# Commodity Plus Carbon (CPC)

Mitigating Climate Change and Reducing Carbon Emissions in Agriculture

Developed by GIC Group





## Issues of Today and Goals of Tomorrow

#### Issues:

- The agricultural sector, which includes the entire value chain and services, accounts for approximately 11% of global GHG Emissions levels.
- GHG ratios (%) attributable to the ag value chain are as high as 31% in livestock & fisheries; 27% in crop production; 24% in land use; and 18% in supply chains.
- Soil degradation is a significant cause of these dramatic changes and serves to compound the problem of reducing carbon emissions levels and meeting the challenge of achieving sustainability.
- ► COVID-19 and the global economic slowdown have resulted in revenue losses for the entire agriculture/ agribusiness value chain.

#### Goals:

- Good agricultural practices
- Reaching Paris Agreement/COP reduction targets
- Developing "green" sources of revenue into crop production and the agricultural value chain
- Mitigating risk for climate change



## **Market Opportunity**

- ► CPC (commodity plus carbon) is a climate risk mitigation system based on new futures contracts for crops and food and feed products.
- ► CPC contracts maximize reduction & sequestration benefits of new technologies and good agricultural practices.
- Risk mitigation: Creates a new hedging instrument for strategic, high volume commodities in futures markets.
- New revenue potential from input cost reductions and incentivized good agricultural practices.

### Solution

► The CPC strategy is to use futures contracts to incentivize good agricultural practices. It is a market approach to reducing carbon emission levels and to sustainable agriculture.

Ecosystem
Market
Management

Climate Risk Mitigation GAP (good agricultural practices)

Incentivized Sustainability Practices

## **Technology**

MyAgData\*

- MyAgData®, CPC collaborator for carbon certification and verification
- Methodology: collecting and standardizing seeding, spraying, yield, and related field data verified with NDVI satellite imagery analytics
- ▶ Blockchain: can track all crop attributes usable in tracking emissions reductions from farm to fork.









## **CPC Competition & Pitfalls**

- "Green" bonds/ securities or ESG impact investment funds/ private equity financing (Environmental/Social and Corporate Governance)
  - ► Lack of transparency (insufficient reporting standards)
  - No guaranteed use of proceeds
- Private sector carbon credit payment/trading programs
  - Companies continue to emit same GHG levels, offset by purchasing credits - greenwashing
- Direct farm payment initiatives for carbon reduction
  - Lack of market incentive hinders both scaling and private sector emission reduction capabilities

## Differentiation of CPC

- Diverse databases and data dumps from sensory detection sources
- Reputable source for verification: MyAgData
- Blockchain Technology
- Mass Balance delivery certification system
- Crop and product contract roll-outs: Corn, Soybeans, Sorghum, Ethanol, Canola, SRW wheat, HRW wheat, Lean hog, Live cattle, Feeder cattle, Cocoa, Cannabis and Hemp
- Market sensitive mitigation instrument
- Horizontal and vertical revenue generation

### **Investment Proposal for CPC**

- Individual crops that either feature GHG reducing traits or are produced through carbon reduction and sequestration technologies and practices
- Low-cost bundling (25%/75%) of the value of a producer's carbon reduction practices with the value of the physical commodity
- ROI based on negotiated royalties on CPC contract listed on Exchange(s)



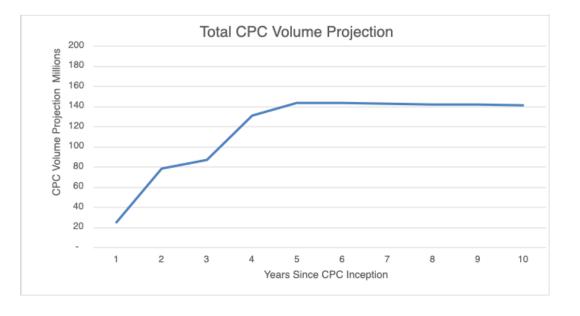




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## Revenue Model of CPC

- ▶ Revenue from Exchange Transaction Fees (Futures)
- ► Three CPC contract roll-outs in Year 1, three roll-outs in Year 2, three in Year 3, two in Year 4 and two in Year 5
- ▶ 10-year trading volumes projected using average 5-year growth rates



INCOME FORECAST	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
Projected Futures Volumes	25,483,502	78,710,459	86,911,207	131,052,264	143,933,579	143,261,805	142,671,718	142,163,784	141,738,583	141,076,542
Exchange Transaction Fees	\$ 1,674,096	\$ 5,170,752	\$ 5,709,487	\$ 8,609,260	\$ 9,455,477	\$ 9,411,346	\$ 9,372,581	\$ 9,339,213	\$ 9,311,280	\$ 9,267,788
Market & Reduction Value Calculations	75,000	150,000	150,000	150,000	225,000	75,000	150,000	150,000	150,000	160,417
Revenues from listing CPC	\$ 1,749,096	\$ 5,320,752	\$ 5,859,487	\$ 8,759,260	\$ 9,680,477	\$ 9,486,346	\$ 9,522,581	\$ 9,489,213	\$ 9,461,280	\$ 9,428,205
Net Income	\$ 358,120	\$ 3,107,273	\$ 3,524,208	\$ 5,691,279	\$ 6,356,092	\$ 6,209,255	\$ 6,234,247	\$ 6,206,155	\$ 6,181,317	\$ 6,171,776

