





# Sign up to our weekly carbon market blog www.climatemarketnow.com



#### Introduction to KraneShares

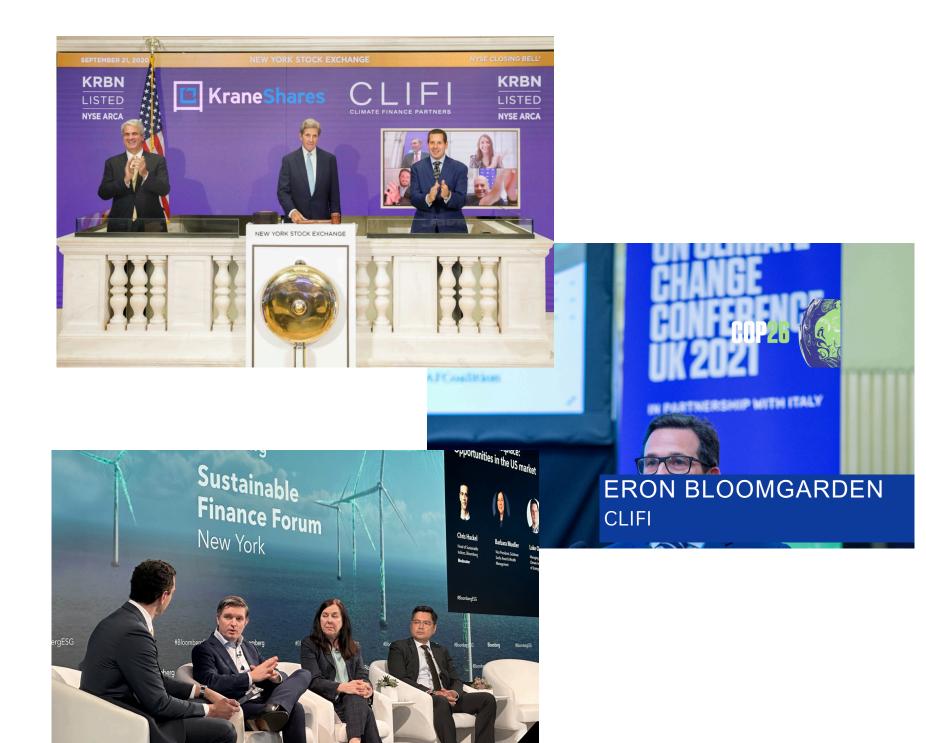
#### **About KraneShares**

Krane Funds Advisors, LLC is a specialist investment manager focused on China, Carbon, Climate, and other uncorrelated assets. KraneShares seeks to provide innovative, high conviction, and first to market strategies. The firm was founded in 2013 and manages for institutions and individuals globally. In 2017, KraneShares formed a strategic partnership with China International Capital Corporation (CICC) when they acquired a majority ownership stake. The firm is a signatory of the United Nations-supported Principles for Responsible Investment (UN PRI).















# Cana utilizes the expertise of Maseer & Kranesahares (and its consultants) to bring compliance carbon to Defi as a comprehensive solution.

**Maseer** is pioneering an end-to-end tokenization platform for high-quality, high-earning Real-World Assets (RWAs) with full integration into decentralized finance (DeFi) protocols, bridging traditional finance with blockchain technology. The company enables the tokenization of previously inaccessible assets and deploys them directly to public blockchain ecosystems. Co-Founded by three respected entrepreneurs with over 25 years of cumulative experience in regulated crypto platforms, production decentralized finance and web3 policy.

#### **Cana Team Experience**













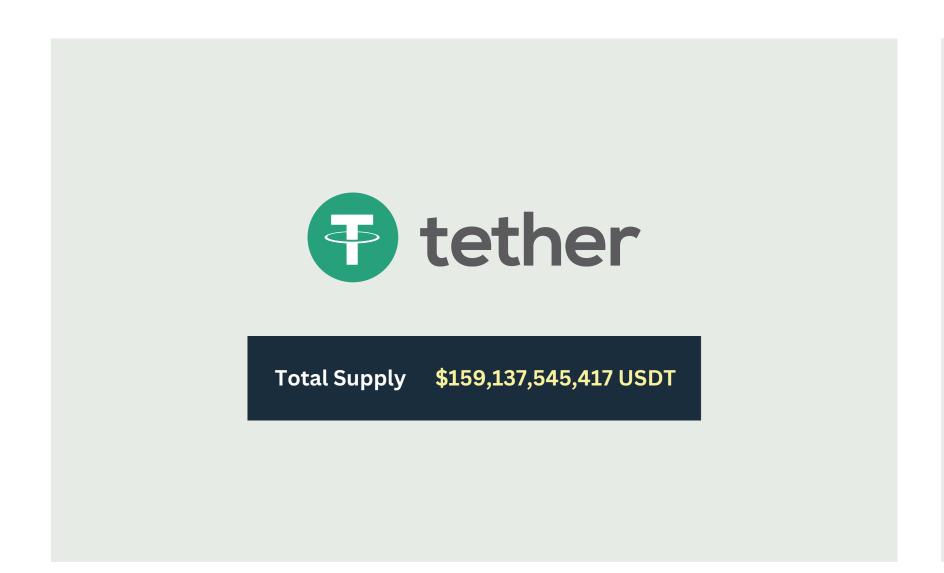




## The Problem:

#### **Dormant Collateral in Web3**

- Billions of USD-pegged stablecoins are currently generating NO yield for holders.
- \$155+ billion of reserves are paying yield to issuers only.





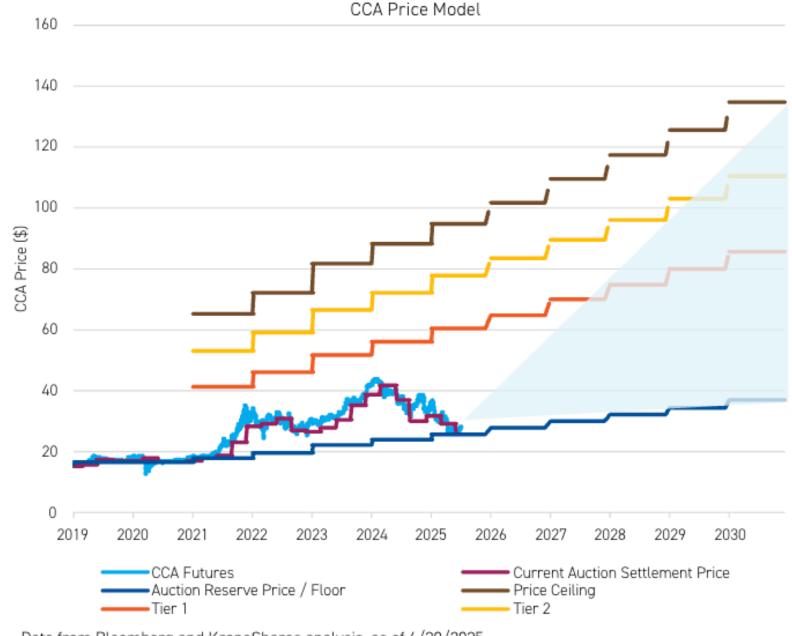
Source: coinmarketcap.com as of July 11 2025 - 11:01am



# The case for California Carbon Allowances:

# **CCA Value Growth**

5x Price Projection from \$28 current market price to \$130+ by 2030 (Bloomberg).



Data from Bloomberg and KraneShares analysis, as of 6/30/2025.



# How CANA Holders Make Money

CANA exists to meet real, proven demand for California Carbon Allowances — an oversubscribed, \$72 BN market that's growing fast but remains hard to access.



# Carbon Credits Face Biggest Test Yet, Could Reach \$238/Ton in 2050, According to BloombergNEF Report

BNEF's Long-Term Carbon Offsets Outlook 2024 shows that the success of the carbon offset market will be determined by the strength of demand and credibility of credits New York and London, February 6, 2024 – Ongoing scrutiny and...

B BloombergNEF / Feb 6, 2024



#### **Growth**

Demand: \$5bn retired annually by Fortune 500 companies. CCA Price projected \$130+ by 2030 (Data from Bloomberg).



#### **Floor Price**

A regulatory built-in price floor that grows the Consumer Price Index + 5%.

4<sup>th</sup> largest economy of the world, the State of California.



## **Collateral Utility**

DeFi-Enabled.

Use as collateral in lending protocols and borrow stables Examples: Morpho, AAVE, Sky, Compound, etc.



# **Boosting Earning**

Buy  $\rightarrow$  Pair  $\rightarrow$  Deploy in DeFi  $\rightarrow$  Earn yield (trading spreads, volatility, demand).

Examples: Uniswap, Curve, Balancer, etc.



# KRANE - CLEAR SKY ENHANCED CARBON OFFSHORE FUND, LTD.

The Cayman Fund exclusively dedicated to Cana Holdings that Owns and Managed Cana Compliance Instrument Tracking System Service (CITSS) account the Physical Carbon

## **KraneShares**

The Partner in conjunction with its consultants, provides the adminsitrative structure and support for the management of the fund complex in relation to the investment decisions of the registrant.

# Cana Holdings Limited

The holding company executes agreements with token holders. Cana will handle purchases, USDT offramps to buy CCAs, and distributions to Cana token holders.

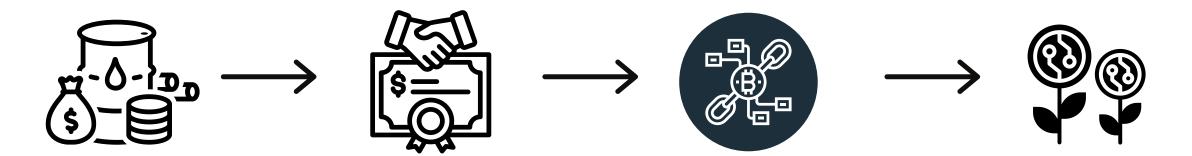
#### **CANA Tokens**

Users receive Cana as ownership a digital warehouse receipt with USDT and are issued Cana Tokens. Their position can be entered and exited via smart contract, and the tokens are ERC-20 and fully compatible with DeFi.



