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POND CLOSES THE CARBON LOOP

A technology intended to profitably addresses global climate change and population growth concerns

CHALLENGES



INDUSTRIALIZATION

GHGs are rising steadily as developing countries industrialize their economies. Meanwhile, industry is looking to decouple growth from emissions



POPULATION GROWTH

Globally, a growing middle-class demands more a protein-rich diet while we face soil degradation and 2+ million tonnes of overfishing



SCRUTINY

Environmental and health advocates are concerned about emissions and water pollution, while investors fear stranded assets

IMPACT



GREEN REVENUE

Pond provides emitters with a potentially lucrative revenue stream from an abundant, overlooked resource – CO₂



FOOD SECURITY

Carbon-neutral, near-zero water, nutrient-rich vegan protein to feed **2-4 billion** additional mouths by 2050



NATURAL INGREDIENTS

Tremendous demand for natural food dyes (e.g. replacing synthetic blue M&M dye with natural algae extract exceeds global supply by 2x)

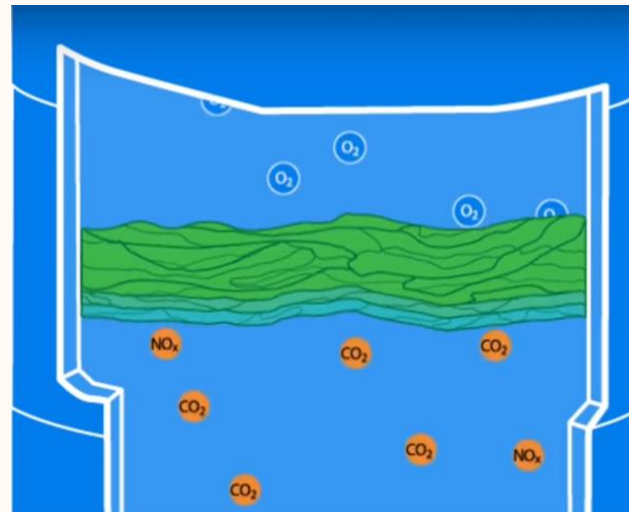
THE POND GROWTH PLATFORM

A technology intended to profitably addresses global climate change and population growth concerns



CARBON FEEDSTOCK

Pond bolts onto factories to mine CO₂ from industrial emissions using a modular design with no costly retrofit of capital equipment.



ALGAE CAPTURES CARBON VIA PHOTOSYNTHESIS

Pond optimizes growth conditions in photobioreactors using proprietary lighting and computer algorithms to maximize output of algae.



ALGAE FOR FOOD, FEED, FIBERS, AND FUEL

Pond-derived pure algae can be processed into marketable products.

Watch our 90-second explainer [video](#)

WHY ALGAE | IMPACT BENEFITS

Various algae strains and extracts can address both high-margin niche markets and vast volume markets

NUTRACEUTICALS

Target Market: >\$2 billion

CAGR: 10% – 20%

Price per tonne: \$10,000 - \$200,000

Highlights

Nutraceutical-grade algae (Astaxanthin, Spirulina, Chlorella) have amongst the densest nutrient profiles and are increasingly popular health supplements. A large body of research identifies antioxidant, anti-inflammatory, and anti-aging properties, amongst other health benefits.



FISH & ANIMAL FEEDS

Target Market: >\$10 billion

CAGR: 10%

Price per tonne: \$1,500 - \$2,000

Highlights

With a protein content of up to 70% and a superior nutrient profile, Pond's algae is ideal for use in animal and fish feeds. Pond can fully replace fishmeal at direct market prices, reducing stress on wild fish populations in the process.



FOOD COLOURANTS

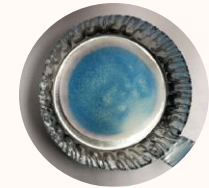
Target Market: >\$2 billion

CAGR: 4% – 7%, accelerating

Price per tonne: \$175,000 - \$300,000

Highlights

Different strains of algae can be used to extract high demand natural blue and yellow food colouring, replacing petrochemical-derived synthetics standard in market today. Global majors (Mars, PepsiCo, Nestlé) have announced major commitments to natural dyes which would outstrip current global supplies by orders of magnitude.



