



CIELO

Cielo Waste Solutions Corp.

October 2020 Investor Presentation

CSE:CMC OTCQB:CWSFF

A Window to a Cleaner World.



Disclaimer

This presentation contains certain statements that may be deemed “forward-looking statements”. All statements in this document, other than statements of historical fact, that address events or developments that Cielo Waste Solutions Corp. (“Company”) expects to occur, are forward looking statements. Forward looking statements are statements that are not historical facts and are generally, but not always, identified by the words “expects”, “plans”, “anticipates”, “believes”, “intends”, “estimates”, “projects”, “potential” and similar expressions, or that events or conditions” will”, “would”, “may”, “could” or “should” occur.

Although the Company believes the expectations expressed in such forward-looking statements are based on reasonable assumptions, such statements are not guarantees of future performance and actual results may differ materially from those in the forward-looking statements.

Factors that could cause the actual results to differ materially from those in forward looking statements include but are not limited to the inability to complete the successful commissioning and commercialization of the Company’s technology and facilities, inability by licensor to obtain patents, failure to successfully negotiate and finalize joint venture agreements, inability to maintain or obtain sufficient financing to complete the Company’s objectives, inability to obtain requisite regulatory and other approvals to successfully commercialize the technology and facilities.

Investors are cautioned that any such statements are not guarantees of future performance and actual results or developments may differ materially from those projected in the forward-looking statements. Forward looking statements are based on the beliefs, estimates and opinions of the Company’s management on the date the statements are made. The Company undertakes no obligation to update these forward-looking statements in the event that management’s beliefs, estimates or opinions, or other factors, should change.



By 2050, the world is expected to generate 3.4 Billion tons of waste annually, increasing drastically from today's 2.01 Billion tonnes in 2016.

– *World Bank Group*



Company Overview

- Cielo is a Canadian and USA publicly traded waste-to-energy company, with primary operations in Red Deer, Alberta, Canada that transforms landfill garbage into high grade renewable fuel.
- Cielo holds the exclusive licence for the global rights to a patent-pending proprietary technology capable of converting multiple waste streams into renewable fuel, at a considerably lower cost than biofuel companies.
- Cielo's first commercial facility in Aldersyde, AB, has been engineered to operate on a continuous flow basis, operating 24-hours a day, roughly 341 days per year, and will be accepting almost any form of industrial and household waste – including but not limited to **all types of plastic, tires, wood waste, organic waste, railway ties and municipal solid waste.**



Company Overview Continued

- Cielo uses a refining process referred to as Thermal Catalytic Depolymerization, which blends waste with a proprietary chemical catalyst and low heat to change the composition of the material, producing renewable transportation diesel, jet and marine fuels and naphtha.
- All developed countries throughout the world require a minimum blend of renewable diesel be used in all transportation diesel fuel. Cielo's renewable fuel can be used in highway, air, ocean and railway sectors, and as a fuel in remote off-grid communities. Cielo's renewable naphtha will be used in the diluent, condensate and gasoline blending markets.
- Once built and operating at full capacity, Cielo's four planned Alberta facilities and one Nova Scotia facility are expected to each produce 1060 gallons (4,000 litres) of renewable fuel per hour on the 1st phases with room for expansions at each site.
- Cielo's technology is scalable, capable of rapid expansion.

With plans to build 40 Facilities across North America, Cielo offers the potential to divert annually about 2.6 Million tonnes of waste going into landfills and convert it into about 1.3 Billion litres of renewable diesel each year.



Experienced Management Team



Don Allan
President & CEO

30+ years of executive leadership experience including experience in debt and equity capital markets, strategy and planning, risk management and investor relations. Extensive background in business development, engineering, marketing and project development.



Dr. Roderick Facey
Lead Engineer

Professional engineer with a doctorate degree from the University of Alberta. Chemical Systems, Structural, Environmental, Mechanical & Process Engineering Specialist.



Shawn Frenette
Chief Financial Officer

20+ years of experience working with rapidly growing and changing companies. Shawn has both USA and Canadian accounting experience as well as public markets. Past 10 years as a co-owner with the SSCR Corporate Solutions consulting group in Red Deer.



Stuart McCormick
VP Compliance & Reg. Affairs

30+ years as Professional Civil and Environmental Engineer. Extensive experience in permits, business strategy, planning and project management.

