

BIOINDUSTRIAL


Directory

Produced by BioAlberta

Phone: 780-425-3804

BioAlberta.com

ALBERTA  INNOVATES

 **bio**
alberta
Association for Life Sciences Industry

Introduction

Welcome to the business directory in Alberta geared specifically towards those companies operating in the bioindustrial sector. This directory aims to highlight those companies that use biological feedstocks, biological materials or organisms as a key part of their process, and/or produces a product with a high biological materials content. It also includes service companies and consulting companies with expertise in biological materials and processes, and industry associations supporting numerous companies in this industry. This directory offers an exciting outlook for bio-based companies in the province of Alberta, and it presents a diversity of companies who make use of renewable biological materials, from start-up to established business.

How to use this Directory

The directory presents each of the participating companies in alphabetical order in the “Company Directory” section. The participating companies provided their contact information and a description of their services, which are included in their company description. The user could also search an electronic version of this directory for keywords of interest.

Acknowledgements

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To update information about your company or to have your company listed in this directory, please contact BioAlberta.

ALPHABETIC TABLE OF CONTENTS

AgriPower Incorporated.....	5
AirTerra Inc.....	5
Alberta Agriculture and Forestry,Bio Processing Innovation Centre (BPIC).....	5
Alberta Agriculture and Forestry,Bio-Industrial Opportunities Section.....	6
Alberta Pacific Forest Products Inc. (AI-Pac).....	6
Algae AquaCulture Technologies	6
Alternative Plastic Products Mfg. Inc.....	6
Archer Daniels Midland	7
ATCO Pipelines and Liquids, Global Business.....	7
Biofuels Inc. (Fortistar LLC)	7
BioRefinex Canada Inc.....	7
BioLargo Water Inc.	8
Biomass Energy Network.....	8
Black Opal Energy Services Inc.	8
Botaneco Inc.	9
Canadian Bio-Systems Inc.	9
Canadian Wood Waste Recycling Business Group (CWWRBG).....	9
Cielo Waste Solutions Corp.....	10
Clean Energy Technology Centre (CETC).....	10
Dapp Power LP.....	10
EarthRenew Inc.	10
Enerkem Inc.	11
Emergent Waste Solutions Inc.....	11
Enagon Inc.	11
FORGE Hydrocarbons Corp.	12
FREDsense Technologies Corp	12
Green Analytics	13
G4 Insights Inc.....	13
GFR Ingredients Ltd.	13
Greengate Power Corporation	13
Grow the Energy Circle Ltd.	14

Hempco Food and Fibre Inc.	14
H&W Biogenics Ltd.	14
Inkubate Packaging	15
Invigor Bioenergy Corporation	15
IRSI Inc.	15
Lethbridge Biogas LP	15
Micron Waste Technologies Inc.....	16
Nano-Green Biorefineries Inc.....	16
Natural Fibre Technologies Inc.	16
NovaGreen Inc.....	16
Permolex Ltd.....	17
Pinnacle Renewable Energy Inc.....	17
Resource Industry Suppliers Association.....	17
Roshan Water Solutions	17
Silvacom Ltd.....	18
SBI BioEnergy Inc.	18
Steeper Energy Canada Ltd.	18
Strathcona Ventures	19
Sun Gro Horticulture Canada Ltd.	19
Susteen Technologies Canada Ltd.	19
Symbiotic EnviroTek Inc.....	20
TerraVerdae Bioworks Inc.	20
True North Renewable Fuels Ltd.....	20
University of Alberta, Faculty of Agricultural, Life, & Environmental Sciences.....	21
University of Calgary, Department of Biological Sciences.....	21
Vanderwell Contractors (1971) Ltd.....	21
Viresco Solutions Inc.	21
Western Archrib	22
West Fraser Timber Co. Slave Lake Pulp	22
Hinton Pulp.....	22
Whitecourt Power LP Capstone Infrastructure	22

AgriPower Incorporated

3108 40 Street SW, Calgary, AB T3E 3J8

Phone: (403) 660-3015

Email: dwebb@agripower.com

Web: www.agripower.com

Doug Webb, Manager, Canadian Business Development

Description: AgriPower is a manufacturer of modular, transportable and advanced technology "Heat Only" and "Combined Heat and Power" Waste to Energy Systems. The Systems can use Biomass (wood, paper, cardboard, and agricultural and forest waste) and a wide variety of other waste materials, including most types of plastic, as fuel to cleanly generate on-grid and off-grid electric power (from 100 kW to 7.5 MW gross) and heat energy (hot water, steam and heated air).

AirTerra Inc.

392 Capri Crescent NW, Calgary, AB T2L1B2, Warehouse:640-42 Avenue N E, Calgary, AB T2E 7J9

Phone: (403) 830-0188

Email: rob@airterra.ca

Web: www.airterra.ca

Robert (Rob) Lavoie, Founder, Karin Lavoie, Financial Officer

Description: Biochar marketing, wholesale and retail supply company. Development of other biochar products is underway. Brands: SoilMatrix Biochar sold in 1.1 kg boxes (6.5 liters) and bulk quantities. Registered with the Canadian Food Inspection Agency (CFIA) - Fertilizer Division.