PETROLEUM DERIVATIVES

Target Market: >\$15 billion

CAGR: 5% – >15%

Price per tonne: \$1,000 - \$3,000

Highlights

Lipid-rich algae can be used to replace petrochemical-derived plastics, ink, fertilizer, or fuels, resulting in both the sequestration of carbon and the production of biodegradable and renewable goods for vast volume markets. Demand for plastic and ink is surging.



WHY POND | INDUSTRY-LEADING TECHNOLOGY

Pond owns the space via process patent for algae cultivation from industrial flue gases & deep expertise in photonics



AGILE & SCALABLE

The Pond platform is strain-agnostic and designed to scale quickly. We can build anywhere and grow algae off any stack.



HIGH VALUE ALGAE

Pond grows a premium product: Our algae is farmed in a contained environment that prevents contamination.



STRONG GLOBAL IP PORTFOLIO

Pond has received or filed for 50+ patents on the process and technology in the US, Canada, the EU, China and Taiwan.



HIGH YIELD

Pond's expertise in photonics and integrated control circuitry with sensors and proprietary algorithms has the potential to achieve industry-leading algae growth rates, up to 20x faster than legacy outdoor systems.

WHY POND | NO CHANGES TO OPERATIONS



RAW STACK GAS

Easy emissions abatement with no further treatment required



BOLT-ON DESIGN

Deployable at existing industrial facilities, anywhere



MODULAR DESIGN

Scalable solution with minimal land footprint



A SUPERIOR ALGAE HARVESTING PLATFORM

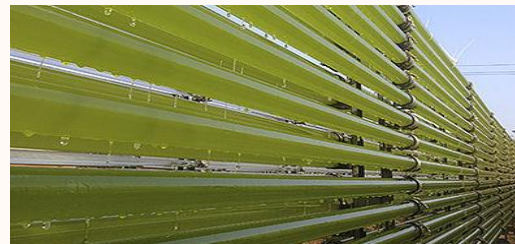
	Open Ponds	Photo-bioreactors	Pond System
Technology Attributes	Uncontrolled, unsecure, high level of contamination, climate dependent, labour intensive	Fully controlled, bio-secure, climate dependent, resource intensive	Fully controlled, bio-secure, location agnostic, climate agnostic, resource-light production
Harvest Rate	< 0.1 g/L/day	0.1 – 0.5 g/L/day	2+ g/L/day
Land	5 metric T / acre	<1 mT / acre	2,000-3000 mT / acre
OPEX (labour)	8.8 – 15 mT / FTE	0.75 – 8 mT / FTE	181 – 250 mT / FTE
CAPEX (production p.a.)	\$62k / mT	\$500k / mT	\$11k / mT (spirulina) \$95k - \$159k (h. pluvialis)
Scalability	Not easily scalable due to land/climate requirements and fixed infrastructure build; not biosecure	Not easily scalable due to land/climate requirements and fixed infrastructure build; biosecure	Easily scaled due to modular design; biosecure
Global Production	95-99%	1-5%	Able to rationalize global supply

20 – 50x better harvest rate

400x less land required

12x operational efficiency

6 – 45x fixed capital efficiency



CURRENT ACTIVITIES

Pond is setting itself up for success across multiple channels – and is being recognized for it



MARKHAM DISTRICT ENERGY

Groundbreaking for nutraceutical algae plant on Oct 10, 2018



STELCO

Construction for algae plant underway; sales expected Q4 2019



POND NATURALS

Acquisitions of Regenurex & RFI Canada's business builds foundation of algae wholesale and retail division



