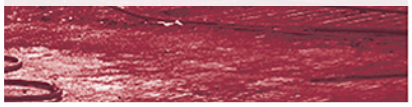
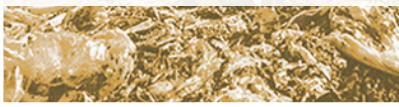
CHAR technologies




Decarbonizing for a Circular Economy through Advanced Design, Technology and Environmental Services.



ANNUAL REPORT 2021

MANAGEMENT'S DISCUSSION & ANALYSIS
FOR THE YEAR ENDED: SEPTEMBER 30, 2021
DISCUSSION DATED: JANUARY 31, 2022

CHAR technologies

OUR OPERATING GROUPS

CHARTECH SOLUTIONS

The CleanTech Systems Engineers

CHAR biocarbon

The Biocarbon Experts

ALTECH

The Environmental Consultants

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INTRODUCTION

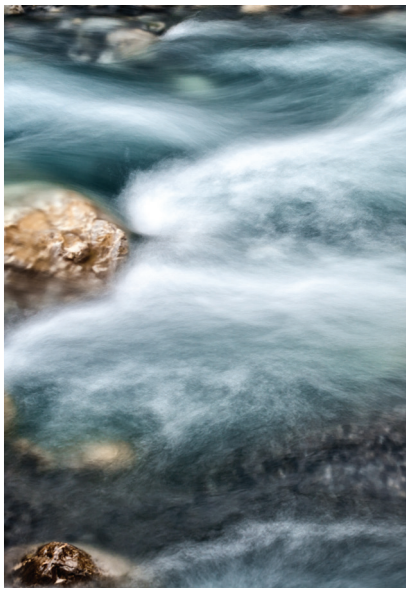
This Management's Discussion and Analysis ("MD&A") of the financial condition and results of operation of CHAR Technologies Ltd. (the "Company" or "CHAR") should be read in conjunction with CHAR's audited consolidated financial statements and notes thereto as at and for the years ended September 30, 2021, and 2020.

The Company's consolidated financial statements and the financial information contained in this MD&A are prepared in accordance with International Financial Reporting Standards ("IFRS") as issued by the International Accounting Standards Board and interpretations of the IFRS Interpretations Committee. Results are reported in Canadian dollars, unless otherwise noted.

Information contained herein is presented as of January 31, 2022, unless otherwise indicated.

For the purposes of preparing this MD&A, management, in conjunction with the Board of Directors (the "Board"), considers the materiality of information. Information is considered material if: (i) such information results in, or would reasonably be expected to result in, a significant change in the market price or value of the Company common shares; (ii) there is a substantial likelihood that a reasonable investor would consider it important in making an investment decision; or (iii) it would significantly alter the total mix of information available to investors. Management, in conjunction with the Board, evaluates materiality with reference to all relevant circumstances, including potential market sensitivity.

Further information about the Company and its operations can be obtained from the offices of the Company or on SEDAR at **www.sedar.com**.


OUR BUSINESS

CHAR is a cleantech development and services company, specializing in high temperature pyrolysis, converting woody materials and organic waste into renewable gases (renewable natural gas and green hydrogen) and biocarbon (activated charcoal "SulfaCHAR" and solid biofuel "CleanFyre"). Additional services include custom equipment for industrial water treatment, and providing services in environmental compliance, environmental management, site investigation and remediation, engineering and resource efficiency.

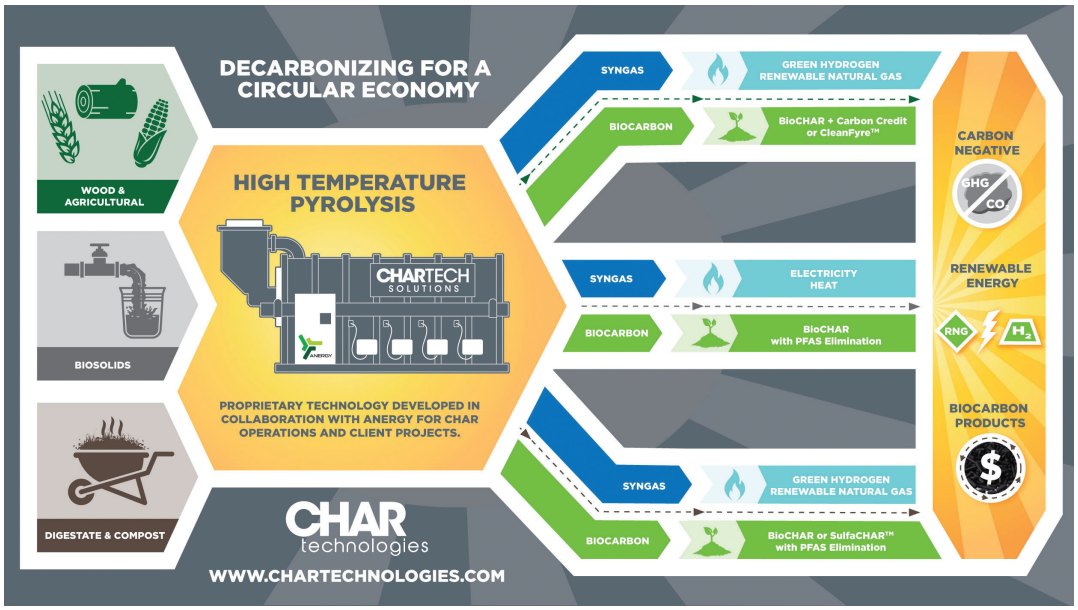
The Company continues to be listed on the Exchange trading under the symbol YES.V. The Company's head office address is 789 Don Mills Road, Suite 403, Toronto, Ontario, M3C 1T5.

CHAR has three operating groups: CharTech Solutions, CHAR Biocarbon and Altech Environmental Consulting.

CharTech Solutions

CharTech Solutions develops and delivers innovative environmental technology solutions to eliminate water pollution and convert challenging waste streams into renewable and valuable outputs, helping our clients embrace the circular economy. As CHAR's technology EPCM (Engineering, Procurement, Construction and Management) group, CharTech Solutions designs and delivers turnkey water and high temperature pyrolysis projects to clients. With core competencies of process engineering and project management, CharTech Solutions specializes in delivering innovative service and technology solutions that are environmentally sustainable and cost-effective for our clients.

CharTech Solutions continually challenges the boundaries of technology to discover innovative, customized solutions in areas including pollution prevention, waste minimization and water recycling. CharTech Solutions' ultimate goal is to create innovations that significantly improve the environment and save our clients' money.



High Temperature Pyrolysis (HTP) Technology

CharTech Solutions proprietary HTP technology is a key growth area for CHAR. In simple terms, HTP heats materials to high temperatures in the complete absence of oxygen, and with no oxygen, the material can't burn, it is instead converted into higher value outputs. HTP converts woody-biomass and challenging organic waste streams (manure, sludge, biosolids, digestate and others) into three renewable and valuable outputs:

1. **Renewable gases:** The HTP process converts a portion of the solid feedstock into a hydrogen-rich syngas, from which purified hydrogen can be separated, or the syngas can be converted into renewable natural gas.
2. **Heat:** Once operational, the HTP process is autothermal – that is, it creates its own energy and does not need external heat sources. A part of this process generates additional heat, which can be captured for various industrial heat load requirements.
3. **Biocarbons (biochar):** TThe remaining solids after the HTP process are converted into a solid carbon product. When used as pollutant filter (activated charcoal, SulfaCHAR) or as a fertilizer additive or soil amendment, these biocarbons not only offset more resource intensive alternatives, but also fix carbon in an extremely stable form, thereby utilizing the natural "carbon capture" processes of the feedstocks, and further sequestering that carbon.

   When used as a biocoal (CleanFyre) to offset fossil coal used in industrial processes, the CleanFyre allows for the carbon sequestered in the coal to remain sequestered, drastically reducing the GHG emissions of vital sectors such as the steel and cement industries.

Water Technologies

CharTech Solutions designs and integrates turnkey, advanced clean water technologies to deliver cost-effective solutions that address the water pollution challenges of our clients.

CharTech Solutions wastewater team specializes in high BOD (biological oxygen demand) applications, a common challenge for Food & Beverage processors, organics processors and renewable natural gas from biogas operations. These include:

Hydrokleen Closed Loop WWT Systems

This innovative wastewater treatment system combines membrane filtration with biological treatment to effectively convert effluent into potable quality water for reuse on-site. This turnkey technology package offers a small footprint, high energy efficiency, reduced GHG emissions, and automated operations with minimal maintenance to improve production processes.

The System also transforms high pollutant wastewater to high quality water for reuse, delivering an integrated, closed loop wastewater technology package that reduces the costs of both water consumption and wastewater treatment on-site.