Alberta Agriculture and Forestry, Bio Processing Innovation Centre (BPIC)

5520 - 36 Street NW, Edmonton, AB T6B 3P3

Phone: (780) 644-8129 Cell: (780) 934-2844

Email: David.fielder@gov.ab.ca

Web: www.agriculture.alberta.ca/bio-industrial

Gabriel Chemello, Lead, Operations & Facilities

Description: The Bio Processing Innovation Centre (BPIC) Pilot & Interim Production Facility specializes in biomass processing and product development working with entrepreneurs, companies and researchers. Out state of the art equipment is available at competitive rates. BPIC has an approve Natural and Non-Prescription Health Products (NNHP) site license, and industrial hemp license (for grain, pressing oil and meal) and in progress, an application for cannabis research and processing license. The Bio Processing Innovation Centre (BPIC), 10,000 sq. ft. pilot facility/labs in Edmonton (opened fall 2017), houses essential equipment for value-added bio-processing and is open to industry clients and academic researchers who wish to de-risk and scale-up their new bioproducts and processes.

Alberta Agriculture and Forestry, Bio-Industrial Opportunities Section

4th Floor, O.S. Longman Building, 6909 – 116 Street, Edmonton, AB T6H 4P2

Phone: (780) 644-8118

Email: hong.qi@gov.ab.ca

Web: www.agriculture.alberta.ca/bio-industrial

Hong Qi, Director

Description: The mandate is to advance the low carbon circular bioeconomy, create jobs, and stimulate economic diversification by valorizing Alberta's bio-based resources through technical and business development support that spur innovation, commercialization and industry development. The primary objective is to support economic diversification - including new markets and waste-to-value-added opportunities - by working closely with bioindustry stakeholders.

Alberta Pacific Forest Products Inc. (Al-Pac)

Box 8000, Range Road 195A, Boyle, AB T0A 0M0;

212, 13220 St. Albert Trail, Edmonton, AB T5L 4W1

Phone: (780) 495-1220

Email: Gordon.Giles@alpac.ca; info@alpac.ca

Web: www.alpac.ca

Gordon Giles, Business Development

Description: Renewable Energy – our company produces renewable energy from forest biomass to power our millsite and sell any surplus to the Alberta power grid. Biomethanol – Alberta-Pacific uses a portion of the bio-methanol it produces to make a pulp whitening agent required to produce pulp and sells any surplus commercially. It is called 'bio-methanol' because it comes from a renewable resource.

Algae AquaCulture Technologies

Phone: (403) 681-7831

Email: grant@kelbacorp.com

Web: www.algaeaqua.com

Grant Kelba, CEO

Description: AACT integrated bioprocessors consume waste heat and carbon dioxide to produce renewable energy and organic soil amendments. AACT systems are ideally suited for the production of methane, hydrogen and bio-oils that can be used as fuel for farm and industrial equipment or to generate electrical power. As the system produces no waste, its byproducts are valuable high-grade organic fertilizer and soil amendments.

Alternative Plastic Products Mfg. Inc.

1610 Lakeside Rd. Lethbridge, AB T1K 3G8

Phone: (403) 329-1713; (403) 382-9431

Email: gh@west-can.com

Web: www.altplastic.com

Grant Harrington, President, Devin Harrington

Description: Manufacturer of plastic lumber and posts from waste plastic.

Archer Daniels Midland

Box 1620, Lloydminster, SK S9V 1K5

Phone: (780) 875-5554

Toll Free: (800) 661-9420

Web: www.adm.com

Patricia Woertz, President, Tim Cassidy, Manager

Description: Parent Company, ADM Decatur, IL Crude Canola Oil, Refined Canola Oil, Canola Meal Pellets, Soy Meal Pellets, Canola Meal, Ethanol, Biodiesel. Export Markets: China - Hong Kong

ATCO Pipelines and Liquids, Global Business

10035 – 105 Street, Edmonton, AB T5J 2V6

Phone: (587) 783-2395

Email: greg.caldwell@ATCO.com

Web: www.ATCO.com

Greg Caldwell, Director, Development and Innovation

Description: Participating on national and international committees with the Canadian Gas Association and in partnership with multiple levels of government. Focused on the funding and testing of emerging technologies aimed at combating climate change, promoting energy security, and sourcing alternative means for Canadians to provide for their energy needs.

Biofuels Inc. (Fortistar LLC)

Hwy 16 (Stony Plain Road) and 231 Street, Edmonton, AB T7Z 1K1

Phone: (403) 261-9754; (780) 203-1909

Email: gnoll@fortistar.com

Web: www.fortistar.com

Grant Noll, VPO, Brian Perrault, General Manager

Description: Wood recycling. Diversion of ICI and C&D wood waste from landfill to power generation. Brands: Wood chip/hog fuel

BioRefinex Canada Inc.

909 - 17th Avenue SW, # 400, Calgary, AB T2T 0A4

Phone: (403) 705-1720

Email: chris.thrall@biorefinex.com

Web: www.biorefinex.com

Chris Thrall, President & CEO

Description: BioRefinex transforms organic waste material safely into high-grade organic fertilizers and feedstock for bioenergy products such as renewable natural gas. It is commercializing its proprietary thermal hydrolysis system that has been certified in 180 countries by the World Organization for Animal Health (OIE) as a destruction methodology for all micro pathogens including BSE-causing agents. The BioRefinex thermal hydrolysis technology has been successfully deployed at full-commercial scale at the Lethbridge Biogas facility, under a license arrangement. BioRefinex is developing the Lacombe Biorefinery project to commercially demonstrate the full capability range of both bioenergy and high-grade organic fertilizer production.

BioLargo Water Inc.