#### **Incentives from Protocols**

Layer 1s and their protocols incentivize investors to move assets there.



Real World Asset Collateral Grows Legal Contract Terms & Conditions

Digitize Contracts as fungible ERC-20 fully collateralized by RWA Deploy in Decentralized
Finance for
more APY

# **Organic Yield Examples**

- Shares of Trading Fees Earned the providing lquidity in UniSwap Pools
- Can Be Earned from Trading Activity
- Earned in CANA and compounded in the trading pool

#### **Artificial Yield Examples**

- Liquidity Incentives
- Earned from incentive fees paid by protocols and Layer 1/2 to attract liquidity
- Earned in protocol + Native Tokens and immediately converted to stablecoins



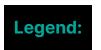
## Cana is Originating Green Sovereign Real-**World Assets**

Sovereign RWAs confer unprecedented competitive advantages in domestic and global markets.

#### **Benefits:**

- Reduced cost of capital and access to new revenue sources.
- Borderless trade 24/7/365.
- Global Foreign Direct Investment into frontier economies' best projects. Targets on excited vertices -NOT T-Bills.
- Inclusive, broad access to national economies to prevent capital flight by providing alternative, local inflation hedges.

Product	CANA	<b>C</b> entrifuge	Ethena	DAI Savings	BUIDL by BlackRock.
Tokenization	V	0	V	V	V
Transparent Collateral	V	O	<b>V</b>	X	O
Asset	Unique High Growth	Unique Investments	Crypto Market Strategy	Treasuries	Treasuries (\$5mm min)
Liquid RWA as ERC-20	V	X	0	X	X
Non-Security	V	X	X	V	X
Single Asset Collateral	V	•	0	X	0
Uncorrelated to Crypto Markets	V	V	X	0	•



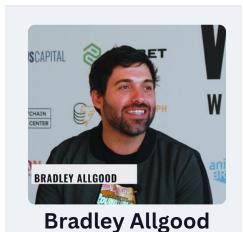




Acceptable X Failure



# The Team



CEO
Maseer LTD

- Founder of US's first Free Economic Zone.
- Founder of multiple blockchain products including sovereign ID protocol and first bankissued stablecoin on public networks.
- Expert in economic development and tokenization with strategic institutional relationships and global network of sovereigns.

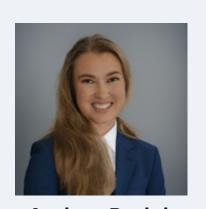


- Previous Senior
   Protocol Engineer at
   MakerDAO
- Piloted the first official on-chain real estate transactions in the United States
- Over a decade of opensource contributions to blockchain projects



Jawaad Bokhari CPO Maseer LTD

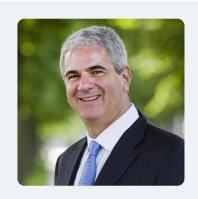
- Former Head of Quantitative Trading at ARB Hedge Fund.
- Built a regulated CEX, exit
- Expert in low-latency algorithmic trading and scalable payments architecture.



Andrea Perlak
CFO

Maseer

- Founder and CEO of Crypto Accounting Group.
- GP/ LP in Crypto Native Funds
- Former World Bank Treasury and KPMG executive.
- 25+ years of Finance and Accounting experience.



Jonathan Krane
CEO
KraneShares

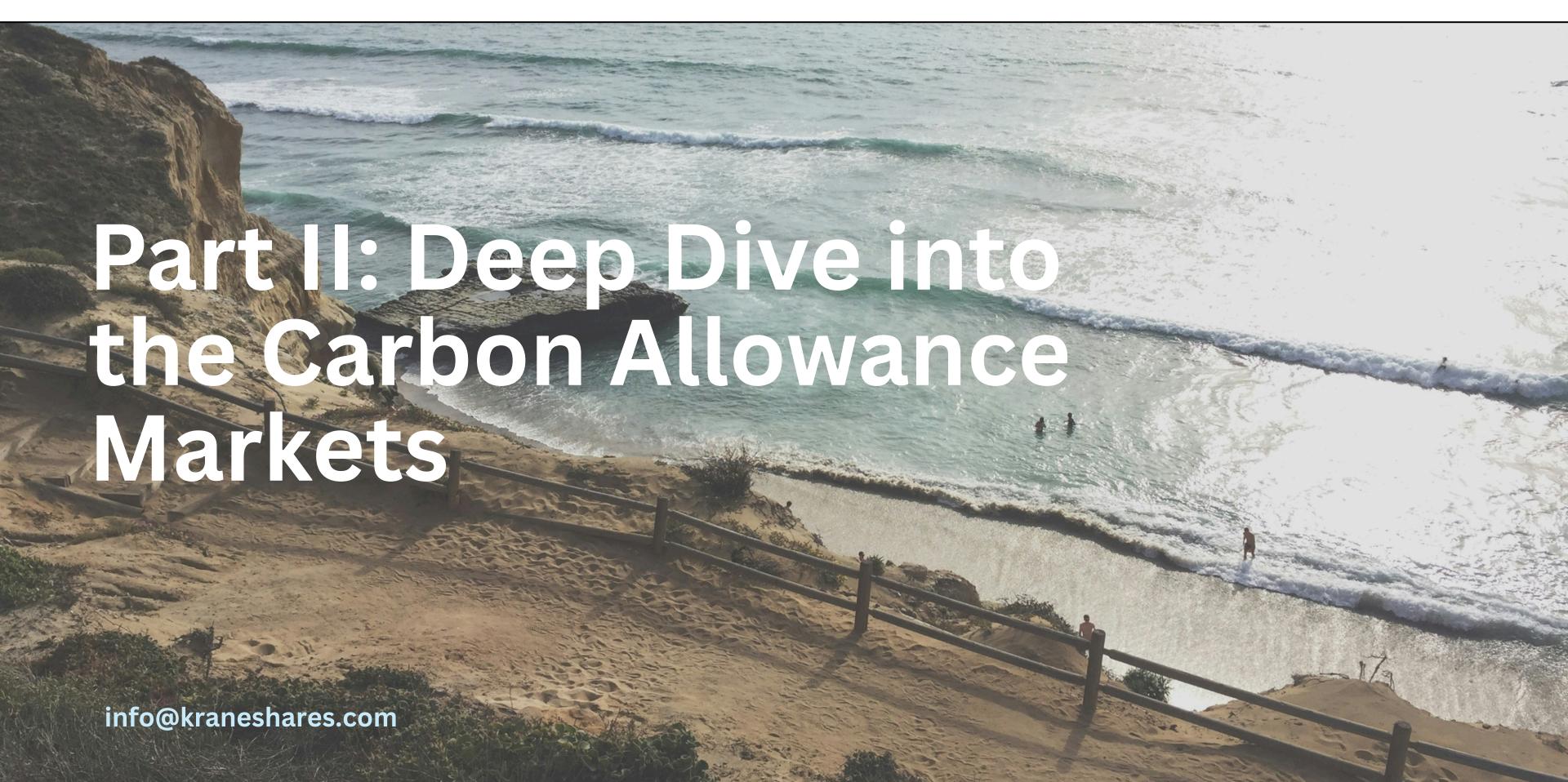
- Jonathan Krane, founder and CEO of KraneShares, a China and climate-focused ETF firm
- With 20+ years of experience in China, Jonathan authored the WSJ Best Seller, The China Dream.
- He holds an MBA from Columbia, a BA from Connecticut College, serves on its board, and is a YPO member.



Shawn Singh
CEO
Clear Sky Advisers

- Clear Sky Advisers: CEO and co-founder, leading sustainable investing and carbon markets.
- DW Partners: General Counsel and CCO, managing \$6B+ in assets, covering legal and compliance.
- Valkyrie Bitcoin ETF: Led legal/compliance for ETF, securing SEC approval and launch.







# **California: The Premier Market Opportunity**

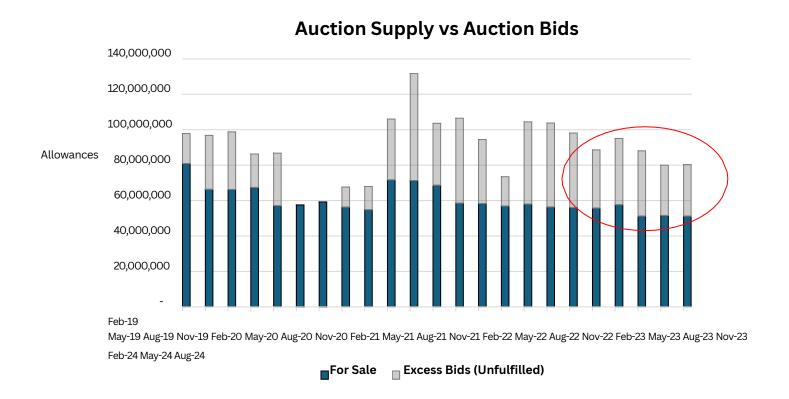
48% emission reduction by 2030 and 85% by 2045

#### Why California?

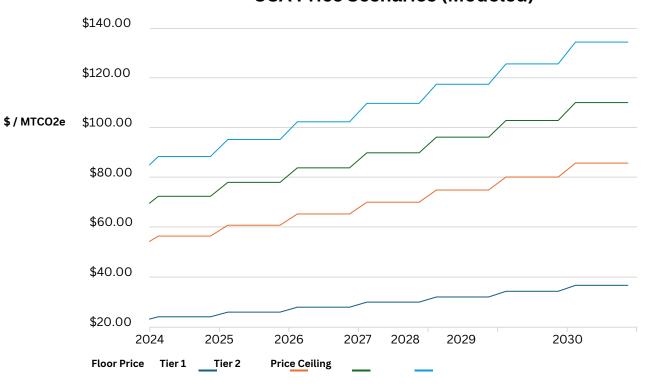
- Cap-and-Trade has been established for more than a decade; it is well supported politically and by industry.
- Cap-and-Trade revenues fund important programs within the state, and in disadvantaged communities.
- In addition to an ambitious target reduction of 48% by 2030, a price floor increases annually at 5% plus CPI\*.