Supportive Board Of Directors



Don Allan Chairman

- President & CEO of Cielo



Robin Ray

- CGA and Partner, MacNevin & Ray
- 30+ years of experience as an officer and director of publicly-traded companies.



Chris Dovbniak

- 30+ years of experience in process management control and purchasing
- Retired instrumentation technician



Doug MacKenzie

- Former EVP Suncor (Refining and Marketing),
- Former Sr VP PetroCanada
- Previous CEO of Permolex International



Mel Angeltvedt

- President, Bozco Enterprises
- 30+ years of experience in process and service in the oil and gas sector



Lionel Robins

- CEO of Renewable U
- Successful businessman, with 7 corporations and commercial real estate holdings
- Active board member on Stars Air Ambulance and past Chairman of 2018 Alberta Summer Games

Demand for Biodiesel in Canada

Locations	Blend %	Diesel Consumed 2015	Biofuels Required
BC	4.0%	1,852	74
AB	2.0%	4,019	80
SK	2.0%	1,315	26
MB	2.0%	1,350	27
ON	2.0%	5,427	109
QC	0.0%	3,177	0
Maritimes	0.0%	1,140	0
Territories	0.0%	178	0
Federal Mandate	2.0%	17,412	348
Total/Average	3.8%	17.4 Billion L/Y	664 Million L/Y

Source: Estimates by Cielo Waste Solutions

Advantageous Economics Over Traditional Diesel

	Traditional Biodiesel	Cielo's Renewable Diesel
Production Cost/L	\$0.36 - \$0.50 (Avg \$0.43)	\$0.39 - \$0.64
Feedstock Cost/L	\$0.85 - \$1.32 (Avg \$0.97)	\$0.06 - \$0.11
Total Cost	\$1.21 - \$1.82 (Avg \$1.40)	\$0.45 - \$0.75
Price in Edmonton	\$1.25/litre	\$1.55 - \$1.80/litre*

Source: Estimates by Cielo Waste Solutions.

- Production Cost estimates are for 2,000 lph production, future facilities will be 4,000 lph
- Cielo's Catalytic Thermal Depolymerization technology allows feedstock to be converted into High Grade Renewable Diesel in considerably less time than traditional Bio-diesel
- Cielo can use a wide range of waste feedstocks for which many companies must pay a disposal fee



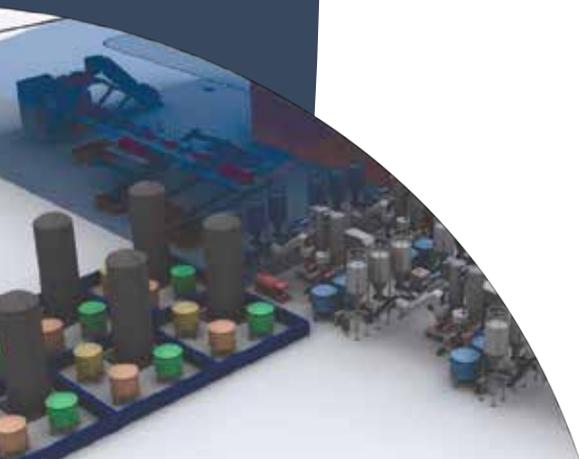
Our Process to Convert Waste

Cielo's process is referred to as **Thermal Catalytic Depolymerization**. Waste materials are blended with used motor oil and a powdered chemical catalyst. The mixture is then heated to a temperature that breaks down the molecules and "cracks" the materials into a blend of distillate fuels. The fuels are then further processed into renewable transportation diesel, jet and marine fuel and naphtha

Simply put, Cielo combines a proprietary catalyst and heat to convert garbage into renewable fuels.

Highlights of our process:

- Process utilizes atmospheric pressure and low heat, expected to result in lower capex costs and the advantages of using unskilled labor to operate plant
- Process is significantly faster than traditional biodiesel processing
- Modular design facilitates scaling for global deployment
- Lower input costs as a result of being able to use multiple different waste sources, rather than solely depending on feedstocks derived from food crops
- Patent approved on the process in USA and in Canada
- The catalyst formulation will be treated as a trade secret and will not be patented





The Cielo Advantage

- Cielo refineries can transform most household and industrial waste that currently goes to landfill into valuable diesel fuel.
- Our refineries operate with virtually no emissions.
- We help in greatly reducing methane emissions from landfills, as well as reduce reliance on imported biofuels made from agricultural products.



