

行政院及所屬各機關出國報告  
出國類別：其他（出席國際會議）

## 出席2023年美國商品期貨交易委員會(CFTC)國際期貨監理官會議及 美國期貨業協會(FIA)年會報告

服務機關：金融監督管理委員會

姓名職稱：證券期貨局 王組長秀玲

駐紐約代表辦事處 劉主任燕玲

證券期貨局 金專員旻姍

派赴國家：美國佛羅里達州波卡雷登市

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# 摘要

2023年美國商品期貨交易委員會（CFTC）國際期貨監理官會議及美國期貨業協會（FIA）年會於2023年3月14日至16日假美國佛羅里達州波卡雷登市舉行，計有超過千位代表與會，本次活動內容包括主管機關會議、專題演講、座談會、交易所資訊交換、期貨業及資訊業者展覽等。本年度會議本會係由證券期貨局王組長秀玲、金專員旻姍及駐紐約代表辦事處劉主任燕玲等3位代表出席。

本屆國際期貨監理官會議及年會充分討論了目前全球衍生性商品市場最關切之議題，包含美國商品期貨交易委員會（CFTC）主席Rostin Behnam專題演講，探討美國期貨市場執法、監理、及期貨業實務，並相互交流國際期貨市場最適監理方向與衍生性金融商品最新議題(包括後疫情時期及俄烏戰爭影響、衍生性商品監理法規趨勢、網路安全與加密貨幣等議題)，另有交易所領導人圓桌論壇、數位資產政策未來展望，及大宗商品展望—氣候風險影響，有效掌握國際監理脈動，做為我國監理趨勢與國際接軌之參採。此外，本會於本次會議期間與加拿大安大略省證管會(OSC) 及美國商品期貨交易委員會(CFTC)舉行主管機關之雙邊會談，積極與各國主管機關建立跨國金融監理合作；另與期交所及期貨公會共同參加與芝加哥商業交易所(CME)及富時羅素指數公司(FTSE Russell)雙邊會談，拓展各項國際合作機會，對我國期貨市場發展與國際化洵有助益。

本次參與會議心得與建議包括積極建置國內店頭衍生性商品集中結算制度；推動期貨市場跨國合作監理及 QCCP 認可；加強我國資訊安全作業及強化網路交易安全相關規範；加密貨幣及數位資產監管之國際趨勢；期貨產業未來展望，以期健全我國期貨市場之發展。



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附件 CFTC 國際期貨監理官會議及 FIA 年會議程

CFTC 國際期貨監理官會議出席名單

# 第一章 前言

2023年美國商品期貨交易委員會（Commodity Futures Trading Commission, CFTC）國際期貨監理官會議及美國期貨業協會（Futures Industry Association, FIA）年會於2023年3月14日至17日假美國佛羅里達州波卡雷登市（Boca Raton）舉行，括來自全球之主管機關、期貨交易所、期貨商及資訊廠商等。本次活動內容包括主管機關會議、專題演講、座談會、交易所資訊交換、期貨業及資訊業者展覽等。

本年度會議係由證券期貨局王組長秀玲、金專員旻姍及駐紐約代表辦事處劉主任燕玲等3位代表出席。本屆國際期貨監理官會議及年會充分討論了目前全球衍生性商品市場最關切之議題，包含美國商品期貨交易委員會（CFTC）主席Rostin Behnam專題演講，探討美國期貨市場執法、監理及期貨業實務，並相互交流國際期貨市場最適監理方向與衍生性金融商品最新議題(包括後疫情時期及俄烏戰爭影響、衍生性商品監理法規趨勢、網路安全與加密貨幣等議題)，另有交易所領導人圓桌論壇、數位資產政策未來展望，及大宗商品展望—氣候風險影響。此外，本會於本次會議期間與加拿大安大略省證管會(OSC)及美國商品期貨交易委員會(CFTC)舉行主管機關之雙邊會談，積極與各國主管機關建立跨國金融監理合作；另與期交所及期貨公會共同參加與芝加哥商業交易所(CME)及富時羅素指數公司(FTSE Russell)雙邊會談，拓展各項國際合作機會，對我國期貨市場發展與國際化洵有助益。

本次報告分為六大章節，第一章為前言，第二章為CFTC及FIA簡介，第三章為雙邊會談內容重點，第四章為國際期貨監理官會議內容重點，第五章為美國期貨業協會年會內容重點，第六章為參與本次會議心得與建議。

## 第二章 美國商品期貨交易委員會及美國期貨業協會 簡介

### 第一節 美國商品期貨交易委員會（CFTC）

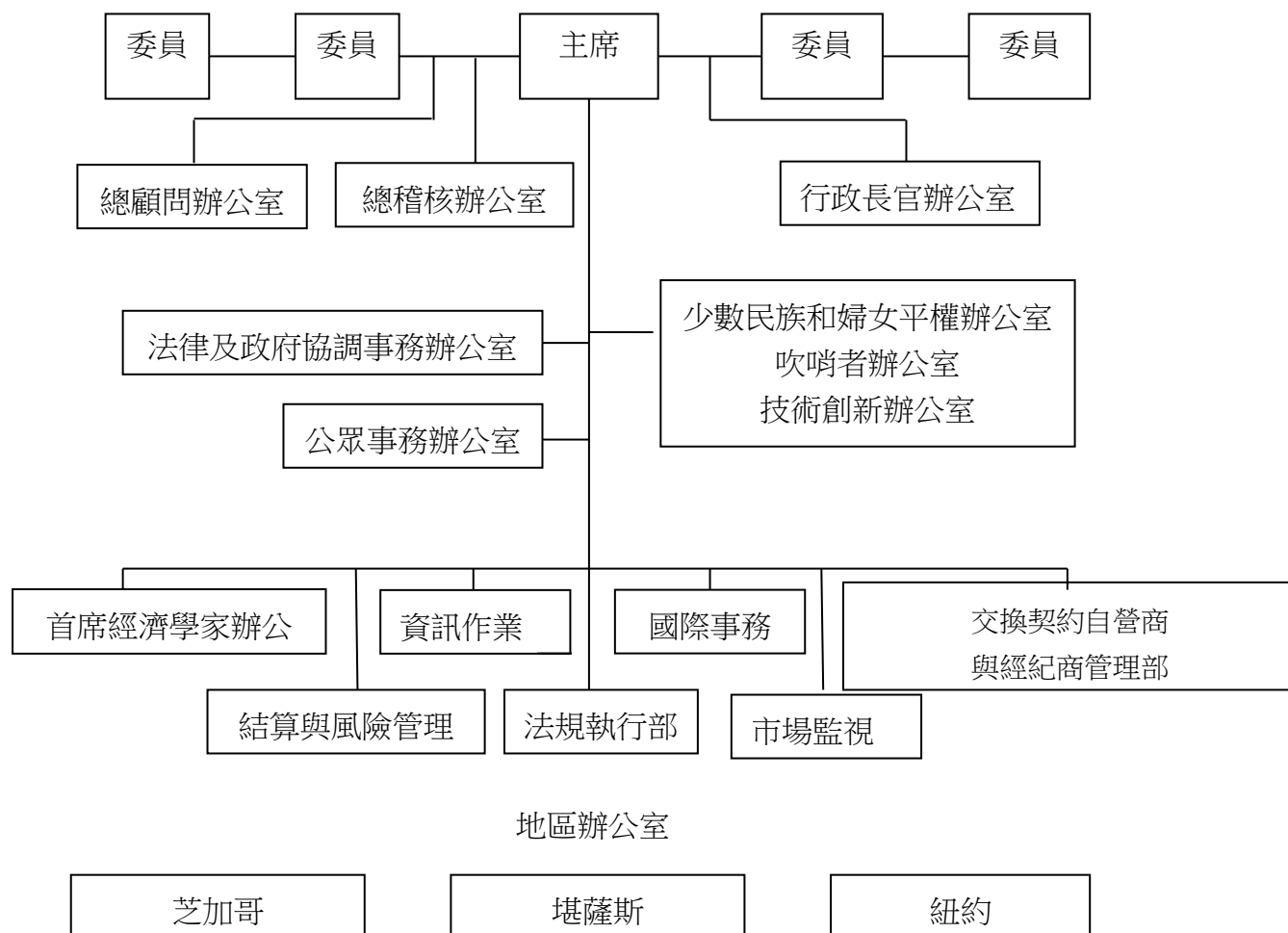
#### 一、發展沿革：

1974年以前，由於大部分期貨契約皆為農產品，依據1936年制定之「商品交易法」(Commodity Exchange Act)規定，期貨主管機關原本由農業部商品交易局之商品交易委員會(Commodity Exchange Commission)擔任。1970年代初期，因農產品期貨價格大幅波動，致使美國國會於1974年修訂「商品交易法」，並授權成立獨立之聯邦機構，以加強對期貨之管制，遂於1974年正式成立CFTC。隨著市場發展，期貨商品種類由農產品期貨擴大至金融期貨，且證券與期貨市場商品發展愈趨複雜，已使得美國政府體認主管機關之個別職權已不足以監管全體金融市場活動，爰美國國會於2000年訂定「商品期貨現代化法」(Commodity Futures Modernization Act of 2000)，明確劃分CFTC監管職權為商品、豁免證券(Exempted Securities)及廣基股價指數(Broad-Based Stock Indices)之期貨與選擇權契約，另窄基股價指數期貨(Narrow-Based Stock Indices Futures)與個股期貨(Single-Stock Futures)因其性質係介於「證券」與「期貨」之間，為一種既屬「證券」又屬「期貨」之商品，故該類商品則由CFTC及美國證券交易委員會(Securities Exchange Commission, SEC)共同管轄。

#### 二、組織架構：

(一) CFTC於1974年依據美國「商品交易法」正式成立，為一個獨立之聯邦機構，以加強對期貨市場之監理。CFTC之委員會係由1名主任委員及4位委員共5人所組成，依商品交易法第2(a)(2)(A)條規定，其委員係由總統提名，經參議院同意後任用，任期5年，且來自同一政黨之委員不得超過3名，並受國會監督。CFTC為便利進行市場監理作業，除將總部設置於華

盛頓特區外，另於期貨交易所所在地之紐約、芝加哥與堪薩斯市等處設置地區辦公室。CFTC之組織架構圖示如下：



資料來源：美國CFTC網站，<http://www.cftc.gov>。

(二) CFTC主要部門工作內容：

1、結算與風險管理部 (Division of Clearing and Risk, DCR)

主要負責監管衍生性商品結算機構 (Derivatives Clearing Organizations, DCO) 及制定衍生性商品市場結算交割相關政策，例如：交換契約、期貨契約與選擇權契約結算業務監管及市場參與者風險管理等，以確保衍生性商品集中結算交割安全。

2、法規執行部 (Division of Enforcement, DOE)



主要業務為調查和起訴涉嫌違反商品交易法及委員會相關規定案件。例如，非法交易商品期貨交易契約、以非法方式欺騙散戶投資（詐欺）、操縱價格及影響市場秩序等類型不法行為。法規執行部為獨立調查單位，經調查結果確認後，CFTC得發起行政裁罰或採以行政訴訟，或與司法機關合作等方式處置不法行為。CFTC行政裁罰包含罰款、暫停交易、禁止交易、撤銷或限制登記等。

### 3、市場監理部（Division of Market Oversight，DMO）

負責美國境內衍生性商品市場監理作業，主要功能在確保衍生性商品市場正確反映標的商品市場供給與需求，免於各種不法交易行為，確保衍生性商品市場發揮價格發現與風險移轉等重要經濟功能。目前市場監理部主要依商品與業務特性區分為農產品、能源、商品、金屬、金融、政策檢視與資料分析等數個小組，利用內部和外部期貨與選擇權商品交易、未平倉部位及其他資訊數據，進行市場監控，並提供數據化訊息以利CFTC制定良好政策，促進市場交易有效性和流動性。

### 4、交換契約自營商與經紀商管理部（Division of Swap Dealer and Intermediary Oversight，DSIO）

主要提供市場業者諮詢，負責市場規範訂定、法規解釋、資格登記、市場管理與交易人保護，以及外國金融監理機構合作及處理受監理業者跨國事件等事宜，並監督及稽核市場業者符合各項財務規定、風險管理程序及內部控制制度，確保市場參與者財務穩健及市場透明度。

### 5、CFTC另有首席經濟學家辦公室（Office of the Chief Economist，OCE）、資訊作業部（Office of Data and Technology，ODT）、國際事務部（Office of International Affairs，OIA）、行政長官辦公室（Executive Director，OED）、總顧問辦公室（Office of General Counsel，OGC）、總稽核辦公室（Office of Inspector General，OIG）、法律及政府協調事務辦公室（Office of Legislative and

Intergovernmental Affairs, OLIA)、少數民族和婦女平權辦公室 (Office of Minority and Women Inclusion, OMWI)、公眾事務辦公室 (Office of External Affairs, OEA)、吹哨者辦公室 (Whistleblower Office, WBO) 及技術創新辦公室 (Office of Technology Innovation, OTI) 等數個辦公室，一同負責處理CFTC業務。

### (三) CFTC諮詢委員會：

CFTC依據「聯邦顧問委員會條例」(Federal Advisory Committee Act)，設立農業諮詢委員會 (Agricultural Advisory Committee, 1985年)、全球諮詢委員會 (Global Markets Advisory Committee, 1998年)、技術諮詢委員會 (Technology Advisory Committee, 1999年)、能源與環境市場諮詢委員會 (Energy and Environmental Markets Advisory Committee, 2008年) 及市場風險諮詢委員會 (Market Risk Advisory Committee, 2015年) 等5個諮詢委員會，就影響美國市場競爭力所涉各種監管和市場問題提供意見，並負責與其他主管機關、期貨市場、經紀或自營商、其他市場參與者與一般交易人等進行溝通，以顧及金融監理完整性與各市場間之公平競爭，並提供相關建議予市場大眾。另與SEC共同設立聯合諮詢委員會 (CFTC-SEC Joint Advisory Committee, 2010年)，以深入瞭解同時涉及證券與期貨之商品發展趨勢與風險概況，並向二機關提出建議，以增進SEC與CFTC之法規制定與監理措施之一致性。

### 三、主要權責：

美國在歷年修訂商品交易法之過程中均逐漸加重CFTC之權限，並於2000年新制定之「商品期貨現代化法」更大幅提高CFTC之權限，將CFTC正式定位為期貨市場監督者。CFTC之職責範圍包括：1. 管理期貨交易所、期貨商及期貨交易顧問之交易活動；2. 准駁期貨交易所營運規章；3. 監督期貨交易所履行規章之

情形；4. 調查可能的違約情事；5. 審核期貨合約規格；6. 暫停或註銷註冊登記。CFTC監管市場之宗旨包括：1. 鼓勵市場競爭與效率以確保期貨市場之經濟功能；2. 保護市場參與者並防止詐欺、人為操縱及不法交易行為；3. 確保結算過程之健全等。透過CFTC之有效監督，確保期貨市場發揮價格發現功能，消除價格偏離風險。

另美國2010年7月通過的「Dodd-Frank華爾街改革及消費者保護法」(Dodd-Frank Wall Street Reform and Consumer Protection Act, 下稱Dodd-Frank法案)也賦予CFTC積極規範店頭衍生性商品交易的權責，使過度承擔風險卻無需承擔責任的店頭交易再也不能規避法規的監督，故CFTC配合將原本的「結算與經紀商管理部」，擴大分成「結算與風險管理部」及「交換契約自營商與經紀商管理部」等2個部門，以加強監管店頭衍生性商品及其風險，特別是交換交易契約(Swap Contracts)。另外也成立了「吹哨者辦公室」，提供檢舉獎金鼓勵民眾針對可疑之違法金融事件提出檢舉，監督市場健全發展。

## 第二節 美國期貨業協會（FIA）

- 一、發展背景：美國期貨業協會（Futures Industry Association, FIA）為全球最大期貨業組織，會員逾300家，代表數以千計期貨業從業人員。FIA於1955年由商品期貨經紀商協會（Association of Commodity Exchange Firms）於紐約成立，旨在提供會員探討時事園地、與交易所合作及溝通橋樑、研討降低成本方式、減少信用濫用問題、推廣期貨教育及維護期貨商及投資大眾權益。該協會自1973年起始有紐約以外期貨經紀商人會，並於1978年更名為美國期貨業協會（Futures Industry Association, FIA），並將總部遷往華盛頓。FIA於80年代伸展觸角至全球，邀請世界各國期貨相關單位入會，並於1988年成立期貨業協會發展基金會（Institute for Financial Markets, IFM），致力於期貨相關教育及宣導。2013年FIA、FIA Asia以及英國期貨暨選擇權協會（Futures and Options Association, FOA）宣布組織改組，成立FIA Global，FOA改名為FIA Europe，2016年FIA、FIA Asia及FIA Europe納入FIA Global旗下，期能加強各國國際性衍生性商品組織間合作，共同推動衍生性商品市場發展。FIA向以期貨業界與國會、美國商品期貨交易委員會（CFTC）及其他衍生性商品主管機關協調者自居，致力於減低交易成本、保護期貨商及其客戶利益、為交易人爭取權益，及向國會及主管機關提供意見以及對相關提案提供建議等。
- 二、董事會：FIA由30位董事（Directors）組成，其下設有亞洲諮詢委員會（Asia Advisory Board）及歐洲諮詢委員會（Europe Advisory Board）。
- 三、區部（Divisions）：FIA原有5個區部，包括芝加哥研究區部（FIA Chicago）、期貨服務研究區部（Futures Services）、資訊研究區部（Information Technology）、日本分部（Japan Chapter）及法務暨法遵區部（Law & Compliance），經整併為以下3個：
  - （一）市場科技研究區部（FIA Market Technology）：主要作為討論及分享知

識平臺，並研究技術解決方案如何用於提高會員業務效率。

(二) 美洲營運研究區部 (FIA Operations Americas)：由FIA芝加哥研究區部 (FIA Chicago) 及期貨服務研究區部 (Futures Services) 於2015年1月合併而成，主要目的在促進產業合作及意見交流，參與者主要為美洲會員。

(三) 法務暨法遵區部 (FIA Law & Compliance)：主要關注對期貨及衍生性商品產業具影響力法律及法規發展，協助FIA提供資訊予相關監管部門及法院，以利其進行決策。

各區部於不同區域、時間召開會議，使會員有機會討論共同問題、交換意見，並對FIA董事會、交易所及其他監管與自律機構提出建議。

四、會員種類：FIA代表來自世界各國期貨界，會員共分兩類：

(一) 正會員 (Primary Members)：僅限於交易所結算會員。

(二) 副會員 (Associate Members)：FIA副會員包括交易所、結算機構、經紀商及交易商、技術服務商、法律服務及其他專業服務提供商等。本公司屬FIA副會員。

FIA會員可參與各區部會議，吸收及分享業界新知，取得FIA統計資料及業界即時資訊，並以優惠價格參與FIA活動。

五、會議：FIA定期舉辦各項會議，與會人士多為全球性證券商、期貨商、國際交易所、期貨相關主管機關、顧問及其他服務提供者等。

(一) FIA年會 (International Futures Industry Conference)：每年春季於佛羅里達州波卡雷登市 (Boca Raton) 舉行，主要探討業界發展議題及最新動態。除各國期貨業界代表，民意代表 (如：參、眾議院議員) 及相關主管機關 (如：CFTC與歐洲證券及市場管理局) 亦積極參與，俾利與交易所、結算機構及業者直接溝通。

(二) FIA國際衍生性商品展覽會暨研討會 (Annual FIA International Derivatives Expo, IDX)：每年6月於英國倫敦舉辦，探討國際業務、實務及法務議題。

