

REBALANCING THE FUTURE OF PLASTICS





Corporate Presentation CSE: PLAS | FSE: XV2 Q3 2024

Disclaimer

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Management Team

Troy Lupul President & CEO

Troy Lupul, with over 30 years in process and produced water management in the oil and gas sector, has been pivotal in advancing treatment technologies for companies like Suncor and Syncrude, with a broad impact across North America. He's an established entrepreneur, having founded Filterboxx Inc. and ClearBakk Energy Services Ltd., both of which were sold to international investors after achieving robust annual revenues. His strategic role in revitalizing AWC's wastewater project in New Jersey underscores his financial and operational acumen. Lupul's technical expertise extends internationally, with experience in deploying process equipment for the Canadian Defence Department in Afghanistan, and projects in the USA, Libya, and Norway. He's a NAIT-educated professional with a provincial level 4 water and wastewater operator certification, illustrating his deep knowledge and competence in the industry.

Wayne Monnery CTO – Ph.D. Eng.

Dr. Wayne Monnery, a PhD in Chemical Engineering from the Brian Hearst, a Chartered Public Accountant, has over 30 years University of Calgary, possesses over 30 years of experience that of experience in the oil and gas sector, demonstrating a aligns closely with PlasCred's pyrolysis initiatives. His remarkable track record of success. His extensive background includes 20 years as a CFO for small public energy companies comprehensive background in gas processing, pipeline hydraulics, separation, and sulfur recovery lends itself to the complex and 12 years working with a leading energy corporation. Throughout his career, Brian has played an instrumental role in chemical transformations involved in pyrolysis. His specialization in crude oil systems, particularly dehydration and stabilization, numerous equity and debt financing deals, skillfully parallels the dehydration and conditioning requirements of collaborating with key stakeholders such as regulators, pyrolytic processes. An active contributor to industry literature, Dr. investment bankers, lawyers, auditors, commercial bankers, Monnery has bridged theoretical concepts with practical reservoir engineers, and company professionals. Brian's applications, particularly in thermodynamics and the physical exceptional expertise in company management has also led him properties of fluids, knowledge that is crucial in optimizing to serve as an independent director for two junior mining enterprises, where he provides valuable guidance and strategic pyrolysis operations. His innovative work in converting waste oversight. His comprehensive understanding of the energy and materials into energy and valuable products through pyrolysis mining industries, combined with his strong financial acumen, directly supports PlasCred's objective of transforming plastic waste into a resource, underscoring his role in sustainable make Brian an invaluable asset. technology development.

Brian Hearst CFO - CPA, CA

Board of Directors

James Cairns

James Cairns is currently an independent consultant. Previously, he held the position of Senior Vice-President, Rail Centric Supply Chain at CN Rail. In this role, he was responsible for executing and expanding CN's bulk and merchandise carload businesses, managing the commercial teams and non-rail operations in his supply chains, and customizing all last-mile services for customer needs. Mr. Cairns oversaw CN's grain, fertilizers, sulphur, coal, petroleum and chemicals, forest products, and metals and minerals businesses. Prior to his role at CN Rail, he served as Vice-President, Petroleum and Chemicals from March 2010 and Assistant Vice-President of CN's domestic intermodal since 2006. Mr. Cairns earned a Bachelor's degree in Business Administration from the University of Winnipeg and an MBA from Queen's University in Kingston, Ontario.

Troy Lupul

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Gerald N. Gilewicz

Mr. Gilewicz serves as the Chief Financial Officer of Journey Energy Inc.. Previously, Mr. Gilewicz served as Chief Financial Officer and Vice President of Finance at Vero Energy Inc. from November 2005 to August 2012. Formerly, Mr. Gilewicz served as Vice President of Finance and Chief Financial Officer of Devlan Exploration Inc. and Dual Exploration Inc. from September 1999 to November 2005. Prior to this Mr. Gilewicz served as a Senior Manager at Deloitte & Touche LLP. Mr. Gilewicz has served as a Director and Chair of the Finance Committee of the Small Explorers and Producers Association of Canada. Mr. Gilewicz is a Certified Professional Accountant and received a Bachelor of Commerce in Accounting from the University of Saskatchewan.