Completed R&D Phase

- Over 200 upgrading technologies were reviewed
- A detailed evaluation on 22 technologies was performed
- Worldwide Exclusive licence Agreement signed on a technology that converts multiple feedstocks (sawdust, plastics, tires, construction waste and municipal organic and solid waste) into renewable diesel
- R&D began in November 2004 with millions invested to date, before and after Cielo's acquisition of the technology
- Cielo operated a demonstration plant for 4.5 years that allowed the study of the feedstocks, catalysts, blending ratios, temperatures, etc.

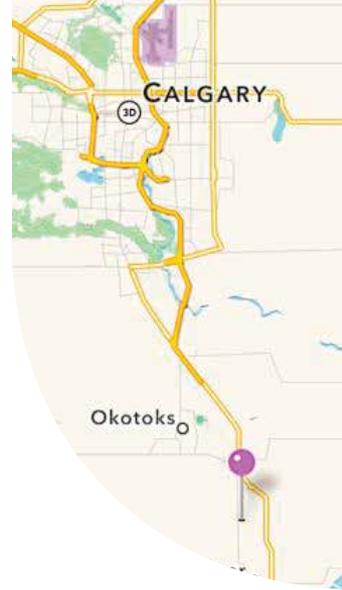
Recent Engineering Design Improvements

- Improvements to the front-end of the process have been implemented that allow for higher waste volumes and multiple feedstocks
- Waste recovery process has been added to the reactor which now vaporizes the waste stream, allowing for recapture of catalyst and hydrocarbons, providing a much cleaner waste ash, as well as higher production and EBITDA numbers
- Cielo is conducting additional R&D to optimize the process. Encouraging results are being recorded.
- Engineering and procurement initiatives for the JV Facilities are underway
- The Facility is now in continuous operations producing renewable naphtha, kerosene and diesel from sawmill waste.



Benefits of First Facility in Aldersyde

- Purchased existing biodiesel plant & land
- Hosted Grand Opening on July 11th, 2019
- Improved modifications have resulted in higher production and lower operating costs
- 2.45-acre site fully serviced with land use zoning in place
- Only 25 km south of Calgary, Alberta
- Close to multiple feedstock suppliers and contractors



Completed Operations

- ✓ Secured feedstock supply for entire production volume for Aldersyde Facility
- ✓ Signed off-take agreement to sell all production
- ✓ \$.13/liter Alberta Bio-Producers Grant

Phase I Upgraded

- ✓ Modifications to design resulted in increase to projected capacity
- ✓ Output capacity ~100 liters per hour (l/h) now and scaling up to 1,000 l/h
- ✓ Design changes will increase production, recovery of waste and lowering operational costs

Next Operational Phases

Phase 2

- Additional automation to be added
- Addition of Material Recovery Equipment for multiple feedstocks
- Increased productive capacity at Aldersyde to 2,000 l/h of renewable fuels