- (三) 芝加哥期貨暨選擇權展覽會 (FIA Futures & Options Expo): 每年秋季在芝加哥舉行，為全球規模最大期貨暨選擇權博覽會，展示最新產品及服務。
- (四) 法務暨法遵研討會 (FIA Law & Compliance Division Workshop): 每年春季於華盛頓舉行，討論期貨相關法令規範及架構，與會者包括稽核人員、律師及主管機關等。
- (五) FIA亞洲區衍生性商品年會 (FIA Asia Derivatives Conference): 每年11至12月於新加坡舉辦，主要由主管機關、期貨業者及資訊業者與會，探討亞洲衍生性商品發展相關議題，會議期間亦同時舉辦展覽會，亞洲主要交易所均設攤參展。區域型研討會則包括杜拜、香港等，本公司亦多次與FIA合辦臺灣衍生性商品市場發展研討會，已建立良好口碑，與會人數亦為FIA區域型研討會之冠。

六、出版品：FIA另一貢獻為提供會員許多期貨與選擇權相關資訊，協助會員隨時掌握業界相關發展狀況，主要包括：

- (一) 市場之聲 (MarketVoice): 係FIA主要出版品，全面性報導全球衍生性商品市場重大議題及趨勢，涵蓋內容廣泛，如：前、後檯作業系統、交易所及店頭衍生性商品結算、行銷、研究、資產管理、法規及經紀業務等。
- (二) 每日電子報 (FIA SmartBrief): 每日透過電子郵件發送新聞簡訊，其中概要列出對全球衍生性商品業界人士重要最新資訊，涵蓋業界新聞、法規動態與FIA活動預告等。

### 第三章、雙邊會談情形

為吸引國外金融機構參與我國集中結算，本會積極推動期交所申請國外主管機關認可為第三國合格集中結算機構（QCCP）等，並積極與各國主管機關建立跨國金融監理合作，爰藉本次會議機緣安排與加拿大安大略省證管會(OSC) 及美國商品期貨交易委員會(CFTC)舉行主管機關之雙邊會談；另與期交所及期貨公會共同參加與芝加哥商業交易所(CME)及富時羅素指數公司 (FTSE Russell)雙邊會談，拓展各項國際合作機會，對我國期貨市場發展與國際化洵有助益。

以下謹就加拿大 OSC、美國 CFTC、芝加哥商業交易所(CME)及富時羅素指數公司(FTSE Russell)等四場雙邊會議，說明會議內容及討論重點。

	主管機關 交易所及業界	與會人員	雙邊會談議題
加國 主管 機關	加拿大安大略省 證管會(OSC)	Tim Reibetanz, Derivatives Branch Senior Legal Counsel, Ontario Securities Commission	本會與加國金融 主管機關建立跨 國監理合作關係 並簽署 MoU。 期許雙邊積極聯 繫，促進雙方金 融穩定與市場監 理之共同合作。
美國 主管 機關	美國商品期貨交易 委員會 (CFTC)	<ul style="list-style-type: none"> <li>● Ms. Christy Goldsmith Romero, CFTC Commissioner</li> <li>● Mr. Suyash Paliwal, Director, Office of International Affairs</li> <li>● Mr. Kevin C. Piccoli, Deputy Director, Office of International Affairs</li> <li>● Ms. Mauricio Melara, Office of International Affairs</li> </ul>	本會與美國金融 主管機關建立跨 國監理合作關係 並透過外交單位 簽署 MoU。 期許雙邊積極聯 繫，促進雙方金 融穩定與市場監 理之共同合作。
美國	芝加哥商業交易所	<ul style="list-style-type: none"> <li>● Tim McCourt, Senior Managing Director,</li> </ul>	有關 CME 費城

交易所	<b>(CME)</b>	Global Head Equity & FX Products <ul style="list-style-type: none"> <li>● Derek Sammann, Senior Managing Director, Global Head of Commodities, Options and International Markets</li> <li>● Christopher LaRosa, Executive D</li> </ul>	半導體指數 (SOX) 授權一節，持續督導期交所持續與 CME 高層積極聯繫互動，努力爭取授權。
業界代表	富時羅素指數公司 <b>(FTSE Russell)</b>	<ul style="list-style-type: none"> <li>● S Arne Staal, CEO of FTSE Russell and Head of Benchmark &amp; Indices of London Stock Exchange Group</li> <li>● Ricardo Manrique, Head of Strategy, FTSE Russell</li> <li>● Tom Jenkins, Head of Strategy – Index Investments Group, FTSE Russell</li> <li>● Jan Thorwirth, Head of Derivatives and Partnerships, APAC, FTSE Russell</li> </ul>	基於雙邊友好，督請交所積極聯繫邀請 FTSE 來臺參加 2023 年臺灣衍生性商品市場發展研討會 (FIA Forum : Taipei 2023) 並擔任永續議題研討會與談人，促進兩國經驗交流及分享。



## 第一節、本會與加拿大安大略省證券管理委員會(OSC) 簽署合格集中結算機構(QCCP)之監理合作瞭解備忘錄(MoU)

期交所前於 110 年 12 月向 OSC 遞件申請 QCCP 認可，期交所聘請加拿大法律顧問公司與 OSC 密切聯繫，並補充相關文件、證照及法規函令等英文版，持續回應 OSC 所詢事項。本局於 111 年 7 月偕同期交所拜訪加拿大駐台北貿易辦事處(Canadian Trade Office in Taipei, CTOT)，CTOT 表示關於本會與加拿大 OSC 進一步建立雙邊共同合作，CTOT 將樂於擔任雙邊橋樑盡力協助。

OSC 就期交所申請加拿大 QCCP 案進行審核，並考量國際監理及跨國合作之重要性，希望促成兩國主管機關監理合作。後 OSC 與本局舉行視訊會議，共同討論兩國未來進行金融監理合作細節。

本會代表於 112 年 3 月 14 日藉參與 2023 CFTC BOCA 監理官會議 (Regulator Meeting)機緣，與加拿大 OSC 代表 Mr. Tim Reibetanz ( Derivatives Branch Senior Legal Counsel，下稱 T 君)舉行雙邊會談，會談內容如下：

T 君表示 OSC 已完成 MoU 條文之最後審核，預計可於兩周內完成相關程序由 CEO 代表完成簽署，嗣後 OSC 將簽署文件寄送本會，並將呈報至加拿大財政部(Ministry of Finance)同意。T 君表示，俟雙方簽署後，OSC 會將 MoU 公告於 OSC 官網，並將載示雙方簽署人姓名。

本會於會談中表達與加國建立金融合作監理榮幸，期待兩國儘快簽署合作備忘錄。俟收到 OSC 簽署文件後將儘速依行政程序由本會主委簽名，完成異地簽署，本會亦將公告新聞稿於本會官網，另本會表示願意配合加拿大之公告時間，雙方同步公告於各自官網，T 君感謝本會之配合，並承諾盡力協調加速完成加拿大方面之簽署程序。

本會於 112 年 3 月 27 日與 OSC 完成異地簽署瞭解備忘錄 (MoU)，就期交所向 OSC 申請為合格集中結算機構(QCCP)一事建立跨國監理合作協議，雙方並於 112 年 4 月 6 日同步於各自官網公告。這是本會繼 109 年 6 月與加拿大證券管理機構(CSA) 之 8 省金融主管機關共同簽署金融科技合作協議 (Fintech Cooperation Agreement)後，進一步擴大兩國金融監理合作範圍，將

深化我國與加拿大之連結與交流，並有助於提升我國金融市場安全、效率與國際競爭力。

本次簽署之 MoU 可強化跨國監理，有助於 OSC 續對於期交所 QCCP 申請案之認可，屆時加拿大金融機構透過期交所進行結算可享有優惠之資本計提，有效提升其資金效率，提高外資參與我國金融市場之意願及市場信心。通過簽署 MoU，本會和 OSC 均表達對於第三國合格集中結算機構加強金融監理跨國合作之期許。該 MoU 促進我國與加拿大金融監管機關相互合作關係以及強化雙邊合作承諾，此一重要里程碑有效深化本會與 OSC 之跨國監管合作。

## 第二節、本會與美國商品期貨交易委員會(CFTC)就合格集中結算機構(QCCP)建立跨國監理合作

依據美國 CFTC 相關規範，國外結算機構需取得 CFTC 豁免註冊為美國結算機構(下稱 QCCP)資格後，方能提供結算服務給美國金融機構。期交所於 110 年 12 月向 CFTC 提出申請 QCCP 認可，再於 111 年 4 月 14 日提出申請 No-Action Relief(暫時性資格)，CFTC 於 111 年 9 月 19 日發布新聞稿，核發期交所 No-Action Relief 資格(期間為 111 年 9 月至 112 年 9 月)，有助於美國金融機構於該段期間內享有資本計提優惠。

美國 CFTC 刻正進行審核期交所之永久性 QCCP 資格，而國外結算機構取得 QCCP 資格要件之一為該結算機構之當地國主管機關須與 CFTC 建立跨國監理合作，例如洽商簽署 MoU (按：CFTC 已與韓國、日本、澳洲、法國等國主管機關簽訂 MoU)，爰美國 CFTC 與本會同意建立合作監理並簽署 MoU，以建立兩國正面合作關係。

本局代表於 112 年 3 月 14 日藉參與 2023 CFTC BOCA 監理官會議 (Regulator Meeting)機緣，與美國 CFTC 代表雙邊會談，美方就 MoU 草案及 FSC side letter 內容提出修正建議及提問，包括收受實體(Recipient Entity)、合格結算機構之相關法規(Laws and Regulations)、資訊揭露或拒絕提供其他機關請求揭露之情況，本會已向美方就資訊交換規定及保密機制，進一步說明我國法規及本會實務運作，俾利美方瞭解，美國 CFTC 感謝本會說明，目前 MoU 及雙方 Side letter 已進入最後審核程序，對於前揭草案應可達成共識，後續將由兩國外交單位接續簽署程序，期待雙方共同努力推動外交單位儘快完成相關程序。

### 第三節、與芝加哥商業交易所(CME)雙邊會談

CME 背景說明：CME 2022 年全球交易量排名第 3 名，掛牌道瓊工業平均指數、標普 500 指數及那斯達克 100 指數等 3 大美股指數期貨與期貨選擇權，及黃金、銅、WTI 原油、天然氣、黃豆、小麥、玉米與美國公債期貨等熱門商品。

期交所近年來持續與 CME 合作密切，包含：

- 2006 年期交所與 CME 簽訂 MOU。
- 授權期交所 2017 年 5 月 15 日推出道瓊與標普 500 指數期貨，2022 年兩商品日均量分別為 3,632 口及 153 口。
- 授權期交所 2019 年 10 月 1 日推出那斯達克 100 指數期貨，2022 年日均量 5,297 口。
- 申請成為期交法第 5 條國內期貨商得受託交易之商品共 164 檔，2022 年交易量共 15,772,463 口，占總複委託交易量 65%。

雙邊會談內容：

近年來永續發展議題格外受到全球政府及投資人重視，ESG 投資已蔚為風潮，為提供市場交易與避險管道，許多國際性交易所也都就自己旗艦的股價指數期貨，推出對應標的指數 ESG 期貨，目前國際上已有超過 50 檔 ESG 期貨或選擇權商品，但多不活絡。反觀 CME E-mini S&P 500 ESG Index Futures 於 2022 年日均量達 1,500 口，較 2021 年大幅成長 40%，爰我方請 CME 分享成功推廣 ESG 期貨之行銷方式。

CME 表示推廣 ESG 商品時可建議資產管理業者適度將小部分資產組合轉移至 ESG 商品，視後續績效表現再分階段擴大 ESG 商品交易；其二，如 ESG 未平倉部位如有逐漸增加，亦可作為行銷推廣賣點，吸引其他市場參與者進入；第三，可研議降低 ESG 商品鉅額交易門檻，提升商品未平倉量；第四，與指數編製機構合作進行市場宣導與投資人教育至為重要，可增進交易人對 ESG 指數歷史績效、編製方式、成份股選股條件等面向瞭解。此外，建議可由合規(compliance)角度推廣商品，以 CME E-mini S&P Europe 350 ESG 指數期貨為例，其即以標的指數符合歐盟永續財務揭露規範(Sustainable

Finance Disclosure Regulation, SFDR)相關條文(Article 8)向客戶推廣。

美國期貨市場參與者多為法人，惟近年來隨全球散戶交易浪潮興起，CME 微型契約交易量屢創新高，我方亦請 CME 分享近年來散戶交易比重之變化，及 CME 是否計畫持續推出以散戶為主要目標客群之商品；此外，由於散戶風險意識通常較為薄弱，CME 是否針對散戶之增加，推出相關投資人保護或教育宣導措施。

CME 表示推出微型契約後，交易量持續上升，以 2022 年 12 月為例，微型期貨與選擇權契約交易量，占整體股價指數期貨與選擇權交易量 37%，日均交易量達 260 萬口，已成為主力商品之一，未來 CME 亦將視市場需求，研議推出更多微型契約之可行性。此外，投資人保護部分，CME 認為對投資人最好保護就是建立投資人風險意識，因此 CME 於網站上，有從淺到深影片及文字，可供散戶投資人參考。

CME 推出比特幣期貨後，交易量持續上升，日均量從 2020 年 8,500 口，上升到 2021 年 9,800 口及 2022 年超過 1 萬口。2021 年 5 月進一步推出微型比特幣期貨後，亦均有超過 1 萬口之日均交易量。我方請教 CME 比特幣原型及微型契約交易人結構分別為何；此外，我們觀察到今年比特幣價格大跌，及發生 FTX 倒閉事件後，原型比特幣期貨交易量上升，而微型比特幣期貨交易量則下跌，請 CME 分享造成此分歧之原因。

CME 表示，由於原型契約規模較大，1 口契約代表 5 顆比特幣，進入門檻較高，因此交易人以法人為主。CME 為滿足散戶交易需求，於 2021 年推出微型比特幣期貨，1 口契約代表 0.1 顆比特幣，門檻大幅降低，因此也吸引許多散戶參與。在今年發生 FTX 事件後，原型比特幣期貨交易量上升，微型比特幣期貨交易量下降，則代表法人認為在 CME 交易比特幣期貨更具保障，因 CME 為 CFTC 監管交易所，客戶資產均須分離存放，且具完善違約處理流程，能最大程度保護客戶資產。而由於散戶於 FTX 事件中受傷較為嚴重，且散戶投資人較不瞭解傳統交易所提供客戶保護機制，因此微型契約交易量反而下滑。

提供交易人更安全便捷服務，近年來國際交易所紛紛與科技公司合作，將數據庫及分析服務移轉至科技公司所提供之雲端服務平臺，如 LSE、CBOE 及 Nasdaq 分別與 Microsoft、Snowflake 及 Amazon 合作，CME 也與

Google Cloud 於 2021 年簽定 10 年期合作契約，我方再請 CME 分享將數據移至雲端之優點及潛在風險，以及到目前為止所觀察到之實際效益。

CME 表示與 Google Cloud 合作前，客戶可以通過 2 種方式取得數據，包括直接連線 CME 位於伊利諾州之數據中心取得，或透過數據服務商，如 Bloomberg 或 Refinitiv 等，訂閱市場數據服務。但無論那種方式都有各種連線軟、硬體設備需求與花費。雲端服務能降低客戶成本，估計取得數據成本僅為傳統方式 10%。截至目前客戶反映均為正向，尚未發生駭客入侵或其他資安事件。

#### 第四節、與富時羅素指數公司(FTSE Russell)雙邊會談

FTSE 背景說明：FTSE 係倫敦證券交易所全資子公司，為全球主要指數公司之一，編製與管理富時 100 指數等超過 120,000 種指數數據。

期交所業取得富時 100 指數及臺灣永續指數授權：

- 永續指數授權: 期交所 2020 年取得 FTSE 與臺灣指數公司授權，同年 6 月推出臺灣永續期貨，2022 年日均量 50 口。
- 富時 100 指數授權: 期交所 2020 年取得 FTSE 與臺灣指數公司授權，同年 11 月推出新臺幣計價之富時 100 指數期貨，2022 年日均量 292 口。

雙邊會談內容：

ESG 指數如何區別於傳統的股票指數：FTSE 表示，由於 ESG 指數與傳統股票指數之間的表現沒有顯著差異，投資者更傾向交易傳統股票指數產品，而不是 ESG 對應產品。使 ESG 期貨較難推廣。

期交所除了本身發展 ESG，亦引導期貨商發展 ESG。FTSE 表示，期貨交易所由於扮演自律組織(Self-regulatory Organization, SRO)角色，具有一定程度之監管期貨業權責，可透過制定期貨業應遵循 ESG 實務守則，或內部控制制度等方式，引導期貨商遵循相關規範，以推動其落實永續發展。此外，期交所亦應強化投資人取得 ESG 資訊之便利性，建議可建置期貨業永續資訊揭露平台或網站，提供投資人簡單便利取得 ESG 資訊之管道，一同推動期貨業之永續發展。

FTSE 為全球主要指數編製公司之一，與資產管理業者合作密切，對全球資產管理最新趨勢必有深入了解，對於下一個最可能成為明星商品類別，FTSE 表示，碳定價工具(carbon pricing instrument, CPI)非常有機會成為下一個市場明星商品。所謂碳定價工具，包括碳稅/費(台灣將實施碳費)與排放交易體系(Emission Trading System, ETS)，近年來，因能源價格上漲及各國政府實施更嚴格氣候政策，碳定價工具價格大幅上漲，但多數價格仍遠低於實現巴黎協定目標所需價格。根據碳價高層委員會(High-Level Commission on Carbon Prices)報告，要在 2030 年將全球升溫控制在巴黎協定設定 2°C 上限之下，每噸碳價必須落在 50~100 美元區間，但 2022 年底只有不到 4%排放量

達到此價格。因此，對未來價格上漲預期與風險管理需求，將推動碳權相關金融商品發展，使其有機會成為下一個熱門商品。



## 第四章 「CFTC 國際期貨監理官會議」內容重點

### 第一節、主席致詞

主講人：Chairman Rostin Behnam (Chairman, CFTC)

CFTC 主席 Rostin Behnam 表示 2022 年為充滿挑戰一年，CFTC 保持高警覺性，於美國境內、外運用所有可用資源、專業知識與新技術以監控、評估及解決交易量與市場波動度相關議題，並揭露衍生性商品及其標的現貨商品市場不當行為。Behnam 呼籲各國監理機關應加強執法，同時也強調商品研議與氣候變遷等新興議題、加密貨幣和雲端技術興起相關挑戰和好處，以及關於操縱或欺詐方面之加強監管措施，以及疫情及地緣政治發展（包括氣候變化）造成之變化。

CFTC 於確保自願性碳市場（Voluntary Carbon Market, VCM）妥適辦理監理角色，並對不合規範商品採取執法行動；另美國須全面立法規範加密貨幣市場以保護客戶並防止其對美國境內及全球金融市場產生影響，Behnam 也再次強調將繼續推動國會支持 CFTC 之立法授權，呼籲國會應儘速推動改革加密資產監管法案，以避免 FTX 破產事件再次發生。Behnam 表示，目前 CFTC 並無權利監管加密貨幣現貨市場交易，也無法瞭解 FTX 其他子公司營運情形，呼籲國會應賦予 CFTC 更多權利。此外，Behnam 建議應暫時停止審理 2022 年 8 月參議員提出之數位商品消費者保護法(Digital Commodities Consumer Protection Act)，待釐清 FTX 事件後再重新審視該法案，評估是否需進一步強化財務訊息及利益衝突揭露等規定。Behnam 表示其已與前 FTX 執行長 Sam Bankman-Fried 多次會面，討論後續直接清算(clear)旗下客戶交易之可行性，而 LedgerX 為 FTX 旗下受 CFTC 監管之子公司，目前客戶資產仍安全且可持續營運無虞，此次雖排除於破產清算範疇外，但已終止其成立結算所之申請。