Capital Structure

Basic Shares Outstanding

Debt

Warrants* @ \$0.25

Warrants** @ \$0.07

Performance Warrants*** @ \$0.25

Fully Diluted Shares Outstanding

Management & Board Ownership on a FD Basis



*12-month warrants expiry of November 2024 **Growth Equity Agreement

*** 1/3 at +\$15 Million Equity Raise 1/3 at Maximus Commissioning 1/3 at First Production

The Plastic Diversion Nyth

Global Plastic Waste Trade

Developed nations are major exporters of plastic waste to economically disadvantaged nations, triggered by **China's pivotal 2017** policy shift which banned plastic waste imports and set off a global chain reaction.

Globally, with 353 million tonnes of plastic waste in 2020, over **2X from 2000,** driven by increased buying power of rising global populations, low levels of recycling, and poor waste management.

In the United States, according to the OECD. **The majority of plastic** waste goes to landfills or is still shipped overseas.



460 Million Tonnes of Plastic Produced

Only 9% of Plastic Waste Recycled



PlasCred Highlights





Advanced Plastic Upcycling Process

Patent-pending low-cost advanced upcycling process to transform up to 80% of unsorted, unwashed waste plastic into

RENEWABLE *C* GREEN CONDENSATE^M

Scalable output from Primus, Neos, Maximus. Neos capacity of 300 bpd and upcycles 60 tonnes*/d of plastic waste. Maximus has initial output capacity of 2,000 bpd and upcycles 400 tonnes/d of plastic waste, scalable to **10,000 bpd** and 2,000 tonnes/d of plastic waste

Robust Strategy for Commercialization

Neos & Maximus to be strategically located in Edmonton, Alberta the heart of Canadas largest refinery zone, a ready market for PlasCred's products, strengthening economics and value.

Multiple revenue channels including Renewable Green **Condensate, Plastic and Carbon Credits, and Commercial End Products.**









Industry-Leading Partners and Expertise

Partnerships with CN Rail, Palantir and Fibreco provide unparalleled transportation and logistics for collecting plastic feedstock timeand cost-efficiently across North America and internationally, solving a critical problem of upcycling companies.

Veteran team in engineering R&D, business development, plastic & carbon credit development.

Condensate Market



Alberta's Condensate Landscape

Significant role in energy sector. PlasCred aligns with market demands.

Condensate Market Strengths

Predictable pricing. Versatility in blending and refining.

Value of Condensate

Trades at or above Canadian Light Sweet Crude.

Market Demand

Current demand: ~1,000,000 barrels/day. Imports from U.S.: ~200,000 barrels/day.

Opportunity for PlasCred

Alberta blenders/shippers seek local high-quality condensate to reduce import dependency. PlasCred's production capabilities position it as an emerging player in the Alberta condensate market.

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PlasCred Process Overview

PlasCred's patent-pending and proprietary process enables true plastic waste removal in a scalable, systematic and profitable way.

RENEWABLE *C* GREEN CONDENSATE[™]

Transforms up to 80% of unsorted, unwashed waste plastic into ultra-clean renewable green condensate, in a commercially viable process providing immediate economic benefit for industry, communities and government organizations for handling waste plastic.

Engineered Scalability for Robust and Profitable Operations

- Primus: 2 bpd condensate, upcycling 400 kilograms/d* of plastic waste
- Neos: 300 bpd condensate, upcycling 60 tonnes/d of plastic waste
- Maximus:
 - Phase 1: 2,000 bpd condensate, upcycling 400 tonnes/d of plastic waste
 - Phase 2: **4,500 bpd** condensate, upcycling **900 tonnes/d** plastic waste
 - Phase 3: 10,000 bpd condensate, upcycling 2,000 tonnes/d of plastic waste

Transforming Plastic Waste back to its Original Mother Earth Molecule

* Assumes 60% Recovery

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PlasCred Process Diagram



Inputs: Plastic Feedstock can be all kinds of mixed unwashed and **unsorted plastics types 1 to 7** optimally polyethylene and polypropylene.