6020 – 118 Street NW, Edmonton, AB T6H 2V8

Phone: (780) 492-6994

Email: Richard.smith@biolargo.com

Web: www.biolargowater.ca

Richard Smith, President & CEO

Description: The Advanced Oxidation System (AOS) is our patented and innovative advanced water treatment technology that marries advances in iodine electrochemistry with cutting-edge materials engineering. The result is a water treatment platform that provides high-level disinfection against bacteria, viruses, and protozoa and elimination of hard-to-treat organic contaminants, all while consuming less electricity than any competing technology.

Biomass Energy Network

5-22C University of Alberta, Agriculture/Forestry Centre, Edmonton, AB T6G 2P5

Phone: (780) 492-5685

Email: biomass@ualberta.ca

Web: www.biomass.ualberta.ca

Dr. David Bressler, Scientific Director

Description: The Biomass Energy Network (BEN) is a university-based network facilitating collaboration and communication amongst the Alberta ecosystem of academia, government, and industry working in the bioenergy sector.

Black Opal Energy Services Inc.

#108, 11225 - 269 Street, Acheson, AB T7X 6E1

Phone: (780) 948-9989, Fax: (780) 948-9911

Email: russell@blackopalservices.com

Web: www.blackopalservices.com

Ken Francis, CEO, Russ Entwistle, President

Description: Black Opal Energy Services is a privately held, Alberta based clean tech, portable, wastewater treatment company. We design, engineer, manufacture, monitor, operate and service modular waste water treatment plants. We offer complete turnkey, compliant wastewater treatment plants and services. Black Opal also provides individualized service, training and support as required.

Botaneco Inc.

134-2985 23rd Avenue NE, Calgary, AB T1Y 7L3

Phone: (403) 668-6685

Email: sales@botaneco.com

Web: www.botaneco.com

James Szarko, President & CEO

Description: Botaneco® is an agri-innovation company that is a global leader in novel oilseed processing technology. Our technology platform produces unique extracts from oilseeds (oleosomes and proteins) that are not available through conventional processing. Botaneco®'s vision is to supply sustainable ingredients that lower the environmental footprint of personal care, food and feed product manufacturers around the world to enable them to provide consumers with natural, healthy, functional and plant-based products. Our team strives to fundamentally change how people care for themselves by what they put on their skin and in their bodies through the ingredients we develop. Brands: Hydresia®, Karmyn™, CapSol™

Canadian Bio-Systems Inc.

4389 112 Avenue SE, Calgary, AB T2C 0J7

Phone: (800) 561-2474; (403) 279-3339

Email: info@canadianbio.com

Web: www.canadianbio.com

R. Owen Jones, President/Owner/CEO

Description: Canadian Bio-Systems Inc. (CBS Inc.) is an innovation-focused company that manufactures a wide range of products used in feed, food, industrial and environmental applications. All the company's products are based on a strong foundation of research and development. Each is designed to deliver specific, clear benefits that represent safe, natural ways to improved performance, profitability and environmental stewardship. The company's product line-up is continually broadened with new, innovative options emerging from its research and development pipeline. Product Claim/Attributes: Canadian Bio-Systems Inc. creates safe, natural solutions for improved performance, profitability and environmental stewardship in the sectors of feed, food, industrial and environmental agriculture.

Canadian Wood Waste Recycling Business Group (CWWRBG)

5003 – 54A Avenue, Stony Plain, AB T7Z 1B7

Phone: (780) 963-7117

Mobile: (780) 239-5445

Email: jdonaldson@cdnwoodwasterecycling.ca

Web: www.cdnwoodwasterecycling.ca

Jim Donaldson, CEO

Description: We are the CWWEBG, a for profit, membership-supported environmental Wood recycling industry resource administrative, management business group based out of Stony Plain, Alberta. The CWWEBG is made up of global Wood recycling industry leaders, Wood recycling bioeconomy companies assembled to build the national Canadian Wood recycling industry through each member's and stakeholder's specialized business service. In brief, we connect people through our business groups resource portfolio providing key leadership contacts, sharing the indispensable industry knowledge, deliver acquired business leads and provide ongoing supportive social media marketing and promotion.

Cielo Waste Solutions Corp.

Bridgeview Place II, #115, 5114-58 Street, Red Deer, AB T4N 2L8

Phone: (403) 348-2972

Email: donallan@cielows.com

Web: www.cielows.com

Don Allan, President and CEO

Description: Cielo plans to construct renewable diesel refineries using alternate waste feedstocks. Using feed stocks of municipal solid waste with plastics and cellulosic materials such as wet organics (compost), plastics, tires, paper, cardboard, sawdust and wood, we will be opening the doors to an untapped source of energy, with profit forecasts that make this project a very attractive investment. Cielo has been commissioning a commercial refinery in Aldersyde, AB since July 2018 and are hoping to be in full commercial production Q2-Q3, 2019. Cielo has already signed MOU's to build the next refineries in Grande Prairie, Calgary, Medicine Hat and Brooks. Brands: Renewable Diesel.