此外，Behnam 表明對於吹哨者計劃之高度重視，CFTC 已建置吹哨者辦公室(Whistleblower's Office)。Behnam 並強調與技術相關之執法，以確保其內部舉報計劃完善可信。此外，企業應保持積極、透明和全面之內部舉報計

劃，並在舉報不當行為時進行即時徹底調查。另外，雲端技術出現帶來網絡安全風險，因此應立即採取行動加強其網絡監督和控制。Behnam 呼籲關注 CFTC 吹哨者計劃之有效性以及與加密貨幣相關之檢舉措施之適當性，有關 CFTC 吹哨者辦公室推出之獎勵計劃已向吹哨者發出超過 30 億美元之獎勵。與加密貨幣欺詐相關之檢舉也越來越普遍，在 CFTC 收到數百多份吹哨者舉報案件中，與加密貨幣有關案件正逐年成長，隨著新技術不斷更新，Behnam 表示 CFTC 之吹哨程序將成為越來越重要輔助執法工具。

CFTC 現行監理機制包括強化風險管理及市場韌性、培養健全實務作法、加強客戶保護、促進效率及創新、優化數據申報流程，及降低法規重複性等多項主題。衍生性商品產業所產生有關利益衝突、資本適足、保證金分離存放、自律組織角色與責任、自律組織、關聯企業風險管理及投資人保護等重要議題，須制訂或修正相關規範，與時俱進。Behnam 認為推動 CFTC 執法重點關鍵因素，包括貨幣政策、技術和地緣政治之變化均為其執法重點。疫情影響導致貨幣和財政政策發生變化，均使 CFTC 保持高度警惕。儘管 COVID-19 和國際動盪帶來了挑戰，但美國就監理規範仍持續精進修改，例如清算和風險部（“DCR”）正對擬議之法令規則進行最後修改，以解決衍生性金融商品清算組織（DCO）相關治理問題。

隨著市場之雲端趨勢，CFTC 時刻注意其變化及影響，儘管雲端技術將使機構能夠更有效地存儲和分析數據，但 CFTC 也意識到存在更多網絡安全風險。投資人期望政府機關在網絡安全控制方面可提供高度之監督與盡職調查，CFTC 市場參與者部（MPD）之工作人員正制定相關政策，以解決期貨業者之系統安全問題。

CFTC 去年宣布成立氣候風險部門（CRU），Behnam 強調該部門致力於「理解、評價和減輕」與氣候相關市場風險，特別是關於衍生性金融商品影響。隨著氣候危機加劇，Behnam 鼓勵與會者與 CRU 聯繫，提出 CFTC 應對商品和衍生性金融商品市場氣候危機精進方向之想法、意見和反饋。此外，國際上越來越關注碳排情況與減碳成效，在 2021 年合國氣候變遷大會（COP 26）中，各國對於淨零碳排做出承諾，Behnam 表示 CFTC 亦將與期貨業者及市場參與者，找到風險與機會，及市場定位與商機，以提升整體國際競爭力。

## 第二節、加密貨幣、數位資產及監管之未來趨勢 **Crypto, Digital Assets and Regulation**

與談人：Jorge Herrada, Director, Office of Technology Innovation, CFTC

Alessandro Cocco, Vice President and Head of Financial Markets Group,  
Federal Reserve Bank of Chicago

美國加密貨幣之監理分為聯邦層級與州層級，在聯邦層級，美國目前並無加密貨幣事業主管機關。(FinCEN 主管洗錢防制；SEC 主管有價證券加密貨幣；CFTC 主管加密貨幣期貨商品)。在州層級，美國部分州有針對加密貨幣制定專法管理。美國 CFTC 認為 2022 年為加密貨幣及數位資產的冬天，對加密貨幣來說是動蕩的一年，依數據公司 CoinGecko 統計，2021 年 11 月全球加密貨幣總市值逾 3 兆美元，加密貨幣總市值在 2022 年 1 月初為 2.25 兆美元，隨後在 11 月創下 1.5 兆美元的年度低點，比特幣期貨交易量下降 52%，乙太幣期貨交易量下降 28%，數位資產衍生品市場在過去一年中大幅下降，下降跌幅遠超過乙太幣期貨。

加密貨幣交易所 FTX 破產事件促使監管機構強化執法，在 FTX 破產事件發生後，多數議員籲請證券交易委員會(SEC)及其他聯邦主管機關嚴格監理加密貨幣市場，並討論關法規架構是否完備，刻擬提案將加密貨幣適用於現行銀行、證券、稅徵及反洗錢相關規範，預計於國會會期進行審查。

美國聯準會(Fed)、聯邦存款保險公司(FDIC)與貨幣監理局(OCC)亦發布聯合聲明，示警加密資產市場隱含之金融系統風險。2022 年加密資產市場許多事件均顯示出該市場之重大波動性及脆弱性，銀行業者應注意之加密資產相關風險，包括詐欺、穩定幣脫鉤風險、市場參與者間連動之傳染風險、風險管理措施缺乏成熟度與穩健性，及缺乏市場監理機制等。此外，就目前加密資產市場發展經驗而言，3 大監理機構均認為發行或持有任何由開放、公眾及/或去中心化架構所發行、保管或移轉之加密資產，與銀行業一直以來之安全與穩定實務作為並不一致，意指未來將強化銀行業者加密資產相關業務之監理力道。

此外，美國證券交易委員會(SEC)與 CFTC 簽署加密貨幣監理合作備忘錄(MOU)，期能強化加密貨幣之監理，避免業者鑽監理漏洞。SEC 對證券型代幣(security tokens)平臺業者具管轄權，倘轄下平臺上市商品型(commodity)代幣將知會 CFTC，SEC 表示規範一致性有助防範詐欺、先行交易行為(front-running)及市場操縱，並確保委託簿透明度，以保護證券型及商品型代幣投資人。自 2008 年比特幣問世迄今，美國主管機關對加密貨幣開罰總額達 33.5 億美元，其中 SEC 占比逾七成。

有鑑於 2022 年發生加密貨幣價格重挫及 FTX 加密貨幣交易所破產事件，英國亦公布加密貨幣產業監管計畫，使加密貨幣之代幣發行、交易與借貸相關規範更加貼近股票及債券等傳統金融資產。該計畫並首創全球加密貨幣借貸制度，受監管加密貨幣貸方(lender)須充分揭露消費者風險，並於破產時隔離(ringfence)客戶資金，亦應納入借貸平臺主要交易對手破產相關緊急應變措施，該監理計畫將提升英國於數位資產領域之市場競爭力。

另 2022 年 7 月 CFTC 將 LabCFTC 升格為技術創新辦公室(Office of Technology Innovation, OTI)，旨在透過創新、諮詢合作及教育等方式推動監管技術革新、促進產業合作並強化教育宣導。CFTC 交換契約執行機構(Swaps Execution Facilities)根據美國商品交易法(CEA)規定成立，於 CFTC 監管下運作之交易機構，旨在促進交換交易由 OTC 轉至 SEF 並強化交易前(pre-trade)價格透明度。其中，符合美國聯邦法規(CFR)第 17 章所定義之交換契約(swap)可於 SEF 交易，包括利率交換(Rate swaps)、信用交換(Credit swaps)、股權交換(Equity swaps)及其他商品交換(Other Commodity swaps)共 4 類，CFTC 將期貨及期貨選擇權除外之所有衍生性商品即定義為 swap。而金融機構、保險公司或商品基金(Commodity pool)等合格契約參與者(Eligible Contract Participants)則遵循 SEF 規則進行交易。

倘機構有提供交易系統或平台，且有任一市場參與者透過使用該系統或平台與其他市場參與者執行或交易 swaps，則須向 CFTC 申請註冊為 SEF 或指定契約市場(Designated Contract Markets, DCMs)；商品交易法(CEA)第 5 節、美國法典 U.S.C. 7 及 CFTC 第 37 章等均涉及 SEF 相關註冊標準、程序及規範要求。註冊機構須持續遵循(ongoing compliance)上述法條及下列 15 項核心準則面向之相關規定，始能維持其 SEF 資格，包括(1)遵守核心準則、(2)

遵守法條規定、(3)不易受操縱之交換契約、(4)交易及交易過程之監控、(5)獲得資訊之能力、(6)部位限制及問責制度、(7)交易之財務完整性、(8)緊急情況授權、(9)及時發布交易資訊、(10)紀錄保存及申報、(11)反壟斷、(12)利益衝突、(13)財務資源、(14)系統保障及(15)任命法遵長。在申請註冊為 SEF 時，機構須說明自身組織規範如何應對滿足各項核心準則之要求。此外，CFTC 轄下市場監視部之法遵分部會定期審查 SEF 是否合規，機構自行訂定之自律計劃是否確實執行以防範市場操縱，並確保交易紀錄妥適保存等其他要求，上述審查統稱為規範執行審查(Rule Enforcement Reviews, RERs)。

2014 年 9 月，CFTC 為交換契約執行機構(SEF)之 TeraExchange 推出受監管之美元/比特幣交換契約(USD/Bitcoin swaps)交易平台及比特幣現貨價格指數，以因應市場上對受監管之比特幣商品需求大幅增加；CFTC 再於 2017 年 7 月核准 LedgerX 為 SEF，成為第 2 家可提供加密貨幣衍生性商品交易之交易所，相隔約 20 日，LedgerX 進一步獲准成為衍生性商品結算機構(Derivatives Clearing Organization, DCO)。CFTC 核准平台業者成為 SEF 時，並不會限制其交易商品種類；目前經核准註冊之 SEF 包括 Bloomberg SEF、Cboe SEF、ICE Swap Trade、LedgerX 等共 21 家，包括：

申請狀態(Status)	家數	機構名稱(Organization)	
已註冊(Registered)	21	360 Trading Networks AEGIS SEF BGC Derivatives Markets Bloomberg SEF Cboe SEF Clear Markets North America DW SEF GFI Swaps Exchange ICAP Global Derivatives ICE Swap Trade iSwap Euro	LatAm SEF LedgerX NEX SEF Refinitiv US SEF SpectrAxe SwapEx TeraExchange tpSEF Tradition SEF TW SEF
暫停(Dormant) (連續長達 1 年未 有任何交換交易)	5	Chicago Mercantile Exchange FTSEF ICAP SEF (US)	MarketAxess SEF Tassat Derivatives
緩辦(Pending)	1	RTX Fintech & Research	
撤回(Withdrawn)	3	EOX Exchange SDX Trading	INFX SEF
撤銷(Vacated)	2	GTX SEF	Seed SEF

### 第三節、氣候變遷對產業衝擊及主管機關因應之道(How Climate is Impacting our Industry and What should Regulators do about it? )

與談人： Moderator – Mauricio Melara – Deputy Director, Office of International Affairs, CFTC

Abigail Knauff – Special Counsel to Chairman Behnam and Deputy of the Climate Risk Unit, CFTC

Flavia Rosembuj – Climate Change Group, World Bank

CFTC 於 2021 年 3 月成立氣候風險部門(Climate Risk Unit, CRU)，旨在推動把對衍生性商品理解及定價等面向納入氣候風險因素，制定全球一致準則政策，引導社會邁向低碳經濟，並建立具氣候韌性金融體系。CRU 就氣候變遷衍生之新型態風險、極端天氣事件對市場影響等議題，與交易所、結算所、業者及市場參與者積極交流溝通。市場更全面瞭解 CFTC 如何推動衍生性商品揭露氣候相關市場風險，邁向淨零經濟模式，以及該類型產品如何融入並遵循 CFTC 或其他主管機關監管框架。CFTC 呼籲各國監理機關積極參與國際論壇，目標係為促成衍生性商品及市場在一致性準則、分類法、揭露方式、實行步驟、監管法規及會計標準等面向達成共識。

此外，自俄羅斯削減對歐盟供應，歐盟天然氣主要交易及定價市場—荷蘭天然氣交易中心(Title Transfer Facility, TTF)之俄羅斯天然氣交易市占率大幅下降，已無法真實反映歐盟能源市場現況。為緩解歐盟能源市場危機，EC 於 2023 年 2 月 15 日起實施天然氣價格上限市場矯正機制(Market Correction Mechanism, MCM)，倘若 TTF 近月期貨價格連續 3 日達每兆瓦時 180 歐元且較液化天然氣(LNG)平均價格高出每兆瓦時 35 歐元，將觸發該機制，防止能源價格極端波動、抑制價格上漲及投機活動，確保歐洲能源衍生性商品市場價格發現功能。歐洲央行(ECB) 2022 年底發布金融穩定報告，其能源供應商亦為大型交易人，對金融穩定雖不具直接危險性，但有一定風險。ECB 並示警倘能源價格波動加劇及持續上漲，半數電力及天然氣衍生性商品交易商恐面臨保證金追繳。另一方面，部份能源業者選擇轉與其他業者進行雙邊交易

以提升資金運用靈活度，惟此類交易市場不甚透明恐導致金融系統面臨更大風險。

我國為積極因應氣候變化，實現永續發展，於 2023 年 2 月 15 日公布將「溫室氣體減量及管理法」修正為「氣候變遷因應法」，完備我國氣候法制基礎。修正重點包含納入 2050 年淨零排放目標、確立部會權責、強化排放管制及誘因機制促進減量、徵收碳費專款專用、增訂氣候變遷調適專章、納入碳足跡及產品標示管理機制，並強化資訊公開及公眾參與機制等。

碳定價是促進減少碳排放之重要政策工具。修正案包括對直接、間接排放源徵收碳費，收入將用於溫室氣體減排計畫，發展負碳技術和低碳產業，並針對溫室氣體減排技術投資給予補貼獎勵。此外，鼓勵企業透過自願減量措施或計畫取得之減碳額度可以轉讓、交易或拍賣。

近年來我國資本市場蓬勃發展，證券期貨業獲利亦屢創新高，證券期貨業除透過各種管道、活動將獲利回饋投資人及社會外，亦關注全球重視環境(E)、社會(S)及治理(G)等永續相關議題之趨勢，積極投入於創造永續發展的市場環境，建構完善的 ESG 生態體系。

為強化證券期貨業健全永續發展經營，本會發布「證券期貨業永續發展轉型執行策略」，以完善永續生態體系、維護資本市場交易秩序與穩定、強化證券期貨業自律機制與整合資源、健全證券期貨業經營與業務轉型、保障投資或交易人權益及建構公平友善服務等 5 大目標，擬定 3 大推動架構、10 項策略及 27 項具體措施。

甫於 2021 年落幕的聯合國氣候變遷大會(COP 26)中，各國對於淨零碳排已做出承諾，我國也宣示將在 2050 年達成淨零碳排的目標。此時正是產業轉型的重要時刻，也是證券期貨業轉型的關鍵時機，希望藉由本執行策略的推動，協助證券期貨業能順利轉型，找到風險與機會，及市場定位與商機，以提升整體證券期貨業之國際競爭力。

## 第四節、執法工作面臨之問題、挑戰和趨勢探討 (Enforcement Discussion on Issues, Challenges and Trends Facing the Industry)

主講人： Nina Ruvinsky – Senior Trial Attorney and Co-Chair of Digital Asset Task Force, Division of Enforcement, CFTC

美國 CFTC 依據執行商品交易法和條例(Commodity Exchange Act and Regulations)進行執法行動，美國 CFTC 三個核心執法原則：包括客戶保護、維持市場完整性、追究不法行為之責任。另 CFTC 與其他州及聯邦機構合作執法，2022 年美國 CFTC 提起了 82 項執法行動，並發出超過 25 億美元關於沒收及民事罰款之命令。CFTC 吹哨者辦公室推出之獎勵計劃迄今已向吹哨者發出超過 30 億美元之獎勵。

2022 年美國 CFTC 執行之 82 項執法行動如下:

FY 2022 Enforcement Actions Filed	
Case Category	# of Actions Filed
Manipulative Conduct, False Reporting, Spoofing	7
Fraud <sup>1</sup>	31
Supervision, Financial Integrity, Business Conduct	7
Illegal Off-Exchange Contracts, Failure to Register	12
Trade Practice Violations (includes Wash Trades, Fictitious Trades, Position Limits)	2
Reporting, Recordkeeping <sup>2</sup>	18
Misappropriation of Material, Non-Public, Confidential Information, Misconduct by Employees against their Employers	3
False Information to CFTC or SRO, Violation of Prior Order	1
Statutory Disqualification	1
<b>Total</b>	<b>82</b>

<sup>1</sup> 15 of these actions also included Failure to Register charges, while 3 of these actions also included false statements to either the CFTC or an SRO.

