



CCFE[®] CFI-US[®]

Chicago Climate Futures Exchange
Carbon Financial Instrument[®]-US

FOR HEDGING AND TRADING OPPORTUNITIES UNDER A FUTURE POTENTIAL U.S. MANDATORY CAP-AND-TRADE PROGRAM

CCFE CFI-US futures contract expirations require delivery of greenhouse gas emission allowances that would be usable for compliance with a mandatory federal U.S. greenhouse gas cap-and-trade program.

If no U.S. federal mandate is enacted, fallback provisions require delivery of other specified mandatory carbon allowances.

These futures contracts are not sponsored by the U.S. Government.

FOR FURTHER INFORMATION, PLEASE CONTACT:

Michael MacGregor
312-299-5122
mmacgregor@ccfe.com

Dan Scarbrough
312-229-5129
dscarbrough@ccfe.com

TABLE OF CONTENTS

3	Introduction
4	Context
5	Frequently Asked Questions
12	Table 1: Actions taken at expiration of CCFE CFI-US futures contracts
14	Table 2: Illustrative trading strategies for CCFE CFI-US futures contracts

INTRODUCTION

The Carbon Financial Instrument® - US (CFI®-US) futures and options contracts traded on Chicago Climate Futures Exchange (CCFE®) require the delivery of greenhouse gas emission allowances that would be usable for compliance under a mandatory U.S. greenhouse gas cap-and-trade program. Delivery of other specified mandatory carbon allowances are required if a U.S. federal mandatory carbon program is not yet enacted at the date of expiration.

This document provides background on this product and addresses frequently asked questions.

CCFE is a wholly owned subsidiary of the Chicago Climate Exchange®, and a member of the Climate Exchange Plc (LSE:CLE.L) group of companies. The CCFE marketplace offers:

- REGULATION BY THE COMMODITY FUTURES TRADING COMMISSION (CFTC)
- CLEARING BY THE CLEARING CORPORATION (CCORP) AND CONSEQUENT ELIMINATION OF COUNTERPARTY CREDIT RISK
- DIRECT ACCESS VIA WEB-BASED ELECTRONIC TRADING PLATFORM
- STANDARDIZED CONTRACTS
- LOW TRANSACTION COSTS
- PRICE TRANSPARENCY/PRICE DISCOVERY



CONTEXT

The CCFE CFI-US futures and options contract specifications require delivery of U.S. federal allowances. The contracts offer the first tool for directly hedging economic exposure associated with:

whether a U.S. greenhouse gas (GHG) reduction mandate is established

when such a U.S. mandate is established

the prices of tradable emission allowances established under such a federal cap-and-trade program

Leading U.S. legislative drafts strongly suggest that some forms of “early action” verified emission reductions realized in advance of U.S. compliance requirements will be recognized and credited under a mandatory GHG cap-and-trade program. The CCFE CFI-US contract, a mandatory U.S. allowance product, opens new hedging and trading opportunities for entities that are exposed to risk in existing and emerging private, state and regional carbon cap-and-trade programs, or have made verifiable early emission cuts.

Since 2003, many businesses and governments have taken on legally binding emission

reduction commitments as members of Chicago Climate Exchange (CCX®). Similarly, active discussions to establish mandatory carbon caps are ongoing in several state- and regional-level efforts, and the first (non-federal) mandatory carbon emissions cap came into force on January 1, 2009 under the Regional Greenhouse Gas Initiative in the northeast U.S.

A U.S. federal mandatory program, which has been the focus of numerous U.S. Congressional drafts, will introduce much broader environmental coverage, with correspondingly broader economic impacts. A federal program would likely also

have important impacts on the private and governmental carbon markets that may exist when and if a federal U.S. mandate is implemented.

The CFI-US futures and options contracts requiring delivery of mandatory U.S. allowances can help businesses implement an economically rational strategy for managing emission compliance requirements that would arise under a U.S. mandate. The remainder of this document addresses frequently asked questions about the contract.

FREQUENTLY ASKED QUESTIONS

What are CFI-US futures and options contracts?

CCFE CFI futures and options contracts are CFTC-regulated futures contracts that require delivery from seller to buyer of U.S. government emission allowances that would be established if the U.S. adopts a mandatory GHG emissions cap-and-trade program. As discussed below, alternative delivery procedures for specified mandatory carbon allowances will be employed if a mandatory federal U.S. GHG cap-and-trade program has not been enacted at the date of contract expiration.

What if no federal mandate has been enacted when a CFI-US contract expires?

