employees, industry bodies, key feedstock suppliers within each designated zone, and other stakeholders to assess and rate the biomass supply chain risk in the BDO Zone. In view of COVID-19, all activities will be carried out remotely. A confidential data room will be set up where client(s) will upload relevant information in its possession.

Ratings activities will be divided into 2 phases. Phase 1 will be a preliminary assessment to determine the availability of woody biomass and probability of an ‘AA’ or ‘A’ BDO Zone rating for the BDO Zone region. The outcome of this phase will be a high level, pre-feasibility estimate of the likelihood of GIG receiving an ‘A’ designation or higher. The study will move forward to Phase 2 if it is deemed that such a designation is sufficiently likely, at the sole discretion of GIG. Phase 1 will take approximately 6 weeks to complete; Phase 2 will take approximately 8-12 additional weeks.

The BDO Zone Rating will be based on the following activities:

4.2.1: PHASE 1

4.2.1.1 PRELIMINARY ASSESSMENT

Objective:	Work with GIG to develop a high-level assessment of the feedstock markets and production to determine the likelihood of ‘AA’ or ‘A’ BDO Zone rating.
Activities:	<ol style="list-style-type: none"> 1. Run a high-level assessment to estimate woody biomass feedstock concentration and BDO Zone infrastructure requirements for the GIG BDO Zone. 2. Screen for major risks by identifying significant potential supply chain shortcomings. 3. Run preliminary scoring protocols to estimate BDO Zone ratings level. 4. Draft a preliminary risk rating report outlining Phase 1 results. 5. Determine Go/No Go for Phase 2 basis likelihood of minimum ‘A’ rating.

¹ Depending on regional economics, supply and competition basin subject to change.

4.2.2: PHASE 2

4.2.2.1: MODIFY BSCR STANDARDS FOR GIG BDO ZONE DESIGNATION

Objective:	Determine BSCR Risk Categories, Factors and Indicators used to designate, score, and certify BDO Zone.
Activities:	<ol style="list-style-type: none"> 1. Form BDO Zone Advisory Committee (10 – 15 members). 2. Review BSCR Standards and designate relevant Risk Categories, Factors and Indicators. 3. Determine additional Risk Factors relating to Infrastructure, and incorporate into BDO Zone Scoring criteria. 4. Confirm suitability of scoring protocols and ratings thresholds for GIG. Modify as necessary.

4.2.2.2 DATA COLLECTION

Supply-Side Data:	Gather data to assess potential feedstock supply risk in nominated BDO Zone. <ol style="list-style-type: none"> 1. Source and review regional data in order to evaluate feedstock supply, cost, and quality risks in the BDO Zone in the following BSCR Risk Categories: Supplier Risk, Competitor Risk, Supply Chain Risk and Scale-Up Risk. 2. Source regional data on key Anchor Suppliers in the BDO Zone including: <ol style="list-style-type: none"> a. Company names; b. Location; c. Annual production / potential feedstock production; d. Other factors pertaining to reliability, longevity, and resilience of feedstock supply.
Competitor Data:	Gather data to assess key competing market risks for feedstock in the BDO Zone. <ol style="list-style-type: none"> 1. Generate a list of competing (and potentially competing) markets in the BDO Zone based on: <ol style="list-style-type: none"> a. Data aggregated by the client; b. Secondary research (including Ecostrat's <i>Biomass Supply Network</i>®) 2. Determine, as possible, for each market: <ol style="list-style-type: none"> a. Name; b. Location; c. Intake capacity (tons per year); d. Current and historical gate pricing (\$/ton). 3. Conduct primary research to identify any announced or potential competing projects.

Infrastructure Data:	<p>Gather data to assess Infrastructure risk to ongoing operations in the BDO Zone.</p> <ol style="list-style-type: none"> 1. Review infrastructure information supplied by GIG, regional economic development bodies and/or other local regional market stakeholders.
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4.2.2.3 DATA ANALYSIS

Feedstock Demand:	<ol style="list-style-type: none"> 1. Aggregate and map competing markets (if any); <ol style="list-style-type: none"> a. Calculate demand impact of each market on the BDO Zone; b. Calculate total demand within the BDO Zone.
Feedstock Availability:	<ol style="list-style-type: none"> 2. Aggregate supplier data and calculate: <ol style="list-style-type: none"> a. Total volumes available from key suppliers; b. Total woody biomass generated in the supply basin; c. Biomass Availability Multiple (BAM).
Feedstock Availability Curves:	<ol style="list-style-type: none"> 3. Based on the results of Feedstock Demand and Feedstock Availability, calculate: <ol style="list-style-type: none"> a. Feedstock availability curve for BDO Zone (Price vs Quantity). 4. Discuss Feedstock Price, Availability and Quality Risk Drivers.