<sup>2</sup> 15 of these actions also included Failure to Supervise charges



我國期貨市場近況及國際合作：

一、完成建置店頭衍生性金融商品集中結算機制，以強化相關交易風險管理並吸引國際資金參與我國市場：

期交所 111 年 7 月 25 日開辦店頭衍生性金融商品集中結算業務，首先推出新臺幣利率交換契約(Interest Rate Swap, IRS)之結算會員自營交易集中結算服務，並將於 112 年 7 月進一步推出新臺幣 IRS 結算會員客戶交易及新臺幣無本金交割遠期外匯契約(NDF)之集中結算服務，期交所建置我國店頭衍生性金融商品集中結算機制，有助於強化我國金融機構從事店頭衍生性金融商品交易之風險管理與吸引國際金融業者參與我國集中結算市場，並提升我國金融市場國際能見度。

二、本會積極推動期交所爭取國際主要金融市場主管機關認可為第三國合格集中結算機構(QCCP)之辦理情形：

為吸引國外金融機構參與我國集中結算，本會積極推動期交所申請國外主管機關認可為 QCCP。有關期交所申請歐盟 QCCP 認可，歐盟執委會( EC ) 於 111 年 9 月公告，我國期貨法規架構及監理機制已通過歐盟評估，符合歐盟法規對等( equivalence ) 規範；本會與 ESMA 於 111 年 10 月完成異地簽署 MoU，此簽署促進我國與歐盟金融監管機關相互合作關係以及強化雙邊合作承諾，並深化本會與 ESMA 之跨國監管合作。ESMA 董事會於 111 年 12 月通過期交所 QCCP 之認可決定(Recognition Decision)，歐盟金融機構透過期交所進行結算可享有優惠之資本計提，有效提升其資金效率，提高外資參與我國金融市場之意願及市場信心，有利吸引歐盟國際金融機構參與我國金融市場，並提升我國國際能見度。

此外，本會於 112 年 3 月與加拿大不列顛哥倫比亞省證券管理委員會(OSC)簽署瞭解備忘錄( MoU )，就期交所向 OSC 申請為合格集中結算機構(QCCP)一事建立跨國監理合作協議。這是本會繼 109 年 6 月與加拿大證券管理機構(CSA) 之 8 省金融主管機關共同簽署金融科技合作協議(Fintech Cooperation Agreement)後，進一步擴大兩國金融監理合作範圍，將深化我國與加拿大之連結與交流，並有助於提升我國金融市場安全、效率與國際競爭力。

另期交所於 111 年 9 月 15 日獲美國 CFTC)核發 No-Action Relief，刻向 CFTC 爭取永久性 QCCP 之資格認可，且澳洲金融機構亦可依據該國法令規

範自行認定期交所為 QCCP，另已向英國主管機關遞件申請認可為英國合格境外集中結算機構，屆時可望進一步提高外資參與我國金融市場之意願及市場信心。

## 第五章 美國期貨業協會年會內容重點

FIA 於每年 3 月份舉辦年會，係為使其會員吸收及分享業界新知、觀點，進而增進期貨市場之健全發展，各國代表均踴躍參與探討期貨業界發展議題與最新動態。

本屆年會於 2023 年 3 月 15 日至 16 日於美國佛羅里達州波卡雷登（Boca Raton）舉行，計有 65 個國家、超過 40 家交易所代表與會。會議內容化市場監理、數位資產政策未來展望，及大宗商品展望—氣候風險影響等論壇，邀請各國主管機關、交易所與業界專家代表擔任與談人進行探討。本屆年會重點如下：

### 第一節、開幕致詞與專題演講

#### 開幕致詞（Opening Remarks）

主講人：Walt Lukken (FIA 主席)

2022 發生許多重要事件，包括過去半個世紀來最大軍事戰爭、80 年代以來最快速上升物價、50 年來最高利率以及加密產業一連串倒閉事件等。在這些挑戰中，期貨業仍持續成長，2022 年交易量成長 34%，顯示期貨業經歷過去多年挑戰與變革，已具足夠市場韌性。

網路風險部分，雖甫發生 ION 遭網路攻擊事件，但過去累積經驗亦順利協助期貨業解決問題，FIA 對期貨業迅速應對此一嚴重網路事件感到自豪。FIA 3 月初成立網路風險工作小組，將匯集市場及網路專家意見，分析提高市場彈性方法，亦將與監管機構密切合作，確保網路安全與業務連續性。

另一項 FIA 提高市場韌性成果為成立衍生性商品市場標準研究所（Derivatives Market Institute for Standards, DMIST）。DMIST 刻討

論結算時間調整、交易參考數據等議題，且近期發布第二份年度進度報告，旨在調整結算作業流程，以期改善期貨業危機應變能力。

## 第二節、專題座談

### (一) 交易所領導人圓桌論壇 (Exchange Leaders Roundtable)

主持人：Bob Pisani (CNBC 資深市場新聞特派記者)

與談人：

- Nicolas Aguzin—香港交易所 (HKEX) 執行長
- Stephane Boujnah—泛歐交易所 (Euronext) 董事長兼執行長
- Terry Duffy—芝加哥商業交易所 (CME) 董事長兼執行長
- Adena Friedman—那斯達克交易所 (Nasdaq) 董事長兼執行長
- Loh Boon Chye—新加坡交易所 (SGX) 執行長
- Michael Peters—歐洲期貨交易所 (Eurex) 執行長
- David Schwimmer—倫敦證券交易所 (LSEG) 執行長
- Jeff Sprecher—洲際交易所 (ICE) 董事長兼執行長
- Edward Tilly—芝加哥選擇權交易所集團 (Cboe Global Markets) 執行長

本場論壇主要討論近期交易狀況、俄烏戰爭影響、美中關係、衍生性商品法規整合、網路安全與加密貨幣等議題：

- 1、過去數個交易日因美國矽谷銀行 (SVB) 等數家中、小型銀行倒閉，引發市場動盪，亦使許多衍生性商品交易所交易量大幅增加，例如 CME、Cboe 與 Eurex 等均創下史上前三高單日交易量。與談人表示，交易所主要功能之一，為提供市場參與者避險工具，使風險得以順利轉移，此亦為過去數日面臨市場動盪時，交易量大幅上升主因。
- 2、俄烏戰爭部分，各國政府制裁俄羅斯對交易所營運產生一定程度影響，如 LSEG 配合制裁，停止俄國企業上市，並將俄國企業從主要指數中移除，且關閉俄羅斯業務。Euronext 則認為，俄國資產遭凍結後仍持續孳息，未來

一旦解除制裁，相關資金釋放將對市場產生重大影響。

- 3、美中關係部分，香港交易所認為中國開放新冠肺炎管制措施速度為全球第一，吸引大量資金移動，過去一個月流入中國資金為過去一年總和。此外，中國存款亦於解封後，積極尋找國外投資標的，不可忽視相關影響，並預期未來一年地緣政治仍為主要影響市場因素。SGX 則認為以境外金融角度而言，中國從未對外封鎖，全世界交易者均可經由 SGX 參與中國市場交易。
- 4、網路安全與雲端業務部分，CME 認為網路安全為少數不論投入多少資源，均無法保證結果議題，具相當不確定性，為 CME 最重視領域之一。雲端部分，過往因雲端服務無法複製自有系統各項功能，未跨入雲端，惟現已可完全複製自有系統功能，故其與 Google Cloud 合作，將數據與分析等業務移至雲端。Nasdaq 則是 10 年前即開始陸續將業務移至雲端，目前雲端服務僅較自有系統效能低約 10%。LSE 表示其與微軟合作非僅將服務雲端化，而係共同開發服務與商品。Euronext 則指出，網路安全威脅與飛機塔臺及核電廠管制作業相似處甚多，一旦出錯即恐造成嚴重後果，故曾親率高階主管赴前述企業學習。此外，攻擊者經常尋找系統最脆弱處攻擊，故須提升整體網路安全意識方可妥適防範。
- 5、加密貨幣部分，全體與談人均認為區塊鏈為未來趨勢，具可追蹤性及降低成本等優勢，惟加密貨幣並非應用區塊鏈技術必要條件，故對加密貨幣看法較為保守。
- 6、衍生性商品法規部分，與談人認為各區域法規相異造成市場分割，不冀望全球法規完全一致，僅希望主管機關間強化合作，建立和諧法規體系。

## (二) 強化市場監理 (Enhancing Regulatory Oversight)

主持人：Jacqueline Mesa (FIA 營運長)

與談人：

- Ugo Bassi—歐盟執委會 (EC) 金融市場總監
- Sasha Mills—英國央行 (BOE) 金融市場基礎設施執行總監
- Abigail Ng—新加坡金融管理局 (MAS) 市場政策及基礎設施部門執行總監
- Caroline Pham—美國商品期貨交易委員會 (CFTC) 委員
- Michael Voisin—Linklaters 法律事務所合夥人

科技快速變革及系統性風險增加，日益加速對金融業有效監理需求。座談會探討監理相關主題，包括加強監理加密貨幣、大宗商品、氣候風險及非金融中介機構 (non-financial intermediaries) 必要性，議題涵蓋加密貨幣市場如何平衡創新與消費者保護，及如何因應氣候風險與促進整體金融體系永續金融發展，摘要如下：

- 1、國際合作於強化監理方面至關重要，而隨著金融市場快速全球化，監理機構須共同應對洗錢、資助恐怖主義 (terrorist financing) 及網路威脅等跨境 (cross-border) 挑戰，亦重申跨市場 (jurisdiction) 法規標準化、資訊共享及協調執法行動 (coordinated enforcement actions) 重要性。
- 2、另一關鍵主題為面對快速變化市況及新興風險時所需敏捷性 (agility) 與適應性 (adaptability)。監理機構須跟進區塊鏈等技術創新步伐，與時俱進，同時亦須就如何因應氣候變化及非金融中介機構參與金融活動程度日漸提高等新風險，及早進行準備。

- 3、數據與分析工具於識別新興風險及強化監理方面扮演重要角色，對監理機關員工持續進行培訓及專業發展實屬必要。
- 4、歐盟執委會近期提議修訂新版歐洲市場基礎設施監管規則（EMIR 3.0），其中包括引入新的小型金融交易對手類別、簡化非金融交易對手相關申報規範以及實施結算機構新框架等，以使 EMIR 與其他國際標準保持一致，並解決與英國脫歐相關過渡性問題。
- 5、歐洲議會經濟與貨幣事務委員會（ECON）近期通過加密資產市場監管法案（Markets in Crypto-Assets Regulation, MiCA）修正案，其中包括加密資產定義更加廣泛、將去中心化金融（DeFi）平臺納入監理範圍，及對穩定幣發行人詳加規範。ECON 亦提議創建新加密資產監理沙盒。前述修正案預計將於未來數月內由歐洲議會進一步討論及表決。
- 6、有效監理於促進金融穩定及保護消費者方面發揮關鍵作用。隨著金融業演進及新興風險不斷出現，監理機構須採取積極主動及創新方式，確保市場保持公平競爭環境及促進永續金融發展，並透過協同合作及採用新科技，建立具韌性與透明金融體系。



### (三) 專家觀點-數位資產政策未來展望 (Expert Insights - The Outlook for Digital Assets Policy: Greater Clarity or More Confusion?)

主持人：Allison Lurton (FIA 法務長)

與談人：Timothy Massad (哈佛大學甘迺迪學院研究學者)

- 1、本場會議以聽眾投票開場，5 成聽眾認為美國目前對加密資產法規過嚴，另外半數則認為過鬆。Massad 表示，目前美國仍未制定加密資產法規主要原因在於支持加密資產者擔憂法規過於嚴格，恐限制虛擬貨幣發展，因此反對立法；反之，反對加密資產者亦不樂見立法後，加密資產正當性更加完備，反有利其發展，故亦反對立法，造成立法困難。
- 2、此外，過去 10 年就加密資產究屬證券或商品範疇爭議，亦阻礙訂定加密資產相關監理規範，導致相關投資者保護標準落後其他金融工具，使交易人蒙受損失。
- 3、為解決加密資產監理問題，Massad 建議美國證券交易委員會 (SEC) 及 CFTC 共同創立與監理一新自律組織 (SRO)，其運作類似現行金融業監管局 (FINRA) 及期貨協會 (NFA)，主要任務係制定及執行加密產業標準，以保護投資者及金融市場。此 SRO 可避免加密資產究為證券或商品爭議，亦無須改變傳統證券及衍生性商品標準，且無損 SEC 及 CFTC 間分工架構。
- 4、前述倡議另一優點為 SEC 與 CFTC 可依現行法律創建此 SRO，毋需由國會立法，可免除立法困境。SEC 與 CFTC 雖無法強制加密資產業者加入該 SRO，惟可透過推出激勵措施鼓勵業者加入並遵守 SRO 規範，進而推動加密貨幣監理生態系統發展。

#### (四) 專家觀點-推動多元、平等與包容 (Expert Insights- Sponsorship to Help Drive DEI)

主講人：Keisha Bell (美國證券集中保管結算公司 (DTCC) 人力資源管理董事總經理)

- 1、數據顯示基層員工種族與性別多元性遠高於高階主管，顯示特定性別與種族員工較易晉升。所有族群中又以亞洲女性與黑人女性最為弱勢，直到近年來多元、平等與包容 (Diversity, Equity, and Inclusion, DEI) 議題漸為企業重視，方有改善。
- 2、為推廣企業內部 DEI，不僅弱勢團體須自己發聲，公司管理階層亦須為他人發聲，以其力量創造出人人均可被公平對待工作環境。職場贊助者 (sponsorship) 即為協助發聲方式之一。
- 3、DTCC 相當重視 DEI 議題，已推出一系列專案，目標係識別最優秀多元化人才並為其制定持續成長計劃、安排資深職場贊助者、增加職業發展透明度、提供主題性管理培訓與報告等，主要專案如下：
  - (1) Men as Allies for Advancing Gender Equality 以及 Men Advocating Real Change (MARC) 計畫：以男性主管擔任弱勢員工職場贊助者。
  - (2) Advancing Women Leaders：正式職場贊助者計畫，為期 1 年半，培養未來高階主管，指定職場贊助者、客製化培訓與發展。
  - (3) Emerging Women Leaders：培訓具潛力女性領導者訓練計畫為期 6 個月。
  - (4) Re-Emerge Internships：重返崗位計畫，支持重返職場員工。

## (五) 大宗商品展望—氣候風險影響 (The Outlook for Commodities - The Impact of Climate Risk)

主持人：Nelson Neale (CHS Hedging 大宗商品經紀商總經理)

與談人：

- Amanda Cain—法國興業銀行 (Societe Generale) 大宗商品代理部主管
- Robin Martin—倫敦金屬交易所 (LME) 市場發展主管
- Dan Scarbrough—IncubEx 產品開發公司總經理暨營運長
- Guy Wolf—Marex 金融服務公司市場分析全球主管

氣候變化對全球經濟產生全面性影響並衝擊大宗商品市場，世界逐漸轉型至低碳經濟提升永續及低碳商品市場需求，傳統大宗商品產業則致力因應氣候風險帶來挑戰：

- 1、新商品如電動車金屬、碳抵減及新能源或電力商品持續成長。此類新興市場為投資人及交易人帶來重要機遇，亦伴隨挑戰，如供應鏈複雜度與不確定性高，價格波動大且不易預估，而投資人就氣候風險對前揭新商品市場影響程度尚未完全了解，亦提高風險評估難易度。
- 2、農業、石油、天然氣及礦業等傳統商品產業亦受到氣候變化影響。天氣模式、資源枯竭及其他氣候相關因素正以各種方式影響前述產業，範圍涵蓋農作物產量、石油生產、採礦及航運路線。由於企業正尋找新方式以適應市況不斷變化並減少碳足跡，此項挑戰亦加速推動產業創新及多元化。
- 3、金融市場於致力推動永續發展及促進採用低碳科技方面亦扮演關鍵地位。將氣候風險納入投資決策投資人日益增加，影響商品及相關金融工具定價，進一步促使大宗商品交易所開發新商品及服務，如倫敦金屬交易所 (LME) 近年推出氫氧化鋰、美國與歐洲廢鋁溢價等永續議題相關期貨，而

產品開發公司 IncubEx 則與歐洲能源交易所 (EEX) 旗下負責北美市場 Nodal 交易所合作推出華盛頓碳權配額 (Washington Carbon Allowance, WCA) 期貨及風力再生能源憑證 (Renewable Energy Certificate, REC) 期貨等，以因應市場不斷變化。

- 4、轉型至低碳經濟仍存在其他挑戰，如貿易戰及能源政策等地緣政治因素持續影響大宗商品市場及氣候風險，而監理法規變革亦影響大宗商品市場前景。鑑於透明度及準確數據對評估氣候風險及進行合宜投資決策至為重要，市場參與者須致力提高資訊品質及可用性，以透明、創新合作方式應對市場不斷變化，建立永續發展全球經濟。

## 第五章 參與會議心得與建議

各國主管機關藉此會議加強互動並討論期貨、期權、衍生品、加密貨幣、監管等方面最新國際趨勢。兩年多來因疫情只能舉辦線上會議，今年來自世界各地之監理機構及交易所以及各會員成員得以聚集在 BOCA，雖然疫情危機正在消退，但烏克蘭戰爭(Russia Ukraine War)背景下，戰爭對市場穩定性、網絡安全、雲端使用、加密貨幣仍是當前最熱門話題。

過去兩年各國採取之穩定市場機制都發揮應有作用，多數主管機關認為目前全球期貨市場基礎設施尚為穩固，但不能因此自滿，特別是美國政府最近就美國關鍵基礎設施遭受網絡攻擊風險發出警示，業者及交易所都需要確保其擁有最強大之網絡防禦能力，各業都應將自己視為潛在被攻擊目標，積極採取適當防護措施，確保擁有全面網絡計劃，另應加強資訊人員之培訓、第三方風險評估、事件應變計劃等。而因應烏克蘭危機及疫情影響，本次會議也針對 ESG（環境、社會和公司治理）這個極其熱門之話題進行論，ESG對於所有企業、股東、客戶和員工至關重要，也確實是一個國際趨勢轉變，各產業必須持續跟進並確保擁有適當 ESG 框架，循序漸進積極推動ESG企業文化。

本會亦藉本次會議機緣安排與加拿大OSC及美國CFTC代表舉行主管機關之雙邊會談，建立主管機關之跨國監理合作，另與期交所及期貨公會共同參加與芝加哥商業交易所(CME)及富時羅素指數公司(FTSE Russell)雙邊會談，從交易所間人員教育訓練合作到商品開發合作，到市場管理經驗分享，包括國外交易所旗艦指數授權、碳權商品發展、虛擬貨幣管理等議題進行請益，並動我國市場國際化。以下謹提出本次參與會議之心得與建議：

**一、積極建置國內店頭衍生性商品集中結算制度：**由於店頭衍生性金融商品具有高槓桿等特性，自97年全球金融風暴後，各國逐漸重視店頭衍生性金融商品風險管理，我國108年1月16日修正公布之期貨交易法第3條增訂店頭衍生性金融商品採集中結算法源，本會108年6月24日配合修正「期貨結算機

構管理規則」，規定結算機構得辦理店頭衍生性金融商品集中結算業務，並發布令指定期交所為辦理店頭衍生性金融商品強制集中結算之機構。配合國際期貨市場監理制度發展將店頭衍生性金融商品納入集中結算，本會督導期交所建置國內店頭衍生性金融商品集中結算機制，並於111年7月21日核准期交所於111年7月25日開辦「店頭衍生性金融商品集中結算業務」，首先提供新臺幣利率交換契約(Interest Rate Swap, IRS)之結算會員自營交易集中結算服務，目前計有11家金融機構取得結算會員身分，將新臺幣IRS交易提交至期交所進行集中結算，除可直接享受減少資本計提之優惠及降低金融機構內部作業處理成本外，並提供金融機構就近於國內進行集中結算服務，有效提升金融主管機關掌握店頭衍生性金融商品市場狀況，增進金融市場穩定，完善我國金融市場基礎設施之具體成果。

**二、推動期貨市場跨國合作監理及 QCCP 認可：**為吸引國外金融機構參與我國集中結算，本會積極推動期交所申請國外主管機關認可為QCCP，並積極與各國主管機關建立跨國金融監理合作。本會於會議期間安排與加拿大OSC及美國CFTC代表舉行主管機關之雙邊會談，有效促成本會與加拿大OSC於112年3月27日完成異地簽署MoU，建立對跨國結算機構之金融監理合作關係，有助於OSC後續對於期交所QCCP申請案之認可，屆時期交所取得認可，將使加拿大金融機構得透過期交所進行結算，並享有優惠之資本計提，有效提升其資金效率；另美國CFTC刻正進行期交所永久性QCCP之資格認可之審核，美國CFTC亦表示與本會建立跨國監理合作之重要性，屆時期交所申請各國主管機關認可為QCCP，可望進一步提高外資參與我國金融市場之意願及市場信心，打造多元創新、安全效率之資本市場，吸引外資為我國金融市場注入活水，並提升我國金融市場之國際競爭力與能見度。

**三、加強我國資訊安全作業及強化網路交易安全相關規範：**雲端及科技仍然是全球金融市場熱門話題，因應大量交易數據，將資訊移至雲端運算環境帶來人工智慧分析巨大商機，多家雲端計算公司已分別與CME、德國交易所集

團、LSEG 及 Nasdaq 等全球主要交易所建立合作夥伴關係；此外，近兩年因為疫情或封城等因素致工作型態改變(例如遠距及居家辦公)，許多工作遷移到雲端，實體應用程序、關鍵業務及交易功能等系統更新速度是否得以因應愈發重要。期貨商應協助客戶熟悉各項系統或軟體操作，提高彈性並增加系統容量及強化系統穩定性。近年來我國期貨市場網際網路使用層面擴大，網路交易數量成長快速，強化網路安全措施亦顯重要，建議期貨商強化其內部控制制度標準、雲端運算、社群媒體、行動裝置資訊安全自律規範、電子交易相關規範，加強網路安全宣導及資通安全作業，有效管理電子交易，並建議期交所加強對期貨商資訊安全之宣導，將業者雲端運算、社群媒體、行動裝置、資訊平台等系統安全，作為期貨商內部控制制度定期查核之重點項目。