Phase 3

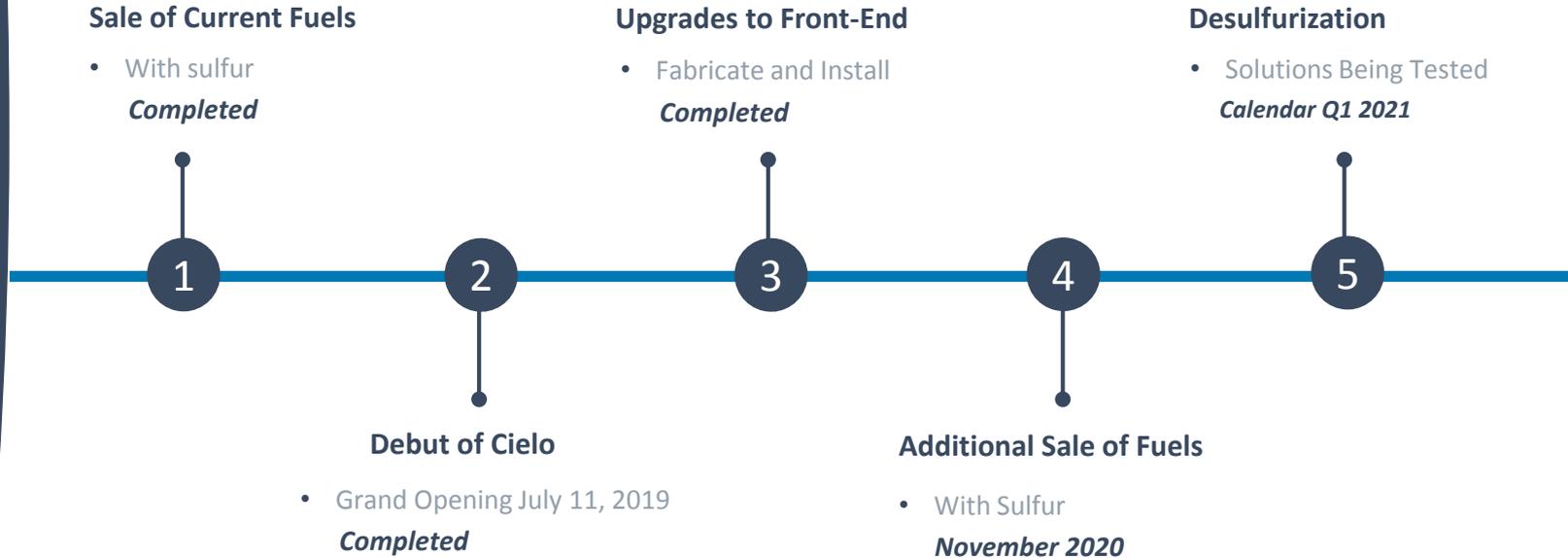
- Initiation of Joint Venture Facilities

Recent Executed MOUs

- Cielo recently signed memorandums of understanding for Joint Ventures in Grande Prairie, Calgary, Medicine Hat, Lethbridge & Halifax (“JV Facilities”)
- **Highlights of the proposed terms of the joint venture agreements include:**
 - Joint venture partners (“JV Partners”) are responsible for 100% of the financing of each project (“Project”) including land (railway access and servicing, buildings, equipment, permitting, constructing and commissioning of the JV Facilities)
 - CIELO will execute the planning, construction, commissioning and operation of the JV Facilities, and overall manage the joint ventures
 - Until the JV Partners recover an amount equal to 100% of the cost of the Projects (“Project Costs”), the JV Partners will be entitled to receive 70% of the profits from the first JV Facility in each territory.
 - Upon the receipt by JV Partners of an amount equal to 100% of the Project Costs for each JV Facility, CIELO will be entitled to receive 50.1%, and the JV Partners will be entitled to receive 49.9%, of the profits from the JV Facilities.