Outputs: Commercial end products with potential customers, including Renewable Green Condensate , Carbon Char, and Aromatics.



Plastic Feedstock

PlasCred's Innovative Solution vs. Mechanical Recycling Challenges

Mechanical Recycling: Mixed plastics and contaminants complicate sorting. **PlasCred**: Pyrolysis process effectively handles various plastic types and contamination.

Mechanical Recycling: Incompatible melting points hinder plastic mixing. **PlasCred**: Pyrolysis process can handle a large volume of diverse plastics.

Mechanical Recycling: Exposure and repeated processing degrade plastic quality. PlasCred: Pyrolysis minimizes degradation, producing valuable condensate.

Mechanical Recycling: Rejection due to unmet quality standards. PlasCred: Produces valuable green condensate, aligning with market demand.



Contamination and Complexity

Compatibility Limitations

Degradation and Quality Concerns

Market Demand Constraints





PlasCred Primus

A pioneering facility engineered to conduct beta testing of PlasCred's unique upcycling process

Successfully brought online and commissioned in May 2023.

Initial test results show a **high quality renewable green condensate** meeting industry specs with capacity of **2 bpd and liquid recoveries up to 80%**

Intensive **rigorous testing** program underway and learnings applied to **Neos design** ensuring **scalable growth**.

This innovative, **patent-pending** technology underscores our commitment to the **circular economy**.





PlasCred Primus

A pioneering facility engineered to conduct beta testing of PlasCred's unique upcycling process

At PlasCred, we're revolutionizing plastic upcycling with our patent-pending, three-step pyrolysis process.

Heating plastic waste, transforming it into a liquid state. This is the first step in our journey towards a **sustainable future**.

Liquid then undergoes thermal degradation, producing a vapor. This crucial second phase prepares the materials for their final transformation.

Vapor interacts with a specially selected catalyst, turning plastic waste into

RENEWABLE **C** GREEN CONDENSATE







PlasCred Neos

The Evolution of Primus Commercial Scaling

Front End Engineering Design Study

Neos FEED Study underway with Grey Owl Engineering Ltd. Anticipated completion early Q4 2024. Capacity of approximately **300 bpd** and designed to be **modular**.

Neos Design

Neos engineered to have equivalent residence time or **space velocity** as **Primus**. Neos engineered to have equivalent relative dimensions, such as Height/Diameter ratio as Primus. **Neos is engineered** to ensure the heat transfer surfaces are equivalent.

Neos Highlights

Neos designed to be **modular**. On completion of the **FEED** study, **PlasCred** will release a full breakdown of the **project metrics** including update on negotiations for a **long-term** offtake agreement and secured plastic feedstock supply.

RENEWABLE *C* GREEN CONDENSATE[™]





PlasCred Engineered Scalability

PlasCred's Technology Develops through Multiple Phases, each **Offering Greater Capacity and Output**

Our Engineered Scalable Solutions are Designed to Meet the Rising Needs of Plastic Waste Reduction



** Phase One is start-up and Phase 2 is full production run times, Phase 3 additional capex for reactors will be added. Material handling capex deployed with Phase One.



MAXIMUS



Maximus Phase Two** 900 tonnes/d ~4,500 bpd



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Commercial End Products

PLASTIC REMOVAL REVENUE

PlasCred Processing



Carbon Char

 $\mathbf{\mathbf{X}}$

10%

Inert carbon and carbonaceous solid produced



RENEWABLE 🏷 GREEN CONDENSATE

80%

Proprietary ultra-clean renewable condensate product with various commercial applications

- TYPES OF END PRODUCT >>>
 - PERCENTAGE >>>
- END PRODUCT DESCRIPTION >>>







Gas

10%

Hydrogen, propane and butane, used for the PlasCred process Quality of the emissions improve with increased feed rates

August 2022 & December 2023 Signed MOU with CN Rai 284/ 5284

5322

Creation of a comprehensive **North American plastic waste** logistics network.



PlasCred Logistics Advantage

The Canadian National Railway Company (NYSE:CNI, TSX:CNR) is a Canadian Class I freight railway and Canada's largest railway.