If no such mandate has been enacted at the time a contract expires, those holding short futures positions at expiration would be required to deliver industrial emission allowances that are established under various other mandatory GHG reduction programs. In this case, sellers would have the option of delivering any of the following:

- European Union Emission Allowances (“EUAs”)
- Allowances issued under the Regional Greenhouse Gas Initiative in the northeast U.S. (“RGGI Allowances”)
- Allowances issued under any other mandatory U.S. state or regional GHG cap-and-trade program that may have come into force at that time

FREQUENTLY ASKED QUESTIONS

What specific instruments can be delivered under CCFE CFI-US futures and options contracts?

If a U.S. carbon cap-and-trade mandate is in place and the U.S. federal registry is operating, then the U.S. federal allowances in that registry can be delivered to fulfill CCFE CFI-US contract terms, *as well as any allowances held in other eligible registries that have been approved as recognized for compliance under the U.S. program.* In all cases the delivered instruments must meet the vintage and type requirement of the contract, notably the requirement that allowances be based on industrial emission reductions.

Some expect that the tradable instruments held in other approved registries, possibly including those used in Chicago Climate Exchange and the Regional Greenhouse Gas Initiative, would eventually be converted into U.S. federal allowances. If this becomes the case, market participants may still wish to trade allowances in their original registries with the intention of subsequently converting those traded allowances into federal allowances.

When might mandatory federal GHG emission limits come into force in the U.S.?

This cannot be answered with certainty. To date, most legislative drafts have established calendar year 2012 as the first compliance year. Prior U.S. experience suggests there would be a period of one to three years between enactment of the law and the first year industry must comply with emission limits.

FREQUENTLY ASKED QUESTIONS



What is the purpose of CFI-US futures and options contracts?

The CCFE CFI-US futures and options contracts allow users to hedge exposure associated with whether and when and U.S. mandatory carbon cap is enacted, and to hedge emission allowance price levels under the U.S. mandate. The contracts might also be useful to entities that would be affected under various policy structures that might govern how the U.S. law integrates emission allowances from existing carbon cap-and-trade programs.

A mandatory U.S. GHG emissions cap-and-trade program would introduce important new economic decisions to U.S. businesses, decisions that may result in tens of billions of dollars worth of consequence each year. In the leading U.S. legislative drafts, over five billion CO₂ emission allowances will be established annually in the early years of the program. Under all proposed programs to date, at least two billion allowances would annually be auctioned by the government. With published price estimates ranging from \$10 to over \$70 per metric ton CO₂, the value of the annual U.S. allowance stock could range from \$50 billion to \$350 billion. Trading in multiple vintages of allowances to plan for least-cost emissions compliance, as well as trading by hedgers and investors, will likely imply the total market value will be considerably higher than the annual stock value.

Like all commodities, prices of emission allowances are unpredictable and fluctuate due to a variety of fundamental factors, such as program rules, economic conditions, relative energy prices, weather, etc. The CFI-US contract offers a transparent, low-cost and regulated instrument that facilitates hedging and least-cost compliance. The contract can play important roles in helping the U.S. achieve its GHG reduction goals.

FREQUENTLY ASKED QUESTIONS

Would the CFI-US contract be useful if a U.S. mandatory GHG cap-and-trade system emerges through a process other than passage of legislation by the U.S. Congress?

Yes. Any U.S. government process that results in the establishment of a U.S. mandatory GHG gas cap-and-trade program that has the force of law would constitute realization of the policy outcome addressed through the terms of the CFI-US contract. For example, adoption of regulations through the actions of a U.S. government agency, such as the U.S. Environmental Protection Agency, could also cause the establishment of a U.S. mandatory GHG gas cap-and-trade program.

What factors might be expected to influence prices of the CFI-US futures and options contracts?

One could expect that the basic drivers of prices would be a combination of:

- the expected likelihood that a U.S. mandate is enacted before the contract expires, and
- expected allowance prices levels if a federal program is implemented.

The likelihood of enactment of a U.S. mandate constitutes an assessment of policy conditions and progress. Expected allowance prices levels if a program is implemented will depend on program rules, and a host of factors such as conditions in the broader economy and energy markets.

One critical rule under a U.S. mandate will be the extent to which allowances from pre-existing programs are recognized as “early action” and are convertible into U.S. federal allowances, as well as the terms, conditions and timing of such conversions.

A further consideration will be prices of the emission allowances that must be delivered if the U.S. federal mandate is not enacted before futures contract expiration.

FREQUENTLY ASKED QUESTIONS

What if the CFI-US contract expires at a time when a U.S. mandate has been enacted, but recognized allowance registries are not yet operable due to activation and linkage issues?