#### Why Now?

- As per CARB staff statements, regulatory proposal to remove 180-265 million allowances over 2026-2030 is expected in September.
- Clear Sky believes Board hearing to approve the proposal are expected in December 2024-February 2025.
- Prices do not reflect the 48% reduction, are well below estimates for the marginal cost of abatement, and the Social Cost of Carbon.
- Nearly 40 million tons of unfulfilled bids at each auction.
- A rulemaking will tighten allowance budgets under Cap-and-Trade, expected to conclude in late 2024 or early 2025.







Source: California Air Resources Board, CSA (as of August 30, 2024)

<sup>\*</sup>CPI: Consumer Price Index is a measure of the average change over time in the prices paid by urban consumers for a market basket of consumer goods and services.

CCA prices are based upon Clear Sky modeling of the auction reserve price, allowance price containment reserve tier 1 and tier 2, and price ceiling, as currently published by CARB in 2024 and escalating annually at 500 bps plus inflation. Inflation is assumed to average 2.25% over the period. Additional information available upon request. Complete details are located at the back of this presentation and are a key part of fully evaluating the data shown.

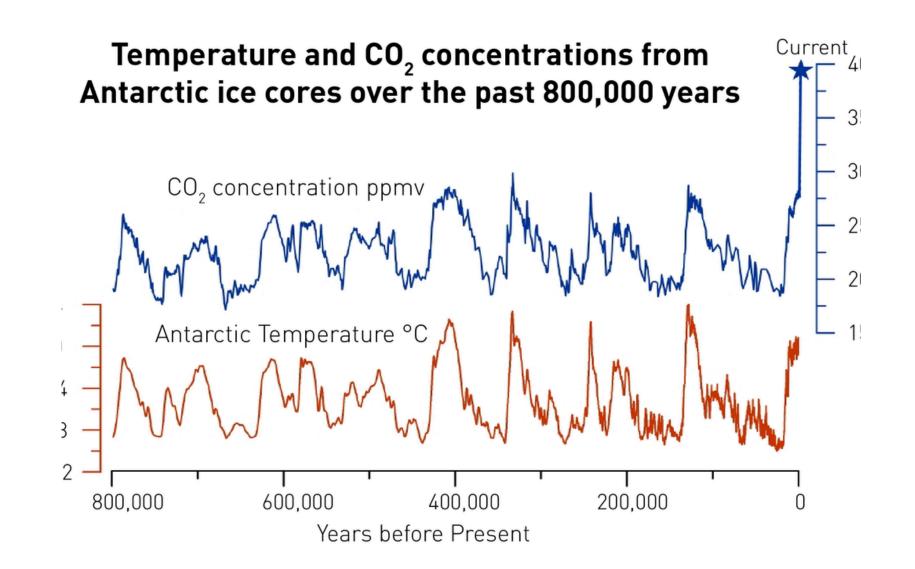


# A climate change crisis? A key indicator is signaling a million-year anomaly...

# Scientists are confident that humans are the primary cause of climate change:

- According to the Fourth National Climate Assessment, the US government's official report on the impact of climate change:
- Many independent lines of evidence support the finding that human activities are the dominant cause of recent (since 1950) climate change.
- Atmospheric carbon dioxide (CO₂) levels have increased from approximately 270 parts per million by volume (ppmv) during preindustrial times to the current 408 ppmv observed in levels that exceed any observed over the past 800,000 years.
- A 40% increase in atmospheric CO₂ levels since the Industrial Revolution is due mainly to human activities (primarily the combustion of fossil fuels).

Source: U.S. Global Change Research Program, Fourth National Climate Assessment, 2018.



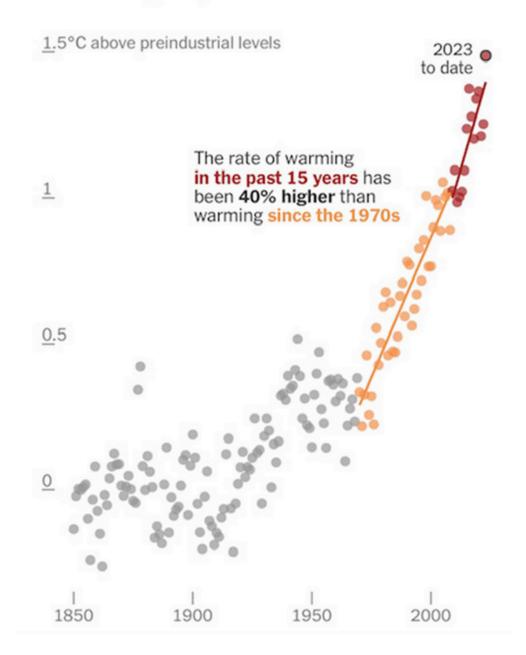
Using Antarctic ice cores scientists can measure past concentrations of gases in the atmosphere. Antarctic ice cores contain distinct layers from snowfall accumulated over thousands of years. Using the air captured in the layers, scientists measure historic atmospheric concentrations.



#### **The Problem**

# Global warming may have accelerated in the past 15 years

Annual average temperatures since 1850



Source: NY Times, "I Study Climate Change. The Data Is Telling Us Something New." Oct. 13, 2023.

## The Investment Solution

Economists forecast the largest capital cycle in history to address climate change. To capture the investment opportunity, investors should consider being long the California Cap and Trade: even under republican office.

- The **S&P Global Carbon Credit Index** rose by **225%** during Trump's first term<sup>2</sup>.
- Compliance carbon markets in the U.S. are managed at the state level.

  California and RGGI states set their own rules, making these programs largely independent of federal influence.
- Both California's program and RGGI have proven resilience withstanding numerous legal challenges throughout the years.
- Prioritization of fossil fuel development under Trump could lead to increased emissions and increased demand for allowances, which could increase prices.
- More speculatively, the US could pursue an EU-style Carbon Border Adjustment Mechanism as a form of carbon tariff, which could increase.

<sup>1.</sup> McKinsey & Company, "The net-zero transition," January 2022 2. Data from Bloomberg 12/31/2015 through 12/31/2020



# **Compliance vs. Offset Carbon Credits**

	Cap-and-Trade/Emission Trading System (ETS)	Carbon Offset
Unit Type	Permit to emit one metric ton of CO2	Verified reduction of one metric ton of CO2
Purpose	Reduce emissions over time for specified regions/industries through a declining annual cap and additional supply adjustment mechanisms	Balance an entity's carbon footprint by investing in projects that reduce or remove emissions
Examples	EU ETS, California Cap-and-Trade, Regional Greenhouse Gas Initiative (RGGI), UK ETS	Building wind turbines or solar farms, supporting methane reduction projects, reforestation, preserving mangroves
Participation	Mandatory (Compliance)	Voluntary
Issuer/Oversight	Central governments and states, government agencies, non-profit corporation  RGGI Inc.  European Commission	Issuers are project developers. Oversight is provided by NGOs/independent verification entities.  VERRA  CLIMATE Gold Carbon Registry  Carbon Registry
Market Size	\$900 billion¹	\$2 billion²
Project-based	No	Yes
Credit Sale	Purchased at auction or (if an entity qualifies) allocated for free	Bought directly from project developers or broker/intermediary

Source: International Carbon Action Partnership, retrieved 9/30/2024.

<sup>1.</sup> Reuters, "Global carbon markets value hit record \$909 bln last year," 2/7/2023.

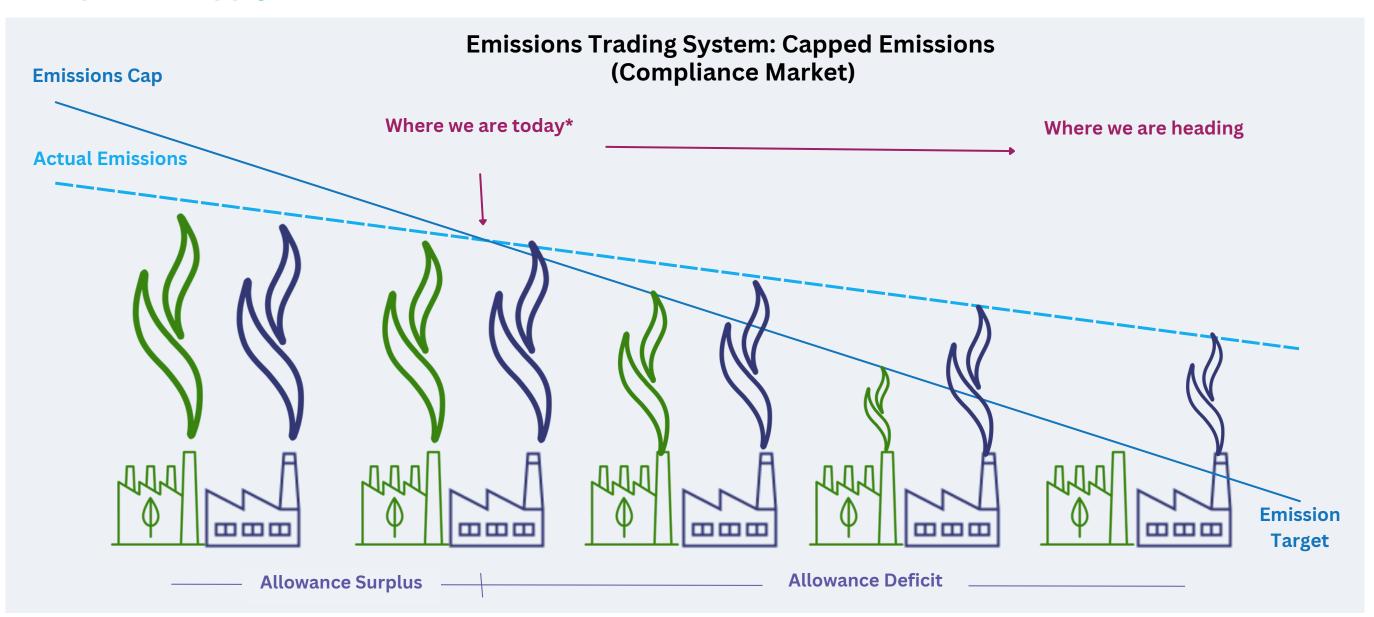
<sup>2.</sup> Reuters, "Voluntary carbon markets set to become at least five times bigger by 2030," 1/19/2023.