Clean Energy Technology Centre (CETC)

5400 24th Avenue Drayton Valley, AB T7A 0C5

Phone: (780) 514-2954

Email: mdeol@draytonvalley.ca

Web: www.cetc-dv.com

Town of Drayton Valley, MD, Manny Deol, COO, Krystle Kotyk, Admin. Assistant

Description: We are a clean tech and bioindustrial business incubator serving the needs of central and northern AB entrepreneurs

Dapp Power LP

RR1, Box 6, Site 4, Westlock, AB T1S 1J3

Phone: (403) 261-9754, (780) 954-2089

Email: gnoll@fortistar.com

Web: www.fortistar.com

Grant Noll, VPO

Description: Fortistar LLC is the parent company with over 3,000 MW of installed capacity in the US and Canada. Power is generated from wood biomass, waste heat, landfill gas and natural gas fired cogeneration. The Dapp plant in Alberta is a 16 MW electrical generating station utilizing wood biomass as fuel from a combination of forest mill residues and landfill waste diversion.

EarthRenew Inc.

#610, 600 – 6th Ave SW, Calgary, AB T2P 0S5

Phone: (403) 457-1029, (403) 860-8623

Email: kdriver@earthrenew.ca

Web: www.earthrenew.ca

Keith Driver, CEO & President

Description: Efficient Source of Power. EarthRenew is a low-cost sustainable power-generation company with a patented production process that converts livestock waste to nutrient-rich, slow-release pelleted organic fertilizer. Controlled use of heat from a natural gas turbine for thermal processing of waste organic materials to produce concentrated high-value certified organic fertilizer.

Enerkem Inc.

#600, 1130 Sherbrooke Street West, Montreal QC H3A 2M8

Phone: (514) 375-6936

Email: gbrisson@enerkem.com

Web: www.enerkem.com

Dominique Boies, Chief Executive Officer (acting) and Chief Financial Officer

Description: Enerkem produces advanced biofuels and renewable chemicals from waste. Its disruptive proprietary technology converts non-recyclable, non-compostable municipal solid waste into methanol, ethanol and other widely-used chemicals. Headquartered in Montreal (QC), Canada, Enerkem operates a full-scale commercial facility in Alberta as well as an innovation centre in Quebec. Enerkem's facilities are built as prefabricated systems based on the company's modular manufacturing infrastructure that can be deployed globally. Enerkem's technology is a prime example of how a true circular economy can be achieved by diversifying the energy mix and by making everyday products greener while offering a smart, sustainable alternative to landfilling and incineration.

Emergent Waste Solutions Inc.

553 Ocean View Drive, Gibsons, BC V0N 1V5

Phone: (604) 282-7329, (604) 741-1956

Email: rwilde@ewscanada.com, khull@ewscanada.com

Web: www.ewscanada.com

Rob Wilde, CEO

Description: EWS is a Canadian company deploying the Advanced Thermolysis System (ATS) technology, an innovative, secure, efficient and proven method incorporating a proprietary thermolysis solution for the converting of waste materials into marketable products such as activated carbon, carbon black, biochar, synthesized gas and fuel oil. Our carbon products have a high surface area and high carbon content. Our fuel and oil are virtually free of carbon dust. The ATS provides waste disposal utilizing a safe, nonpolluting, non-toxic process compliant with all environmental standards. Brands: Emergent Biochar & Emergent Carbon Black & Emergent Activated Carbon.

Enagon Inc.

RR4 Site5 Box 21, Lacombe, AB T4L 2N4

Phone: (403) 633-5554

Email: enagoninc@gmail.com

Web: www.enagonllc.com

Garry Evernden, President, Canada

Description: Enagon's PowerWave Mill re-envisioned traditional drying and powdering technology, reconfiguring it to economically meet modern industry needs. Similar to a tornado, we've designed turbines that create enormous pressure and speed in the mill's powdering chamber. Plants are an abundant source of protein with endless applications. Power Wave Mills can help you separate that protein from the hulls, stalk fiber and oils. Our mills can pulverize any food material into fine dry powder with a long shelf life. We can help you pulverize industrial and construction materials into fine powder at high capacity, increasing the applications and value of your product.

Expander Energy

1414 8 St SW, Calgary, AB T2R 1J6

Phone: (403) 475-4146

Email: j.teare@expanderenergy.com

Steve Price, President and CEO, Expander Energy

Web: www.expanderenergy.com

Description: Expander is an Alberta based company that builds, operates, and licenses state of the art

Biomass/Gas to Liquids (BGTL™) facilities that convert biomass waste into sustainable, drop-in, low carbon fuel suitable for land, air, and marine transportation.

Expander and partners are building Canada's first-of-a-kind renewable Biomass/Gas to Liquids facility, in Slave Lake Alberta, using waste wood fibre and natural gas as feedstock to produce, clean, renewable synthetic diesel and jet fuel (SynDiesel® and SynJet®).

Expander has an experienced team with deep expertise in leadership and technology. Our team has redefined the Fischer-Tropsch process in Gas to Liquids, BGTL™ and heavy oil upgrading with advanced environmental, cost-efficient engineering.

FORGE Hydrocarbons Corp.

Site 306, 250 Aurum Road NE, Edmonton AB, T6T 1J1

Phone: (905) 330-4778

Email: neilvk@forgehc.com

Web: www.forgehc.com

Tim Haig, CEO, Neil Vanknotsenburg, VP Projects

Description: FORGE Hydrocarbons Corporation (FORGE) is founded on patented technology from the University of Alberta (inventor Dr. David Bressler). The company's proprietary Lipid-to-Hydrocarbon (LTH) technology produces drop-in hydrocarbons such as renewable diesel, jet fuel and gasoline. FORGE aim to operate (or obtain licenses to operate) multiple, integrated commercial-scale biorefining operations using previously uneconomic, high free fatty acid (FFA) waste streams, such as biosolids, tallow, inedible vegetable oils, and yellow and brown grease. The process does not use expensive catalysts or hydrogen. Outputs meet or exceed petroleum standards.