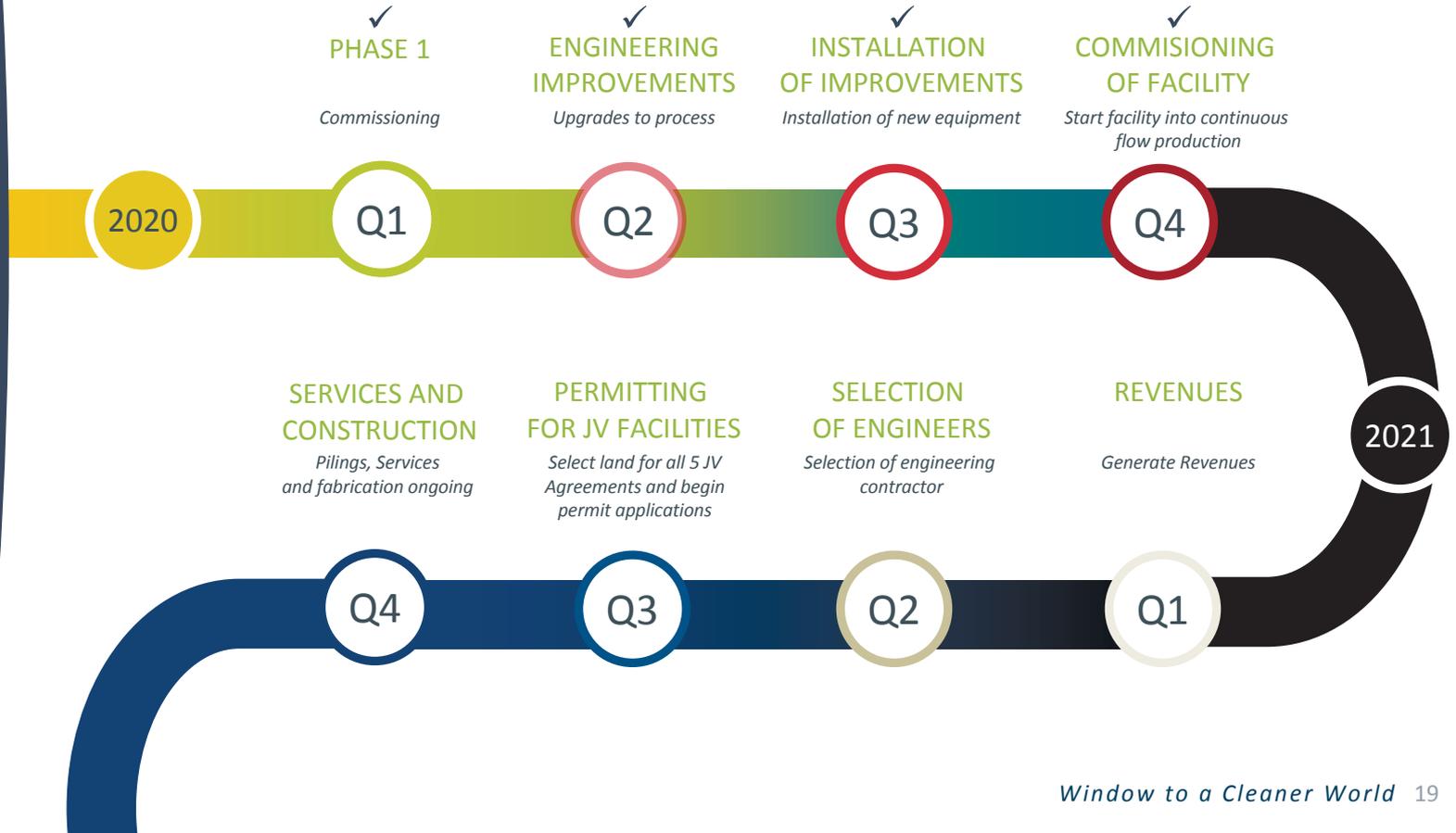
Cielo would receive non-dilutive funding from 5 follow-on facilities, each at an anticipated cost of ~\$50M generating for Cielo \$8.75M in Management Fees and a carried 50.1% Ownership valued at \$125M

2019-2020 Milestones – Completed & Upcoming



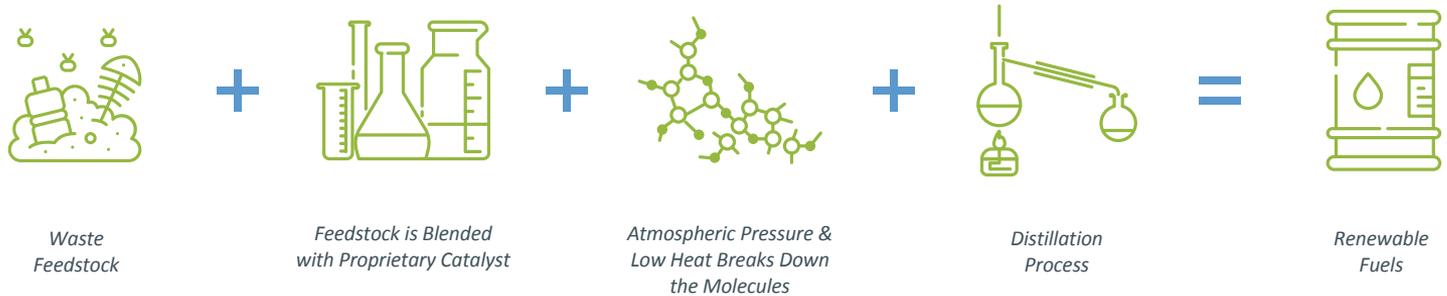


Calendar 2020 – 2021 Operational Timeline



Cielo's Thermal Catalytic Depolymerization (TCD) Process to Convert Waste

Cielo Facilities Operate with No Harmful Emissions



Industry Metrics

Global Waste Generated/Year



2.01
Billion Tons
in 2018



3.4
Billion Tons
by 2050



≈ 37%
Of Global waste is disposed
of in landfills

Demand for Diesel in Canada



17.4 Billion Liters
of fossil fuel diesel
produced in 2015

665 Billion Liters
of renewable diesel required to meet
yearly mandate by Canadian Government

98%
of mandated renewable diesel
is currently imported from overseas
by ships burning bunker fuel