CROSSRIVER GROUP

LOI for US\$100 million in project financing capital for plants in Canada & US



ST. MARYS CEMENT

R&D plant in operation since 2011



CANNABIS

IP filed, in-house R&D to apply Pond's technology to growers' pain points in achieving consistent yield



OFFTAKE

Written interest from algae buyers in nutraceutical, food colourant, animal feed, and bioplastics



CLEAN16

Winner of the 2018 Clean16 R&D Award for Pond's contribution to Clean Capitalism in Canada

POND PROJECTS

These projects are currently in operation or underway

PILOT - ST. MARY'S CEMENT

Industry: Cement Manufacturing

Partner: Votorantim Cimentos,
Natural Resources Canada

Location: St. Mary's, ON, Canada

Size: 25,000 litres

Target: Demonstration plant in operation and development since 2011



STELCO STEELWORKS

Industry: Steel Manufacturing

Location: Nanticoke, ON, Canada

Product: Aquaculture Feed

Size: 1,500,000 litres

Output Capacity: 2,000 tonnes

Target: First algae sales by Q4 2020



MARKHAM DISTRICT ENERGY

Industry: Power Generation

Location: Markham, ON, Canada

Product: Nutraceuticals

Size: 200,000 litres (Phase 1)

Output Capacity: 100 tonnes

Target: First algae sales by Q4 2020





PLANT 1: STELCO STEELWORKS

Industry	Steel Manufacturing
Location	Nanticoke, Ontario, Canada
Product	Food Colourants & Biofoam
Algae	<i>Chlorella, Spirulina</i>
Size	1,500,000 litres
Output	2,180 tonnes of algae per year
Capacity	
CO₂	4,000 tonnes per year
Sequestered	
Status	Seed system engineering complete, major equipment ordered
Target	Seed Stage completion by Q1, commercial algae sales by Q4 2019

PLANT 2: MARKHAM DISTRICT ENERGY

Industry	Combined Heat & Power Co-Gen
Location	Markham, Ontario, Canada
Product	Nutraceuticals - Astaxanthin
Algae	<i>Haematococcus pluvialis</i>
Size	200,000 litres
Output Capacity	1-2 tonnes astaxanthin per year
CO₂ Sequestered	120 tonnes per year
Status	Engineering package complete
Target	First algae sales by Q4 2019



Underlying assumptions for output capacity include a harvest rate at 0.5 g/L/day and continuous operations for 330 days/year; and for construction & commissioning to continue according to plan without any major interruption.

PARTNERSHIP WITH RFI INGREDIENTS

This partnership forms the foundation for **Pond Naturals** to expand its product portfolio and enter new verticals



CANADIAN DISTRIBUTION TO RIGHTS TO ALL RFI PRODUCTS

Through the acquisition of RFI Canada's business, Pond Naturals becomes the Canadian distribution partner for RFI. The transition will be seamless for existing RFI Canada clients in the food and health supplements industries. Natural products include custom blends, bulk ingredients, vegan protein, fruit powders, colours, antioxidants, herbal extracts, and many more.



POND TO SUPPLY RFI WITH ALGAE BIOMASS & EXTRACTS

Pond anticipates that it will supply RFI Ingredients with its clean, green, Made-in-Canada products, including Spirulina, Phycocyanin, or Astaxanthin. This allows RFI to accelerate its product innovation.



INDUSTRY VET GRANT SMITH TO LEAD POND NATURALS

Former President of RFI Canada and Strategic Advisor to Pond, Grant Smith joined on Dec 1, 2018 to lead the Pond Naturals division. He brings 25 years of experience, a stellar reputation, and deep knowledge of the nutraceutical space. Grant sees great promise in Pond's ability to deliver new products and serve new verticals and geographies.



Grant Smith

VP Pond Naturals

Former President, RFI Canada



REGENUREX HEALTH

Definitive agreement to acquire British Columbia-based manufacturer & marketer of branded Astaxanthin signed Dec 10, 2018, anticipated to close in Q1 2019



EXISTING ALGAE PLANT

Regenurex owns and operates a small Astaxanthin-plant in Agassiz, BC.