FREDsense Technologies Corp

3320 14 Avenue NE, Bay #8, Calgary, AB T2A 6J4

Phone: (403) 852-7338

Email: emily@fredsense.com

Web: www.fredsense.com

Emily Hicks, President, David Lloyd, CEO

Description: FREDsense Technologies combines biology and electrochemistry to create portable and autonomous water monitoring technologies for use directly in the field. Brands: FRED-Arsenic.

Green Analytics

2057 111 Street, Unit 348, Edmonton AB, T6J 4V9

Phone: (877) 353-6835, (226) 820-0233

Email: jeff.wilson@greenanalytics.ca

Web: www.greenanalytics.ca

Jeff Wilson, CEO, Amy Taylor, Chief Operations Officer

Description: Green Analytics is an employee-owned independent consulting firm specializing in the economic dimensions of environment and natural resource management. We integrate research, analysis, business solutions, and database and software development for businesses and governments seeking innovative solutions for a more environmentally sustainable economy. Brands: Green Metrics City.

G4 Insights Inc.

7966 Winston Street, Burnaby, BC V5A 2H5

Phone: (604) 451-9166, Cell: (604) 202-6671

Email: edson@g4insights.com

Web: www.g4insights.com

Edson Ng, Principal

Description: G4 Insights is developing and commercializing proprietary PyroCatalytic Hydrogenation (PCH) technology to produce clean, low cost renewable natural gas (RNG) from lignocellulosic biomass such as forestry residue and agricultural crop waste. G4's technology delivers significantly higher net energy conversion and has lower capital intensity compared to other RNG technologies.

GFR Ingredients Ltd.

4820 49th Street, Barrhead, AB T7N 1G8

Phone: (866) 218-5220

Email: info@gfringredients.com

Web: www.gfringredients.com

Theresa Gough, Plant Manager

Description: Manufacturing Premium Plant Based Ingredients. GFR Ingredients specializes in proprietary plant protein powders with superior nutritional properties. GFR Ingredients can also create a variety of specialty powders; including spray-dried fermented powders of single ingredient greens, or plant ingredient combinations. Our Custom Processing services creates unique product ingredients to your specifications with the help of our talented production team.

Greengate Power Corporation

#350 - 237, 8th Ave SE, Calgary, AB, T2G 5C3

Phone: (403) 930-1300

Email: info@greengatepower.com

Web: www.greengatepower.com

Dan Balaban, President & CEO, Jordan Balaban, CFO

Description: Renewable energy

Grow the Energy Circle Ltd.

Box 210 Coaldale, AB T1M 1M3

Phone: (403) 345-3844

Email: ckpfarms@hotmail.com

Web: www.growtheenergycircle.com

Chris Perry, President

Description: On-Farm anaerobic digestion Biogas facility. We utilize clean organic waste streams to produce biogas. This biogas is used to fuel a 900HP combined heat and power system, producing 633KW of 24/7 green electricity.

Hempco Food and Fibre Inc.

915-34 Avenue Nisku, AB T9E 1E7

Phone: (604) 431-8787

Email: diane@hempcocanada.com

Web: www.planethemp.ca

Diane Jang, President & CEO

Description: Hempco has been a hemp seed food processor, marketer and distributor for 15 years. Hempco is expanding into hemp fibre processing.

H&W Biogenics Ltd.

16223 101 Street, Edmonton, AB T5X 5A3

Phone: (780) 908-6905

Email: info@biogenx.ca

Web: www.biogenx.ca

Harry Welling, Managing Director

Description: H&W Biogenics Ltd. is the home of one of the leading and most experienced Bio-Energy Project Development Consultancies, assisting private, corporate and public clients since 2004. Harald (Harry) Welling (MD) and the Biogenics Team have played a key role in the steady and proactive promotion of biomass and biogas energy, and its sensible, successful use in Canada. We have followed an unswerving course to establish the basis for bioenergy projects to become a sustainable and reliable alternative for economic and environmental project development opportunities, even in smaller scales in Alberta, all over Canada and now also the United Kingdom and Ireland. Brands: Lambion Energy, Koeb, Archea.

Inkubate Packaging

120-48520 Highway 2A, Leduc County, AB, T9E 2X2

Phone: (780) 907-2270

Email: kevin@inkubatepackaging.com

Web: www.inkubatepackaging.com

Kevin Bryldt, President/Owner/CEO

Description: Location in Kavanagh, Alberta.

Inkubate Packaging is an ISO9001:2015 certified and NHP licenced company that provides clients with secondary package design and manufacturing. We provide in-house leading-edge graphic design, package conversion, and warehousing services for customer products. We are dedicated to supporting companies requiring flexible, customized packaging solutions. We specialize in low - mid volume production runs with quick turnarounds. Product Claim or Attributes: ISO9001:2015 certified, Natural Health Products Site Licence for Secondary Packaging, and GMP compliant.

Invigor Bioenergy Corporation

3048 9th Street SE, Calgary, AB T2G 3B9

Phone: (403) 816-7897

Email: lpetersen@invigor-energy.ca

Web: www.invigor-energy.ca

Lorne Petersen, EVP Corporate Development

Description: Invigor is a value adding processor of oil seeds and animal fats. We are developing an 80 million litre biodiesel facility in Lethbridge, AB. Invigor uses a unique process technology slate, first of its kind in Canada, to upgrade feedstocks into biodiesel and glycerin.