Compact Moving Bed Bio-Reactor (MBBR)

CharTech Solutions high-performance MBBR treatment technology utilizes a specialized biochip material within the aeration tank. This creates a robust system with a compact footprint. The large surface area of our innovative MBBR + Biochip system produces only a minimal amount of sludge compared to conventional treatment methods. This Compact MBBR + Biochip system can handle large loads of wastewater, while consistently achieving high-levels of contaminant reduction. It is a compact, cost-effective system that significantly reduces the costs of wastewater treatment and discharge.

Advanced Reverse Osmosis (RO) Clean Water Systems

CharTech Solutions clean water treatment team specializes in designing efficient and economical RO solutions to convert wastewater, raw water or treated effluent into potable quality water for reuse on-site. This is often applied in industries including food & beverage processing, oil and gas production, mining, and other industrial sectors. Our advanced semi-permeable membranes work like a filter, effectively treating salt and contaminants to produce abundant amounts of clean water. Our team also focuses on delivering automated systems, including remote monitoring and control of each stage within the treatment process. Whether it's seawater, brackish or treated effluent water, CharTech Solutions' advanced RO clean water technology offers high recovery rates with low energy consumption and reduced operating costs.

Services & Delivery Models

With advanced PLC and HMI controls included with the innovative wastewater and high temperature pyrolysis systems, CharTech Solutions can offer a suite of services, from remote monitoring to full-time operation and regular maintenance visits. In addition to providing turnkey cleantech projects to clients, CHAR also offers BOT (build-operate-transfer) and BOO (build-own-operate) models, which allows clients to shift capital expenses to operating expenses, while ensuring optimal system performance as well as a recurring revenue stream for CHAR.

CHAR Biocarbon

CHAR biocarbon

The future of energy is low-carbon and CHAR Biocarbon is creating that future today. Using advanced pyrolysis technology and other innovative processes, CHAR Biocarbon is developing a suite of biocarbons, from activated charcoals that not only treat pollutants but also sequester carbon, to high efficiency biocoal that delivers cleaner power, while reducing emissions and saving money. Biocarbons are one of the two valuable outputs from the high temperature pyrolysis (HTP) process, the other being renewable gases (hydrogen and/or renewable natural gas).

CLEANFYRE

CleanFyre – CHAR's Biocoal

CleanFyre, which is a type of biocoal, allows large industrial users to switch from heavy greenhouse gas emission fossil coal to GHG-neutral biocoal. Not only does the switch have environmental benefits, but also has the ability to save users significantly in reducing GHG- emission related costs. Standard coal, when burned, produces around 3 tonnes of greenhouse gas carbon dioxide emissions. With pricing expected to reach $170/ tonne of GHG CO2 in Canada in the near future, each tonne of fossil coal burned has an associated $510 of GHG CO2 cost. Biocoal, being made from woody biomass and woodwaste, is considered biogenic, and does not generate significant GHG CO2. In addition, through various collaborations with industrial partners and advanced technology centres, CleanFyre will be a "drop-in" coal replacement, requiring minimal capital investment by the industrial users to switch.

SulfaCHAR™ CATALYTIC DESULFERIZATION

SulfaCHAR – CHAR's Activated Charcoal

SulfaCHAR is an activated biochar designed and developed to capture noxious hydrogen sulfide (H2S). SulfaCHAR can be integrated into a first-generation biogas or renewable natural gas anaerobic digester (AD). A by-product of the AD process is a solid material called anaerobic digestate, which is similar to a compost. Using CHAR's high temperature pyrolysis process, the anaerobic digestate is processed creating additional renewable gases for the facility, as well as an advanced activated charcoal (conceptually similar to a Brita filter) called SulfaCHAR. The SulfaCHAR is then used to capture H2S from the AD system, which is a required treatment. In addition, when anaerobic digestate is processed via high temperature pyrolysis, it reduces the carbon intensity (CI) score of the overall AD facility. In some jurisdictions, CI score is a critical factor in the sale price of their renewable natural gas, the lower the CI score, the higher the sale price of the gas.

Services & Delivery Models

CHAR Biocarbon has two principal functions – the first is to continue to pursue R&D efforts to develop higher value biocarbons. The second is to work with CharTech Solutions clients to find appropriate end customers for biocarbon produced from the turnkey high temperature pyrolysis kiln implementations. Many HTP clients are not in the biocarbon business, but instead are utilizing HTP to minimize an organic waste issue, or looking to produce renewable gases. CHAR Biocarbon's expertise is to ensure that the highest value is found for the produced biocarbons, and matchmake between the producers and consumers of the biocarbons.

Altech Environmental Consulting

Since 1986, Altech has partnered with its large, loyal, industrial customer base to expertly identify and implement environmental solutions that help clients measurably meet their Environmental, Social and Governance (ESG) targets and improve compliance, while reducing risks. Altech's engineers and scientists combine long-term relationships with a flexible approach and deep regulatory knowledge, to help our clients meet their goals of optimizing profits while protecting and preserving the environment.

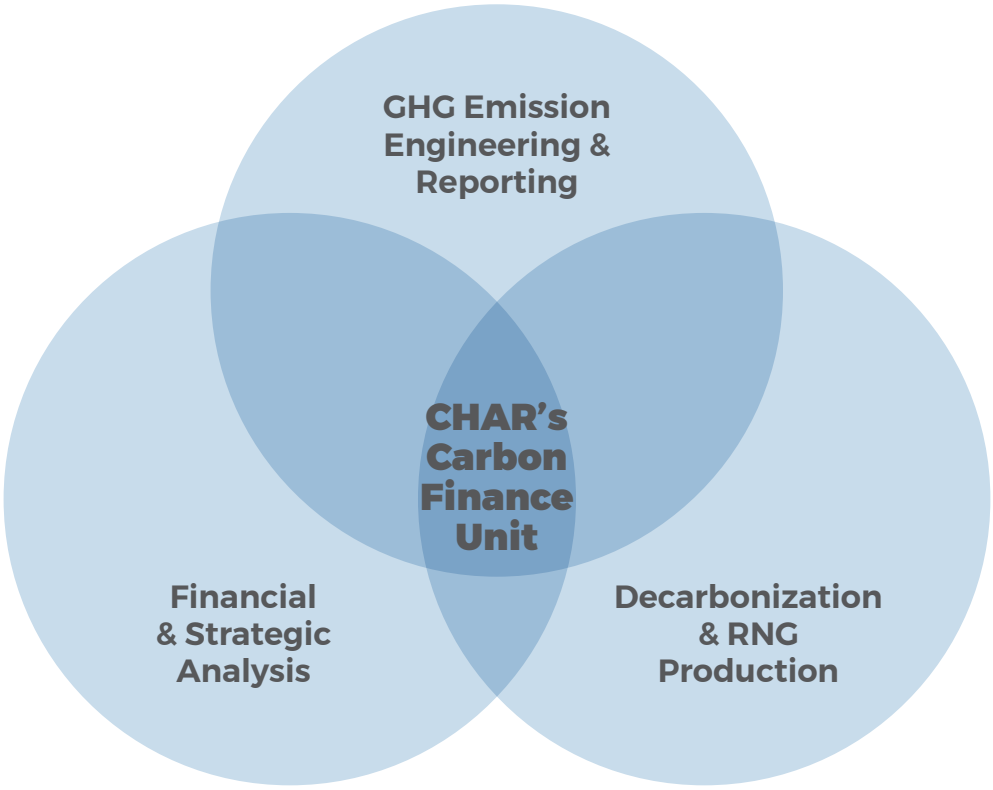
Property Due Diligence and Remediation

Altech performs a broad range of cost-effective site and subsurface investigations to support property transactional due diligence and site development, and to restore financial value to clients' properties. With geotechnical, geoscientific and professional engineering expertise, Altech's professionals conduct comprehensive contaminant identification, delineation, and migration studies, in addition to full remediation, geotechnical, and decommissioning projects.

Carbon Finance Unit

In 2021, CHAR added capabilities in compliance & voluntary carbon credit consulting for our long-standing major manufacturing Clients. Our Altech subsidiary's new Carbon Finance Unit and its alliance partners combine to provide corporate understanding and Financial analysis & verification of generating carbon credits and offsets from decarbonization projects (including pyrolysis projects), to help Clients set and achieve their Net-Zero corporate targets. The alliance further supports the brokerage and trading of compliance and offsets credits in a global carbon market recently estimated at $272B USD and growing 20% annually. (*See the figure at the top of the next page.*)

This new CHAR capability is a successful fusion of the overlap between CHAR's engineering services, our pyrolysis technology, and our environmental consulting strengths. Representative Clients to date include an International car parts manufacturer, a major Canadian brewery, and a North American combustion technology firm.



Source: S&P Global Platts, Jan 2021, www.spglobal.com

Compliance and Permitting

Altech's team applies its up-to-date regulatory knowledge to ensure clients' workplaces are always in compliance with all of the latest requirements in indoor air quality, outdoor air emissions, wastewater discharge, solid and hazardous waste disposal, and spills. Altech's specialized Environmental Health & Safety Auditing delivers recommended actions that improve efficiencies and avoid potential liabilities, to generate both short and long-term savings. Altech's energy and water use efficiency audits also help improve clients' bottom lines.