**四、加密貨幣及數位資產監管之國際趨勢：**加密貨幣及數位資產相關風險包含網路攻擊、缺乏隔離之客戶資產和利益衝突，也不乏濫用於非法目的或是詐騙，在FTX事件中看到投資人(尤其是散戶)受到的傷害。目前加密貨幣散戶投資者增加，CFTC也呼籲加強對加密交易所之監管，認為主管機關應在三方面加強檢查，包括網路安全、利益衝突及安全穩健財務審查等；此外在網路威脅部分，加密貨幣收到重大網絡攻擊威脅，現在網絡罪犯目標主要是投資者在不同區塊鏈之間轉移數位資產及數據時進行攻擊，更應強化相關監理。各國主管機關認為應該彌補現有漏洞及監管差距，另交易人對於此威脅也沒有足夠認識，因此必須注意客戶和公司資金混用之情況，避免客戶資金遭濫用。建議持續關注國際趨勢，作為國內制定散戶投資人保護措施之參考，及強化對加密貨幣、數位資產及監管，做為未來監理之工作重點。

**五、期貨產業未來展望及健全國內期貨市場發展：**2022年迄今，疫情及烏俄戰爭造成全球市場動盪，市場風險與監理政策為今年備受關注議題；且烏俄戰爭導致能源價格上漲50%，全球供應鏈面臨重大壓力，各國面臨小麥、石

油、金屬、化肥等大宗商品短缺難題，市場相關風險管理應具備警示機制，以因應價格急遽變動情境。另新興市場快速成長，延長交易時間為許多交易所吸引資金且提升交易量方式，惟交易所與期貨商均應考量更健全之風險管理，例如應將定期壓力測試、考量市場間相關性與可能連鎖效應，納入相關市場監理規範，以完善監管風險機制。本會將持續參與國際會議，積極關注各國監理趨勢發展，強化風險管理，提升期貨市場交易人風險意識，健全國內期貨市場發展。



## 附件

- 一、CFTC國際期貨監理官會議及FIA年會議程
- 二、CFTC國際期貨監理官會議出席名單
- 三、CFTC國際期貨監理官會議資料

# 附件一

## CFTC國際期貨監理官會議 及FIA年會議程



Boca Raton Resort – Addison Ballroom  
Boca Raton, Florida  
March 14, 2023

- 8:00 – 9:00            **Registration**
- 9:00 – 9:10            **Welcoming Comments** - Kevin Piccoli, CFTC Deputy Director and Head of Technical Assistance
- 9:10 – 9:30            **Opening Remarks** – Chairman Rostin Behnam
- 9:30 – 10:30           **Enforcement Discussion on Issues, Challenges and Trends Facing the Industry** – The discussion will begin with a presentation by the CFTC’s Enforcement followed by an interactive discussion with all participants on enforcement in their jurisdiction.
- Nina Ruvinsky – Senior Trial Attorney and Co-Chair of Digital Asset Task Force, Division of Enforcement, CFTC
- 10:30 – 10:45           **The Importance of a Whistleblower’s Office** –The CFTC Whistleblower’s Office will discuss the benefits and challenges facing them in today’s environment.
- Melanie Devoe – Attorney Advisor, Whistleblower Office, CFTC
- 10:45 – 11:00           **Break**
- 11:00 – 12:00           **Crypto, Digital Assets and Regulation – Where is it heading?** The Director of the CFTC Office of Innovation will lead a discussion on the latest in crypto and digital assets. This will be followed by a discussion from the perspective of the Federal Reserve Bank of Chicago.
- Jorge Herrada, Director, Office of Technology Innovation, CFTC
  - Alessandro Cocco, Vice President and Head of Financial Markets Group, Federal Reserve Bank of Chicago
- 12:00 – 1:00           **Break**



1:00 – 2:00

***How Climate is Impacting our Industry and What should Regulators do About it?*** This discussion will focus on climate issues we face as regulators and how we are addressing them. This will be followed by an interactive discussion with all participants about their experiences.

- Moderator – Mauricio Melara – Deputy Director, Office of International Affairs, CFTC
- Abigail Knauff – Special Counsel to Chairman Behnam and Deputy of the Climate Risk Unit, CFTC
- Flavia Rosembuj – Climate Change Group, World Bank

2:00 – 3:00

***Regulatory Roundtable*** – Senior regulators from around the world will discuss issues, challenges, priorities and trends in their jurisdiction.

- Suyash Paliwal – Director, Office of International Affairs, CFTC
- Ugo Bassi – Director of Financial Markets at FISMA, the European Commission's Directorate General for Financial Stability, Financial Services and Capital Markets Union
- Emmanuel Givanakis – Chief Executive Officer, Abu Dhabi Global Market, United Arab Emirates
- Christina Rolle – Executive Director, Securities Commission of the Bahamas
- Sasha Mills – Executive Director of Financial Market Infrastructure, Bank of England

3:00 – 3:10

***Closing Comments*** – Suyash Paliwal, Director, Office of International Affairs, CFTC



BOCA

SCHEDULE

CURRENT EXHIBITORS

CHARITY GOLF

ARCHIVE

13 March 2023 - 16 March 2023 • 6:00 PM - 7:00 PM ET

## Boca: Who you need to meet. What you need to know.

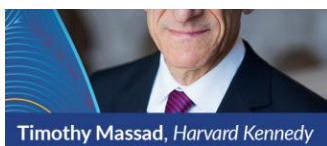
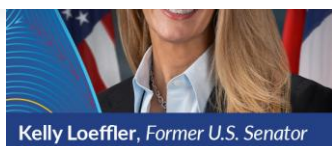
For nearly 50 years, Boca – the International Futures Industry Conference – has delivered on that simple promise. In just a few days Boca 2023 can connect you with the information and people needed to set your agenda for the year. Enter an environment teeming with industry elites and get access to the firms and people that shape markets. Boca is your opportunity to make headlines, forge connections and gain exposure to the trends, products and companies that are transforming the cleared derivatives industry.

Thank you to everyone who joined us for Boca 2023. Details about next year's conference will be available soon.

If you are interested in speaking at Boca or have a speaker suggestion, [please fill out this form](#).

## Featured Speakers





## 2023 Schedule

13 & 14 March

15 March

16 March

### Monday 13 March

4:30 p.m. - 6:00 p.m.

Registration Open

6:00 p.m. - 7:30 p.m.

Coinbase Evening Reception

Join us for our first-ever pre-conference networking reception sponsored by Coinbase.

### Tuesday, 14 March

8:30 a.m. - 9:30 a.m.

Exchange Chairmen and Presidents Breakfast (Invitation Only)

*Co-sponsored by Korn Ferry and Shearman & Sterling*

*The Geopolitical Realities in a New Era of Great Power Competition*

Speaker:

**The Honorable Kenneth J. Braithwaite**, Rear Admiral, US Navy(ret), 31st US Ambassador to the Kingdom of Norway, 77th US Secretary of the Navy

9:00 a.m. - 6:30 p.m.

Registration & Exhibits Open

9:30 a.m. - 6:30 p.m.

The Marquee Is Open

*Presented by Trading Technologies in partnership with Ateo, AxeTrading, KRM22 and RCM-X*

Meet in the Marquee to network with colleagues and enjoy refreshments during the conference. Stay close to conference action, sessions, and attendees in the tented area on the Grand Lawn.

10:00 a.m. - 12:00 p.m.

B3 Arrival Refreshments

Once you arrive, enjoy coffee, breakfast snacks, and networking with colleagues sponsored by B3.

12:30 p.m. - 2:30 p.m.



**12:10 p.m. - 12:40 p.m.**

**Sponsored Session - Coinbase**

***How Regulation Will Shape the Future of Crypto***

With the regulatory spotlight on crypto, Coinbase experts, alongside industry peers, will discuss the paths of creating workable regulation and what it means for the future of the digital asset landscape and adoption.

**Moderator:**

**John D'Agostino**, Senior Institutional Strategist, Coinbase

**Speakers:**

**Julia Hueckel**, Associate General Counsel, Coinbase

**Brian Quintenz**, Head of Policy, a16z crypto

**Chris Perkins**, President, CoinFund

**12:50 p.m. - 1:20 p.m.**

**Sponsored Session - Microsoft**

***London Stock Exchange Group and Microsoft: Intelligent Data and the Future of Financial Markets***

Join David Schwimmer, CEO, London Stock Exchange Group (LSEG), and Bill Borden, CVP of WW Financial Services, Microsoft in a dynamic discussion about the future of data and financial markets. In a new strategic partnership, Microsoft and LSEG are focused on delivering next generation data, analytics, and workplace solutions that will transform how firms discover, analyze, collaborate, and transact across the financial markets value chain.

**Speakers:**

**Bill Borden**, CVP of WW Financial Services, Microsoft

**David Schwimmer**, CEO, London Stock Exchange Group

**1:30 p.m. - 2:00 p.m.**

**Sponsored Session - MIAX**

***MGEX: Building a Modern Futures Clearing System***

MIAX is rebuilding the MGEX clearing system using innovative, proprietary technology to create a modern clearing house platform. Join us as we share our vision for the future of our clearing technology, clearing services and modernization of our risk management framework.

**Moderator:**

**John Smollen**, Executive Vice President, Head of Exchange Traded Products and Strategic Relations, MIAX

**Speakers:**

**Sean Barry**, Senior Vice President & Chief Information Officer, ADMIS

**Joseph W. Ferraro III**, President, MIAX Futures and Deputy General Counsel, MIAX

**Lindsay Hopkins**, Vice President, Senior Counsel, MGEX

**JB Mackenzie**, Vice President & General Manager - Futures & International, Robinhood

**Douglas M. Schafer, Jr.**, Executive Vice President, Director and Chief Information Officer, MIAX

**2:30 p.m. - 3:30 p.m.**

**MIAX Coffee & Connections**

Enjoy coffee and refreshments with colleagues sponsored by MIAX.



### ***TT 2023: From Trading Screen Evolution to Platform Revolution***

Since being acquired by 7RIDGE in late 2021, Trading Technologies has transformed from a trading screen provider serving professional futures traders to the multi-asset-class, end-to-end, technology platform company for the global capital markets industry. Learn how TT is building the operating system of capital markets and forging into new markets and asset classes through strategic partnerships, acquisitions and organic growth.

#### **Speakers:**

**Nick Garrow**, EVP Multi-Asset & Buy Side, Trading Technologies  
**Jason Shaffer**, EVP Product Management, Trading Technologies  
**Keith Todd**, Chief Executive Officer, Trading Technologies  
**Carsten Kengeter**, Co-Founder, 7RIDGE & Chairman, Trading Technologies  
**Jose Lopez**, Director - North America, ATEO  
**Stephen Casner**, CEO, KRM22  
**Joe Signorelli**, Managing Director, RCM-X, a subsidiary of Trading Technologies

**2:50 p.m. - 3:20 p.m.**

### **Sponsored Session - SGX Group**

#### ***Uncovering the Pulse of Asia***

Join an interactive discussion on industry trends and topics in Asia. Gain a live market perspective with SGX Group and Monetary Authority of Singapore (MAS).

#### **Speakers:**

**Craig Cohen**, Head of America Sales, Global Sales & Origination, SGX Group  
**Lim Cheng Khai**, Executive Director, Financial Markets Development Department, Monetary Authority of Singapore  
**Paul Macchione**, Senior Director, Global Sales & Origination, SGX Group  
**Ding Meiyan**, Senior Director, Co Head Derivatives Product Management, Equities, SGX Group

**3:30 p.m. - 3:45 p.m.**

### **Opening Remarks**

In his traditional welcome address, Walt Lukken sets the scene for Boca 2023 and shares his views on some topical issues.

#### **Speaker:**

**Walt Lukken**, President & CEO, FIA

**3:45 p.m. - 5:15 p.m.**

### **Exchange Leaders Roundtable**

In a dynamic and engaging dialogue, leaders from major exchange groups around the world will discuss challenges and opportunities for exchange-traded markets and the role of their respective organizations in the coming years.

#### **Moderator:**

**Bob Pisani**, Senior Markets Correspondent, CNBC

#### **Speakers:**

**Nicolas Aguzin**, CEO, Hong Kong Exchanges and Clearing Limited  
**Stephane Boujnah**, CEO and Chairman of the Managing Board, Euronext  
**Terry Duffy**, Chairman and Chief Executive Officer, CME Group





**David Schwimmer**, Chief Executive Officer, London Stock Exchange Group

**Jeff Sprecher**, Chair & Chief Executive Officer, ICE

**Edward Tilly**, Chairman and Chief Executive Officer, Cboe Global Markets

**5:15 p.m. – 6:30 p.m.**

**Microsoft Cocktail Hour**

Enjoy networking and refreshments with conference colleagues and visit conference exhibitors sponsored by Microsoft.

**6:30 p.m. – 8:30 p.m.**

**Opening Reception**

Kick off your conference experience with networking and refreshments among conference colleagues, sponsors, and exhibitors.

**8:30 p.m. - 10:30 p.m.**

**SGX Group Late Night Event**

Join the reception sponsored by SGX Group and enjoy a gold and glamorous networking experience to close out day one of Boca!

*Schedule subject to change. Please check back frequently as sessions and exact times are added.*

## Sponsors

### Platinum





### Key Issues

- CCP Risk
- Operations and Execution
- Sustainable Finance
- Cross-Border
- Capital
- Commodities
- Digital Assets
- Diversity & Inclusion

### News & Resources

- Press Releases
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BOCA

SCHEDULE

CURRENT EXHIBITORS

CHARITY GOLF

ARCHIVE

13 March 2023 - 16 March 2023 • 6:00 PM - 7:00 PM ET

## Boca: Who you need to meet. What you need to know.

For nearly 50 years, Boca – the International Futures Industry Conference – has delivered on that simple promise. In just a few days Boca 2023 can connect you with the information and people needed to set your agenda for the year. Enter an environment teeming with industry elites and get access to the firms and people that shape markets. Boca is your opportunity to make headlines, forge connections and gain exposure to the trends, products and companies that are transforming the cleared derivatives industry.

Thank you to everyone who joined us for Boca 2023. Details about next year's conference will be available soon.

If you are interested in speaking at Boca or have a speaker suggestion, [please fill out this form](#).

## Featured Speakers





Kelly Loeffler, *Former U.S. Senator*



Timothy Massad, *Harvard Kennedy*



Karl Rove, *Wall Street Journal*

## 2023 Schedule

13 & 14 March

**15 March**

16 March

### Wednesday, 15 March

**6:30 a.m. - 7:30 a.m.**

#### **Axoni Boot Camp**

Join your fellow attendees bright and early for a morning workout featuring bursts of intense activity alternating with intervals of lighter activity. This workout includes functional fitness, such as using whole body, multijointed exercises that simulate movements people do in life. This boot camp will challenge you no matter what your fitness level.

**7:30 a.m. - 6:30 p.m.**

#### **Registration Open**

**8:00 a.m. - 9:00 a.m.**

#### **ICE Energy Breakfast**

Join former U.S. Senator and businesswoman, Kelly Loeffler as she hosts a fireside chat with Democratic strategist and ABC News contributor, Donna Brazile and Wall Street Journal columnist and former White House Deputy Chief of Staff to George W. Bush, Karl Rove to discuss the current environment in Washington and the 2024 Presidential Election.

#### **Moderator:**

**Kelly Loeffler**, Fmr. U.S. Senator, Fmr. CEO, Bakkt, And SVP, Intercontinental Exchange

#### **Speakers:**

**Donna Brazile**, Democratic Strategist, ABC News contributor and former Chair of the Democratic National Committee

**Karl Rove**, Wall Street Journal Columnist and former White House Deputy Chief of Staff to George W. Bush

**9:00 a.m. - 6:15 p.m.**

#### **Exhibits Open**

**9:05 a.m. - 9:30 a.m.**

#### **CFTC Keynote Address & Fireside Chat**

In this annual keynote address, CFTC Chairman Rostin Behnam sets out his current priorities for the US regulator and shares his thoughts on topical issues.

#### **Moderator:**

**Walt Lukken**, President and CEO, FIA

#### **Speaker:**

**Rostin Behnam**, Chairman, Commodity Futures Trading Commission



robust, safe and transparent markets. This panel of industry leaders will consider some of the lessons learned from these developments and assess the impact on cleared derivatives.

**Moderator:**

**Richard Berliand**, Chairman of TP ICAP Group and FIA Tech

**Panelists:**

**Trabue Bland**, Senior Vice President, Futures Exchanges, ICE

**Alicia Crighton**, Co-Head of Global Futures, Goldman Sachs & Co. LLC

**Don Wilson**, CEO and Co-Founder, DRW Holdings

**Michael Winnike**, Director - Head of US Market Structure, BlackRock

**10:20 a.m. - 10:50 a.m.**

**Networking Break**

*Boca Café sponsored by Eurex*

*The Marquee presented by Trading Technologies in partnership with Ateco, AxeTrading, KRM22 and RCM-X*

Enjoy networking and refreshments with conference colleagues.

**10:55 a.m. - 11:40 a.m.**

**Enhancing Regulatory Oversight**

Regulators consider the current key targets for enhanced regulatory oversight and how best to achieve it – including crypto, commodities, climate risk, and non-financial intermediaries.

**Moderator:**

**Jacqueline Mesa**, Chief Operating Officer & Senior Vice President of Global Policy, FIA

**Panelists:**

**Ugo Bassi**, Director Financial Markets, DG FISMA, European Commission

**Sasha Mills**, Executive Director, Financial Market Infrastructure, Bank of England

**Abigail Ng**, Executive Director, Markets Policy & Infrastructure Department, Monetary Authority of Singapore

**Caroline Pham**, Commissioner, Commodity Futures Trading Commission

**Michael Voisin**, Partner, Linklaters LLP

**11:40 a.m. - 12:25 p.m.**

**Back to Business Casual: How Crypto is Rebuilding by Focusing on Real-World Problems**

In the wake of the crypto hype cycle fading, there's a belief that blockchain has underdelivered. The builders and entrepreneurs that remain must now demonstrate their solutions address actual problems. This panel will explore some of the most ambitious endeavors currently underway in distributed finance.

**Moderator:**

**Dave Olsen**, Jump Trading Group

**Panelists:**

**John D'Agostino**, Senior Institutional Strategist, Coinbase

**Kristin Johnson**, Commissioner, Commodity Futures Trading Commission

**John Palmer**, President, Cboe Digital

**Dawn Song**, Founder, Oasis Labs

**12:30 p.m. - 2:00 p.m.**

**DTCC Keynote Lunch**

**Speaker:**

**Ian Bremmer**, President, Eurasia Group and GZERO Media

**2:10 p.m. - 2:40 p.m.**

**Expert Insights - The Outlook for Digital Assets Policy: Greater Clarity or More Confusion?**

It's been one year since the Biden Administration published its Executive Order on Ensuring Responsible Development of Digital Assets, a year which has seen several significant crypto firm failures and declines in crypto prices. What about overall policy and regulation? Have the objectives of the executive order been advanced? Has there been too much "regulation by enforcement" as the crypto industry says, or too little, as some in Congress assert? What is the outlook for legislation on crypto generally or stablecoins? What is the outlook for CBDC development?

**Moderator:**

**Allison Lurton**, General Counsel and Chief Legal Officer, FIA

**Speaker:**

**Timothy Massad**, Research Fellow, Harvard Kennedy School Mossavar-Rahmani Center for Business and Government and Director, M-RCBG Digital Assets Policy Project

**2:40 p.m. - 3:24 p.m.**

**The Market of the Future**

What is the right market structure for the future? What are the challenges of achieving key goals such as real-time risk management and true 24/7 operations? This panel will consider the principles that govern the sound functioning of markets and how to encourage innovation without compromising on market safety.