PlasCred has entered an MOU with CN Rail, establishing a strategic alliance for logistics and transportation of plastic waste to **PlasCred upcycling plant locations**.

Securing a steady stream of **essential plastic waste** feedstock.

Potential Gulf Coast Plant sites and access for enhanced global connectivity.



Fibreco's efficient rail delivery coordination with CN, dry bulk storage, and loading processes expand **PlasCred's** feedstock supply chain internationally.

Signed MOU with the objective of investigating the feasibility of **utilizing existing port location for importing** plastic waste feedstock.



PlasCred Logistics Advantage

Fibreco Export Inc. is one of the world's largest wood biomass handling terminals, with enhanced terminals to accommodate export of agricultural products to Europe and Asia.

December 2023 Palantir Technologies Inc. NYSE: PLTR





PlasCred Logistics Advantage

Palantir Technologies Inc. (NYSE: PLTR) is a leading provider of AI systems globally and in Canada

PlasCred entered a strategic collaboration **with Palantir Technologies Inc**. to integrate **AI technology** into its supply chain **logistics** and **operational optimization**.

The partnership involves the implementation of **Palantir's Foundry and AI Platforms** at **PlasCred's Primus** plant and developing **supply chains** as a beta test.

Insights from **Primus** will inform the logistics and operation of the upcoming **Maximus** facility.

What is a Plastic Credit?



Verra is a Leader in the Plastic Credit Market

Verra's Plastic Waste Reduction Program drives investment to plastic waste management projects worldwide that are thirdparty audited and verifiably reduce plastic waste in the environment.

Projects certified with Verra's Plastic Program can generate **Plastic Credits**.

There are two types of Plastic Credits that indicate the infrastructure investment made:

- Waste Collection Credit (WCC)
- Waste Recycling Credit (WRC)

PlasCred can become the Gold Standard of Plastic Credits



PlasCred's approach has the potential to set a completely new benchmark for plastic credits.

PlasCred **Maximus Phase One** is forecasted to remove up to 400 metric tonnes of plastic per day with potential value **of \$20,000 to \$320,000 per day** in Phase One.

Verra's current market value of plastic credits are \$50 to \$800 per tonne of plastic removed.

Urgent market demand for PlasCred's plastic credit solutions is evident.

- Pepsi, Coke, Nestle, and P&G are all presently engaged in a class action lawsuit over plastic pollution.
- Verification of PlasCred's process has begun with Verra and SCS Global including **ISCC+ verification**

Verra Plastic Credit Process











PlasCred has formed a Credit Development Team partnered with industry leading organizations.

Countries internationally are more committed than ever to reducing Greenhouse Gases.

Carbon/Plastic markets are evolving quickly.

Voluntary Carbon Units

Voluntary Carbon Markets are on pace to be valued between \$5B - \$100B market by 2030.

Current market value of carbon credits are ~\$8-22 per tonne of carbon removed.

Expansion Across North America

Scalable & Repeatable

Expansion Targets Across North America

Utilizing CN Rail and Logistics Network

- Helena, MS
- Mobile, AL
- Chicago, Il
- Los Angeles, CA
- Cushing, OK



Maximus Financial Estimates



* Assumptions: Pricing for Condensate is based on Edmonton Condensate at \$95 barrel CAD, and Plastic Credits at \$50/tonne. **Figures are subject to change, until the FEED study is completed. Pre-FEED Level 3 complete.

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Our Vision -Rebalancing the future of plastics.

PlasCred is transforming plastic waste by granting plastic a valuable second life.

PlasCred is is advancing towards a **climate-positive future**, aspiring to be among the **largest advanced plastic waste upcycler's** in North America and worldwide.

Employing **groundbreaking patent pending technology**, PlasCred will revolutionize the approach to plastic waste management and upcycling.

Well-defined roadmap guides PlasCred's future, emphasizing **positive environmental outcomes** and establishing PlasCred as the benchmark for environmental credits, encompassing both plastic and carbon credits.







Banker: **BMO** Legal: Torys LLP





T2P 2X6

Transfer Agent: Endeavor Trust