As jurisdictional environmental permitting and reporting requirements become more complex, Altech's engineers and scientists provide advanced air modeling, noise assessment & mitigation, dust & odour control, carbon footprint analysis & reduction, and stormwater and wastewater permitting support for all its clients, to meet compliance deadlines and shorten permitting timelines.

ENVIRONMENTAL, SOCIAL & CORPORATE GOVERNANCE (ESG) REPORTING

Introduction

Continuous improvement is a key aspect of any Environmental, Social and Governance (ESG) process. With that commitment at heart, CHAR is developing an ongoing ESG reporting framework as the first step in measuring the many ESG aspects of CHAR and our communities. Our goal is to develop consistent climate-related financial risk and opportunity disclosures for our stakeholders. The baseline metrics and methodologies for quantifying those risks and improvements, are now under development. We commit to continuously improving our ability to measure, manage and report on these ESG issues and will ensure they become embedded in all of our governance and business management processes.

This, and future annual ESG reports will be based on the standards of the Sustainability Accounting Standards Board (SASB), a non-profit organization founded in 2011 to develop sustainability accounting standards, as well as current guidance provided by the Task Force on Climate-related Financial Disclosures (TCFD), a committee of the international Financial Stability Board. By selecting these globally accepted standards, CHAR strives to provide a clear view for all stakeholders through a window of comparison, to underline how we fit within a cleantech industry that is growing and strengthening as new technologies are developed, the market shifts and demand for our products and services increase to meet the challenges of a changing global climate.

Who We Are and How We Mitigate Climate Change

CHAR Technologies Ltd. is a leading cleantech development and environmental services company listed on the TSXV ('YES.V'), advancing the global low-carbon future. We specialize in delivering innovative service and technology solutions the benefits of being both environmentally sustainable and cost-effective for our clients. Focusing on resource efficiency and recovery, low value material conversion and clean water treatment, our services and solutions significantly improve the environment and reduce costs. Examples include:

- Our proprietary high temperature pyrolysis technologies convert low value wastes to high value usable biocarbon end products and renewable energy, such as renewable natural gas (RNG) and hydrogen fuels.
- Our consulting engineering services help our industrial and commercial clients reach their own corporate targets by minimizing their environmental footprints related to carbon emissions, resources and waste.
- Our water technologies and related services help reduce consumption and increase conservation of fresh water, optimize facility use and reduce discharges of this precious resource.

- Our energy efficiency engineering capabilities help lower our industrial clients' emissions through energy audits and design/build/installation of energy efficiency upgrades at their facilities. We help clients reduce natural gas combustion and electrical energy consumption, which allows them to save supply costs, reduce carbon taxes and reduce their reportable Scope 1 and Scope 2 GHG emissions.

The Cornerstones of CHAR ESG Reporting

Environmental:

This initial commitment to ESG reporting endeavours to develop consistent climate-related financial risk and opportunity disclosures for our stakeholders. Since a key business focus for CHAR is the reduction and replacement of gases that contribute to the global human and financial risk of climate change, our positive contribution to mitigating the issue in a growing low-carbon economy is a material issue and therefore included in this ESG report. Our direct GHG impact based on current operations is very small in comparison to the net carbon benefit that our services and technologies provide to our customers.

CHAR is rapidly increasing its application development activities to offer technology products that consume less energy, emit fewer greenhouse gases, and provide significant and valuable net negative carbon benefit and offsets.

Social:

As one of our most critical stakeholders, our employees are core to driving our business and innovation and live our values on a daily basis. CHAR's aim is to support our employees through a diverse, inclusive and flexible workplace. Some of the key reasons for striving for continuous improvement in our Social component of our ESG plan are:

- Attract the best talent, through growth opportunities, financial stability, and our passion for contributing to our own clients' environmental compliance and ESG goals.
- Provide an inclusive and collaborative work culture where absenteeism and turnover are reduced.
- Employee gender diversity, as a globally recognized avenue to enhancing growth & profits.

Governance:

The CHAR Board of Directors comprises seven directors, all of whom are independent. Management (i.e., our CEO, CFO, and COO) reports to, but does not sit on, the Board of Directors. This helps to further maintain the Board's independence

Energy conservation and climate change mitigation opportunities are inherently addressed by the Board in its strategic guidance to the Corporation, since our own core business lines and revenue growth pertain to those initiatives for our clients.

CHAR and its Board have a driving and overarching long-term strategic direction, to become a key supplier within the global low-carbon economy that includes the increased use of clean technology renewable fuels and environmental services. Short-term strategic planning by the Board focusses on how to best identify and fulfil the opportunities created by this material societal and financial shift.

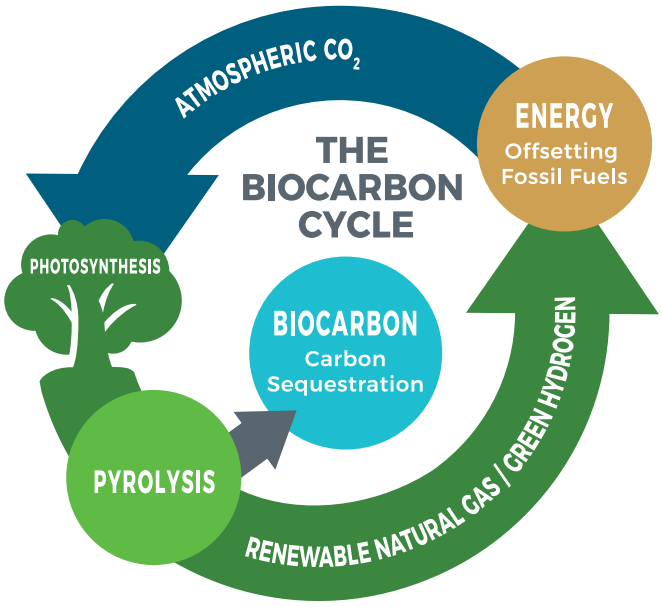
Measuring ESG Performance and Developing Continuous Improvement Practices

Environmental

We currently measure our own direct greenhouse gas emissions (Scope 1 emissions, see "Key CHAR ESG Metrics" on page 16), which for our own operations is the calculated sum of greenhouse gas emissions generated from natural gas combustion (for example, the use of natural gas in our R&D systems).

Outputs from the CHAR high temperature pyrolysis technologies include proprietary biocarbon products, excess heat, and pyrolysis gas which can be then used to generate energy directly or upgraded to renewable natural gas or purified hydrogen. Hydrogen & RNG can both be used as direct replacements for fossil fuels.

We feel it's important to distinguish between our carbon (GHG) emissions from fossil fuels, such as natural gas and fuels derived from biogenic sources as a result of running our installed systems, (i.e. from using syngas instead of natural gas to supply the systems' thermal requirements). In future, our GHG reporting will distinguish between eCO2 emissions from fossil and biogenic fuel origins to illustrate the very real advantages of the high temperature pyrolysis process.



The biochar products produced from waste biomass by our technologies are also rich in carbon and can contribute significantly to global carbon sequestration.

In future, we plan to be able to measure and report on all GHG metrics of importance to our stakeholders: and measure the net GHG reductions generated by our technology installations for our clients through client use of renewable natural gas, hydrogen and/or biocoal, as well as the carbon sequestration benefits through various uses of biocarbon. The annual reporting total of Scope 1 and Scope 2 emissions will therefore be our net contribution to climate change caused by GHG emissions, which is expected to be increasingly negative (i.e., beneficial), as the number of installations of our technologies grows worldwide.

Social

CHAR encourages our employees to be actively involved in our local communities. CHAR leads by example, donating to both Swin, Drink, Fish as well as KidsAbility as part of our recent Christmas Spirit of Giving campaign. We continually engage with and support our academic partners, including the Institute for Chemicals and Fuels from Alternative Resources (ICFAR) at Western University, the University of Toronto, the University of Guelph, York University and others. Our engagement often includes interactions and support to students, allowing them to engage with a company commercializing a technology in their areas of research interest. Measuring the following will allow for continuous improvement in our Social component of our overall ESG commitment:

1. **Employee Satisfaction:** Employee turnover ratio is often used as an indicator of employee satisfaction. As CHAR continues to grow as a corporation, we plan on measuring and reporting this ratio in this report and using the ratio for continuous improvement of our already advancing human resources initiatives.

2. **Customer retention:** Client satisfaction can be gauged by the number of Clients retained in a period. CHAR is creating a baseline for this ratio and will be reporting in future ESG reports.

3. **Gender Diversity:** Staff gender diversity has reportedly scientifically been shown to be correlated with better financial performance. CHAR tracks its gender diversity ratio and strives for continuous improvement, at or above competitive standards in our industry of technology development, product installations, and engineering services.

Governance

CHAR's Board of Directors consists of highly qualified, experienced, and independent members who are actively engaged in the business. For a high growth business such as CHAR, one of the main indicators of that engagement and involvement is the high Board Meeting attendance rate. A high and sustained attendance rate is indicative of a connected, relevant, and valuable Board of Directors, and a culture of growth.