IRSI Inc.

6415 75 Street NW, Edmonton, AB T6E 0T3

Phone: (780) 394-6173

Email: c.olson@irstrategies.org

Web: www.irsi-inc.com

Chris Olson, President

Description: IRSI designs and fabricates pyrolysis systems to reduce residual waste streams and produce value added biochar.

Lethbridge Biogas LP

4456 - 8th Avenue North, Lethbridge, AB T1H 6W5

Phone: (403) 328-1429, (403) 382-8409

Email: stefan@ecbna.com

Web: www.lethbridgebiogas.ca

Thane Hurlburt, President, Stefan Michalski, Director Operations, Ed Mulder, Plant Manager

Description: Processing of organic feedstock to produce biogas used for generation of renewable electricity and heat.

Micron Waste Technologies Inc.

#915, 700 West Pender Street, Vancouver, BC V6C 1G8

Phone: (403) 681-7831 (Calgary location)

Email: grant@kelbacorp.com

Web: www.micronwaste.com

Grant Kelba, CEO

Description: Micron's patented on-site treatment system turns organic waste into clean water, with solutions to handle specialized organic waste generated by cannabis cultivators, food producers, food operators, hotels, and more.

Nano-Green Biorefineries Inc.

#36, 500 Lessard Drive, Edmonton, AB T6M 1G1

Phone: (780) 702-5026

Email: richard_shuhany@yahoo.com

Web: www.nano-greenbiorefineries.com

Richard G. Shuhany, Chairman, and Chairman of Blue Goose Biorefineries (operating company of the NanoGreen Group)

Description: Nano-Green Biorefineries Inc. is a privately held technology development company. The technology under development is the production of cellulose nanocrystals (CNC) from a wide variety of biomass sources.

Natural Fibre Technologies Inc.

9527 49 Avenue, Edmonton, AB T6E 5Z5

Phone: (780) 465-1532

Email: info@naturalfibretech.com

Web: www.naturalfibretech.com

Tam Tekle, President & CEO

Description: Natural Fibre Technologies is a company focused on whole-crop utilization: adding value to the agricultural residues after the seed has been removed. Natural Fibre Technologies processes agricultural material—particularly hemp—grown by food producing strategic partners across Western Canada. With a production facility in Nisku Alberta, NFT is the first commercial hemp processing plant in Alberta.

NovaGreen Inc.

#80, 6805 - 82 Ave, Edmonton, AB T6B 0E9

Phone: (587) 879-9602

Email: barry@novagreen.ca

Web: www.novagreen.ca

Barry Farquharson, CEO, Larry Donovan, President, George Ritchie, CSO

Description: Biomass Extraction and Conversion Leadership.

Permolex Ltd.

8010 Edgar Industrial Crescent, Red Deer, AB T4P 3R3

Phone: (403) 309-5254

Email: bduniece@permolex.com

Web: www.permolex.com

Randy Cook, President, Bridgette Duniece VP

Description: A unique value-added grain fractionation facility located in Red Deer. The facility is the first of its kind in North America using feed grade wheat in all processes. The plants design incorporates leading technologies and processes to capitalize on the benefits of three traditionally independent manufacturing processes namely a flour mill, a gluten plant and a fuel grade ethanol plant. This unique integration allows the by-products of one process to be utilized as feedstock for the next process. Ethanol can also be made from barley, rye, triticale or corn in our process. Brands: Vital Wheat Gluten, Permolex All Purpose Flour.

Pinnacle Renewable Energy Inc.

#350, 3600 Lysander Lane, Richmond, BC V7B 1C3

Phone: (604) 270-9613

Email: investors@pinnaclepellet.com

Web: www.pinnaclepellet.com

Robert McCurdy CEO

Description: Alberta Plant is in Entwistle, AB. Pinnacle is the world's third largest producer of industrial wood pellets. With eight production facilities in Western Canada linked by rail to ocean shipping terminals on the B.C. coast, as well as one production facility in Alabama with convenient access to ocean shipping via the U.S. Gulf Coast, Pinnacle is one of the only wood pellet suppliers with the scale and capability to serve major global utilities.

Resource Industry Suppliers Association

1002 7 Street, Nisku, AB T9E 7P2

Phone: (780) 489-5900

Email: 80consult@gmail.com

Tanya Adie, Executive Director

Description: We are non-profit organization whose aim is to foster economic activity within the natural resource sectors. Furthermore, our goal is to foster economic info, education, and networking between industry buyers and sellers.

Roshan Water Solutions

5042 Andison Close SW, Edmonton, AB T6W 3T4

Phone: (780) 667-7914

Email: sohrabi@roshanwatersolutions.com

Web: www.roshanwatersolutions.com

Amirreza Sohrabi, Ph.D., Founder & CEO

Description: We offer portable sensing technologies for detection of E.coli and Total coliform in water. While current standard testing methods can take a few days to generate the test results, our technology analyze samples in only 1 hour. The technology is in the form of a reader and disposable cartridges for fast and onsite testing of water samples.

Silvacom Ltd.