If the program has been adopted into U.S. law, but no approved registry is operating, those holding positions in CFI-US contracts will have their open positions converted by rolling the position forward into a futures contract position in the contract that expires one year subsequent to the original contract position. The price at which open contracts will “roll” is the final settlement price of the original contract escalated by the prevailing rate on one-year U.S. Treasury notes.

For example, under these circumstances, positions in the December 2013 futures contract would roll into a December 2014 futures contract. If the prevailing one-year U.S. Treasury interest rate at that time was 3%, the price established for the new rolled contract position would be 1.03 multiplied by the final settlement price of the December 2013 futures contract.

As with all futures contracts, market participants that do not want to experience the implications of the contract’s post-expiration delivery process – a contract rollover in this case – have the option of liquidating open contracts before a contract expires.

What is date of enactment for the various pathways that could be employed to establish a federal mandatory program?

- In the case of enactment via legislation originating in the a U.S. Congress: a bill that has passed the Congress becomes law either on the date it is signed by the President of the United States, unless another date has been specified in the legislation. If the President fails to sign or return a bill with objections within 10 days (excluding Sundays) after it has been presented to the President, it becomes law on the day after the tenth day. If Congress, by its adjournment, prevents the return of a bill, it does not become law.
- In the case of enactment via federal agency regulations: the date of enactment is the date of publication of a final regulation in the Federal Register, unless the published regulation expressly provides a different effective date.
- In the case of enactment via court order: date of publication of the court’s opinion, unless that opinion it expressly provides a different effective date.
- In the case of enactment via Executive Order: the effective date provided therein.

FREQUENTLY ASKED QUESTIONS

What if a law or regulation that establishes a federal mandatory GHG cap-and-trade program is challenged in court or its implementation is otherwise called into question?

A federally approved and enacted program is considered enacted until a specific court or Congressional decision nullifies it. A court-ordered temporary injunction may temporarily put implementation of an enacted program on hold, but in such case the enactment has in fact occurred.

If there is a successful challenge to a federal action that establishes a federal mandatory GHG cap-and-trade program (e.g., a permanent injunction or a court finding that invalidates the action) then all contract expirations subsequent to such a reversal would be considered to have occurred at a time when a law is NOT enacted, hence triggering alternative delivery requirements involving mandatory allowances from other programs, as discussed above.

If there were any disputes involving CCFE and CFI-US contracts, how would they be resolved?

If otherwise not resolved, disputes between parties to a transaction are resolved through the arbitration process as described in CCFE Rulebook Chapter 8, Arbitration, which utilizes the National Futures Association Arbitration Rules. Potential violations of CCFE rules by persons subject to CCFE's jurisdiction (as defined in the CCFE Rulebook) are handled by the procedures described in CCFE Rulebook Chapter 7, Discipline and Enforcement. Disciplinary Panels hearing such cases are comprised of CCFE Trading Privilege Holders.

FREQUENTLY ASKED QUESTIONS

Are federal mandatory GHG emission allowances that are purchased in a U.S. Government auction eligible for delivery for CFI-US futures and options contracts and after a federal mandatory has been enacted?

Yes. Allowances purchased in a U.S. Government auction (or an auction conducted by a designated entity on behalf of the U.S. Government) are eligible to be delivered against CFI-US futures and options contracts, provided that they are tendered in amounts that are recognized for compliance use under the U.S. Government program as equivalent to 1,000 metric ton CO₂ of compliance obligations under the U.S. Government GHG limitation and trading program.

Aside from the U.S. government registry, what other registries might become approved as eligible for delivery under a mandatory U.S. program?

Indications from draft U.S. cap-and-trade legislation suggest that emission reductions and associated instruments in various state, regional and private registries may, under “Early Action Crediting” provisions, become sources of eligible allowances under U.S. law, such as:

- Chicago Climate Exchange
- Regional Greenhouse Gas Initiative
- The Climate Registry
- California Climate Action Registry

ACTIONS TAKEN AT EXPIRATION OF CCFE CFI-US FUTURES CONTRACTS

Table 1 below summarizes the range of scenarios that would apply for various policy and implementation outcomes. For demonstration purposes, the 2013 contract has been used as an example.