Key CHAR ESG Metrics

	UNITS	FY2020	FY2021
Environmental Data			
CO_2e Scope 1			
From operations, R&D [1]	tonnes	45.23	56.45 [4]
Biogenic origin [2]	tonnes	-	-
Use of product outputs [3]	tonnes	-	-
CO_2e, Scope 2	tonnes	-	-
Social Data			
Employee Turnover Ratio	%	26	7
Gender Diversity	%	33	39
Governance Data			
Board Meeting Attendance Rate	%	96	100

(1) Scope 1 refers to direct emissions of greenhouse gases from combustion of fossil fuels, in metric tonnes of carbon dioxide equivalents, calculated using CANADA'S GREENHOUSE GAS QUANTIFICATION REQUIREMENTS, Environment and Climate Change Canada, Version 3.0, December 2019.

(2) Biogenic-origin eCO2 emissions from running our systems (i.e. from using syngas instead of natural gas, for our technologies' thermal requirements).

(3) GHG reductions through Client use of products generated by our technologies, (i.e,, renewable natural gas, biocoal, hydrogen, etc.).

(4) FY2021 saw a significant increase in the utilization rate of our pyrolysis demonstration plant located in Ontario, Canada, for R&D and for efficacy tests prior to technology sales to prospective Clients. Some fossil-derived natural gas is combusted during these demonstrations.

MARKET DRIVERS AND OPPORTUNITIES

CHAR is focused on two significant growth opportunities: 1) the delivery of turnkey pyrolysis projects for organic waste conversion and persistent chemical destruction (Biogas By-Products, Biosolids & PFAS), and; 2) as a renewable infrastructure project owner, converting woody biomass and other waste streams into valuable outputs; Hydrogen, Renewable Natural Gas and Biocarbon.



Turnkey Pyrolysis System Sales:
Biogas By-Products, Biosolids & PFAS

As a turnkey high temperature pyrolysis developer, CHAR is well positioned to capitalize on emerging markets in organics processing and emerging chemical destruction. CharTech Solutions will deliver turnkey, bolt-on HTP systems to clients in the organics processing and biosolids industries.

The primary opportunity to supply turnkey high temperature pyrolysis systems is for the treatment of biosolids. A series of reports from researchers, government agencies, and associations has identified PFAS in biosolids as a growing concern. PFAS, the infamous chemical compound described in the Hollywood movie; “Dark Waters”; and documentary “The Devil We Know”, is an abbreviation for per- and poly-fluoroalkyl man-made chemicals that contain a carbon and fluorine atom backbone. PFAS compounds are used in hundreds of industrial processes and consumer products, including Teflon, Gortex, Scotch Guard, and firefighting foam, among many others. There are concerns that PFAS chemicals may have toxic effects on humans and animals. A major concern in the municipal wastewater treatment industry is the presence of PFAS in biosolids. Biosolids from some municipal wastewater treatment plants are utilized as an organic soil fertilizer and conditioner on agricultural fields. CHAR Technologies patented pyrolysis process converts low-value biosolids that may contain PFAS into higher value biocarbon that

is PFAS-free as well as a hydrogen-rich syngas. Without treatment, these contaminated biosolids have limited disposal options, including limitations at landfills. CHAR has conducted numerous trials with various potential clients and partners throughout 2020 to demonstrate the technology's ability to reach high enough temperatures (greater than 700˚C) to eliminate PFAS in biosolids and is poised to capitalize on this substantial market opportunity.

The other significant opportunity for turnkey pyrolysis systems is in the biogas space is the treatment of the solid by-product from anaerobic digesters. Typically, an anaerobic digester is converting food-wastes into biogas, which is further refined into renewable natural gas, while also producing a solid by-product called anaerobic digestate. In many jurisdictions in the United States, the pricing these AD facilities receive for their RNG is based on that facility's carbon intensity – that is, the lower the carbon intensity of producing the RNG, the higher the price the RNG can command. CHAR commissioned a third-party report which demonstrated that by processing anaerobic digestate using high temperature pyrolysis, the carbon intensity of the RNG produced could be further reduced, thus increasing the net price for the RNG. This significant benefit is in addition to the reduced waste liability by processing the solid anaerobic digestate, the production of additional renewable gases for the site, and the potential production of SulfaCHAR as a biogas treatment option.

Renewables Infrastructure: Hydrogen, Renewable Natural Gas and Biocarbon

Within the development of renewables infrastructure, the short-term opportunity is to convert woody biomass into renewable natural gas and biocoal ('CleanFyre'). The medium-term opportunity is to continue to process woody biomass, however to shift the outputs to hydrogen and high-value added biocarbons. This shift can occur with minimal additional investment in the infrastructure, and can therefore allow the operations to respond to market demand in a rapid fashion.

High-temperature pyrolysis, which is conducted at 700˚C or greater in an oxygen-free reactor, converts woody-materials into biocarbons and a syngas. The syngas is rich in hydrogen and carbon oxides, and is a well-known industrial gas. Syngas can be further processed to increase the amount of hydrogen, which can then be separated into an industrial quality hydrogen stream or converted into renewable natural gas through a process known as methanation.

As a renewable infrastructure developer, CHAR will either own entirely, or partially through JV arrangements, the assets. JV partners could include feedstock suppliers, entities with a track record of plant operations excellence, and other interested stakeholders.

In the near-term, projects will be focused on long-term offtake agreements for the production of renewable natural gas (RNG) from woody biomass via high temperature pyrolysis (HTP), which is a second generation RNG technology. First generation RNG is from anaerobic digestion, where organic waste materials (green bin waste, other food and restaurant wastes, agricultural waste such as manure, and others) are processed and pumped into a large tank, where bacteria convert the organic matter into a methane rich biogas, which is then upgraded to RNG.

HTP is a second-generation process, which thermally converts woody biomass into a syngas in a zero-oxygen, high temperature reactor. The syngas, which is rich in hydrogen, then goes through a methanation process, where the hydrogen and carbon oxides are combined to produce methane and water. This methane rich gas is then upgraded to RNG.

The key benefits of HTP are that it can process the vast quantities of wood and wood waste available to produce RNG, whereas first-generation anaerobic digesters can only use food waste and other organic feedstocks. The second key benefit of HTP is the production of a high value co-product, biocarbon. Examples of biocarbon use include CHAR's CleanFyre and SulfaCHAR products. There is significant, and growing, demand for RNG as various jurisdictions in Canada and the United States implement RNG targets and mandates in their respective gas pipeline grids.

A key process step of producing renewable natural gas using high temperature pyrolysis is first the production of syngas, which is rich in hydrogen. As the hydrogen economy continues to develop, and demand for green hydrogen grows, CHAR's HTP systems can shift production to hydrogen. Therefore, CHAR is producing hydrogen today, and in the medium term will shift the focus from RNG production to green hydrogen production as the demand continues to develop. There are two recognized pathways to produce green hydrogen – the first is through electrolysis, whereby a water molecule is split using electric current into hydrogen and oxygen. The second is through the processing of biomass in thermal systems, such as CHAR's high temperature pyrolysis. The significant advantage to CHAR's HTP process is it can be deployed in diverse geographic regions, without the electricity grid concerns and limitations faced by electrolysis. Both the Canadian Government and the Government of Ontario have released various policy statement and strategies on the significant role hydrogen will play in the renewable energy future.

OPERATIONS

CHAR continues to focus on commercial opportunities to deploy CHAR's pyrolysis process, used to produce various biocarbons, including SulfaCHAR utilizing low value or waste streams as feedstock, including woody biomass, compost and biosolids. Historically, the Company has received funding from the SD Natural Gas Fund (supported by Sustainable Development Technology Canada ("SDTC") and the Canadian Gas Association ("CGA") to execute on a project to build and operate a 1-tonne per day pyrolysis system to produce biocarbon, which allowed the company to produce commercial quantities of SulfaCHAR. Commissioning was completed and operation began in the first quarter of fiscal 2019. The SD Natural Gas Fund provided a $750,000 non-repayable grant toward the project from SDTC and the CGA. In addition, the Ontario Centres of Excellence provided a $1,000,000 non- repayable grant toward the project following the same milestones and payment schedules as the SD Natural Gas Fund which the Company has adhered to.

In October 2018, the Company initially announced that it had successfully commissioned the pyrolysis equipment used to produce biocarbons, including SulfaCHAR. The system has been operational for two years and is producing commercial quantities of SulfaCHAR and pilot quantities of CleanFyre. The system has showcased the Company's proprietary pyrolysis technology using various waste streams to create quality byproducts. The Company is now confident it is able to move forward and move into the commercial phase for HTP systems.

On March 11, 2020, the World Health Organization characterized the outbreak of a strain of the novel coronavirus ("COVID-19") as a pandemic which has resulted in a series of public health and emergency measures that have been put in place to combat its spread. The duration and impact of the continuing COVID-19 outbreak is unknown at this time and it is not possible to reliably estimate the impact that the length and severity of these developments will have on the financial results and condition of the Company in future periods.