## **Compliance Carbon Market Overview**

• Emissions Trading System (ETS), or Cap-and-trade, is a government mandated & regulated, standardized, liquid market valued at \$900B in 2023,¹ while the offsets market consists of non-standardized carbon reduction/removal projects collectively worth \$2B.²

#### **Transparent Supply with Mandated Demand**



# Mandatory participation for specified industries



<sup>\*</sup>KraneShares/ CliFi models show that 2024-25 is the year we see allowance surpluses going into deficit in certain defined markets.

<sup>1.</sup> Reuters, "Global carbon markets value hit record \$909 bln last year," 7/Feb/2023.

<sup>2.</sup> Reuters, "Voluntary carbon markets set to become at least five times bigger by 2030," 19/Jan/2023.



#### How carbon allowances can reduce emissions

# **Potential Benefits of Carbon Pricing**



#### **Auction Revenue**

Sustainable Communities & Clean Transportation High-Speed Rail

Energy Efficiency forSocial Climate Fund

Public Buildings Wetlands & Watershed Restoration

Energy Efficiency &

Expansion & Electrification Clean Energy of Public Transit

Affordable Housing & Natural Resources & Sustainable Communities Program Program

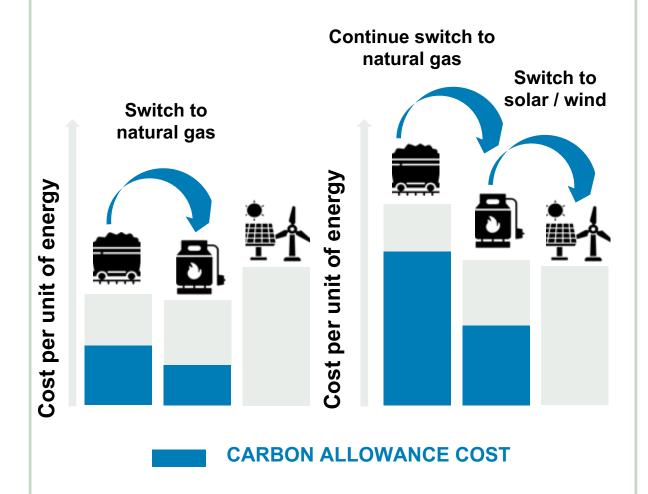
Greenhouse GasFire Prevention & Reduction Fund Urban Forestry Projects

**Modernization Fund** Power Plant Decommissioning Electric vehicle (EV) Rebates



#### **Fuel Switching**

#### **Coal -> Natural Gas -> Renewables**





#### **Accelerating Innovation**

**Fusion & Modular** Nuclear



**Aviation Redesign** 



**Energy Storage** 



**Carbon Capture Use** & Storage



Renewable Technology



**Energy Intensive Industries** 

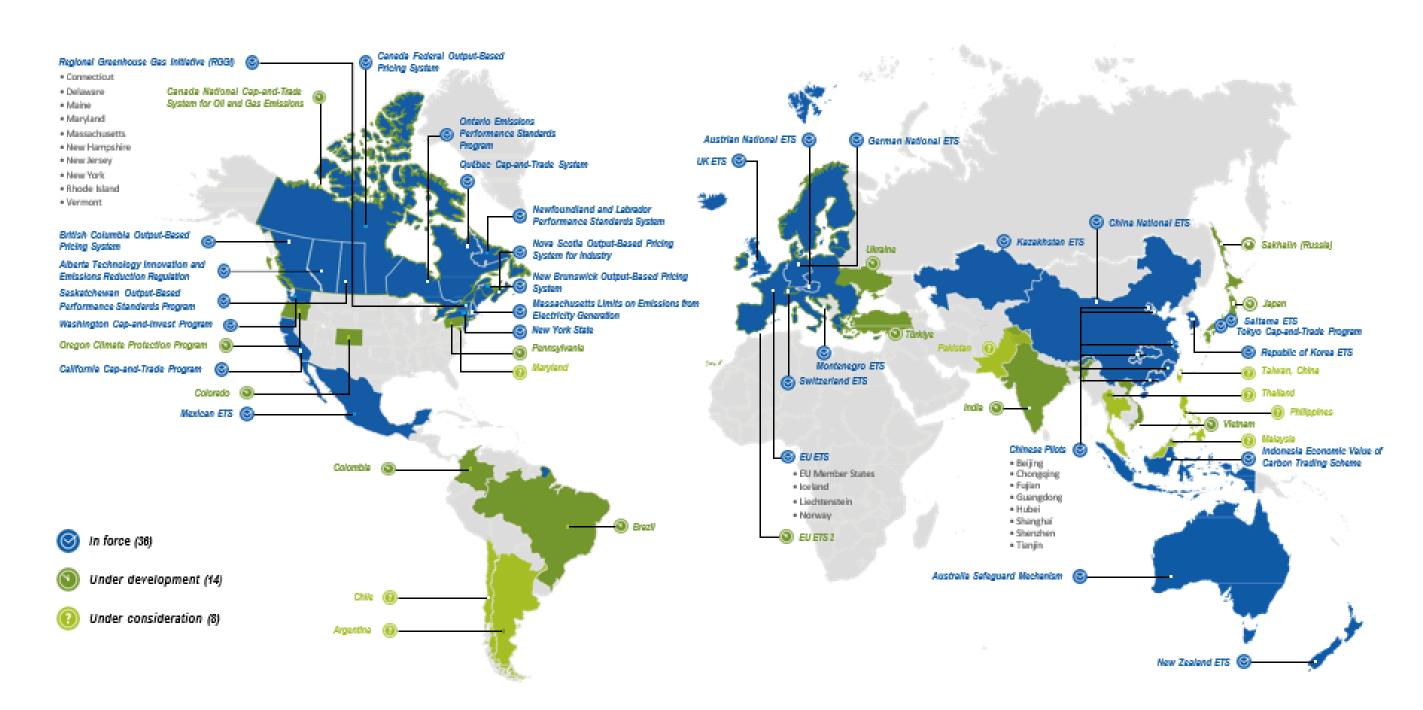




# Compliance carbon is a dynamic market expected to rapidly expand across regions

# Expansion of Carbon Pricing is Critical to Achieve Emissions Targets

70+ carbon pricing programs worldwide, covering ~25% of global emissions
On average, carbon programs cover just 30% of a country's total emissions at a price of \$25/MtCO2e



Source: ICAP and Morgan Stanley, "CBAM and the Path to a Global Carbon Price," May 8, 2024.



#### California Carbon Allowances: "Collateral for our notes"

A Differentiated Investment In The Driver Of Decarbonization In California Since 2012

#### **Strategy (Buy-and-Hold)**

- Long-biased in physical California Carbon Allowances (CCAs).
- We believe CCAs are the best opportunity in the regulated carbon markets.
- Strategy could seek to lower volatility by adding protection with tactical trading (see Optional Risk Management).

#### **Optional Risk Management (Tactical)**

- Existing "Floor" of \$24.04 (2024) increases annually at 5% plus inflation; mitigates downside risk like a regulatory put option.
- Proposed Risk Strategy Mitigation: increases as prices move above the floor, decreases as prices move towards the floor.
- Proposed trading strategy with conservative focus to offset cost of downside protection.
- Proposed Leverage: increases as prices move towards the floor and decreases as prices move above the floor.

#### **CCA Spot, Auction and Floor Price**



Source: Intercontinental Exchange, California Air Resources Board (August 30, 2024)

Cana is accompanied by risk. California Carbon Allowance are speculative and involves significant risks, including possible loss of the entire value. Please review the special considerations at the end of this presentation.



# California cap-and-trade hitting its inflection point, shifting into an annual deficit starting in 2024

- 150Mt removed from the emissions budget to align the annual allowance cap with the 2022 Scoping Plan's accelerated emissions reduction target of 48% below 1990 levels by 2030 compared to the prior target of 40%<sup>1</sup>.
  - Annual emission caps reduction rate could increase to 9-14% from the current 4% rate<sup>2</sup>.
- Remove excess supply in the market through a combination of reducing price ceiling reserve accounts, auction amounts, or free allocations.
- Additional supply cut of 115Mt to adjust for lower emissions numbers after applying the updated 2022 methodology for measuring emissions to prior periods<sup>1</sup>.