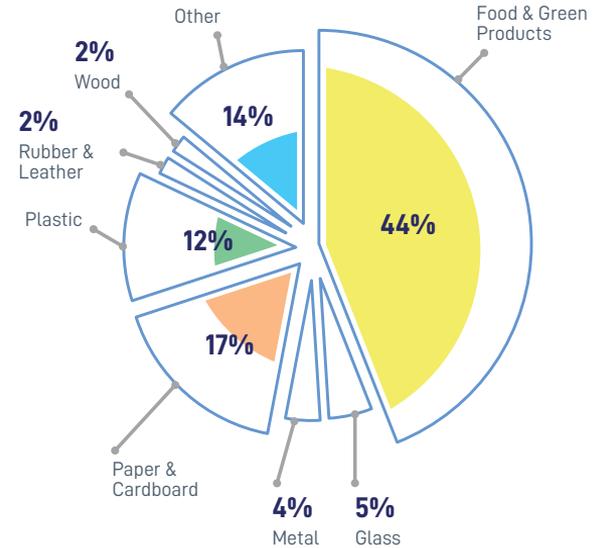
Global Renewable Diesel Production



4x
by 2030

4.8 Billion Liters
Per Year in 2019

19.7 Billion Liters
Per Year by 2023



Global Waste to Energy Market Size



\$25 Billion
in 2015

\$44 Billion
in 2024



\$15 Billion
estimated 2020 CAPEX

\$19 Billion
estimated 2024 CAPEX

CAPEX Investment Increasing in the Global Thermal Waste-to-Energy Market

Investment Highlights

- **Proven Technology** – millions of dollars and years spent on R&D (through various related companies), validation from multiple 3rd parties; **cutting-edge technology** is a game changing solution to the world's garbage problem
- **Exclusive license** - Cielo holds an exclusive global license from a related party with ability to purchase license back by Cielo
- **Patent** – process patent has been approved in the USA and in Canada
- **Little Canadian Competition** – no major renewable diesel producers in Canada that can sell to this market
- **Permits** – Municipal and Provincial Permits approved
- First commercial facility at Aldersyde now operating 24-hours a day
- Achieved first production and first sales of product
- **Ability to use waste feedstocks** – unlimited availability at a low cost
- **Low carbon end-product** – reductions in GHG emissions
- Signed long-term feedstock supply agreement with CP Rail for scrap railroad ties for 4,000lph facility
- Targeted to be Canada's first renewable diesel producer, a product that is fully compatible with fossil diesel
- **Regulated Demand** - Canadian Regulators have mandated minimum blend of renewable diesel into all transportation grade diesel, almost all of which currently must be imported



Share Metrics & Ownership Summary

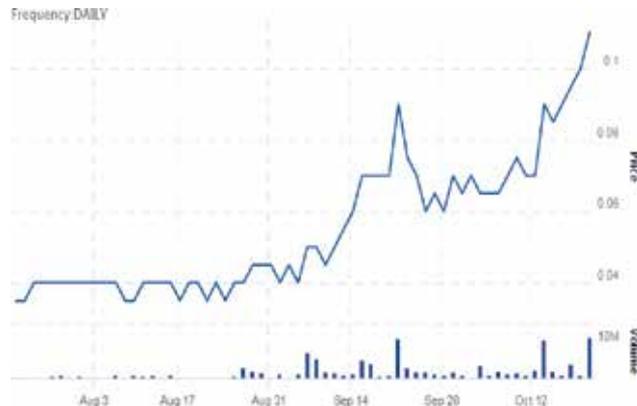
Cielo Waste Solutions Corp. (CSE:CMC, OTCQB: CWSFF)	
Share Price (CAD)	\$0.07
Market Cap (CAD)	\$21.1M
Shares Outstanding	301,201,680
Warrants	75,390,606
Options	9,190,000
Restricted Share Units	3,250,000
Fully Diluted Shares Outstanding	497,836,391
52 Week Range (CAD)	\$0.035 - \$0.11

Ownership Summary

Management and
Insiders

37%

52 Week Price Chart (**as of October 21, 2020)



As of October 21, 2020

Cielo's Green Facilities Have The Potential To Solve The Global Garbage Crisis & Make The Planet A Better Place For Generations To Come



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