<i>Scenario</i>	No federal mandate	Federal mandate is enacted, 2013 is 1 st compliance year, <u>no operating registry</u>	Federal mandate enacted, 2013 is 1 st compliance year, <u>registry is operating</u>	Federal mandate enacted, <u>2014</u> is 1 st compliance year, <u>no operating registry</u>
Contract expiration:	January 2013	January 2013	January 2013	January 2013
Federal mandate enacted?	No	Yes	Yes	Yes
First compliance year	unknown	2013	2013	<u>2014</u>
Approved and operable Registry at contract settlement date?	No	No	Yes	No
Action after contract expiration	Deliver either EUAs, RGGI allowances, or allowances from other mandatory state/regional programs in the U.S.	Roll open contracts into one-year later contract	Standard delivery procedure	Roll open contracts into one-year later contract
Clearing Corporation actions	Once seller indicates his preference, instruct to deliver via the relevant registry	Roll positions into January 14 contract positions at (January 13 settlement price) x {1+(360 day treasury rate at settlement date)}	Standard instructions and pay/collect procedures	Roll positions into January 14 contract positions at (January 13 settlement price) x {1+(360 day treasury rate at settlement date)}
Delivery	In accordance with CCFE's three business days delivery schedule	Will occur in a sanctioned registry if January 14 contracts are held through expiration	In accordance with CCFE's 3 business days delivery schedule	Will occur in a sanctioned registry if January 14 contracts are held through expiration
Vintage delivered	EUAs, RGGI allowances or other mandatory state/regional in the U.S. – vintage 2013 or earlier, but not earlier than 2008 vintage	2013 U.S. federal allowances (or equivalent)	2013 U.S. federal allowances (or equivalent)	<u>2014</u> U.S. federal allowances (or equivalent)

FREQUENTLY ASKED QUESTIONS

If an industrial entity that becomes subject to emission limits also undertakes activities that are construed as “projects”, for example, a landfill gas collection and combustion system, would credits produced by such projects be deliverable under the provisions of the rules governing CFI-US contracts?

No. Only allowances, and not “offsets”, can be delivered in fulfillment of the CFI-US futures and options contract requirements. “Credits” from a landfill gas system are not considered “allowances” eligible for delivery, regardless of the terminology used to describe such instruments.

ILLUSTRATIVE TRADING STRATEGIES FOR CCFE CFI-US FUTURES AND OPTIONS CONTRACTS

This table contains examples of views, strategies, positions, conditions, outcomes, assumptions and other information related to carbon trading. The examples and information in the table are

hypothetical only. The examples and information in the table are not trading strategy recommendations, predictions of future legal developments, or indications of future results. Each market participant

must consider prevailing circumstances in the context of its own needs and views, and decide what, if any, trades to make. Each market participant assumes all risk of its analysis and trades.

Policy view held by trader	Market participant's strategy	Entities that might take this position	Market view held by trader	Examples of possible positive trade outcomes
U.S. <i>will</i> have federal mandatory program enacted before January 2013 contract expiration	Because existence of the U.S. federal mandatory program would impose new costs, take positions that increase in value if the law is enacted	Regulated emission sources, e.g., electric power generators, oil refiners, manufacturers subject to U.S. regulation	U.S. allowance prices after a federal mandatory program is established will be higher than existing carbon markets, carbon allowances from pre-existing programs are recognized under U.S. federal mandatory program	Buy allowances in existing carbon programs, hold those for conversion into federal allowances. Buy allowances in existing carbon programs, sell CFI-US futures, deliver lower-price existing program allowances against higher priced futures contract position, to the extent possible.
U.S. <i>will</i> have federal mandatory program enacted before January 2013 contract expiration	Hedge against <i>higher</i> U.S. allowance prices	Regulated emission sources	U.S. allowance market prices will be considerably <i>higher</i> than generally expected	Buy CFI-US futures, liquidate those contracts at higher prices as a U.S. federal mandatory program materializes and is stricter than most had expected.
U.S. <i>will</i> have federal mandatory program enacted before January 2013 contract expiration	Hedge against <i>low</i> U.S. allowance prices	Entities that undertake U.S.-credited emission reduction activities before the law is enacted	U.S. allowance market prices will be considerably <i>lower</i> than generally expected	Sell CFI-US futures, liquidate those contracts at lower prices as U.S. federal mandatory program materializes and is less strict than generally expected.
U.S. <i>will NOT</i> have a federal mandatory program enacted before January 2013 contract expiration	Take positions that yield value if the law is not enacted	Entities that undertake emission reduction activities that do not get credited because no law is enacted	No U.S. federal mandatory program means no obligation to deliver U.S. allowances. Allowances in existing carbon programs continue to trade at prices below those expected for U.S. federal mandatory allowances	Sell CFI-US futures, liquidate those contracts at lower prices as action on U.S. federal mandatory program fails to materialize. Sell CFI-US futures, purchase allowances in existing carbon programs to be able to make delivery if no U.S. federal mandatory program enacted.