**Moderator:**

**Rob Creamer**, President and CEO, Geneva Trading

**Panelists:**

**Jonathan Kellner**, CEO, MEMX

**Jerome Kemp**, President, Baton Systems

**JB Mackenzie**, Vice President & General Manager - Futures & International, Robinhood

**Liam Smith**, Head of Corporate Strategy, Optiver

**Julie Winkler**, Chief Commercial Officer and Senior Managing Director, CME Group

**3:25 p.m. - 4:10 p.m.**

**Building Industry Resilience**

The cyberattack on a key technology supplier has raised questions around resilience and exposure to the risk of failure – for whatever reason – of a systemically important part of the industry's infrastructure. Speakers consider the lessons learned from the recent incident, approaches to mitigate against such risk in the future, and examine whether regulators will be taking a closer look at oversight of key technologies going forward.

**Moderator:**

**Don Byron**, SVP – Head of Global Industry Operations and Execution, FIA

**Panelists:**

**Christy Goldsmith Romero**, Commissioner, Commodity Futures Trading Commission

**Randolf Roth**, Member of the Executive Board, Eurex

**Keith Todd**, Chief Executive Officer, Trading Technologies

**Tom Wagner**, Managing Director, SIFMA



The program presented by trading technologies in partnership with ICE, the trading, FINRA and NYSE  
Enjoy networking and refreshments with conference colleagues.

**4:45 p.m. - 5:30 p.m.**

**FIA Hall of Fame Ceremony**

Join us to celebrate the latest inductees to the FIA Hall of Fame. Since 2005, FIA has celebrated and recognized significant contributions individuals have made to the listed and cleared derivatives community through the Hall of Fame.

**5:30 p.m. - 6:15 p.m.**

**FIA Hall of Fame Reception**

*Co-Sponsored by R.J. O'Brien, TSI Imagine*

**6:30 p.m. - 8:30 p.m.**

**Boca Nite Out**

*Co-Sponsored by Cboe Digital, Citadel Securities, CME Group, Exegy, MEMX, Nasdaq, NinjaTrader, OCC, Tradeweb Markets, Wells Fargo*

Unwind your second day at Boca with the continuation of a great conference tradition. Enjoy giveaways, refreshments, and networking with conference attendees.

*Schedule subject to change. Please check back frequently as sessions and exact times are added.*

## Sponsors

### Platinum





### Key Issues

- CCP Risk
- Operations and Execution
- Sustainable Finance
- Cross-Border
- Capital
- Commodities
- Digital Assets
- Diversity & Inclusion

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CHARITY GOLF

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13 March 2023 - 16 March 2023 • 6:00 PM - 7:00 PM ET

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Thank you to everyone who joined us for Boca 2023. Details about next year's conference will be available soon.

If you are interested in speaking at Boca or have a speaker suggestion, [please fill out this form](#).

## Featured Speakers





## 2023 Schedule

13 & 14 March

15 March

16 March

### Thursday, 16 March

7:00 a.m. - 8:00 a.m.

FIA Tech Fun Run

7:30 a.m. - 1:00 p.m.

Registration Open

8:30 a.m. - 9:30 a.m.

Microsoft Networking Breakfast

9:30 a.m. - 10:00 a.m.

**Expert Insights - Sponsorship to Help Drive DEI**

Sponsorship is an important tool for driving diversity, equity and inclusion in organizations. Learn about steps to take to drive a culture of sponsorship in your organization and create a more equitable and inclusive workplace.

**Speaker:**

Keisha Bell, Managing Director - Head of Talent Management and Diversity, Equity & Inclusion, DTCC

10:05 a.m. - 10:50 a.m.

**Managing Price Hikes and Volatility**

The volatility experienced on the back of the war in Ukraine, especially in commodities markets, created stresses in the system. This panel of exchanges and market participants considers the tools available to the industry to manage these stresses and how best to avoid a repeat of the experiences of 2022.

**Moderator:**

Jan Bart de Boer, Global Chief Commercial Officer and Board Member, ABN AMRO Clearing Bank

**Panelists:**

Roland Chai, Executive Vice President, Marketplace Technology, Nasdaq

Chris Edmonds, Chief Development Officer, ICE

Troy Kane, Global Head of Derivatives and FICC Development, Citadel Securities

Summer Mersinger, Commissioner, Commodity Futures Trading Commission

Peter Reitz, CEO, European Energy Exchange AG



Book Club sponsored by Euronext

**The Marquee presented by Trading Technologies in partnership with Ateco, AxeTrading, KRM22 and RCM-X**

Enjoy networking and refreshments with conference colleagues.

**11:15 a.m.- 12:00 p.m.**

**The Outlook for Commodities - The Impact of Climate Risk**

The response to global climate change has led to a growth in trading of new commodity products - such as metals used in electric vehicles, carbon offsets, new energy/power products - while also impacting more traditional sectors. This panel will look at how these products will fare as climate becomes an increasing focus for financial markets.

**Moderator:**

Nelson Neale, President, CHS Hedging

**Panelists:**

Amanda Cain, Head of Agency Commodities, Societe Generale

Robin Martin, Head of Market Development, London Metal Exchange

Dan Scarbrough, Co-Founder, President & COO, IncubEx

Guy Wolf, Global Head of Market Analytics, Marex

**12:00 p.m. - 1:00 p.m.**

**Networking Lunch**

**Co-Sponsored by ION Group, Taiwan Futures Exchange, TMX | Montréal Exchange**

**1:00 p.m. - 2:00 p.m.**

**Golf Clinic**

**Sponsored by BSO**

**1:00 p.m. - 5:30 p.m.**

**Charity Golf Event benefiting Futures for Kids**

**Title Sponsor HKEX**

**Co-Sponsored by ABN AMRO Clearing, Barclays, CQG, Eventus and Genesis Global**

A Boca tradition returns with the Charity Golf Tournament. Join your colleagues for fun round robin style play on The Boca Raton Golf Course benefitting Futures for Kids.

**5:30 p.m. - 7:00 p.m.**

**Closing Reception**

**Co-Sponsored by Architect Financial Technologies Inc & FIA**

*Schedule subject to change. Please check back frequently as sessions and exact times are added.*



Contact [Toni Vitale Chan](#), Vice President of Business Development at +1 312.636.2919 for questions about sponsoring or exhibiting.

## FIA Hall of Fame

Since 2005, FIA has celebrated and recognized significant contributions individuals have made to the listed and cleared derivatives community through the Hall of Fame. On Wednesday afternoon at Boca 2023, FIA will celebrate the newest class of Hall of Fame honorees featuring twelve individuals. FIA will also honor the recipients of the new President's Award.

### Key Issues

- CCP Risk
- Operations and Execution
- Sustainable Finance
- Cross-Border
- Capital
- Commodities
- Digital Assets
- Diversity & Inclusion

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# 附件二

## CFTC國際期貨監理官會議 出席名單

## Participant List

<b>First Name</b>	<b>Last Name</b>	<b>Title</b>	<b>Institution</b>	<b>Country</b>
Calissa	Aldridge	Senior Executive Leader	Australian Securities and Investment Commission	Australia
Christina	Rolle	Executive Director	Securities Commission of The Bahamas	Bahamas
Kep	Samphy	Director of Department	Securities and Exchange Commission of Cambodia	Cambodia
Pheakdey	Vin	His Excellency Dr./ Deputy Director General	Securities and Exchange Commission of Cambodia	Cambodia
Seang	Thirith	Deputy Director General	Securities and Exchange Commission of Cambodia	Cambodia
Janice	Cherniak	Senior Legal Counsel, Derivatives	Alberta Securities Commission	Canada
Shane	Wanotch	Manager, Derivatives Oversight	Alberta Securities Commission	Canada

Chad	Conrad	Senior Legal Counsel	Alberta Securities Commission	Canada
Hugo	Lacroix	Superintendent	Autorité des marchés financiers	Canada
Dominique	Martin	Senior Director	Autorité des marchés financiers	Canada
Andrew	Kriegler	President & CEO	New Self-Regulatory Organization of Canada	Canada
Tim	Reibetanz	Senior Legal Counsel	Ontario Securities Commission	Canada
Stephanie	Adolphus	Senior Legal Counsel	Cayman Islands Monetary Authority	Cayman Islands
Jennifer	Smith	Deputy Head of Division	Cayman Islands Monetary Authority	Cayman Islands
Jessica	Ebanks	Deputy Head	Cayman Islands Monetary Authority	Cayman Islands
Vojtech	Belling	Dr./Executive Director	Czech National Bank	Czech Republic

Olero opiew	Ojulu	Deputy Bureau head	Gambella regional state trade bureau	Ethiopia
Yannick	Connan	Senior Investigator	Autorité des marchés financiers	France
Marie	Desplanques	Senior legal officer	Autorité des marchés financiers	France
Thomas	Beck	Head of Division	Federal Financial Supervisory Authority (BaFin)	Germany
Foster Komla	Nani	Asst. Mgr, Sec. Exchanges and Depository	Securities and Exchange Commission, Ghana	Ghana
Eric	Tenkorang	Senior Manager	Securities and Exchange Commission, Ghana	Ghana
Amarjeet	Singh	Executive Director	Securities and Exchange Board of India	India
Abhishek	Rana	Manager	Securities and Exchange Board of India	India



Prateek	Arora	Assistant General Manager	Securities and Exchange Board of India	India
Orlando	Luisillo Ramirez	Deputy Mgr. Securities Settlement Systems & CCPs	Banco de Mexico	Mexico
Niranjana	Phuyal	Manager	Nepal Stock Exchange	Nepal
Bas	de Wit	General Counsel - Head of Legal Affairs Division	Dutch Authority for the Financial Markets (AFM)	Netherlands
Muhammad	Anwar Hashmi	Additional Joint Director	Securities and Exchange Commission of Pakistan	Pakistan
Robert	Rybski	Expert	Polish Financial Supervisory Authority (KNF)	Poland
Suzy	St. Brice	Senior Legal Officer	Eastern Caribbean Securities Regulatory Commission	Saint Kitts and Nevis
Meiseong	Lau	Deputy Director	Monetary Authority of Singapore	Singapore
Alp	Eroglu	Senior Policy Advisor	IOSCO	Spain

Florian	Benjamin	Specialist	Swiss Financial Market Supervisory Authority FINMA	Switzerland
Jessie	Zuellig	Senior Specialist/Analyst	Swiss Financial Market Supervisory Authority FINMA	Switzerland
Hsiu-Ling	Wang	Director	Financial Supervisory Commission, Taiwan	Taiwan
Ming-Shan	Chin	Specialist	Financial Supervisory Commission, Taiwan	Taiwan
Jasmin Yenling	Liu	Director	Financial Supervisory Commission, Taiwan	Taiwan
Enver	Usca	Vice Chair	Capital Markets Board of Turkey	Turkey
Murat	Haholu	Board Member	Capital Markets Board of Turkey	Turkey
Emmanuel	Givanakis	CEO	Abu Dhabi Global Market	United Arab Emirates

Mary Anne	Scicluna	Senior Executive Director	Abu Dhabi Global Market	United Arab Emirates
Abdulla	Alzaabi	Associate	Abu Dhabi Global Market	United Arab Emirates
Simon	O'Brien	Executive Director	Abu Dhabi Global Market	United Arab Emirates
Carmel	Deenmamode	Manager, Market Conduct & Post Trade Policy	Financial Conduct Authority (FCA)	United Kingdom
Kevin	Piccoli	Deputy Director	Commodity Futures Trading Commission	United States
Alessandro	Cocco	VP & Head of Financial Markets Group	Federal Reserve Bank of Chicago	United States
Gloria	Dalton	Senior Director and Head	Financial Industry Regulatory Authority (FINRA)	United States
Stephanie	Dumont	Executive Vice President	FINRA	United States
Thomas	Sexton	CEO	National Futures Association	United States
Karen	Wuertz	SVP External Affairs & Communications	National Futures Association	United States

Joe	McCarthy	Senior Communications Specialist	National Futures Association	United States
Erin	McCartney	Senior Special Counsel	Securities and Exchange Commission, USA	United States

# 附件三

## CFTC國際期貨監理官會議資料



U.S. Commodity Futures Trading Commission

# CRYPTO 2023

## International Regulators' Conference

Jorge Herrada, Director  
Office of Technology Innovation

March 14, 2023



Photo Credit: Abigail Herrada, South Georgia Island, March 2022

Disclaimer: The views expressed in this presentation and discussion are the personal views of Jorge Herrada and do not necessarily reflect the views and or positions of the U.S. Commodity Futures Trading Commission, its Chairman, Commissioners or staff.



### Office of Technology Innovation EO and Legislative Recap

### Looking Back: How Did We Arrive Here?

- First DLT in Micronesia
- Select Crypto Developments 2022

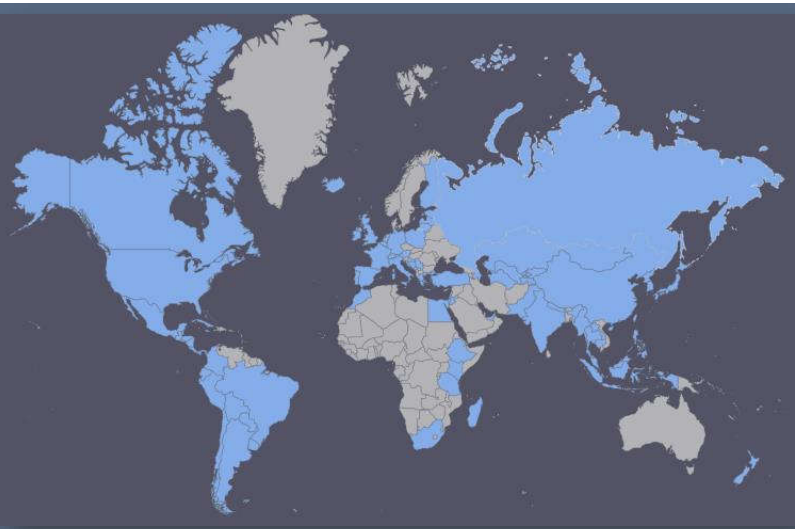
### Looking Forward: What's Happening & What's On The Horizon

# Agenda

International Regulators' Conference

March 14, 2023





Countries visited by J.Herrada, last updated March 2023  
Create your map by visiting: [https://www.amcharts.com/visited\\_countries](https://www.amcharts.com/visited_countries)

Who has traveled the furthest to get here today?

## Leadership and Vision

### Office of Technology Innovation (OTI)

Formed in the Summer of 2022 by Chairman Rostin Behnam, the Office of Technology Innovation serves as the CFTC’s financial technology innovation hub, driving change and enhancing knowledge through innovation, consulting/collaboration, and education. OTI regularly advocates for the advancement of responsible innovation, industry collaborations, and public outreach and education.



Jorge Herrada,  
*Director, Office of Technology Innovation*

- Tenured Commission employee of 20+ years;
- Degrees from Shippensburg, Chicago, and London;
- Passionate about international travel and all fintech, digital asset and crypto interests;
- Traveled to 90+ countries including Antarctica (with penguins!)



## Executive Orders and Legislation



# Executive Order / FSOC Report / White House RFI

- “Executive Order on Ensuring Responsible Development of Digital Assets” Called for 11 reports.
- *Crypto-Assets: Implications for Consumers, Investors, and Businesses* report. Crypto-asset activities could pose risks to the stability of the U.S. financial system if their interconnections or scale grows. Recommendations:
  - US regulatory and law enforcement should vigilantly monitor the crypto-asset sector for unlawful activity
  - US regulatory agencies should use their existing authorities to issue guidance and rules.
  - US authorities should work individually and through the Financial Literacy and Education Commission (FLEC) to ensure consumers, investors, and businesses have trustworthy info on crypto-assets.
- FSOC’s *Report on Digital Asset Financial Stability Risks and Regulation* recommends “the passage of legislation providing for rulemaking authority for federal financial regulators over the spot market for crypto-assets that are not securities.”
- January 26, 2023, the White House released a RFI on Digital Assets Research, to help identify priorities for R&D related to digital assets, including blockchain, distributed ledgers, decentralized finance, smart contracts, and related issues such as cybersecurity and privacy and sustainability as they relate to digital assets. Deadline, March 3, 2023.

Sourced Online:

[https://home.treasury.gov/system/files/136/CryptoAsset\\_EO5.pdf](https://home.treasury.gov/system/files/136/CryptoAsset_EO5.pdf)

<https://home.treasury.gov/system/files/261/FSOC-Digital-Assets-Report-2022.pdf>

<https://www.federalregister.gov/documents/2023/01/26/2023-01534/request-for-information-digital-assets-research-and-development>

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## Legislation

### Digital Commodities Consumer Protection Act of 2022 (August 2022)

- U.S. Senators Debbie Stabenow (D-MI), Chairwoman of the Senate Committee on Agriculture, Nutrition, and Forestry, and John Boozman (R-AR), Ranking Member, along with Senators Cory Booker (D-NJ) and John Thune (R-SD) introduced the Digital Commodities Consumer Protection Act of 2022 to give the Commodity Futures Trading Commission new tools and authorities to regulate digital commodities and offer safeguards for customers and our markets.

### Major Recommendations:

- Closes regulatory gaps by requiring all digital commodity platforms—including trading facilities, brokers, dealers, and custodians—to register with the CFTC.
- Requires digital commodity platforms to prohibit abusive trading practices, eliminate or disclose conflicts of interest, maintain sufficient financial resources, have strong cybersecurity programs, protect customer assets, and report suspicious transactions.

### Outcome:

- Currently, Congress is continuing to finalize bipartisan legislation on a comprehensive plan forward.

[https://www.agriculture.senate.gov/imo/media/doc/crypto\\_one-pager1.pdf](https://www.agriculture.senate.gov/imo/media/doc/crypto_one-pager1.pdf)

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# Enforcement Discussion: Issues, Challenges, and Trends Facing the Industry

Boca Raton, Florida  
March 14, 2023

## DISCLAIMER

The analyses and views expressed here are those of the authors and do not necessarily reflect the views of the commission or CFTC staff.

## Agenda

- CFTC Enforcement Program Overview
- Recent Enforcement Actions and Industry Trends
- Q&A and Group Discussion

Presenter: Nina Ruvinsky

Senior Trial Attorney & Co-Chair, Digital Asset Task Force



CFTC Enforcement Program Overview

## Commodity Exchange Act Enforcement

- CFTC enforces the Commodity Exchange Act and Regulations
- Three core enforcement principles:
  - Customer Protection
  - Integrity of the markets
  - Holding Wrongdoers Accountable
- Cooperative enforcement with other state and federal agencies, domestically and internationally
- New Director of Enforcement Ian McGinley

## Task Forces

- Task forces focus on seven substantive areas:
  - 1) Spoofing and Manipulative Trading;
  - 2) Digital Assets;
  - 3) Insider Trading and Protection of Confidential Information;
  - 4) Bank Secrecy Act;
  - 5) Swaps;
  - 6) Corruption; and
  - 7) Romance Scams

## 2022 Enforcement Fiscal Year in Review

- CFTC obtained orders imposing over \$2.5 billion in restitution, disgorgement and civil monetary penalties
- CFTC filed 82 enforcement actions
- 4 Litigation victories
- Whistleblower program: record-breaking \$200 million award, bringing total whistleblower program awards to over \$3 billion

<b>FY 2022 Enforcement Actions Filed</b>	
<b>Case Category</b>	<b># of Actions Filed</b>
Manipulative Conduct, False Reporting, Spoofing	7
Fraud <sup>1</sup>	31
Supervision, Financial Integrity, Business Conduct	7
Illegal Off-Exchange Contracts, Failure to Register	12
Trade Practice Violations (includes Wash Trades, Fictitious Trades, Position Limits)	2
Reporting, Recordkeeping <sup>2</sup>	18
Misappropriation of Material, Non-Public, Confidential Information, Misconduct by Employees against their Employers	3
False Information to CFTC or SRO, Violation of Prior Order	1
Statutory Disqualification	1
<b>Total</b>	<b>82</b>

<sup>1</sup> 15 of these actions also included Failure to Register charges, while 3 of these actions also included false statements to either the CFTC or an SRO.