### 5-Year Financial Projection

#### **Pilot commodities for CPC contract:**

- ► Corn, Soybean and Cocoa Year 1
- ► SRW Wheat, HRW Wheat and Sorghum Year 2
- Canola, Ethanol and Lean Hog Year 3
- **▶** Live Cattle and Feeder Cattle Year 4
- Cannabis and Hemp Year 5

- 5-year IRR: 47.85%
- > 5-year NPV: USD \$13,212,563
- ► 10-year NPV: USD \$33,386,385
- **5-year EBITDA:USD \$25,459,222**

Futures Volume Projection (CPC) w/ market assumptions					
Year	2023	2024	2025	2026	2027
Corn	15,194,170	29,642,975	28,915,893	28,206,645	27,514,794
Soybean	10,289,332	20,469,581	20,361,076	20,253,147	20,145,789
Cocoa	2,760,987	5,763,203	6,014,971	6,277,737	6,551,983
Canola	1,272,781	2,634,167	2,725,855	2,820,736	2,918,918
Sorghum	413,383	843,301	860,167	877,371	894,918
Lean Hog	2,314,582	4,695,852	4,763,500	4,832,123	4,901,734
Ethanol	123,238	217,827	192,510	170,134	150,360

#### **Objectives**

- Use of futures contracts to mitigate climate change risk through good agricultural practices. Crop cultivation accounts for **49.2**% of total GHG emissions in agriculture.
- Create additional revenue for farming and agribusiness sectors.

#### Roadmap

- Phase I:
  - Data collection
  - Data verification, authorization under VERRA registry protocol
- Phase II:
  - Establish OTC transactions
  - Initiate negotiations for Exchange listings
- Phase III:
  - MMRV (Measurement, Monitoring, Reporting, and Verification) of the impacts of listed CPC contracts.

## Milestones

## 5-Year Deal Structure

49%	\$7,708,371
	\$4,162,521
	\$3,545,851
2007	<b>#2.146.254</b>
20%	\$3,146,274
	\$1,698,988
	\$1,447,286
10%	\$1,573,137
10,0	\$849,494
	\$723,643
	4 ,
	20%

## **Investment Strategy**

## Patent carbon reduction measurement methodologies

- Secures the intrinsic value of CPC as a proprietary trading instrument
- Patent to cover as many steps, and variants, as possible in independent and dependent claims so as to cover the application for diverse mix of CPC contracts

## Multiple Exchanges and OTC electronic platforms (CPC "hosts")

• Negotiating contracts for the listing of an array of CPCs

## Launch sequence for CPC listings

• Beginning in 2021, with a maximum of 3 new CPC commodity contract listings per year.

## Determinants of asset value

- Patent secured methodology
- Goodwill valuation from delayed return of R&D funded phase of the product development
- •Royalty based returns from contract listings

#### **NEWCO Development**

- •Shareholder aggregation rights to cumulative CPC roll-outs
- •Founder options to continue initial or expanded participation levels under original terms
- In case of IPO, conversion rights to preferred stock for any subsequent rounds of capital raising.

Favorable investment terms corresponding to Proof of Concept, Stage 2 (60% completion) financing

## **Investment Participation**

- Stage IV, Proof of Concept: completion of pilot OTC for CPC corn, CME negotiations
- ► Launch CPC project/2023 (CPC Hemp grant with Lincoln U approved)
- Deal structure options designed to afford investors maximum leverage
  - ► Low-level of paid-in capital, the threshold for which is determined by the costs to finalize product development and complete product launch



IRR	47.85%
NPV(up to 49%)	\$13,212,563

## Management/PartnerTeam



#### Richard Gilmore, GIC Group, President/CEO

- Former Special External Advisor to the White House and USAID on Global Food Security
- Trustee for Nutrien, Board member-Swiss investment group, and corporate and public sector
   Advisor
- ▶ PhD, International Economics and Trade, Fulbright and Rockefeller Foundation fellowships



Deb Casurella, CEO, MyAgData (Partner for Data Verification)

CPC data authentication and verification responsibilities

Nathan DiNiro, CEO and Founder, Full Granklestein Ventures, Inc. (Partner/Blockchain Specialist)

Blockchain securitization of CPC data.

Steffen Mueller, Principal Economist, Bioenergy, University of Illinois/Chicago (Partner/Mass Balance Specialist)

Mass balance certification for CPC commodity deliveries