#### **Overall Impact:**

Collectively, these measures would **remove about 20% from the 2025-2030 emissions budget** 

Introducing an explicit supply adjustment mechanism like the MSR in the EU ETS, could lead to a 30% removal<sup>1</sup>

Approval of the reform is expected by year-end and implemented in 2025

<sup>2022</sup> Climate Change Scoping Plan
Achieving Carbon Neutrality by 2045

Greenhouse gases
485%

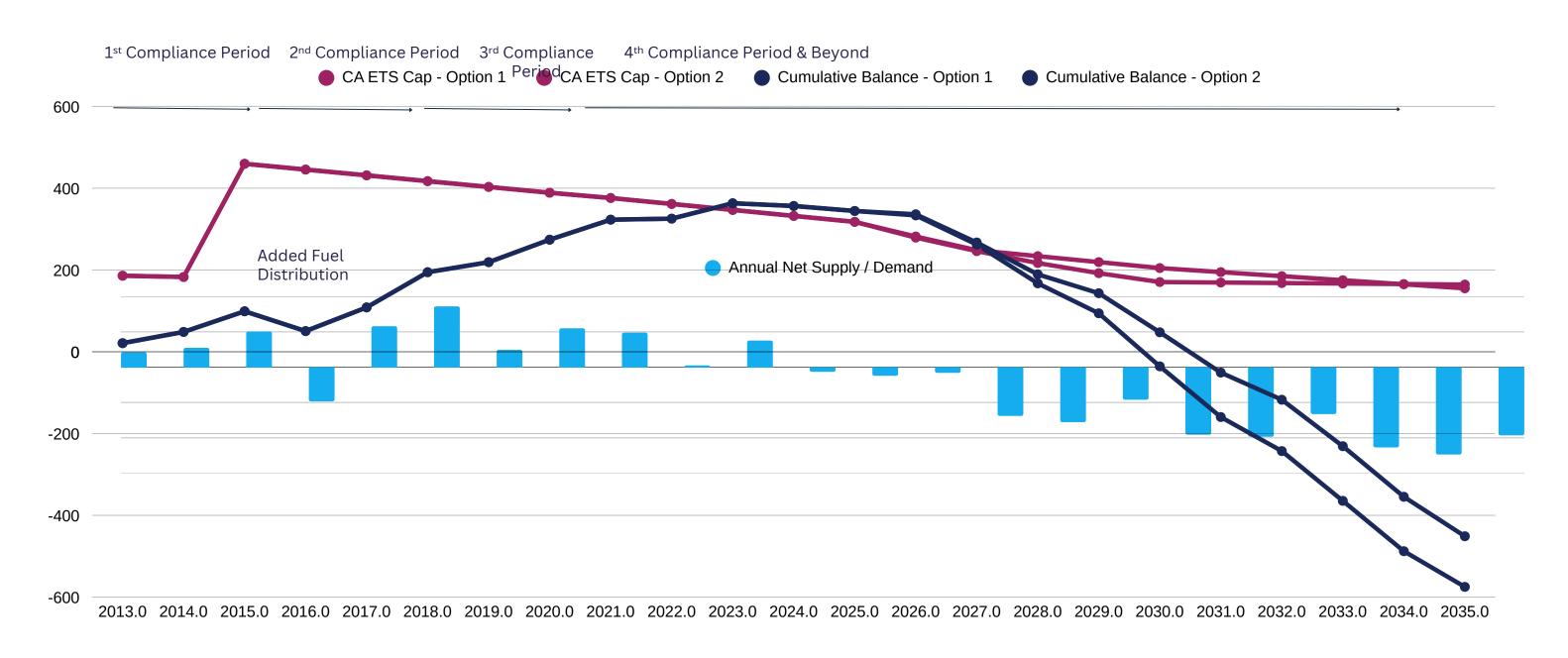
Air pollution
771%

Fossil fuel
94%

<sup>1.</sup> Sources: CLIFI, CARB, "Cap-and-tradeCap-and-trade Program Workshop", 7/27/2023 2. NACW, "Plenary: Status and Outlook for North American Compliance Markets", March 2024



# **Supply & Demand Model: California**

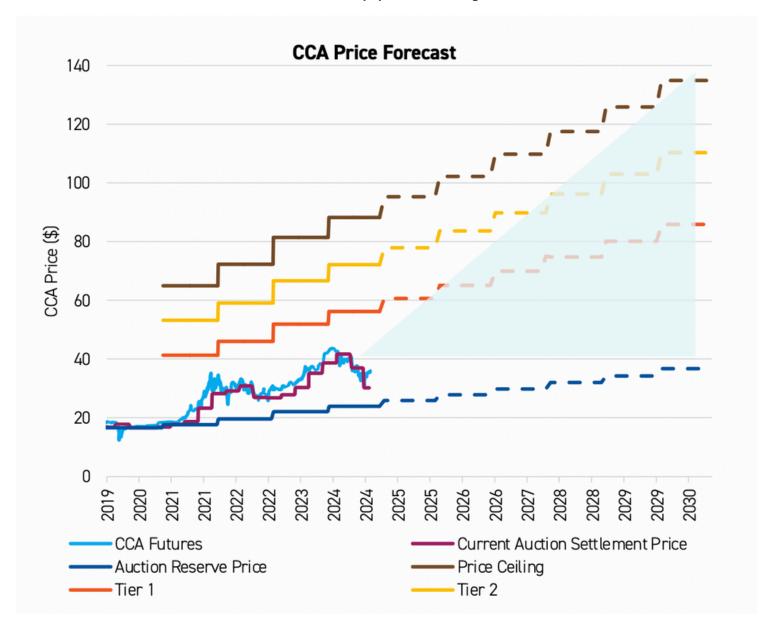


Proprietary CLIFI Model. Last updated 9/30/2024. California operates under the Western Climate Initiative (WCI), which administers the shared emissions trading market between California and Québec.



# Market structure helps drive carbon pricing, provides downside protection & rises above inflation

The price floor and ceiling levels shape the California carbon allowance (CCA) investment opportunity



Data from Bloomberg and KraneShares analysis, as of 9/30/2024.

#### **CCA Price Forecasts**

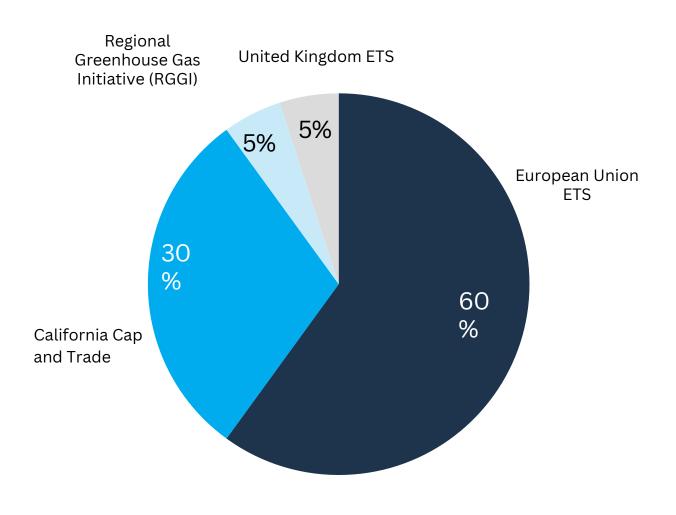
CARB	\$134 by 2030	Based on their alternative scenario modeling for the 48% and 55% targets, with prices moving in line with the price ceiling
BNEF	\$79 by 2030	Based on the 48% emissions reduction target and REPowerEU frontloading
cCarbon	+\$90 by 2030	Based on 48% targets, with the expectation that carbon capture, utilization, and storage (CCUS) and new abatement opportunities will lead to greater decarbonization efforts at higher carbon prices
Clear Blue Markets	\$86 by 2030	Based on the assumption that prices will hit the Tier 1 level
Macquarie	\$82 by 2030	Based on the where prices need to reach to achieve the 48% target with backdating methodology for the annual cap reduction

Source: Bloomberg New Energy Finance (BNEF), Sep 2024; Macquarie Insights, Sep 2024; cCarbon, "CARB's Nov'23 Workshop indicates CCAs to trade along the price ceiling at \$115 by 2030; high prices may push CARB to tread on a tightrope," 11/17/2023; California Air Resources Board (CARB), Cap-and-Trade Meetings and Workshops, Combined Presentation, retrieved 05/Jan/2024. Clear Blue forecasts retrieved Sep 2024. Price targets are estimates from the sources indicated and do not indicate any actual investment.



# Why carbon allowance futures? Liquidity and market size

S&P Global Carbon Credit Index Weighting<sup>2</sup>



Top 4 carbon allowance futures markets annual trading volume and market growth by annual trading volume<sup>1\*</sup>

July 31, 2014 – December 31, 2023

Year	EUA volume (billions)	UKA volume (billions)	CA volume (billions)	RGGI volume (billions)	Total volume	EUA YoY growth	UKA YoY growth	CA YoY growth	RGGI YoY growth	Total growth
2023	668.5	28.0	52.0	5.6	754.1	6%	-15%	17%	-3%	6%
2022	628.9	32.8	44.5	5.8	712.1	-4%	88%	1%	77%	-1%
2021	652.0	17.5	43.9	3.3	716.7	159%	-	108%	120%	161%
2020	251.8	-	21.1	1.5	274.4	23%	-	44%	10%	24%
2019	205.0	-	14.7	1.4	221.0	36%	-	116%	35%	39%
2018	150.8	-	6.8	1.0	158.6	354%	-	31%	81%	307%
2017	33.2	-	5.2	0.6	39.0	11%	-	56%	-57%	13%
2016	30.0	-	3.3	1.3	34.6	-31%	-	-12%	-1%	-28%
2015	43.2	-	3.8	1.3	48.2	-	-	-	-	-
2014	44	-	0.3	-	44.3	-	-	-	-	-

<sup>1.</sup> Data from Bloomberg as of 12/31/2023.

<sup>2.</sup> Data from S&P Dow Jones Indices. Weightings as of annual rebalance on 11/30/2023.

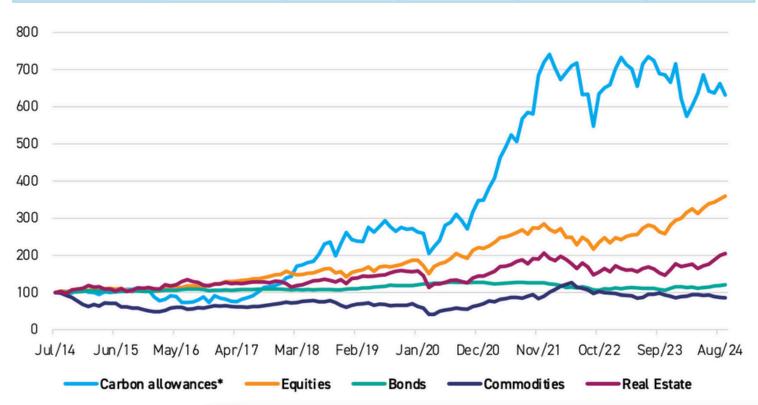
<sup>\*</sup>See end of presentation for definitions.