<sup>2</sup> 15 of these actions also included Failure to Supervise charges



## Recent Noteworthy Enforcement Actions

### Digital Asset Cases

- 19 digital asset cases in FY 2022, 4 more so far in FY 2023
- Registration case examples: Blockratize d/b/a Polymarket.com and bZeroX LLC & Ooki DAO
- Manipulation case examples: Mango Markets/ Avraham Eisenberg and Digitex Futures / Adam Todd (also a registration case)
- Fraud and fraudulent misstatements case examples:
  - FTX / Sam Bankman Fried
  - Mirror Trading International Limited / Cornelius Steynberg
  - Gemini Trust Company
  - Tether / Bitfinex

## Manipulation, Spoofing, Wash Trading, Position Limits

- Manipulation and foreign corruption: Glencore (record-setting \$1.186 billion total penalty). Assistance from numerous international partners
- Cross-market spoofing: Skudder / Global Ag / Nesvick Trading
- Wash trading, position limit violations, and reporting failures by two Chinese companies: COFCO Corp. and Chinatex Corp.

## Recordkeeping, Reporting, Supervision and Business Conduct

- Recordkeeping and supervision: 12 financial institutions, for a total of \$796 million penalties for failing to stop employees from using unapproved communication methods, including personal text, WhatsApp, and Signal.
- System Safeguard, Reporting, and False Statements: CX futures
- SEF Violations of 15-second delay rule: tpSEF, Inc.

## Fraud & Misappropriation of Material Non-Public Information

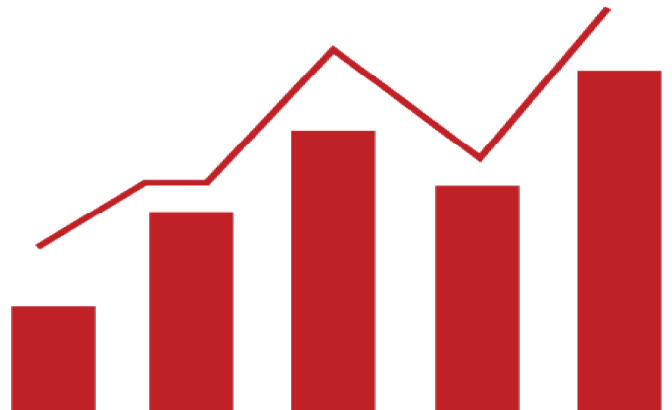
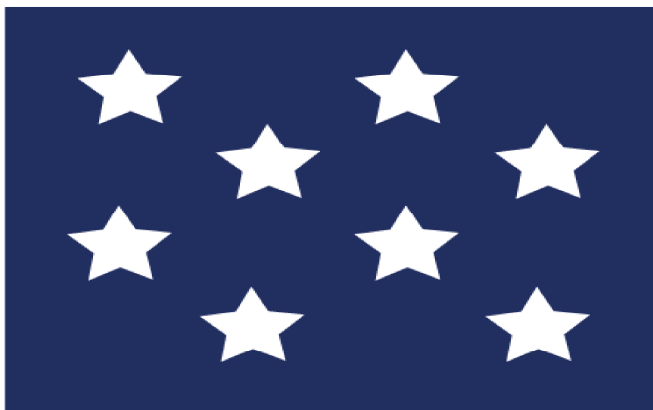
- Misappropriating confidential information, brokerage kickback scheme, and false statements to CFTC: Matthew Clark
- Misappropriation of block order information and unauthorized trading: Coquest et al.
- Tipping confidential block trade order information: Omerta Capital et al.
- Multi-Million dollar forex fraud scheme: WorldWideMarkets

## Registration, Violations by Registered Entities, Swaps

- Sweep of unregistered FCMs claiming CFTC registration
- Violating customer protections regulations: ICE Clear Europe
- Swap-Data Reporting, Conflicts of Interest, Mid-Market Mark, and Supervision Failures: ED&F Man
- Swap Reporting and Daily Mark Disclosure Violations: BNP Paribas
- Scheme to defraud swaps counterparties: Archegos Capital Management / Patrick Halligan



## Q&A and Group Discussion



Thank you!

**Nina Ruvinsky**  
Senior Trial Attorney & Co-Chair, Digital Asset Task Force  
[nruvinsky@cftc.gov](mailto:nruvinsky@cftc.gov)



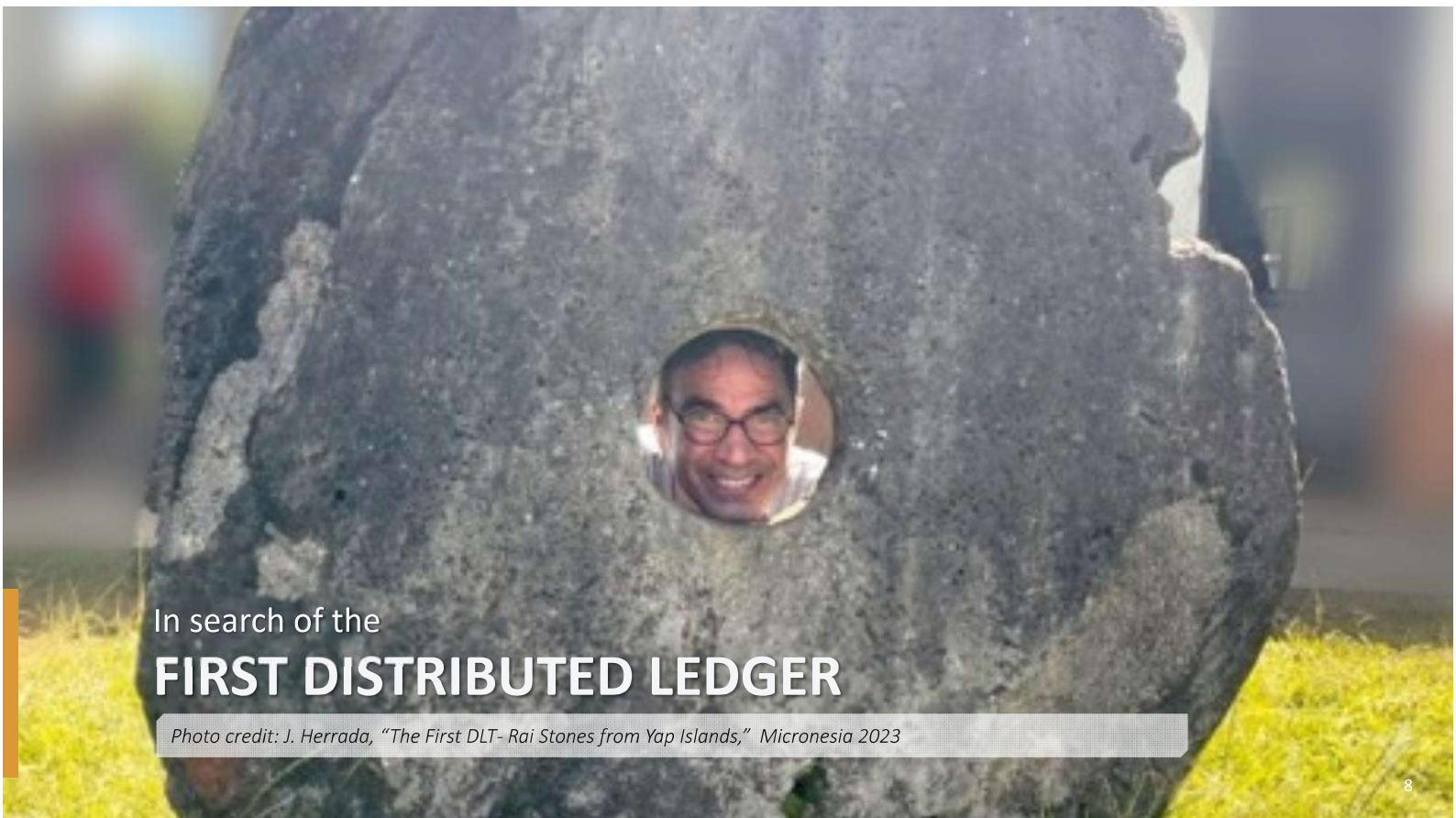


## Looking Back: *How Did We Arrive Here?*

- First DLT – Rai Stones of Yap, Micronesia



*Photo credit: J. Herrada, "The First DLT- Rai Stones from Yap Islands," Micronesia 2023*



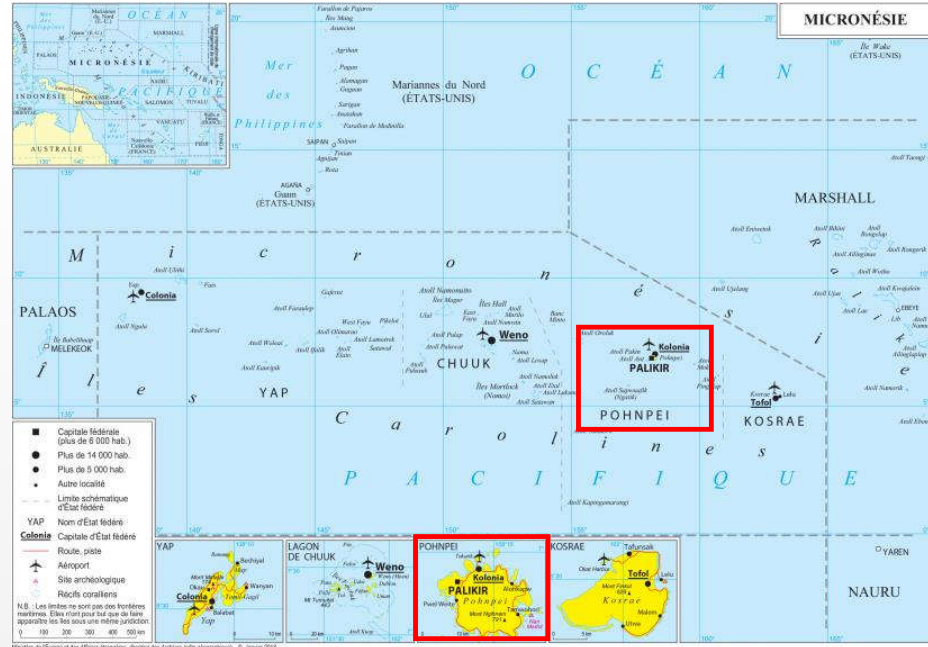
In search of the  
**FIRST DISTRIBUTED LEDGER**

*Photo credit: J. Herrada, "The First DLT- Rai Stones from Yap Islands," Micronesia 2023*

# Federated States of Micronesia (FSM)

## Fast Facts

- Strategically important to the defense of the Pacific
- From WWII - 1986 Micronesia was a US Trust Territory.
- Compact of Free Association provides money to FSM and free movement
  - FSM citizens can move to the US and live indefinitely.
- Official Language: English
- Official Currency: US dollar
- Population:
  - In country: 130,000
  - Abroad (mostly US): 30,000
- 19,000 visitors annually
- One of the least visited and rainiest countries in the world.
  - Why? One reason may be that the coast is a mangrove habitat instead of sandy beaches so tourists are not as attracted.



# Federated States of Micronesia (FSM)

## Rai stones from Yap – The First Distributed Ledger Technology (DLT)

One of the earliest examples of distributed ledgers is the “Big Stone Money” from Yap.

“Rai” stones were highly valued and used for ceremonial gifts.

There were no limestone quarries in Yap, so 500-600 years ago, people from Yap would go to Palau, 280 miles away, carve the stones into large coins using primitive tools such as shells, and transport them back to Yap.

Given that Palau and Yap are both only 6 miles by 15 miles, you better not miss the island on the way there or on the way home. And some of the Rai stones weighed nearly 9,000 pounds and were 12 feet in diameter. Talk about Proof of Work mining!

Instead of moving the stone, ownership was recorded by oral tradition (an early form of a distributed ledger where multiple nodes / individuals had to agree to the ownership). In fact, one stone accidentally fell in the ocean during transport. Since they knew where it was, all was not lost. They just tracked ownership on the ledger.

There are over 6,000 Rai stones in existence today, but almost all on Yap.



STONE MONEY OF UAP, WESTERN CAROLINE ISLANDS.  
 (From the paper by Dr. W. H. Furness, 3rd, in Transactions, Department of Archaeology, University of Pennsylvania, Vol. 1., No. 1, p. 51, Fig. 3, 1904.)

# Scavenger Hunt



## Find a Rai Stone from Yap in Pohnpei

- Currently, there is one flight monthly to the Yap Islands. (Visitors are confined to island for a full month before traveling again).
- Might this neighboring island (well, 1,400 miles away) of Pohnpei have somehow ended up with a Rai stone?



## Rai Stones

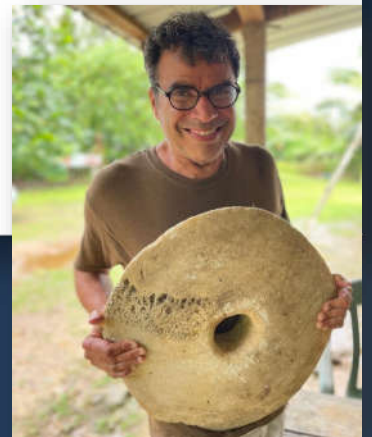
*The First Distributed Ledger Technology (DLT)*



*Largest Rai stone in a grassy spot in the parking area of Pohnpei Islands Central High School (PICS) high school.*



*Rai stone #2 at the FSM Supreme Court. Photo taken after session adjournment.*



*A family heirloom belonging to the recently deceased King at his remote royal residence - the hardest and most elusive to see.*



# Looking Back: *How Did We Arrive Here?*

- Select Crypto Developments 2022



## Select Crypto Developments 2022



**IMPLOSIONS**



**CRYPTO WINTER**



**HACKS**



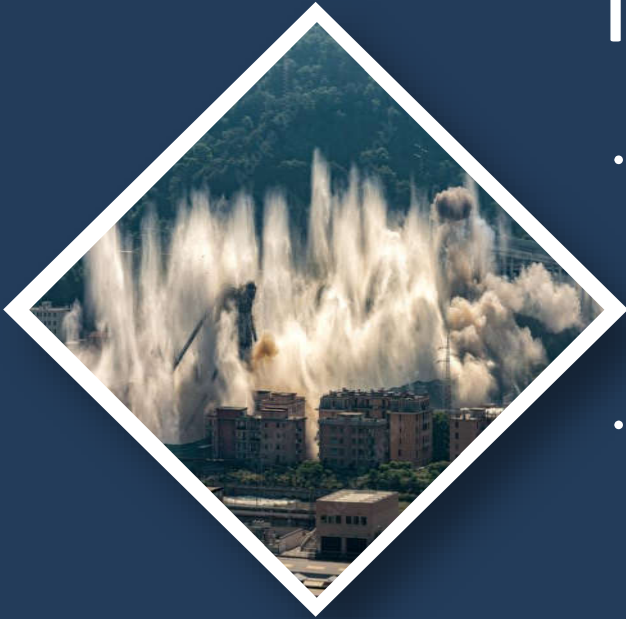
**ETHEREUM  
UPGRADE**



**TORNADO CASH  
SANCTION**

*\*Ethereum image/content intended for Editorial use only.*

# Implosions



- **Terra / Luna** – Algorithmic Stable Coin collapse – May 2022
  - Impacted Three Arrows Capital, Voyager, Celsius, FTX & Alameda Research, and BlockFi. Continues to impact other players such as Gemini and Digital Currency Group.
- **FTX collapse** – November 2022
  - “As defendants touted and marketed FTX.com as a model digital commodity asset platform, defendants were committing fraud to the detriment of US investors and to the credibility of the digital asset markets,” said CFTC Acting Director of Enforcement Gretchen Lowe – (CFTC press release December 2022).

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# Crypto Winter

*And Market stumbles*



- Market cap drops from \$2.2 trillion to \$1 trillion – “2022 has been a tumultuous year for cryptocurrencies. The total crypto market capitalization in 2022 opened the year at \$2.2 trillion in January and subsequently hit an annual low of \$1 trillion in November.”
- Bitcoin futures volume drops 52%, Ethereum 28% - “The digital asset derivatives market primarily declined over the past year. Last-twelve-months, Bitcoin futures volume decreased by 52%, more than Ethereum futures’ 28% decline.”

Sourced Online: <https://www.theblock.co/post/196671/2023-digital-asset-outlook>

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# Crypto Winter

And U.S. Layoffs



- 23,600 layoffs in 2022 - including 1,160 employees at Coinbase, 1,100 employees at Kraken (30%), and 1,020 at Bybit.\*
- 2,000 layoffs in 2023 so far – including 40% of Silvergate, 20% of Coinbase, 20% of Dapper Labs, 10% of Elliptic, 20% of Polygon, 5% of Chainalysis, etc.\*\*
- Employment up since 2019 - But, employment in crypto is up over 351% since 2019 (421 firms employ 82,248 people within the industry, vs 18,200 from 158 companies in 2019)\*\*\*

\*Sourced Online: <https://cryptoslate.com/highest-number-of-crypto-layoffs-seen-in-2022/>  
\*\* <https://fortune.com/2023/02/23/crypto-layoffs-2023-coinbase-gemini-luno-more-than-2000-jobs/>  
\*\*\* <https://www.theblock.co/post/196671/2023-digital-asset-outlook>

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## Noteworthy Hacks of 2022



### • Cross-chain bridges are risky:

- **Wormhole, \$325 million, February 2022.** Attackers found a vulnerability in Wormhole, a bridging protocol, and minted 120,000 wEth. Note recent Wormhole counter hack.\*
- **Ronin Network, \$625 million, March 2022** – 173,600 ETH and 25.5 million USDC were stolen from the Ronin network, NFT-based video game, Axie Infinity. Attackers hacked the nodes processing network transactions. US Treasury claims North Korean Hackers are responsible.
- **Harmony, \$100M, June 2022** – Hackers attacked bridge, but method has not been disclosed.
- **Nomad, \$190 million, August 2022** – Hacker tricked the protocol into sending stored tokens.
- **BNB Smart Chain, \$110M, October 2022** – Hackers exploited a bug in bridge's verified proof, allowing them to forge approvals.
- The Block stated that the value locked in cross-chain bridges fell 90% in 2022, from \$58B in January to \$6B in November.

### • Additional noteworthy hacks:

- **Beanstalk, \$182M, April 2022** – In less than 13 seconds, an attacker took out a flashloan to borrow \$1B in crypto, exchanged that to get 67% voting stake in Beanstalk, and then transferred Beanstalk tokens to themselves
- **Wintermute, \$160M, September 2022** – Wintermute used a service called Profanity which allowed creation of vanity addresses. Attackers used brute force to come up with private keys for vanity addresses.
- **Mango Markets, \$112M, October, 2022** – Hacker squeezed liquidity out of Mango Markets decentralized exchange by manipulating price oracles.

- Recommended website - <https://web3isgoinggreat.com/> cynical, but very informative.