CORPORATE HIGHLIGHTS

Cleanfyre Biocoal Purchase Order

Received a purchase order from one of Canada's largest steel producers for up to 1,000 tonnes of Char's proprietary CleanFyre biocoal. This contract builds on Char's previous successful pilot production run of 20 tonnes and is the next step in continuing commercialization work. CleanFyre is a carbon neutral, solid biofuel made from various woody biomasses and wood wastes, and provides a low greenhouse gas emission biocoal substitute to integrate into existing steel-making processes.

California Green Hydrogen Project

Arranged a test project with Hitachi Zosen Inova (HZI) to develop a high-temperature pyrolysis to green hydrogen system at its existing San Luis Obispo (SLO) anaerobic digestion facility in California. Under the definitive agreement with HZI's SLO operating company, Char's high-temperature pyrolysis system will process 18,000 tonnes per year of solid anaerobic digestate into 1,320 tonnes of green hydrogen per year and 2,800 tonnes per year of biocarbon. The project will be delivered under a BOOT (build-own-operate-transfer) model, where Char will be the initial project owner, with HZI managing system operations. While Char owns the assets, Char will receive revenues directly for the project outputs (green hydrogen and biocarbon). Upon executing the transfer, at its option, HZI's subsidiary will purchase the project for a one-time payment. Continuing project output revenues will be dispersed based on a predefined agreement.

Renewable Natural Gas Production

Upgraded its operational high-temperature pyrolysis facility to produce approximately 20,000 gigajoules per year of renewable natural gas (RNG). The approval of a $300,000 grant from NGIF (Natural Gas Innovation Fund) Industry Grants, a division of NGIF Capital Corp., will support the upgrades. The grant financing will be partially disbursed at the commencement of each of three milestones (detailed engineering design, fabrication and commissioning, and validation). Char anticipates project commissioning to commence in March, 2022.

Technology Partnership with Anergy

Signed an exclusive technology licensing agreement with Char's principal kiln technology supplier, Anergy, a global waste transformation leader. This agreement strengthens Char's relationship with Anergy to continue its collaboration on technology development opportunities globally and provides formal exclusivity in the North American market. Char has the technology rights to all the equipment intellectual property (IP), including patents and designs, which will allow the company to more efficiently lead the engineering, procurement and manufacturing of the entire high-temperature pyrolysis (HTP) system. This agreement will streamline the design process, reduce overheads and delivery times, and will ultimately allow for even more competitive bidding of projects and thereby potentially increased profit margins overall.

Kirkland Lake Biomass to Renewable Natural Gas Project

Commenced surveying and geotechnical testing at the proposed site of its woody biomass to renewable natural gas (RNG) high-temperature pyrolysis (HTP) project near Kirkland Lake, Ont. This project will potentially produce 500,000 gigajoules per year of RNG and 10,000 tonnes per year of Char's proprietary CleanFyre biocoal. The Kirkland Lake project will be designed, built, operated and owned by Char.

The company had previously entered into a land purchase option agreement (July 2, 2021) with the Town of Kirkland Lake with respect to the proposed project site as well as a letter of interest (July 9, 2021) for biomass supply to the project and an exclusive letter of interest (Sept. 16, 2021) with a Canadian gas utility for long-term RNG offtake. It is anticipated that an offtake contract will be finalized by early 2022. CleanFyre from the proposed Kirkland Lake facility will be earmarked for future sale to the steelmaking and metal smelting industries.

Saint-Félicien Biomass to RNG Project

The Company announced plans to deploy, own and operate an HTP system adjacent to a biomass power plant on land that has been reserved for CHAR by the City of Saint-Félicien, Quebec. The facility will be designed to produce approximately 5,000 tonnes per year of biocarbon and 250,000 GJ/yr of renewable natural gas, for which CHAR has received a letter of interest from the local natural gas utility.

The project will be phased, producing biocarbon for metallurgical and carbon credit generation first, to allow for a more rapid deployment and shorter time to initial revenue. The CHAR facility will leverage the existing biomass handling and processing equipment operated for the Centre de Valorisation de la Biomasse du Domaine-du-Roy, a public-private consortium, which allows for significant overall project capital savings.

Private Placement

In February 2021, the Company completed a non-brokered private placement whereby the Company issued 18,461,538 units at a price of $0.325 per unit for gross proceeds of $6,000,000. Each unit is comprised of one common share and one half of a warrant exercisable at $0.40 within two years.

Stock option grants (RSU's, SAR's, Long Term Incentive Program)

On January 29, 2021, the Company granted 1,333,000 stock options to directors, officers, employees and consultants of the Company. The stock options may be exercised for a period of five years at a price of

$0.49 per share. These stock options vest as follows: 672,500 stock options vested immediately, 580,500 stock options vest based on the achievement of specific performance criteria and EBITDA milestones and 80,000 vest over one year. On March 31, 2021 grants were made for 150,000 that vested immediately. In addition, on April 5, 2021 further grants were made for 95,000 options. These stock

options vest as follows: 35,000 stock options vested immediately and 60,000 stock options vest over one year. On July 21, another 75,000 stock options were granted to a consultant of the Company. These stock options may be exercised for a period of five years at a strike price of $0.52 per share and vest quarterly over one year.

On August 31, 2021, the Company granted 1,039,559 RSUs to officers and employees of the Company. The RSUs may be exercised for a period of five years.

On August 31, 2021, the Company granted 480,000 SARs to an officer of the Company. The SARs may be exercised for a period of five years at a strike price of $0.72 per share.

On January 30, 2020, the Company granted 930,000 stock options to officers, directors, employees and consultants of the Company at a strike price of $0.115. On February 27th 2020 the Company issued 100,000 options to an officer at a strike price of $0.15. On April 1st 2020, the Company issued 160,000 options to a new officer at a strike price of $0.075 followed by a grant of 50,000 options on July 1, 2020 at $0.105 to a new director. All the options granted during the fiscal year have an exercise period of five years from the date of the grant.

In the previous fiscal year on February 7th 2019, the Company granted 961,000 stock options to directors, officers, employees and consultants of the Company. The stock options may be exercised for a period of five years at a price of $0.20 per share. These stock options vest as follows: 505,000 stock options vested when granted and 426,000 stock options were to vest based on the achievement of specific performance criteria.

Furthermore, on August 16, 2019, the Company granted 78,125 stock options to an officer of the Company. The stock options are exercisable for a period of five years at a price of $0.16 per share. These stock options vested at the time of the grant.

TRENDS

Management regularly monitors economic conditions and estimates their impact on the Company's operations and incorporates these estimates in both short-term operating and longer-term strategic decisions. During the quarter, equity markets in Canada showed signs of improvement, with equities increasing significantly during this period. Strong equity markets are favourable conditions for completing a public merger or financing. Apart from these and the risk factors noted under the heading "Risk Factors", management is not aware of any other trends, commitments, events or uncertainties that would have a material effect on the Company's business, financial condition or results of operations. See "Risk Factors" below.

Selected Annual Financial Information

	Year ended September 30, 2021 ($)	Year ended September 30, 2020 ($)	Year ended September 30, 2019 ($)
Revenue	1,378,007	1,759,905	1,622,667
Net loss	(3,261,831)	(703,802)	(821,209)
Net loss per share – basic and diluted	(0.05)	(0.02)	(0.02)
	As at September 30, 2021 ($)	**As at September 30, 2020 ($)**	**As at September 30, 2019 ($)**
Total assets	10,322,759	3,408,115	4,274,249
Total long-term liabilities	880,314	1,165,164	1,472,864

Summary of Quarterly Result

Period	Revenue ($)	NET INCOME OR (LOSS)		Total assets ($)
		Total ($)	Basic and diluted income (loss) per share [9] [10] ($)	
September 30, 2021	358,605	(1,635,746)[1]	(0.02)	10,322,759
June 30, 2021	375,988	(925,702) [2]	(0.01)	8,481,829
March 31, 2021	323,444	(505,913) [3]	(0.01)	9,083,916
December 31, 2020	319,970	(194,470) [4]	(0.00)	3,817,836
September 30, 2020	278,634	(12,087) [5]	(0.00)	3,408,115
June 30, 2020	351,193	(205,570) [6]	(0.01)	3,601,453
March 31, 2020	534,343	(326,313) [7]	(0.01)	3,775,859
December 31, 2019	595,735	(159,832) [8]	(0.00)	4,162,045
September 30, 2019	424,442	(466,351) [9]	(0.01)	4,274,249
June 30, 2019	464,824	237,372 [10]	0.01	4,187,343
March 31, 2019	298,003	(313,312) [11]	(0.01)	4,893,986
December 31, 2018	435,398	(278,918) [12]	(0.01)	5,201,117

(1) Net loss of $1,635,746 consisted of $299,079 of professional fees, $97,572 of depreciation, $337,388 of amortization, $356,782 of office expenses and other general working capital expenses offset by gross profit of $213,985 and grant income of $110,203. A goodwill write down was taken for $264,390.