#### Carbon allowance markets risk and reward

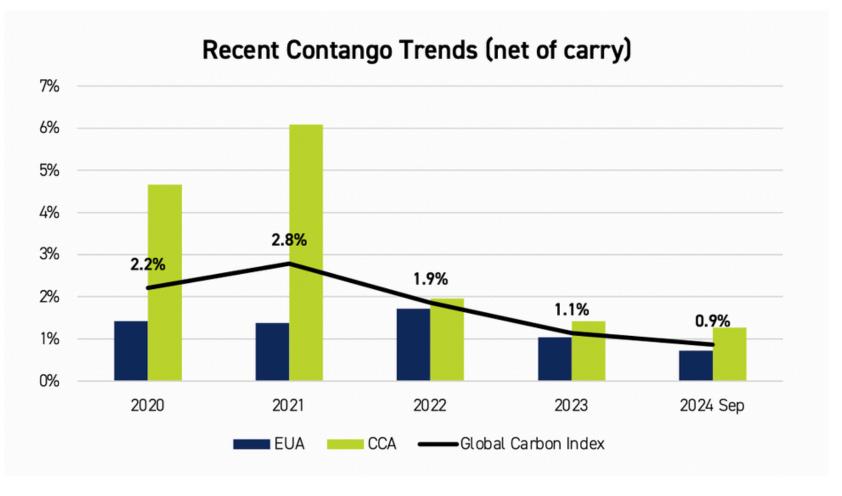
# Performance of carbon allowances versus major asset classes<sup>1</sup> Aug 31, 2014 - Sep 30, 2024

	Carbon Allowances*	Equities	Bonds	Commodities	Real Estate
Annualized Return (%)	19.89%	13.41%	1.85%	-1.50%	7.32%
Annualized Volatility (%)	28.36%	15.17%	4.91%	22.33%	18.19%
Sharpe Ratio	0.75	0.78	-0.01	0.02	0.32



#### Carbon allowance futures exhibit low correlation to other asset classes

Correlation (Monthly) Aug 31, 2014 – Sep 30, 2024							
Correlation US Equities Bonds Commodities Real Estate Gold Oil							
Carbon Allowances*	0.296	0.069	0.294	0.250	-0.055	0.272	

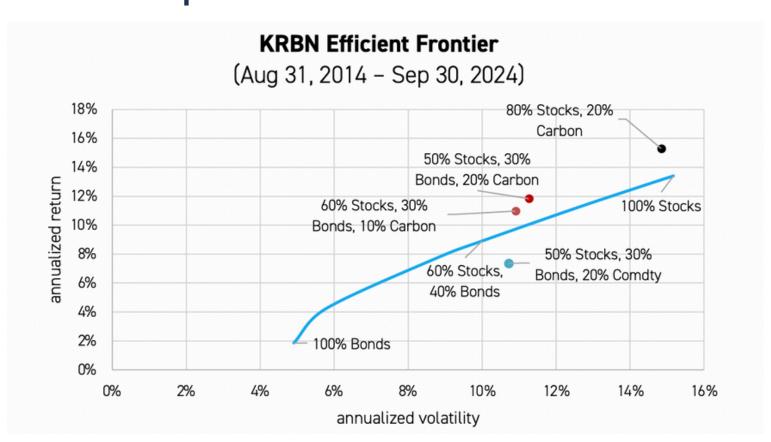


Source: CLIFI and ICE as of 11/Sep/2024.

Data from Bloomberg and S&P Indices as of 8/31/2014-9/30/2024.\*Carbon allowances: top four carbon allowance markets (weighted by volume) versus major asset classes. See end of presentation for material differences between asset types and definitions; Equities: S&P 500; Bonds: The Agg; Commodities: The S&P GSCI; Real Estate: MSCI US REIT Index. Index returns are for illustrative purposes only and do not represent actual Fund performance. Index returns do not reflect any management fees, transaction costs or expenses. Indexes are unmanaged and one cannot invest directly in an index. Past performance does not guarantee future results.

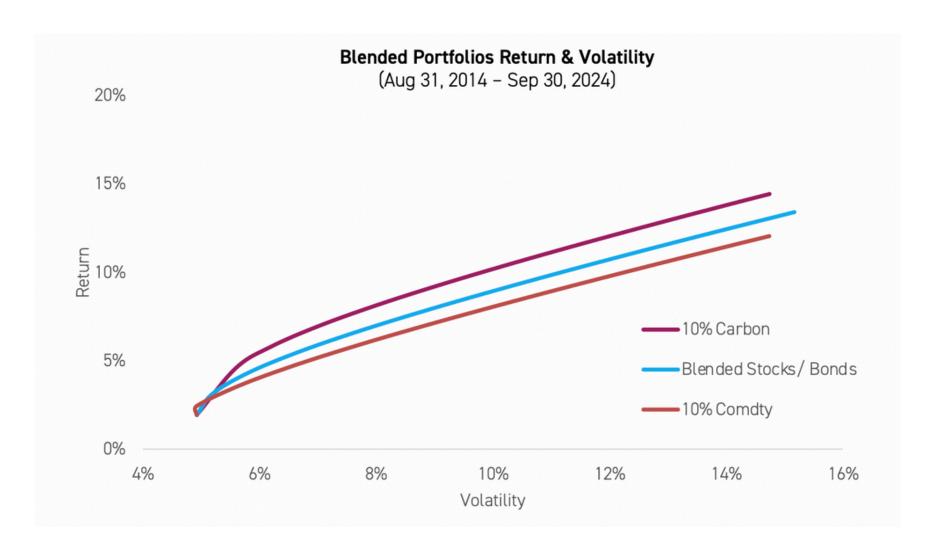


# Adding carbon allowances\* may enhance returns when used as a complement to a traditional 60% stock and 40% bond portfolio



Portfolio Model	Annual Return	Volatility (Risk)
100% Bonds	1.85%	4.91%
100% Stocks	13.41%	15.17%
100% Carbon	19.49%	28.33%
60% Stocks, 40% Bonds	8.91%	10.00%
60% Stocks, 30% Bonds, 10% Carbon	10.98%	10.90%
50% Stocks, 30% Bonds, 20% Commodities	7.36%	10.71%
80% Stocks, 20% Carbon	15.30%	14.84%

#### Allocating as little as 10% may yield risk-adjusted performance benefits



Data from Bloomberg and S&P Dow Jones Indices as of 9/30/2024. \*Carbon allowances: see end of presentation for material differences between asset types and definitions; Equities: S&P 500; Bonds: The Agg; Commodities: The S&P GSCI. Index returns are for illustrative purposes only and do not represent actual Fund performance. Index returns do not reflect any management fees, transaction costs or expenses. Indexes are unmanaged and one cannot invest directly in an index. The above chart is purely hypothetical and is not meant to inform any investment decision. Past performance does not guarantee future results.



# **High Level Overview**

	Market Structure Comparison							
	European Union ETS	California Carbon Allowance Market (CCA)	United Kingdom ETS	Regional Greenhouse Gas Initiative (RGGI)				
Start of Operation	2005	2012	2021	2009				
Region	EU countries plus Iceland, Liechtenstein and Norway	California linked with Quebec	United Kingdom	11 Northeastern US states				
Currency	Euro	US Dollar	British Pound	US Dollar				
Sector Coverage	Domestic Aviation, Industry, Power	Transport, Buildings, Industry, Power	Domestic Aviation, Industry, Power	Power				
Сар	1,464.8 MtCO2e	294.1 MtCO2e	147.2 MtCO2e	93.0 million short tons CO2 or 88.0 MtCO2				
Annual Cap Reduction	4.3% in 2024, 4.4% in 2028	~4% per year between 2021-2030	~2.8% reduction in 2022 (declines by 4.2 MtCO2e per year)	~3% of the 2020 cap between 2021-2030				
Market Mechanism	Market Stability Reserve (MSR)	Auction Reserve Price Allowance Price Containment Reserve	Transitional Auction Reserve Price (ARP) Cost Containment Mechanism	Auction Price Floor Cost Containment Reserve (CCR) Emissions Containment Reserve (ECR)				
TNAC*	1,135.79 MtCO2e	~300 MtCO2e	18 MtCO2e	80 MtCO2e				
Auction Frequency	Weekly	Quarterly	Every 2 weeks	Quarterly				

Source: International Carbon Action Partnership, retrieved 6/30/2024. \*TNAC: total number of allowances in circulation, a term specific to the EU ETS but is a measure of the allowance surplus, TNAC data as of 12/31/2022.

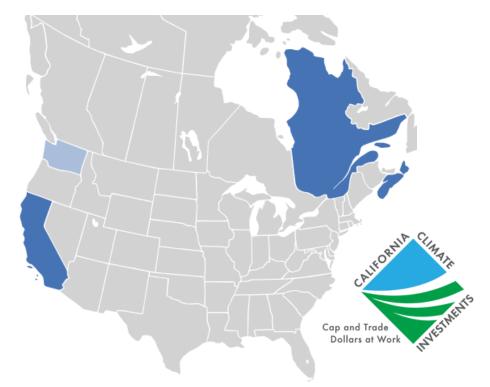


# California Carbon Allowance Market (CCA)

The CCA market launched in 2012, and now covers ~75% of the state's GHG emissions. California joined the Western Climate Initiative (WCI) in 2007 and linked its program with Québec's in January 2014.

#### **Market Outlook:**

- 2022 Scoping Plan increased the emissions reduction target to 48% below 1990 levels. Results in annual cap reduction factor rising to 9% from the current ~4%.
- 2023 reserve price increased to \$24.04, up from \$22.21 while the ceiling price increased to \$88.22 from \$81.50. Implies 8.2% natural upside tailwind (increase of 5%+CPI) without changes in demand/supply.
- Provides potential hedge against inflation through a price floor that is pegged to inflation rates, i.e., the price floor rises 5% plus Consumer Price Index (CPI), see Case Study 1 slide for more details.