3912 - 91 Street NW, Edmonton, AB T6E 5K7

Phone: (780) 462-3238

Email: john.peters@silvacom.com

Web: www.silvacom.com

Tom Grabowski, President & CEO

Description: Silvacom™ provides consulting and software solutions to improve land management. We help our clients solve real-world problems using design, innovation, and creativity. The Silvacom Group works in environmental management, forest management, GIS, ecosystem services, and software development and serves multiple sectors including forestry, energy, agriculture, government, and Indigenous groups. Silvacom is an industry thought-leader in developing geospatial inventories and information systems for bioresources. We specialize in the acquisition and analysis of scientifically-based, empirical biomass estimates derived from forested land, agricultural residues, and municipal solid waste.

SBI BioEnergy Inc.

1803 - 94 Street, NW, Edmonton, AB T6N 1E6

Phone: (780) 413-9832, (780) 278-9832

Email: ips@sbibioenergy.com

Web: www.sbibioenergy.com

Dr. Inder Pal Singh, President and CEO, Dr. Shradha Singh, Vice President

Description: SBI BioEnergy is an Alberta company that has developed innovative, environment-friendly Drop-In fuel manufacturing technologies. Drop-In fuels are highly valued, as they have no blend wall, meaning that any amount of these fuels can be added to conventional fuels such as diesel, gasoline, and jet fuel. SBI's fuels do not require modifications to engines, storage, or distribution infrastructure. SBI products fit well with the global interest in alternative fuels and are produced in a sustainable manner. It eliminates use of hydrogen or any consumable chemicals in the production of high-quality Renewable Jet fuel, Renewable Diesel and water clear biodiesel meeting all international fuel standards. Royal Dutch Shell has acquired global exclusive license from SBI for development and commercialization of its Biofuel technology in year 2017.

Steeper Energy Canada Ltd.

#220, 906 12th Ave SW, Calgary, AB T2R 0K7

Phone: (587) 890-8009

Email: sergios@steeperenergy.com

Web: www.steeperenergy.com

Perry Toms, CEO

Description: Steeper is a clean-energy company commercializing its proprietary Hydrofaction™ technology to convert waste or low value biomass into renewable bio-crude oil or Hydrofaction™ Oil. Refined into renewable diesel, jet fuels or heating oil as well as biochemicals or bio-lubricants, Hydrofaction™ Oil can be made compatible with the existing fossil fuel infrastructure. Based in Calgary (CA) and Copenhagen (DK), Steeper has successfully proven the advantages of Hydrofaction™ with over 1750 oil producing hours completed at its Pilot Plant. Building on this success, Steeper is developing a large-scale Demonstration Plant in Tofte, Norway, to prove the commercial readiness of Hydrofaction™ in collaboration with Silva Green Fuel AS, owned by Statkraft (Norway state utility) and Södra (Swedish forestry major).

Strathcona Ventures

52155 Range Road 233, Sherwood Park, AB T8B 1C5

Phone: (780) 464-0485

Email: info@strathconaventures.com

Web: www.strathconaventures.com

Alex Von Hauff, CEO

Description: Pine Shavings, Pellets, and Hemp bedding. Arena Dust Control and commercial dust control. NAG Bags Slow Hay Feeders. Sirocco Stall Deodorizer. EquiCrown Compression Wraps. SilverTec Stall Mats. DryGuy Waterproofing. Microbe Defence.

Strathcona Ventures focuses on innovation within agriculture and commercial industries. Including environmentally friendly solutions for bi-product waste including wood and Hemp waste materials. Economical and environmentally responsible dust control options. And recently focusing on bacterial and viral protection.

Sun Gro Horticulture Canada Ltd.

Box 189, 52130, RR65, Seba Beach, AB T0E 2B0

Phone: (780) 797-3019

Email: info@sungro.com

Web: www.sungro.com

Ken Elsbury, CEO, Warren Walker, General Manager (Western Canada)

Description: Peat Moss, Peat Based Mixes, Organic Absorbents. Brands: Sunshine, Technigro

Susteen Technologies Canada Ltd.

#16, 2439 54th Avenue SW Calgary, AB T3E 1M4

Phone: (403) 921-4568

Email: bruce.hillen@susteen-tech.com

Web: www.susteen.ca

Bruce Hillen, CEO

Description: Susteen Technologies Canada Ltd. (STC) is a clean technology development and marketing company based in Calgary with over 100 employees. STC focuses on resource production from organic residues through efficient thermo-chemical conversion technology. STC is a spin-off company of the Fraunhofer UMSICHT institute and holds exclusive licence for sales and service of Thermo Catalytic Reforming (TCR®) technology for North America. STC engages in the development of bio-mass conversion applications based on TCR, and designs and delivers TCR® reactor equipment.

Symbiotic EnviroTek Inc.

#8210, 11500 - 35 Street S.E., Calgary, AB T2Z 3W4

Phone: (403) 453-0233

Email: symbiotic@symenv.com

Web: www.symenv.com

Art Deane, President & CEO

Description: Symbiotic EnviroTek Inc. ("Symbiotic") is a privately held corporation based in Calgary, Alberta, Canada that has developed and tested an advanced modular Algae Cultivation technology for growing microalgae in moderate and inclement weather conditions. There are two divisions to Symbiotic:

- Division-1: Produces a high quality, high protein (60%) Chlorella powder for the human food ingredients and Natural Health Products industry. It also produces biomass for use in manufacturing animal feed.
- Division-2: Provides phycoremediation services to municipalities and various industry sectors, and produces clean water and algal biomass that are used as feedstock to manufacture various bio-based products.

TerraVerdae Bioworks Inc.