(2) Net loss of $925,702 consisted of $209,961 of professional fees, $96,888 of depreciation $406,348 of office expenses and other general working capital expenses offset by gross profit of $160,441 and grant income of $110,204.

(3) Net loss of $505,913 consisted of $127,251 of professional fees, $96,725 of depreciation $295,810 of office expenses and other general working capital expenses offset by gross profit of $162,859 and grant income of $110,204.

(4) Net loss of $194,470 consisted of $82,749 of professional fees, $120,965 of depreciation $234,611 of office expenses and other general working capital expenses offset by gross profit of $171,976 and grant income of $132,087

(5) Net loss of $12,087 consisted of $40,326 of professional fees, $126,843 of depreciation $153,489 of office expenses and other general working capital expenses offset by gross profit of $216,984 and grant income of $172,460.

.(6) Net loss of $205,570 consisted of $84,552 of professional fees, $105,619 of depreciation $162,046 of office expenses and other general working capital expenses offset by gross profit of $173,405 and grant income of $29,256.

(7) Net loss of $326,313 consisted of $128,224 of professional fees, $105,619 of depreciation $345,005 of office expenses and other general working capital expenses offset by gross profit of $219,378 and grant income of $210,506.

(8) Net loss of $159,832 consisted of $85,585 of professional fees, $103,762 of depreciation $365,196 of office expenses and other general working capital expenses offset by gross profit of $299,654 and grant income of $142,853..

(9) Net loss of $466,351 consisted of $119,008 of professional fees, $185,702 of depreciation $359,514 of office expenses and other general working capital expenses offset by gross profit of $241,513 and grant income of $207,332.

(10) Net loss of $237,372 consisted of $84,903 of professional fees, $184,690 of depreciation $351,531 of office expenses and other general working capital expenses offset by gross profit of $302,873 and grant income of $644,204.

(11) Net loss of $313,312 consisted of $84,631 of consulting fees, $184,720 of depreciation $354,237 of office expenses and other general working capital expenses offset by gross profit of $189,200 and grant income of $308,179.

(12) Net loss of $278,918 consisted of $72,131 of consulting fees, $184,720 of depreciation $303,538 of office expenses and other general working capital expenses offset by gross profit of $265,612 and grant income of $150,428.

DISCUSSION OF OPERATIONS

Year ended September 30, 2021 compared with the year ended September 30, 2020

The Company's net loss totaled $(3,261,831) for the year ended September 30, 2021, with basic and diluted loss per share of $(0.05). This compares with a net loss of $(703,802) with basic and diluted loss per share of $(0.02) for the year ended September 30, 2020. The increase in net loss of $2,558,029 was principally because:

- Revenues decreased to $1,378,007 for the 2021 fiscal year from $1,759,905 in the 2020 fiscal year. As the Company continued to build out its technology it utilized more internal resources and increased its human resources. Furthermore, the pandemic delayed a number of engineering projects. Additionally, the Company dedicated resources to initiate a new Carbon Finance business unit as part of the consulting business.
- During the year ended September 30, 2021, the Company recognized $462,698 of grant income compared to $555,075 last year which primarily related to OCE and SDTC funding initiatives and achieving milestones.
- During the year ended September 30, 2021, the Company realized gross profit of $709,261 compared to $909,421 for the year ended September 30, 2020. The decrease in gross profit is mainly derived from lower revenues of $394,398 in engineering and technology revenues which offset a small increase of
- $12,500 or 56% growth in product sales as well as overall gross margins falling slightly from 51.7% to 51.5% on a year over year basis.
- Depreciation decreased by $29,689 or 6.8% for the year ended September 30, 2021 compared to the year ended September 30, 2020. The decrease is attributable to depreciation on the kiln and building at its small scale production plant (following its commissioning in October 2018).
- Amortization expense increased by $305,963 or 240% as a result of amortization of additional intangible assets in the form of an exclusive license acquired in the fourth quarter.
- During the year ended September 30, 2021, office expenses increased by $267,815 or 26.1% over the 2020 comparative period due to hiring more employees to further build the Company's infrastructure primarily relating to engineering investments as well as an increase of overhead expenses. Office expenses include salaries, rent, insurance, travel and administrative services.
- During the year ended September 30, 2021, the Company incurred $242,098 on research and development compared to $90,420 for the year ended September 30, 2020, an increase of 168%. During the 2021 year, the Company invested further in research and development to advance its Pyrolysis technology for the commercialization phase.
- Professional fees increased by $380,353 to $719,040 in fiscal 2021 compared to $338,687 in fiscal 2020. Additional legal counsel resources were needed primarily to structure contracts, for growth

and funding initiatives. Resources were also dedicated to IR, PR and business development. Share based expenses increased from $98,833 to$1,006,044. This results in a $907,211 increase which is attributable to increased black scholes option values attributable to an increased share price, an increased number of grants as well as the introduction of a long-term incentive plan and the subsequent issuance of RSU's and SAR's under the plan.

- A charge was taken for $264,390 to write down goodwill resulting from an estimated impairment relating to Char's non-core engineering consulting business (AECL).
- All other expenses related to general working capital requirements.

Three months ended September 30, 2021 compared with the three months ended September 30, 2020

The Company's net loss totaled $1,635,746 for the three months ended September 30, 2021, with basic and diluted loss per share of $0.02. This compares with a net loss of $12,087 with basic and diluted loss per share of $0.00 for the three months ended September 30, 2020. The increase in net loss of$1,359,265 was principally because:

- During the three months ended September 30, 2021, the Company recorded gross profit of
- $213,985 compared to $216,984 for the three months ended September 30, 2020. The decrease in gross profit is mainly derived from its external consulting services, partially offset by an increase in air and water treatment systems revenues.
- During the three months ended September 30, 2021, the Company recognized $110,203 of grant income commensurate with the commissioning of the kiln and achieving a key milestone of the Low Carbon Innovation Fund.
- Depreciation decreased by $29,271 to $97,572 for the three months ended September 30, 2021 compared to the three months ended September 30, 2020.
- Amortization increased to $337,388 from $31,755, in the comparable three months ended September 30, 2020 due to the exclusive licensing agreement signed in the fourth quarter of fiscal 2021.
- During the three months ended September 30, 2021, office expenses increased by $203,293 over the 2020 comparative period to $356,782 due to an overhead increase. Office expenses include salaries, rent, insurance, travel and administrative services.
- During the three months ended September 30, 2021, the Company incurred $118,585 on research and development compared to $39,002 for the three months ended September 30, 2020.
- Share based expenses of $475,094 were recorded in the quarter attributable to long-term incentives for executive management compared to nil in the last quarter of the fiscal 2020 year.
- The majority of other expenses related to general working capital.

CASH FLOW

At September 30, 2021, the Company had cash of $3,001,384 compared to $129,127 at September 30, 2020. The increase in cash of $2,872,257 from September 30, 2020 resulted from the following:

Operating activities were affected by non-cash items of share-based payments of $1,006,044, depreciation of $412,154, amortization of $432,986, and deferred grant income of $462,698, The net change in non-cash working capital balances of $617,648 occurred because of an increase of amounts receivable of $328,283, an increase in work-in-progress of $166,242, an increase in inventory of $7,438, an increase in prepaid expenses of $221,185, an increase in deferred income of $nil and an increase in accounts payable and accrued liabilities of $105,499.

The Company spent $716,057 for the purchase of property and equipment for its production facility and $831,474 for intangible assets relating primarily to the exclusive technology licensing agreement signed in the fourth quarter.

The Company received net proceeds from issuances of equity and warrants of $6,284,530, $40,000 in loans, grant proceeds of $nil, made lease payments for $57,744 and repaid loans for $3,360. On a year over year basis grant income was reduced by 17% from $555,075 in fiscal 2020 to $462,698 in fiscal 2021. This decrease was largely attributable to a greater focus on commercialization efforts versus R&D initiatives. As a result of the Company more focused on commercialization it is less dependent on grant funding at this stage of its life cycle. However, grant funding opportunities are expected to increase for major projects in the short-term as well as in future years.

LIQUIDITY AND FINANCIAL POSITION

The Company's total assets at September 30, 2021 were $10,322,759 (September 30, 2020 - $3,408,115) against total liabilities of $4,778,776 (September 30, 2020 - $2,100,064). The increase in total assets of $6,914,644 which resulted mainly from the raising of equity during the Fiscal 2021 period and the acquisition of intangible assets. To a lesser extent property and equipment, amounts receivable and prepaid expenses increased which were partially offset by a goodwill write-down.

The activities of the Company have been primarily financed by private placements of securities, the exercise of warrants and options and its initial public offering.

The SD Natural Gas Fund project included a $750,000 non-repayable grant from SDTC and a $1,000,000 non-repayable grant from the Ontario Centres of Excellence. The project builds on the previous research and development work conducted by CHAR. The project is split into 3 milestones. The first milestone, which is the design and fabrication of a 1-tonne per day biocarbon (including SulfaCHAR) production system is completed. The second milestone, which is the commissioning and initial operation of the 1-tonne per day biocarbon (including SulfaCHAR) production system is completed.