	CCA Overview
<b>Start of Operation</b>	2012
Sector Coverage	Transport, Buildings, Industry, Power
Currency	US Dollar
<b>Auction Frequency</b>	Quarterly
Сар	280.7 MtCO2e (2023)
Annual Cap Reduction	Between 2021-2030, the cap declines by about 13.4 MtCO2e each year, averaging about 4% per year, to reach 200.5 MtCO2e in 2030
TNAC*	~300 MtCO2e
Verified Emissions	292.2 MtCO2e
Total Revenue Since Start	\$27.0 billion
Governing Organization	California Air Resources Board (CARB)
Evaluation / ETS Review	CARB is required to update their "California Climate Change Scoping Plan" at least every five years and provide annual reports to committees of the legislature and the board
GHG Reduction Targets	By 2030: 40% reduction from 1990 GHG levels By 2045: Achieve carbon neutrality

<sup>\*</sup>TNAC: total number of allowances in circulation, a term specific to the EU ETS but is a measure of the allowance surplus. TNAC as of 9/30/20224

International Carbon Action Partnership, "USA - California Cap-and-Trade Program Factsheet," retrieved 9/30/2024



# California Carbon Allowance Market (CCA)

	CCA Market Stability Mechanism						
Auction Reserve Price (Floor Price)	\$24.04 per allowance (EOY 2024)	The auction reserve price increases annually by 5% plus inflation, as measured by the Consumer Price Index.					
Allowance Price Containment Reserve (APCR)	price tiers and a pr	each annual cap are placed in the APCR, where they are distributed into two rice ceiling. Two-thirds of the allowances are distributed evenly across the two e remaining third, plus unsold allowances that have been transferred into the the price ceiling.					
Cost Containment Reserve	(66,811,000 credits) Contract Tier 2: \$72.21		Tier prices increase by 5% plus inflation (as measured by the Consumer Price Index) It allows covered entities access to allowances at set prices as a hedge against higher costs.				
Price Ceiling	\$88.22		At the price ceiling, a compliance entity can purchase CCAs (or, if no allowances remain, "price ceiling units") up to the amount of its current unfulfilled emissions obligation. The revenues from the sale of price ceiling units will be used to purchase additional emissions reductions on a ton for ton basis. Price ceiling sales only occur when no allowances remain at the two lower tiers and an entity cannot meet its obligation with its existing account.				

Source: International Carbon Action Partnership, "USA - California Cap-and-Trade Program Factsheet," retrieved 12/30/2023; Prices are for 2024, as listed by the California Air Resource Board, Cost Containment Information, retrieved 9/30/2024.

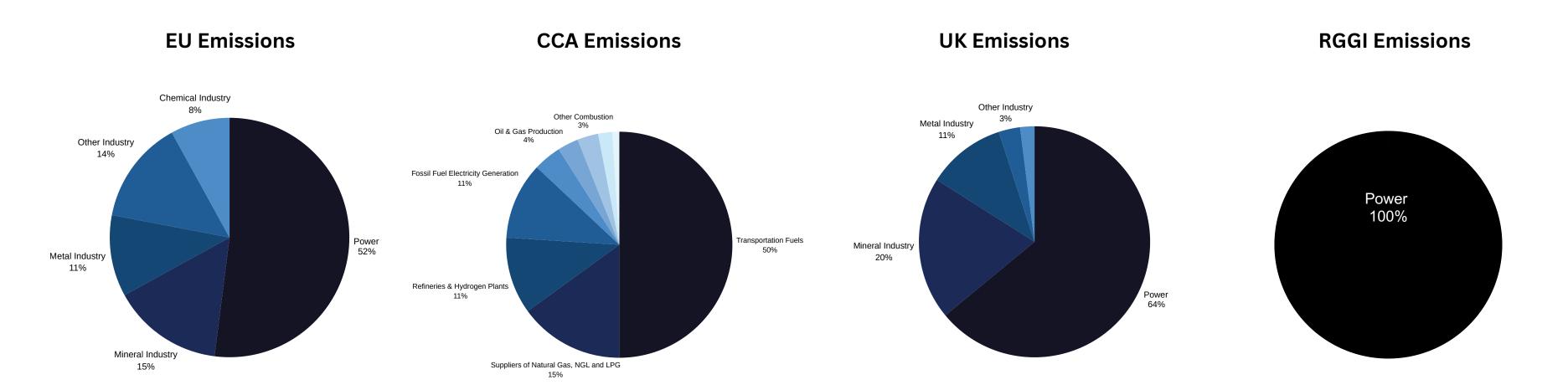
## • CCA Market Top Buyers

Company name	<ul><li>Total Covered Emissions</li></ul>	• % of Annual Cap
• Chevron U.S.A., Inc.	• 12,339,195	• 4.09%
MARATHON PETROLEUM COMPANY, LP	• 10,859,257	• 3.60%
<ul> <li>Southern California Gas Company</li> </ul>	• 6,437,755	• 2.14%
Phillips 66 Company	• 5,643,777	• 1.87%
<ul> <li>Pacific Gas and Electric Company</li> </ul>	• 5,580,448	• 1.85%
<ul> <li>PBF Energy Western Region, LLC</li> </ul>	• 4,984,949	• 1.65%
<ul> <li>Valero Marketing and Supply Company</li> </ul>	• 3,603,171	• 1.20%
<ul> <li>Shell Energy North America (US), LP</li> </ul>	• 2,603,064	• 0.86%
• Calpine Energy Services, LP	• 2,273,012	• 0.75%
<ul> <li>BP Products North America, Inc.</li> </ul>	• 2,171,380	• 0.72%

Source: CARB, as of 8/31/2022.



# Breakdown of Emissions by Sectors Covered Under the Cap-and-Trade Programs



Source: cCarbon as of 12/31/2021



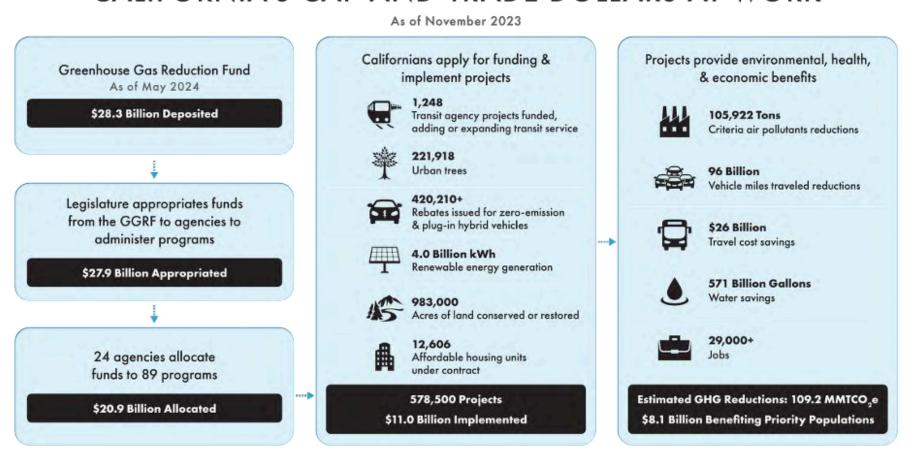
## Case Study: Auction Revenue Use in California

- California has implemented nearly 600,000 climate/development projects worth \$9.3 billion since the start of the program. Roughly 76% of funding is directed toward low-income communities.
- Revenue generated at auctions is returned to utility ratepayers through the California Climate Credit and funds the Greenhouse Gas Reduction Fund and the California Climate Investments program, which support investments in energy efficiency, clean transportation, solar energy, and other GHG-reducing projects.
- For an interactive map of climate investments statewide, visit <a href="https://webmaps.arb.ca.gov/ccimap/">https://webmaps.arb.ca.gov/ccimap/</a>.

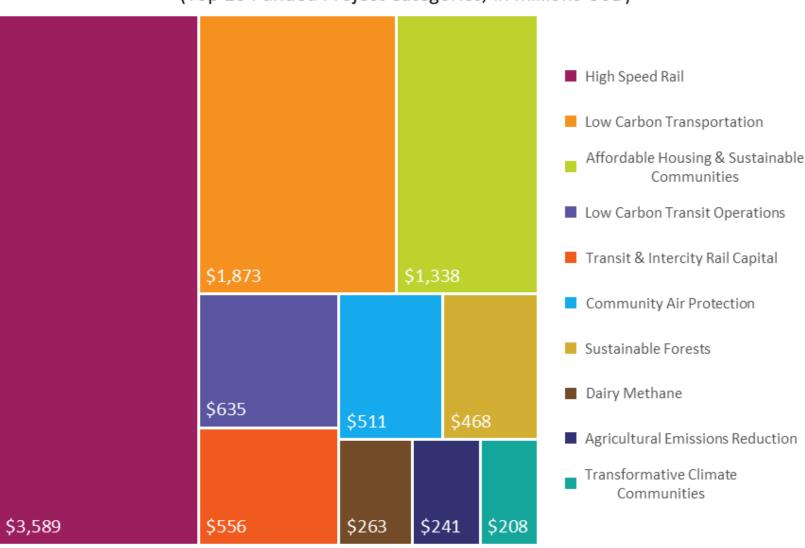
"This is the backbone of our climate funding in this state...It's a point of deep pride that we continue to be a model for the rest of the nation, and for that matter, around the world."

-Governor Gavin Newsom

#### CALIFORNIA'S CAP-AND-TRADE DOLLARS AT WORK



# Total Implemented Investments from the Greenhouse Gas Reduction Fund (Top 10 Funded Project Categories, in millions USD)



Source: CA Climate Investments and Berkley Law as of November 2022.

Source: CA Climate Investments, "2024 Annual Report, Cap and Trade Proceeds."



# Case Study: Beyond 2030, CCA plays a crucial role in achieving new tightened emissions targets

- Though the cap-and-trade program does not technically expire until 2050, CARB's authority to actively operate and revise the program beyond 2030 will likely require a new legislative initiative.
- While there has been some uncertainty surrounding the extension of the CCA program, below are key reasons supporting the carbon market beyond 2030.