Pond intends to expand production capacity substantially using its state-of-the-art equipment & controls system.



PROPRIETARY EXTRACTION TECHNOLOGY

Regenurex developed an all-natural extraction process that yields premium value Astaxanthin.

Pond intends to apply this extraction technology at other facilities.



MADE-IN-CANADA BRAND

Made in Canada Astaxanthin is highly sought after due to Health Canada's world-leading standards.

Regenurex has a solid foundation for its consumer brand and Pond looks forward to unlocking its potential.

POND LEADERSHIP

We have the people to realize our vision



STEVE MARTIN

Chief Executive Officer

Senior Scientist & department lead for EXFO Photonics, Efos Inc; Director at U of Toronto MBA program

Designed critical optical and display components for US military fighter jets

Pioneered new LED modules, fibre-optic packaging, & polymer-based photonics



KEVIN ANDRADE

Chief Operating Officer

International project acquisition and execution as executive with SNC-Lavalin. Experience in mining, industrial and infrastructure projects. Led emissions solutions group

Corporate commercial lawyer experience with Torys in Toronto and Goodwin Procter (New York)



PETER HOWARD

VP Project Development

International cleantech and sustainability executive

Climate change and sustainability consulting experience with PwC and Zerofootprint, developing multi-million dollar business lines

Senior policy advisor to Canadian governments on climate change policy



GRANT SMITH

VP Pond Naturals

Executive with 20+ years experience in the global health supplements and ingredients space

Co-Founder & partner at RFI Canada, the distributor for ingredients to well-known consumer brands in across North America

ADVISORY

This presentation contains forward-looking statements and information (collectively referred to as "forward-looking information") within the meaning of applicable securities laws about Pond's projections, targets and estimates based on certain assumptions disclosed in this advisory and in our publicly available documents available on SEDAR ([sedar.com](https://www.sedar.com)). Although Pond believes that the expectations represented by such forward-looking information are reasonable, there can be no assurance that such expectations will prove to be correct. Readers are cautioned not to place undue reliance on forward-looking information as actual results may differ materially from those expressed or implied. Pond undertakes no obligation to update or revise any forward-looking information except as required by law.

Forward-looking information in this presentation is identified by words such as "intended", "potentially", "anticipated", "planned" and "target" and includes: statements about the design, plans, timing, revenue and output capacity of Pond's plants; the harvest rate, land, capex and production using Pond's algae harvesting system; the anticipated closing of Pond's M&A activity, specifically the successful acquisition of Regenurex Health, the closing of which is subject to conditions, as disclosed in Pond's news release dated December 11, 2018, including the use of proceeds of Pond's investment in the transaction and the expected synergies of the transaction on Pond's and Regenurex's combined business.

Developing forward-looking information involves reliance on certain key expectations and assumptions made by Pond and consideration of certain risks and uncertainties, some of which are specific to Pond and others that apply to the industry generally. The assumptions on which the forward-looking information in this presentation is based include: the completion of the acquisition of Regenurex Health, including approval by the shareholders of Regenurex, receipt of TSXV and all other applicable third party consents, and the satisfaction of all other closing conditions in respect of the transaction; the receipt of anticipated funding from NGIF; the receipt of regulatory and partner approvals; the ability of Pond to raise capital; the ability of Pond to achieve commercial scaling; the increased demand for its products and the completion of plants as designed, scheduled and budgeted. Specifically, the underlying assumptions for output capacity for pond projects disclosed herein include a harvest rate at 4g/L/day (Spirulina) and 0.5g/L/day (Astaxanthin) and continuous operations for 330 days/year.

Additional information about risks, assumptions and uncertainties and other factors that could cause Pond's actual results to differ materially from those expressed or implied herein is contained under the "Risk Factors" section of Pond's MD&A for the period ended September 30, 2018, available on Pond's website and on SEDAR ([sedar.com](https://www.sedar.com)).