4.2.2.4: RISK EVALUATION, SCORING AND RATING

Objective:	Develop a comprehensive feedstock supply chain risk assessment expressed as a Risk Rating.
Application of BSCR Standards:	Aggregate current market and project data. Review and identify areas of feedstock related risk exposure using the framework of the <i>Industry Standards for Biomass Supply Chain Risk</i> (ecostrat.com/standards) and recommend mitigation strategies.
Risk Assessment, Scoring and Ratings:	Evaluate, score and rate risk in 6 Feedstock Risk Categories (Supplier Risk, Competitors Risk, Supply Chain Risk, Feedstock Quality Risk, Scale-Up Risk, Infrastructure Risks), and (as relevant and subject to available data) applicable Risk Factors and Risk Indicators.
Issue of BDO Zone Rating:	Draft and issue BDO Zone Rating (Ecostrat and the BDO Zone Advisory Committee). GIG will have the right to use the BDO Zone Logo in promotion of its designation for a period of two (2) years. Rating is valid for 2 years.

4.2.2.5: BDO ZONE RISK RATING COMMUNICATION AND PROMOTION

Objective:	Drive new bio-based business development opportunities to GIG.
Activities:	<ol style="list-style-type: none"> 1. Appoint Local Development Leader (LDL). 2. Draft and issue joint press release (Ecostrat and GIG) to relevant biobased organizations and sector publications world-wide. 3. Promote/share rating on respective websites and social media channels of BDO Zone Initiative, Ecostrat, GIG, and the TAC. 4. Issue BDO Zone rating to: <ol style="list-style-type: none"> a. Invest in Canada to communicate to Canadian Trade Commissioner Offices and Cleantech Trade Officers; b. National Biobased Associations; c. BDO Zone Strategic Alliance Partners. 5. Participate in one BDO ZoneCONNECT Monthly Webinar series to promote the BDO Zone Rating to bioproject developers and investors worldwide. 6. Participate in BDO ZoneCONNECT 'Rapid Accelerator' Webinar (<i>optional</i>): private hosted (virtual) discussion groups with pre-qualified biobased project developers and investors from around the world. Guaranteed attendance of at least 100 biobased project developers and investors specifically focused on utilizing GIG's biomass type.

4.3 PROGRESS REPORTING & DELIVERABLES

Confidentiality

All work under this engagement will be strictly confidential and will not be disclosed, released, or published without the written permission of client.

Update Calls

Ecostrat will host regular update calls to update client on progress to date and discuss the path forward to rating completion.

Final Regional Risk Ratings and Report

The final work product will be a BDO Zone Risk Ratings report containing Ecostrat's analysis (Appendix A), along with all supporting maps and high-level scoring protocols. Granular scoring dates shall be confidential. The report will be delivered in Word (.docx) and PDF (.pdf) formats, data can be delivered separately in Excel (.xlsx) format.

GIS Database

If relevant, the final work product of this Project will contain a GIS database containing all data developed from research activities.

No Guarantee of Ratings

Ecostrat does not guarantee any BDO Zone Rating.

5: COMMERCIAL OFFER

Phase 1

Preliminary Assessment	\$22,000
Ecostrat Inc. in-kind contribution	(\$7,260)
Net	CAD 14,740

Phase 2 (Optional)

BDO Zone Designation – Greenview Industrial Gateway, AB	\$75,750
Ecostrat Inc. in-kind contribution	\$24,997
Net	CAD 50,753

Phase 3 (Optional)

BDO ZoneCONNECT Rapid Accelerator webinar	\$9,500
Net	CAD 9,500

Payment Schedule:

Phase 1

100% (non-refundable) payable upon Rating Authorization. Payment due net 15 on invoice. If Phase 1 Preliminary Assessment determines that GIG is unlikely to receive an “A” or “AA” rated BDO Zone designation, then Phase 2 will not proceed.