The third and final milestone, which is testing of the use of SulfaCHAR for gas cleaning and agricultural applications is complete, and CHAR is finalizing the final report with SDTC. The previous completion of phase 2 of this project allowed the Company to begin producing commercial quantities of SulfaCHAR and is an important next step in the commercialization of SulfaCHAR. The Company also received approval for approximately $1 million from the Government of Ontario through LCIF for the commercialization of CleanFyre. The Company has received payments of $903,028. The first milestone has been successfully completed. The second milestone, which consists of a 20 tonne industrial trial of CleanFyre, was completed at the end of 2020. The Program was cancelled and CHAR does not anticipate any further payments from the Program.

During fiscal 2022, the Company's corporate head office costs are estimated to average approximately $600,000 per quarter. Head office costs include professional fees, reporting issuer costs, consulting fees, salaries and general and administrative costs.

The Company's cash at September 30, 2021 is sufficient to fund its corporate head office costs of $600,000 per quarter for fiscal 2022. The Company is estimated to realize revenue of $2,500,000 for fiscal 2022.

COMMITMENT

The Company has no further obligations with respect to flow through shares. As at September 30, 2021, $0 remains to be spent as part of the flow-through funding agreement for shares issued in December 2018. The Company had indemnified the subscribers for any related tax amounts that could have become payable by the subscribers as a result of the Company not meeting its expenditure commitments.

The Company's operating lease agreement for its kiln building location expired on December 11, 2020 and was subsequently renewed on a month-to-month basis.

Yearly Minimum Royalty Payments

During the fiscal year the Company signed an exclusive technology licensing agreement with its principal kiln supplier. Char has the technology rights to all the equipment intellectual property (IP) including patents and designs, which will allow the Company to effectively lead the engineering, procurement and manufacturing of the entire high-temperature pyrolysis (HTP) system. This agreement will streamline the design process, reduce overhead and delivery times. The effective date of the Agreement is July 1st, 2021 and is effective for three years. Pursuant to the exclusive license agreement the Company is obligated to make minimum advance royalty payments of USD $3,000,000 in respect of its sales of HTP systems.

The minimum royalty payment required which includes intellectual property rights and exclusivity is in US dollars as follows: $500,000 in year 1, $1,000,000 in year 2 and $1,500,000 in year 3. The payments for the first three years of the Agreement are to be paid as follows: $750,000 USD in FY 2021 and $2,225,000 USD paid in FY 2022. The Company paid $750,000 USD in the FY 2021.

TRANSACTIONS WITH RELATED PARTIES

Related parties include the Board of Directors, close family members and enterprises that are controlled by these individuals as well as certain persons performing similar functions. The transactions with related parties are as follows:

Transactions with Related Parties Breakdown

	Year ended September 30, 2021 ($)	Year ended September 30, 2020 ($)
Marrelli Support Services Inc. ("MSSI") (i)	nil	14,100
DSA Corporate Services ("DSA") (ii)	10,126	9,102
1456087 Ontario Inc. ("1456087") (iii)	110,000	60,000
Mark Korol, CFO (iv)	165,000	39,000
Numbers & Co. (v)	nil	32,750
Eric Beutel (vi)	5,000	nil

(i) The former Chief Financial Officer of the Company is a senior employee of MSSI. As at September 30, 2021, MSSI was owed $nil (September 30, 2020 -$14,100).

(ii) DSA is affiliated with Marrelli Support through a common officer. DSA provides corporate secretarial services. As at September 30, 2021, DSA was owed $944 (September 30, 2020 - $849). These amounts are included in accounts payable and accrued liabilities.

(iii) 1456087 is a company controlled by James Sbrolla, a director of the Company. 1456087 provides consulting services to the Company.

(iv) Mark Korol was appointed Chief Financial Officer of the Company on April 1, 2020.

(v) Numbers & Co. is a company controlled by the former Chief Administration Officer of the Company, Dimitris Stubos. Numbers & Co. provides consulting services to the Company. Mr. Stubos ceased to be the CAO in April, 2020. As at September 30, 2021, Numbers & Co. was owed $nil (September 30, 2020 $nil).

(vi) Eric Beutel is a Director of the Corporation.

During the year ended September 30, 2021, loans were extended by the Company to officers of the Company for a total amount of $154,343, to be paid on demand at the Bank of Canada's prime rate of 2.45%. The table below is a summary of the loans extended to the officers of the Company:

Summary of Loans

	Year ended September 30, 2021 ($)
Andrew White, CEO	$131,343
Mark Korol, CFO	$15,000
Brian Bobbie, COO	$8,000

Remuneration of directors and key management of the Company was as follows:

Remuneration of Directors and Key Management

	Year ended September 30, 2021 ($)	Year ended September 30, 2020 ($)
Salaries	292,197	249,812
Total	**292,197**	**249,812**

During the year ended September 30, 2021, the Company recognized $807,748 (2020: $85,811) of share-based compensation from options granted to officers and directors.

OUTSTANDING SHARE DATA

The number of common shares of the Company outstanding and the number of common shares issuable pursuant to other outstanding securities of CHAR as at January 27, 2022 are as follows:

Total Securities

Securities	As at January 27, 2022
Common shares outstanding	72,145,651
Issuable under options	4,066,625
Warrants	8,963,969
Broker Warrants	914,967
RSU's	1,039,559
SAR's	480,000
Total securities	**87,610,771**

Of the stock options issued 4,447,625 are vested at September 30, 2021. The RSU's vested are 221,000 and 160,000 SAR's are vested at September 30, 2021.After September 30, 2021, a total of 589,900 shares were issued upon exercise of units warrants (63,900) and stock options (526,000).

OFF-BALANCE SHEET ARRANGEMENTS

The Company does not have any off-balance sheet arrangements that have, or are reasonably likely to have, a current or future effect on the results of operations or financial condition of CHAR.

CRITICAL ACCOUNTING JUDGMENTS AND KEY SOURCES OF ESTIMATION UNCERTAINTY

The preparation of these consolidated financial statements requires management to make judgments, estimates and assumptions that affect the application of policies and reported amounts of assets and liabilities, and revenue and expenses. The estimates and associated assumptions are based on historical experience and various other factors that are believed to be reasonable under the circumstances, the results of which form the basis of making the judgments about carrying values of assets and liabilities that are not readily apparent from other sources. Actual results may differ from these estimates.

The estimates and underlying assumptions are reviewed on an ongoing basis. Revisions to accounting estimates are recognized in the period in which the estimate is revised if the revision affects only that period or in the period of the revision and further periods if the review affects both current and future periods.

Critical areas of estimation and judgments in applying accounting policies include the following:

Going concern

As discussed above, these consolidated financial statements have been prepared in accordance with IFRS on a going concern basis, which assumes the realization of assets and discharge of liabilities in the normal course of business within the foreseeable future. Management uses judgment in determining assumptions for cash flow projections, such as anticipated financing, anticipated sales and future commitments to assess the Company's ability to continue as a going concern. A critical judgment is that the Company continues to raise funds going forward and satisfy their obligations as they become due.

Deferred taxes

The calculation of deferred taxes is based on assumptions which are subject to uncertainty as to timing and which tax rates are expected to apply when temporary differences reverse. Deferred tax recorded is also subject to uncertainty regarding the magnitude of non-capital losses available for carry forward and of the balances in various tax pools. By their nature, these estimates are subject to measurement uncertainty, and the effect on the financial statements from changes in such estimates in future period could be material. Deferred tax assets are recognized to the extent that it is probable that they will be able to be utilized against future taxable income. Deferred tax assets are reviewed at each statement of financial position date and adjusted to the extent that it is no longer probable that the related tax benefit will be realized.

Useful lives of property and equipment and intangibles

As described above, the Company reviews the estimated useful lives of property and equipment and intangibles with definite useful lives at the end of each year and assesses whether the useful lives of certain items should be shortened or extended, due to various factors including technology, competition and revised service offerings. During the year ended September 30, 2020, the Company was not required to adjust the useful lives of any assets based on the factors described above.

Business combinations

In a business combination, all identifiable assets, liabilities, and contingent liabilities acquired are recorded at their fair values. One of the most significant estimates relates to the determination of the fair value of these assets and liabilities. For any intangible asset identified, depending on the type of intangible asset and the complexity of determining its fair value, an independent valuation expert or management may develop the fair value, using appropriate valuation techniques, which are closely to the assumptions made by management regarding the future performance of the assets concerned and any changes in the discount rate applied.

Share-based payments

The Company estimates the fair value of convertible securities such as warrants and options using the Black-Scholes option-pricing model which requires significant estimation around assumptions and inputs such as expected term to maturity, expected volatility and expected dividends.

CAPITAL MANAGEMENT

The Company includes equity comprised of share capital, reserves and deficit, in the definition of capital.