Edmonton location: University of Alberta, Agri-Food Discovery Place

Phone: (978) 712-0220

Web: www.terraverdae.com

William Bardosh, Founder and CEO

Description: TerraVerdae BioWorks is an innovative green materials and chemicals company dedicated to the development of sustainable products from single carbon feedstocks such as methanol and methane. We engineer performance biomaterials that are simultaneously waste-derived, bio-based and biodegradable for a range of markets worldwide. Our focus is on bioplastic blends, composites and coatings & films. We develop bioactive metabolites and bio-based ingredients for use in Cosmetics, Flavours & Fragrances, Nutritional Supplement and Agricultural applications.

True North Renewable Fuels Ltd.

Calgary, Alberta, Canada

Phone: (403) 969-2215

Email: srosendorff@tnrf.ca

Douglas Cole, CEO, Steven Rosendorff, Chief Commercial Officer

Description: Project Green is a renewable fuel facility to be located in Western Canada, developed by True North Renewable Fuels Ltd. It is envisioned to have a nameplate capacity of 600 million litres per year of Hydrogen Derived Renewable Diesel (HDRD), renewable Naphtha and renewable Liquefied Petroleum Gas. Canola oil is proposed as the primary feedstock, however other oils such as soy oil, animal fats and used cooking oils are also suitable feedstocks.

University of Alberta, Faculty of Agricultural, Life, & Environmental Sciences

5-22C University of Alberta, Agriculture/Forestry Centre, Edmonton, AB T6G 2P5

Phone: (780) 492-4986

Email: dbressle@ualberta.ca

Dr. David Bressler, Professor, Scientific Director, Biomass Energy Network

Description: Agricultural Biotechnology, Industrial Biotechnology. Major Product/Service: Teaching, research, and service in agricultural sciences, environmental sciences, and human ecology
Description of Service: The Faculty of ALES provides solutions to global challenges. They teach their students to help feed the world, ensure a healthy environment, strengthen individual and community well-being, and nurture bio-resource innovation.

University of Calgary, Department of Biological Sciences

Rm BI578, University of Calgary, Calgary, AB T2N 1N4

Phone: (403) 220-5161

Email: dlayzell@ucalgary.ca, dlayzell@cesarnet.ca

Web: www.cesarnet.ca, www.transitionaccelerator.ca

Dr. David B. Layzell FRSC, Director, Canadian Energy Systems Analysis Research (CESAR) Initiative, Research Director, The Transition Accelerator, Professor, Dept. of Biological Sciences

Vanderwell Contractors (1971) Ltd.

Box 415, Slave Lake, AB, T0G 2A0

Phone: (780) 849-3824

Email: ken@vanderwell.com

Web: www.vanderwell.com

Ken Vanderwell, General Manager, Neal Knoot, Operations Manager, Mike Hair, Woodlands Manager

Description: Sawmill manufacturing facility, dimensional lumber, wood shavings, wood pellets, bio-mass hog fuel.

Viresco Solutions Inc.

440, 2nd Avenue SW – 21st Floor, Calgary, AB T2P 5E9

Phone: (403) 926-2902

Email: info@virescosolutions.com

Web: www.virescosolutions.com

Karen Haugen-Kozyra, President

Description: Consulting company specializing in GHG quantification, policy research, stakeholder engagement, and supply chain analysis, serving clients in the agriculture, agri-food processing and bioenergy sectors.

Western Archrib

4315 92 Avenue, Edmonton, AB T6B 3M7.

Phone: (780) 440-7431, (780) 465-9771

Email: alema@westernarchrib.com

Web: www.westernarchrib.com

Kent Fargey, President

Description: Western Archrib is a manufacturer of glued laminated timber (Glulam beams, columns and Westdek panels), wood products and a supplier of complete wood systems for buildings. A strong technical support system including engineering, drafting and project management to provide a complete package of material and information to support the design and installation for our customers. Brands: Glulam, Westlam, Westdek.

West Fraser Timber Co.

Slave Lake Pulp

Box 1790, Slave Lake, AB T0G 2A0

Phone: (780) 849-7777

Hinton Pulp

760 Switzer Drive, Hinton, AB T7V 1V7

Phone: (780) 865-2251

Email: eddie.peace@westfraser.com

Web: www.westfraser.com/products/bioproducts

Edward Seraphim, President and CEO, Eddie Peace, Leader Bioproducts (250) 992-0821

Description: BCTMP, Kraft Pulps Market, Solid lumber, Plywood, MDF, LVL. Our energy and bioproducts initiatives aim to substitute fossil fuels by utilizing carbon-neutral biomass fuels such as bark, wood residuals and other wood co-products of our manufacturing process. Today, a significant portion of our energy needs is met through renewable biomass fuel sources located at many of our facilities. Ongoing innovative areas of research are exploring new methods of using wood byproducts, including Canada's first commercial lignin plant and cellulose bio-composites.

Whitecourt Power LP

Capstone Infrastructure

Box 1888, Highway 43, Whitecourt AB T7S 1P6

Phone: (780) 778-3334, ext. 302

Email: lsanche@capstoneinfra.com

Web: www.capstoneinfrastructure.com

Leonard Sanche, Plant Manager

Description: The Whitecourt facility, which is made up of one steam turbine and one generator, uses wood waste to generate electricity. Fluidized bubbling bed boiler combustion is the principal technology for the conversion of biomass for electricity production. The combustion process generates hot gases that in turn produce steam, which is then used to generate electricity in the turbine/generator. The electricity generated by the Whitecourt facility is sold under a long-term power purchase agreement and is delivered to Alberta's power grid.