Phase 2

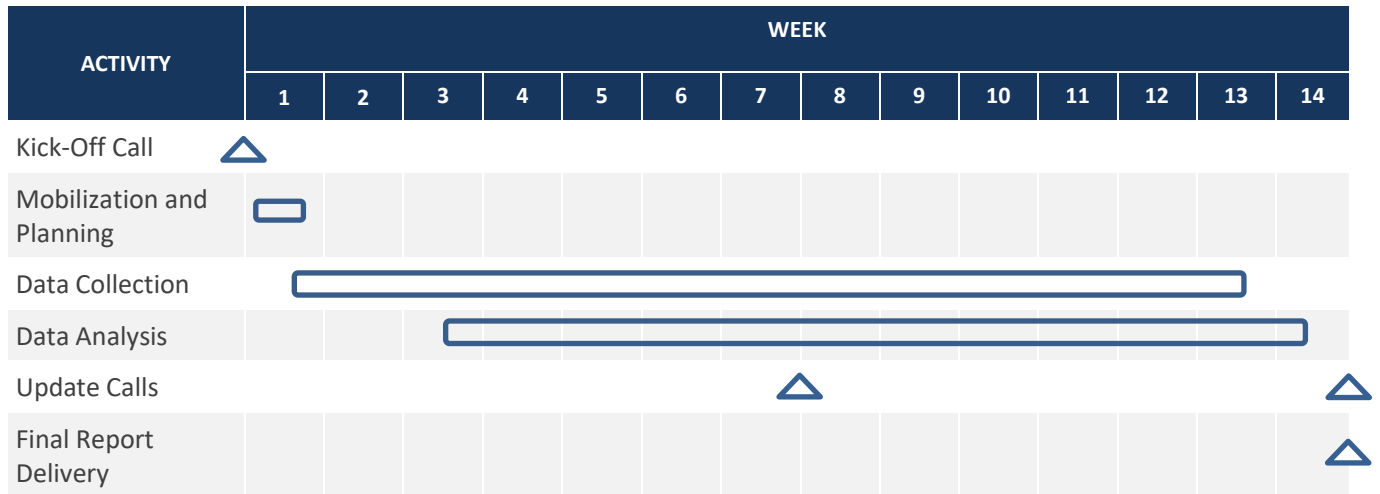
50% retainer (non-refundable) payable upon authorization; balance payable upon submission of the Final Ratings Report. Payments due net 15 on invoice. Should project billable hours exceed that of the value listed above, additional hours will be charged.

Phase 3

100% (non-refundable) payable upon webinar authorization. Payment due net 15 on invoice.

6: TIMELINES

The project team will host a Kick-Off Call upon receipt of the retainer payment and will proceed according to the following timeline:



7: CONFIRMATION OF AGREEMENT TO PROPOSAL TERMS

By signing and returning this page, you are acknowledging your agreement to all terms of this Proposal, including payment terms.

Signed and agreed to as of the _____ day of _____, 2022.

ECOSTRAT INC.

Per:

President: Jordan Solomon

GREENVIEW INDUSTRIAL GATEWAY

Per:

Authorized Signing Officer

8: ECOSTRAT VISION AND VALUES

OUR VISION

To increase the rate of adoption of biofuels, renewable chemicals, bioenergy and bio-products across North America and the world. We will do this by:

- Constantly updating our *Biomass Supply Network*® to ensure that it is always the largest and most comprehensive knowledge base of biomass supply in North America.
- Supplying the highest quality biomass, under long-term fixed-price contracts anywhere in the world.
- Providing accurate, up to date information on biomass supply and feedstock risk to any clean energy project in any location.
- Attracting top quality people who share our vision.

OUR VALUES

Integrity

Integrity of action, clarity of thought, fair dealing, respect in all interactions. These values are of the utmost importance.

Customer Satisfaction

Our future depends on us helping to make our customers successful. We are proactive and easy to do business with. We offer expert knowledge and practical solutions, and we deliver on our promises.

Employee Engagement

We foster a culture that promotes excellent performance, teamwork, inclusion, leadership and growth.

Innovation

We are a company of firsts. We encourage innovation and support new ways of thinking. We invest time, intelligence and capital in innovative approaches to clean energy.

Sustainability

We strive to achieve sustainable economic growth in the energy sector by promoting and developing the most efficient use of renewable resources.