The Company's objective when managing its capital is to safeguard the ability to continue as a going concern in order to provide returns for its shareholders, and other stakeholders and to maintain a strong capital base to support the Company's core activities. The Company has no externally imposed capital requirements. To secure the additional capital necessary to pursue these plans, the Company may attempt to raise additional funds through the issuance of equity or by securing strategic partners.

FINANCIAL INSTRUMENTS AND RISK MANAGEMENT

Risk management

In the normal course of its business, the Company is exposed to a number of financial risks that can affect its operating performance. These risks, and the actions taken to manage them, are as noted below.

Credit Risk

Credit risk is the risk that one party to a financial instrument fails to discharge an obligation and causes financial loss to another party. Financial instruments that potentially subject the Company to credit risk consist primarily of cash and accounts receivable. The risk related to cash is managed through the use of a major financial institution which has high credit quality as determined by the rating agencies. Accounts receivable mainly consists of receivables from its customers and have historically been subject to very few bad debts. Credit risk is assessed as low.

Market risk

Market risk is the risk that the fair value of the future cash flows of a financial instrument will fluctuate because of changes in the market prices. The Company's cash includes cash held in bank accounts that earn interest at variable interest rates. Due to the short-term nature of these financial instruments, fluctuations in market rates do not have a significant impact on estimated fair values.

Interest rate risk

Interest rate risk is the risk the fair value or future cash flows of a financial instrument will fluctuate because of changes in market interest rates. The Company does not hold any significant interest bearing assets or liabilities.

Liquidity risk

Liquidity risk is the risk that the Company may not be able to generate sufficient cash resources to settle its obligations as they fall due. The Company's strategy is to satisfy its liquidity needs using cash on hand, and cash flow provided by financing activities. As at September 30, 2021, the Company had cash of $3,001,384 and current assets of 1,247,035 to settle current liabilities of $3,898,462. The Company's accounts payable , current lease liabilities and deferred grant income are due within one year from the date of the statement of financial position.

Fair value

Fair value is the amount for which an asset could be exchanged, or a liability settled, between knowledgeable, willing parties in an arm's length transaction. The fair value of the Company's cash, amounts receivable, accounts payable and loans payable are estimated by management to approximate their carrying values due to their short-term nature.

RISK FACTORS

An investment in the securities of the Company is highly speculative and involves numerous and significant risks. In addition to the risks identified therein, additional risks not presently known to the Company may arise from to time and may cause a material adverse effect on the Company and any investment in the Company. Investors are cautioned not to rely upon any forward-looking statements in this MD&A as such statements are subject known and unknown risks.

1. **No History of Profits**

   CHAR has not earned profits to date and there is no assurance that CHAR will earn profits in the future, or that profitability, if achieved, will be sustained. The success of CHAR ultimately depends upon its abilities to generate significant revenues to finance operations as opposed to external funding. There is no assurance that future revenues will be sufficient to generate the funds required to continue operations without external funding. If CHAR does not have sufficient capital to fund its operations, it may be required to forego certain business opportunities;

2. **Future Capital Requirements**

   CHAR will require additional financing in order to grow and expand its operations. It is possible that required future financing will not be available, or if available, will not be available on favourable terms. There can be no assurances that CHAR will be able to raise additional capital if its capital resources are exhausted;

3. **Management of Growth**

   CHAR may be subject to growth-related risks including capacity constraints and pressure on its internal systems and controls. Any expansion of CHAR's business may place a significant strain on its financial, operational and managerial resources. There can be no assurances that CHAR will be able to manage growth successfully;

4. **Limited Operating History**

   CHAR began carrying on business in February, 2011 and is therefore subject to many of the risks common to early-stage enterprises;

5. **Reliance on Management**

   The success of CHAR is dependent upon the ability, expertise, judgment, discretion and good faith of their respective senior management;

6 Additional Financing

In order to execute the anticipated growth strategies, CHAR will likely require additional equity and/or debt financing beyond order to support on-going operations, to undertake capital expenditures or to undertake acquisitions or other business combination transactions;

7 Competition

There is potential that CHAR will face intense competition from other companies, some of which can be expected to have longer operating histories and more financial resources and manufacturing and marketing experience than CHAR;

8 Operating Risk and Insurance Coverage

CHAR has insurance to protect its assets, operations and employees. While CHAR believes its insurance coverage addresses all material risks to which it is exposed and is adequate and customary in its current state of operations, such insurance is subject to coverage limits and exclusions and may not be available for the risks and hazards to which CHAR is exposed;

9 Fluctuation of Market Price

The market price of the Company's Shares may be subject to wide fluctuations in response to many factors;

10 Dividends

The Company has no earnings or dividend record, and does not anticipate paying any dividends on the Common Shares in the foreseeable future;

11 Limited Market for Securities

The Company's are listed on the Exchange, however, there can be no assurance that an active and liquid market for the Company's Shares will develop or be maintained and an investor may find it difficult to resell any securities of the Company; and

12 Environmental and Employee Health and Safety Regulations

CHAR's operations are subject to environmental and safety laws and regulations concerning, among other things, emissions and discharges to water, air and land, the handling and disposal of hazardous and non-hazardous materials and wastes, and employee health and safety.

CAUTION NOTE REGARDING FORWARD-LOOKING STATEMENTS

Certain statements contained in this MD&A and in certain documents incorporated by reference in this MD&A, contain "forward-looking information" for the purposes of applicable Canadian securities laws (the "forward-looking statements"). All statements other than statements of historical fact are forward-looking statements. Often, but not always, forward-looking statements can be identified by the use of words such as "plans", "expects", "is expected", "budget", "scheduled", "estimates", "continues", "forecasts", "projects", "predicts", "intends", "anticipates" or "believes", or variations of, or the negatives of, such words and phrases, or statements that certain actions, events or results "may", "could", "would", "should", "might" or "will" be taken, occur or be achieved. Forward-looking statements involve known and unknown risks, uncertainties and other factors that may cause actual results to differ materially from those anticipated in such forward-looking statements, including those risk factors identified below in the section "Risk Factors. The forward-looking statements in this MD&A speak only as of the date of this MD&A unless an alternative date is specified in such statement. Certain forward-looking statements contained in this MD&A relate to the Company's ability to continue its business activities and to execute on its business plan as currently anticipated. These forward look-statements as well as the other forward-looking statements contained herein, are based upon certain material assumptions, including the Company's expectation that its costs will remain consistent with the costs currently anticipated and that financing through equity raises, debt financing or a combination thereof will continue to be available to the Company and on terms anticipated and reasonably acceptable to the Company. The risk factors identified in the "Risk Factors" section below may cause such assumptions and/or the forward-looking statements to be untrue.

Inherent in forward-looking statements are risks, uncertainties and other factors beyond the Company's ability to predict or control. Please see the "Risk Factors" section included in this MD&A. Readers are cautioned that actual results and developments are likely to differ, and may differ materially, from those expressed or implied by the forward-looking statements contained in this MD&A.

The Company undertakes no obligation to update publicly or otherwise revise any forward-looking statements whether as a result of new information or future events or otherwise, except as may be required by law. If the Company does update one or more forward-looking statements, no inference should be drawn that it will make additional updates with respect to those or other forward-looking statements, unless required by law.

DISCLOSURE OF INTERNAL CONTROLS

Management has established processes to provide them with sufficient knowledge to support representations that they have exercised reasonable diligence to ensure that (i) the consolidated financial statements do not contain any untrue statement of material fact or omit to state a material fact required to be stated or that is necessary to make a statement not misleading in light of the circumstances under which it is made, as of the date of and for the periods presented by the consolidated financial statements; and (ii) the consolidated financial statements fairly present in all material respects the financial condition, financial performance and cash flows of the Company, as of the date of and for the periods presented.

In contrast to the certificate required for non-venture issuers under National Instrument 52-109 Certification of Disclosure in Issuers' Annual and Interim Filings ("NI 52-109"), the Venture Issuer Basic Certificate filed by the Company does not include representations relating to the establishment and maintenance of disclosure controls and procedures ("DC&P") and internal control over financial reporting ("ICFR"), as defined in NI 52-109. In particular, the certifying officers filing such certificate are not making any representations relating to the establishment and maintenance of:

1. Controls and other procedures designed to provide reasonable assurance that information required to be disclosed by the issuer in its annual filings, interim filings or other reports filed or submitted under securities legislation is recorded, processed, summarized and reported within the time periods specified in securities legislation; and

2. A process to provide reasonable assurance regarding the reliability of financial reporting and the preparation of consolidated financial statements for external purposes in accordance with the issuer's generally accepted accounting principles (IFRS).

The Company's certifying officers are responsible for ensuring that processes are in place to provide them with sufficient knowledge to support the representations they are making in such certificate. Investors should be aware that inherent limitations on the ability of certifying officers of a venture issuer to design and implement on a cost effective basis DC&P and ICFR as defined in NI 52-109 may result in additional risks to the quality, reliability, transparency and timeliness of interim and annual filings and other reports provided under securities legislation.

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YES LISTED ON TMX TSX Venture Exchange