#### Market caps set to 2050

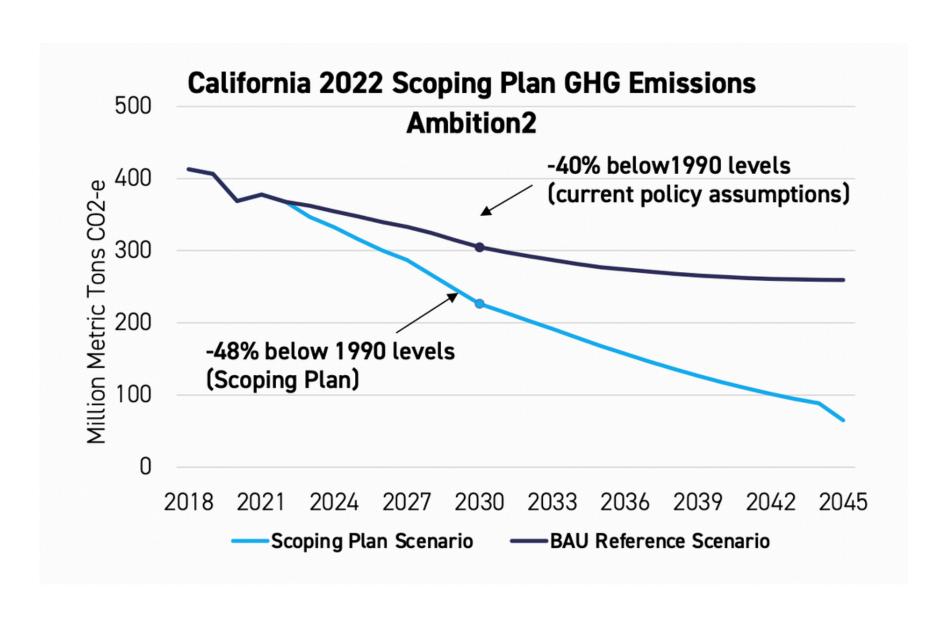
CCA program regulation includes specific annual market caps through 2031, with a predetermined formula to set annual caps from 2032-2050.1

#### Room to contribute to 2045 carbon neutrality goals

The emissions in 2030 are expected to be ~200Mt with the Scoping Plan's new emissions reduction target, while the Reference scenario (no policy change) projects them to be ~300Mt.<sup>2</sup>

#### CCAs can be auctioned years in advance

According to law firm, Sheppard Mullin, the program would have to end several years before 2030 to prevent the loss of value from CCAs auctioned in advance. The lawyers argue this risk highlights how the current provision's 2030 date is 'meaningless'.<sup>3</sup>



<sup>1.</sup> CARB, "Unofficial electronic version of the Regulation for the California Cap on Greenhouse Gas Emissions and Market-Based Compliance Mechanisms," p. 110, April 2019. 2. CARB, CLIFI as of 2/28/2023.

<sup>3.</sup> Carbon Pulse, "California's ARB has authority to operate cap-and-trade program beyond 2030 -law firm," October 26, 202



#### **Important Notes:**

Cana is accompanied by risk. An purchase of Wearhouse Receivables of California Carbon Allowances held in a KRANE - CLEAR SKY ENHANCED CARBON OFFSHORE FUND, LTD. is speculative and involves significant risks, including possible loss of the entire value. Please review the special considerations at the end of this presentation.

#### Risk Disclosures:

This information should not be relied upon as research, investment advice, or a recommendation regarding any products, strategies, or any security in particular. This material is strictly for illustrative, educational, or informational purposes and is subject to change. Certain content represents an assessment of the market environment at a specific time and is not intended to be a forecast of future results; material is as of the dates noted and is subject to change without notice.

CANA relies on the existence of cap and trade regimes. There is no assurance that cap and trade regimes will continue to exist, or that they will prove to be an effective method of reduction in GHG emissions. Changes in U.S. law and related regulations may impact the way the CANA operates, increase CANA costs and/or change the competitive landscape. New technologies may arise that may diminish or eliminate the need for cap and trade markets. Ultimately, the cost of emissions credits is determined by the cost of actually reducing emissions levels. If the price of credits becomes too high, it will be more economical for companies to develop or invest in green technologies, thereby suppressing the demand for credits. CANA may invest in derivatives, which are often more volatile and may magnify the CANA's gains or losses. A derivative (i.e., futures/forward contracts, swaps, and options) is a contract that derives its value from the performance of an underlying asset. The primary risk of derivatives is that changes in the asset's market value and the derivative may not be proportionate, and some derivatives can have the potential for unlimited losses. Derivatives are also subject to liquidity and counterparty risk. The Funds are subject to liquidity risk, meaning that certain investments may become difficult to purchase or sell at a reasonable time and price. If a transaction for these securities is large, it may not be possible to initiate which may cause the CANA to suffer losses. Counterparty risk is the risk of loss in the event that the counterparty to an agreement fails to make required payments or otherwise comply with the terms of derivative.

The use of futures contracts is subject to special risk considerations. The primary risks associated with the use of futures contracts include: (a) an imperfect correlation between the change in market value of the reference asset and the price of the futures contract; (b) possible lack of a liquid secondary market for a futures contract and the resulting inability to close a futures contract when desired; (c) losses caused by unanticipated market movements, which are potentially unlimited; (d) the inability to predict correctly the direction of market prices, interest rates, currency exchange rates and other economic factors; and (e) if CANA has insufficient cash, it may have to sell securities or financial instruments from its portfolio to meet daily variation margin requirements, which may lead to the CANA selling securities or financial instruments at a loss. CANA invests through a subsidiary, and is indirectly exposed to the risks associated with the Subsidiary's investments. The value of a commodity-linked derivative investment typically is based upon the price movements of a physical commodity and may be affected by changes in overall market movements, volatility of the Index, changes in interest rates, or factors affecting a particular industry or commodity.

Fluctuations in currency of foreign countries may have an adverse effect to domestic currency values. CANA is subject to interest rate risk, which is the chance that bonds will decline in value as interest rates rise. Narrowly focused investments typically exhibit higher volatility. CANA's assets are expected to be concentrated in a sector, industry, market, or group of concentrations. The securities or futures in that concentration could react similarly to market developments. Thus, CANA is subject to loss due to adverse occurrences that affect that concentration. CANA is non-diversified.

None of the U.S. Securities and Exchange ("SEC"), the U.S. commodity futures trading commission ("CFTC") or any other U.S. or Non-U.S. governmental, regulatory or self-regulatory agency, authority or organization has in any manner: (i) passed upon or made any finding or determination as to the merits, value or fairness of an investment in any Fund or the adequacy or accuracy of this presentation or any Fund's CPPM, (ii) made any recommendation as to such an investment or (iii) passed upon, sponsored, recommended, approved or disapproved of the offering of interests issued by any Fund or the abilities or qualifications of any consultant or adviser. Any representation to the contrary is unlawful. Clear Sky Funds ordinarily are not registered or regulated as investment companies under the ICA and, accordingly, investors in Funds ordinarily will not receive the protections afforded by that act. No information contained in this presentation should be construed as providing legal, regulatory, tax, accounting, investment, financial or other advice or as a recommendation to subscribe for, hold or dispose of an interest or any investment made, contemplated to be disposed of by any Funds.

This presentation may contain certain statements, opinions, predictions, and conclusions that may be forward-looking statements). Forward-looking statements can be identified by the use of forward-looking terms such as "anticipate," "intend," "believe," "perceive," "perceive," "glan," "goal," "seek," "estimate," "expect," "strategy," "future," "objective," "project," "target," "likely," "may," "should," "will" and similar expressions. Any forward-looking statements contained herein are solely those of Cana and are based solely on Cana's current outlook regarding future events. Because forward-looking statements relate to the future, they are based on certain assumptions, and subject to inherent uncertainties, risks and changes in circumstances that are difficult to predict and that generally are outside of Cana's control. The actual implementation and results of the investment strategy and the financial condition and success of a fund or investment may differ materially from that which might be suggested or indicated by such forward-looking statements.

Therefore, the recipient of this presentation should not place undue reliance on such forward-looking statements. In considering any performance data contained herein, you should bear in mind that past or targeted performance is not indicative of future results, and there can be no assurance that any Fund will achieve comparable results or that target returns will be met. You should also bear in mind that past or targeted portfolio characteristics are not indicative of future portfolio characteristics and there can be no assurance that unrealized investments will be realized at the valuations shown as actual realized returns will depend on, among other factors, future operating results, the value of the assets and market conditions at the time of disposition, any related transaction costs, and the timing and manner of sale, all of which may differ from the assumptions on which the valuations contained herein are based. Nothing contained herein should be deemed to be a prediction or projection of future performance of any Cana, Kraneshares, KCM, Clear Sky Fund or any of the consultants. Prospective investors should make their own investigations and evaluations of the information contained herein.

Some of the information contained in this presentation has been obtained from sources other than Cana, Kraneshares, KCM, Clear Sky Fund or any of the consultants, and the Clear Sky Funds. While Cana, Kraneshares, KCM, Clear Sky Fund or any of the consultants believes such information to be reliable for the purposes of this presentation, neither Clear Sky or any of its affiliates, nor its or their respective members, partners, officers or employees, has independently verified such information. Accordingly, none of the foregoing can guarantee the accuracy of such information

Target returns, if presented, are provided solely for the purpose of providing insight into the strategy's investment objectives, detailing the strategy's anticipated risk and reward characteristics in order to facilitate comparisons with other strategies. The target return presented is not a prediction, projection or guarantee of performance. The target is presented based upon estimates and assumptions and there can be no assurance that the targets will be realized. The target should not be used as a primary basis for a potential investor's decision to invest in the strategy. The target is presented gross of fees and does not reflect the effect of management fees, incentive compensation, costs, certain expenses and taxes. Except where otherwise indicated herein, the information provided herein is based on matters as they exist as of the date hereof and not as of any future date, and will not be updated or otherwise revised to reflect information that subsequently becomes available, or circumstances existing or changes occurring after the date hereof. Certain performance data presented is estimated, unaudited, "net" of fees only, and subject to change. Accordingly, the calculations have been made based on, in some cases, limited available data and a number of assumptions. Because of these limitations, the performance information of past performance.