\*Sourced online: <https://newsletter.mollywhite.net/p/oasis-defi-centralization>

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# Ethereum Upgrade

& THE MERGE

- Ethereum Merge - Switched Ethereum's consensus mechanism from Proof-of-Work (PoW) to Proof-of-Stake (PoS) September 2022
  - PoS uses economic incentives to achieve consensus by requiring validators to stake (i.e., lock up) tokens in order to vote for correct blocks. Staked "Ether acts as collateral that can be destroyed if the validator behaves dishonestly or lazily."\*
- Major Benefits:
  - Sustainable - Reducing energy consumption by 99.9% (Dropped from 46-94 terawatt hour (TWh) per year to 0.01 TWh per year, 1/10<sup>th</sup> of the energy consumed by Micronesia per year)
  - Scalable – The Merge preps Ethereum for reduced transaction fees and increased throughput
  - Secure – less vulnerable to 51% attacks
  - Bonus - ETH supply stabilizes instead of increasing
- Risks:
  - Centralization - Ethereum could become more centralized via staking pools, MEV
  - Unintended Consequences

\*Ethereum image/content intended for Editorial use only.

\*\*Sourced Online: <https://ethereum.org/en/developers/docs/consensus-mechanisms/pos/>

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# Tornado Cash Sanctions

- Office of Foreign Assets Control (OFAC), a part of the U.S. Treasury, added privacy protocol Tornado Cash to its sanctions list on August 8, 2022;
- Tornado Cash is a currency mixer. Users deposit funds into a central pool and can withdraw funds with a zero knowledge proof at a later date into new accounts in different amounts;
- Historically, this was the first instance of open-source code being added to a sanctions list;
- OFAC asserted Tornado Cash was primarily used for money laundering and was used by North Korean hackers;
- Dutch authorities arrested a Tornado Cash developer, Russian Alexey Pertsev;
- More on this later when we discuss 'centralization'.



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# Looking Forward: What's Happening & What's On The Horizon

- *Ethereum Upgrades – Shanghai, MEV, and Centralization/Censorship*
- *DeFi / DAOs*
- *NFTs*
- *Scams and Hacks*



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## Ethereum – Shanghai

Shanghai – Upcoming April 2023 release of Ethereum

Allows withdrawal of staked Eth. but this will be limited to eight validators (32 Eth each) for each epoch (32 blocks , ~6.4 minutes)

Stepping stone to upgrades for scalability (i.e., sharding or parallel processing)

*\*Ethereum image/content intended for Editorial use only.*

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# Ethereum 'MEV'

- MEV – “Miner Extractable Value”, now “Maximal Extractable Value” refers to the profits that can be made by extracting value from Ethereum users through block production.\*
- Arbitrage opportunity in the ordering of transactions.\*
- Separation of Block builders and Block proposers
  - Block builder can reorder, sandwich (the act of front-running a large order, only to use their market order as exit liquidity to profit from the spread), or censor transactions within blocks being produced. Submits block with a bid.
  - Block proposers – Connects to relays and selects highest bid w/o seeing block
- Typically impacts DeFi users interacting with automated market makers and other apps.
- Recommended read, “Miners, Front-Running-as-a-Service Is Theft,” written by Phil Daian’s thesis advisor. Daian founded FlashBots, a major MEV provider.  
<https://www.coindesk.com/markets/2021/04/07/miners-front-running-as-a-service-is-theft/>



\* Sourced Online: <https://bitcoinmagazine.com/business/centralization-risks-and-flaws-of-ethereum-merge>

# MEV Sandwich Order Example

Victim (0xdbC...00C1e) placed an order to buy XYZ token on Uniswap for 1 WETH. The order was placed in the Mempool of transactions waiting to be written to the blockchain. (October 19, 2022)



Attacker (0x000...f594e) realized they could make extra Eth if they bought a small amount of XYZ on Uniswap right before the victim’s buy order and then sell their XYZ immediately after the Victim’s larger order pushed the price up.



#	Who	Transaction
1	Attacker	Buy 5.4M XYZ with 0.21890 ETH.
2	Victim	Buy as much XYZ as you can get for 1 Eth. Result after attack: 21.620M XYZ received.
3	Attacker	Sell 5.4M XYZ for 0.270184 ETH.
		Attacker offers the Block Proposer \$65.50 in Eth to write the transactions to the blockchain in the above order. Attacker keeps \$0.93 profit for themselves. But the victim has overpaid (i.e., received less XYZ than they would have received otherwise).

Sourced online: <https://eigenphi.io/mev/ethereum/tx/0x3a6174e05c4558e7601aea05586647c7436e7c2744de3dedab28889af4fed4ae>  
 Note: for readability in the example above, we changed “THAT” token to “XYZ” token.

# Ethereum – Centralization / Censorship



- Tornado Cash Mixer is an object lesson for Centralization and Censorship
  - OFAC added privacy protocol Tornado Cash to its sanctions list on Aug 8, 2022, asserting app primarily used for money laundering.
  - Firms began complying with sanctions including Circle (stablecoin), GitHub (code repository), and Infura (Ethereum infrastructure provider) blacklisting Ethereum addresses.
- Large validators started censoring transactions after the merge (e.g., Coinbase, Kraken, staking service Lido, etc.)
  - But according to <https://www.mevwatch.info/>, OFAC compliant blocks hit a high of 79% in November 2022, but has been steadily dropping to 39% on March 1, 2023.
  - Blockchain consulting firm Labrys, the creator of MEV Watch, stated that more validators are opting to use MEV-boost relays that do not apply OFAC censorship.

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## DeFi / DAOs

### Drop in activity

- ETH locked dropped – In 2022 “Value locked in DeFi decreased 74.6% from \$166 billion to \$42.1 billion. Terra’s ecosystem collapse in May marked the most drastic crash in value locked.” \*
- Revenues dropped - “While Uniswap remained the leading protocol by revenue, with an annual revenue of \$792 million in 2022, its monthly revenue sank from \$134 million in January to \$53.3 million in November.”  
<https://tokenterminal.com/terminal/metrics/revenue#total> shows revenue numbers

### Decentralized Autonomous Organizations (DAOs)

- Regarding the Ooki DAO enforcement action “These actions are part of the CFTC’s broader efforts to protect U.S. customers in a rapidly evolving decentralized finance environment,” said Acting Director of Enforcement Gretchen Lowe. “Margined, leveraged, or financed digital asset trading offered to retail U.S. customers must occur on properly registered and regulated exchanges in accordance with all applicable laws and regulations. These requirements apply equally to entities with more traditional business structures as well as to DAOs.”\*\*

\*Sourced Online: <https://www.theblock.co/post/196671/2023-digital-asset-outlook>

\*\*Sourced Online: <https://www.cftc.gov/PressRoom/PressReleases/8590-22>

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# Non-Fungible Tokens (NFTs)

- NFT Winter – Boom started in early 2021, peaked in May 2022 (\$1.75B trade volume in a day), dropped precipitously to \$100M per day, but is slowly climbing to \$630M)\*
- Wash Trading
  - It can be challenging to understand volume given wash trading. According to Dune Analytics, wash trading accounted for 50% of the volume in 2022, and nearly 45% of all-time NFT volume.
  - For example, in October 2021, CryptoPunk #9998, sold for 124,457 ETH, over \$530M at the time, making it the most expensive art purchase in history. It turned out to be a wash sale from the owner of #9998 to themselves. It cost them \$800 in fees.
- Ascendency of Blur
  - On February 15, 2023, Blur overtook OpenSea in daily Eth trading volume (Source: Nansen.ai). It is unusual to see a long standing incumbent like OpenSea unseated.
- Royalties
  - Are royalties a given? Blur and other OpenSea competitors have shown that if royalties are not in the code, but depend on the exchanges, royalties may eventually drop away.
- Unique use cases
  - Specific parcels of land for tokenized carbon projects, Tiffany collaboration with CryptoPunks, Adidas pairing NFTs with merchandise, and concert tickets, etc. Is my concert ticket a security?
- Bitcoin ordinals – embedding data (e.g., JPGs) in witness area of blocks.

\*<https://www.theblock.co/data/nft-non-fungible-tokens/nft-overview/nft-trade-volume-by-chain>

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## Scams and Hacks - Examples

- Pig butchering / Romance Scams – See recent advisory from the CFTC’s Whistleblowers office, previously mentioned by presenter Melanie Devoe (CFTC- Whistleblower Office).\*
- Rug Pulls – According to Solidus labs 8% of all Ethereum tokens are programmed to execute rug pulls. 12% of BNB tokens are scams.\*\*
  - Examples include Honey pots (prevents buyers from re-selling their tokens), hidden mints (let developers create unlimited new tokens), hidden transfers (allows developers to transfer tokens to their own address).
- Phishing Scams – e.g., Monkey Drainer, in operation since 2022, stole approximately \$13M before shutting down on March 1, 2023.\*\*\*
  - Scammers would hack the Discord of an NFT project, promote a free air drop which ultimately resulted in the victim signing a transaction that emptied their wallet.\*\*\*\*
- Advisories and Articles can be found at <https://www.cftc.gov/LearnAndProtect/AdvisoriesAndArticles/index.htm>

\* <https://www.whistleblower.gov/node/4546>

\*\* <https://www.soliduslabs.com/reports/rug-pull-report> also see [their tokensniffer.com](https://www.tokensniffer.com), e.g.,

<https://tokensniffer.com/token/bsc/2mj0nbmz52x5ksv83i4he102lze99ha91ajaxcdxaqz88hs38zxb6x3ghmnx>

\*\*\*\* <https://blog.xp.network/who-is-monkey-drainer-and-how-to-protect-your-nfts-from-scammers-de918aead95d>



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U.S. Commodity Futures Trading Commission

## Questions? Comments?

### International Regulators' Conference

Jorge Herrada, Director  
Office of Technology Innovation  
[Innovation@cftc.gov](mailto:Innovation@cftc.gov)

Disclaimer: The views expressed in this presentation and discussion are the personal views of Jorge Herrada and do not necessarily reflect the views and or positions of the U.S. Commodity Futures Trading Commission, its Chairman, Commissioners or staff.

Photo Credit: Abigail Herrada, Gentoo Penguins, Brown Bluff, Antarctica, March 2022



## Climate finance opportunities – what should regulators do about it?

Flavia Rosembuj  
Boca Raton, March 14, 2023

# Agenda

- **What are carbon markets?**
- **How is the World Bank contributing?**
- **What should be the role of the regulator?**



- Effective climate action requires massive private and public investment
- Scaling up climate finance calls for global cooperation, political leadership, and reforms at national level
- Carbon pricing is an investment in our future



## Types of climate finance

### International Public Climate Finance

*Finance deployed through MDBs and bilateral systems*

#### Dedicated Climate Finance

Concessional finance with climate focus

**Example:** Grant funding from the GEF to promote adaptation

#### Development Finance with Climate Benefits

MDB balance sheet investment with climate benefits

**Example:** WB loan for a climate-resilient port

### Other Climate Finance

*Other funding sources that can be catalyzed by international public climate finance*

#### Private Finance

Commercial for-profit investment in climate assets

**Example:** Investment in wind turbine manufacturing plant

#### Local Government Budgets

Domestic government spending supporting climate goals

**Example:** SOE builds a solar power plant

#### Carbon Markets

Revenues from selling carbon emission offsets

**Example:** Avoided deforestation project sells emission reductions to company with net-zero pledge



## • What are carbon markets?

- Potential
- Different markets and different assets
- Growing at different speeds
- With lots of actors



## What is the potential for carbon markets

- Total global carbon emissions are currently around 50 billion tons per year
- Assuming 10% mitigation through market mechanisms, estimated carbon revenue can be \$75-125 billion a year – (price range of \$15-25 per ton)
- Can leverage a total of \$375-625 billion a year in project investments
- This can account for up to 10-20% of the climate finance required to keep the target under 1.5C
- Realization of such potential will however depend on enabling regulations, institutions and infrastructure for carbon markets



## Emission reductions credits have different markets

### Result-based Finance

Financier/buyer pays for verified outcome (e.g., verified tCO<sub>2</sub>e) or Emission Reduction Credits (ERCs) following agreed methodology and MRV (which can be based on a carbon standard)

### Voluntary Carbon Markets

- Corporates use VCM to “pledge and comply”, i.e., demonstrate achievement of their Voluntary Commitments (e.g., net zero goals).
- There is no legal framework

### Compliance Carbon Market

- Used to achieve compliance with the Paris Agreement or another compliance requirement (e.g., CORSIA, Emission Trading System like Korea)



## Carbon markets grow at different speeds

**Voluntary carbon markets are growing faster than compliance markets**

- Growth of voluntary markets far supersedes compliance markets; they have funneled more than **EUR5bn over the last 20 years**
- In 2021, the volume of voluntary market credits reached its maximum since 2010 and reached nearly **US\$2 billion in (2021)** for the first time
- Demand is growing so fast that market is expected to be **supply constrained** in the coming years
- The demand for carbon credits from **Nature-based Solutions (NbS)** projects is the growing faster

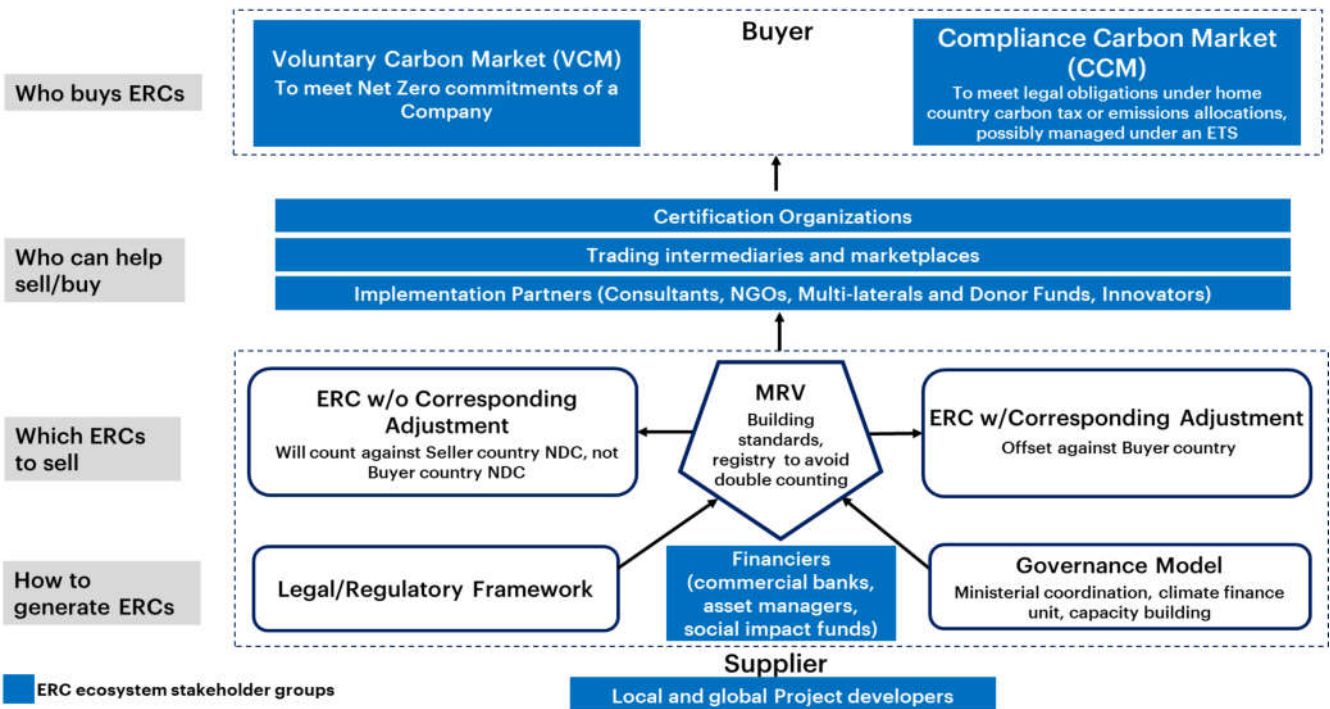
**Paris Agreement will grow compliance markets which are catalyzed by the voluntary markets**

- Article 6 can help countries meet their NDC goals in a faster and cheaper way with **US\$300 billion/year** savings;
- 55 countries' NDC confirm their interest of utilizing international market mechanisms and there is an increasing number of Article 6 pilots
- It is estimated that **airlines** will need to offset **~0.5 – 3.0 billion tons of CO<sub>2</sub>** from 2021–2035 to comply with CORSIA
- Both schemes can help reduce market fragmentation



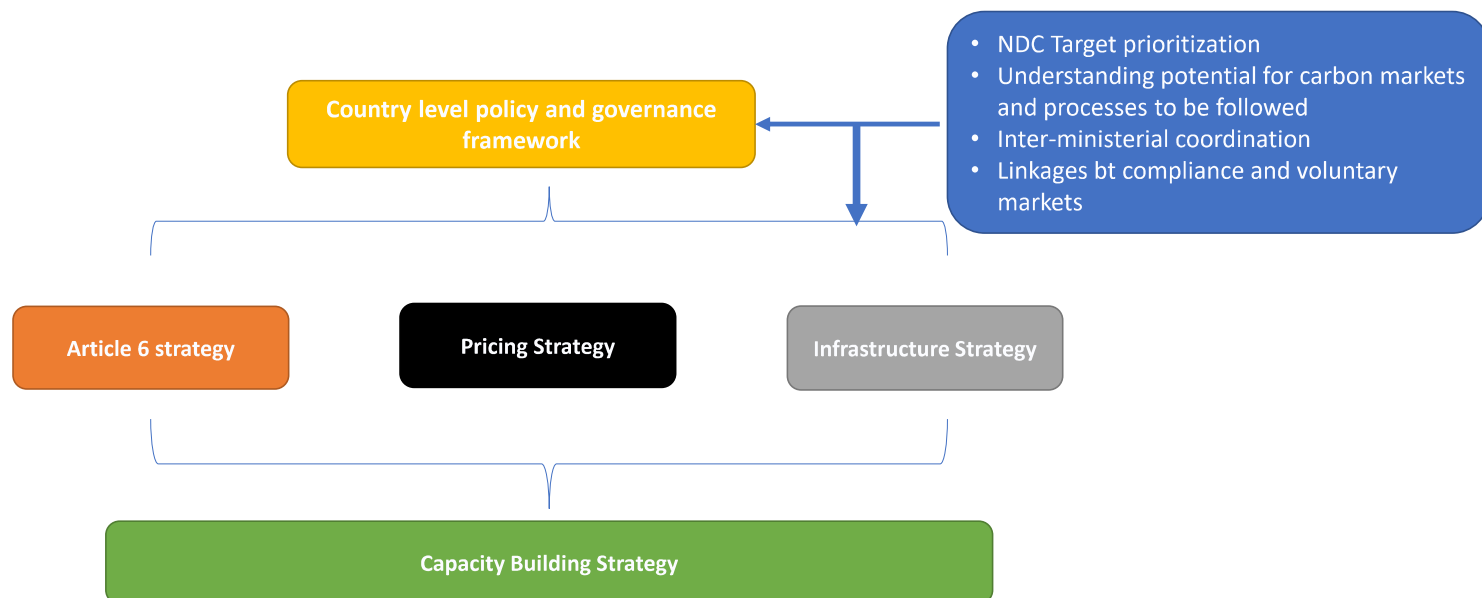
Source: UNEP; IEA; World Bank; Ecosystem Marketplace; Carbon Brief; ecbi; Climate Focus; Refinitiv

## The global carbon market is quite complex





A good understanding of requirements and establishing clear strategies supported by a national framework will determine the robustness of carbon markets



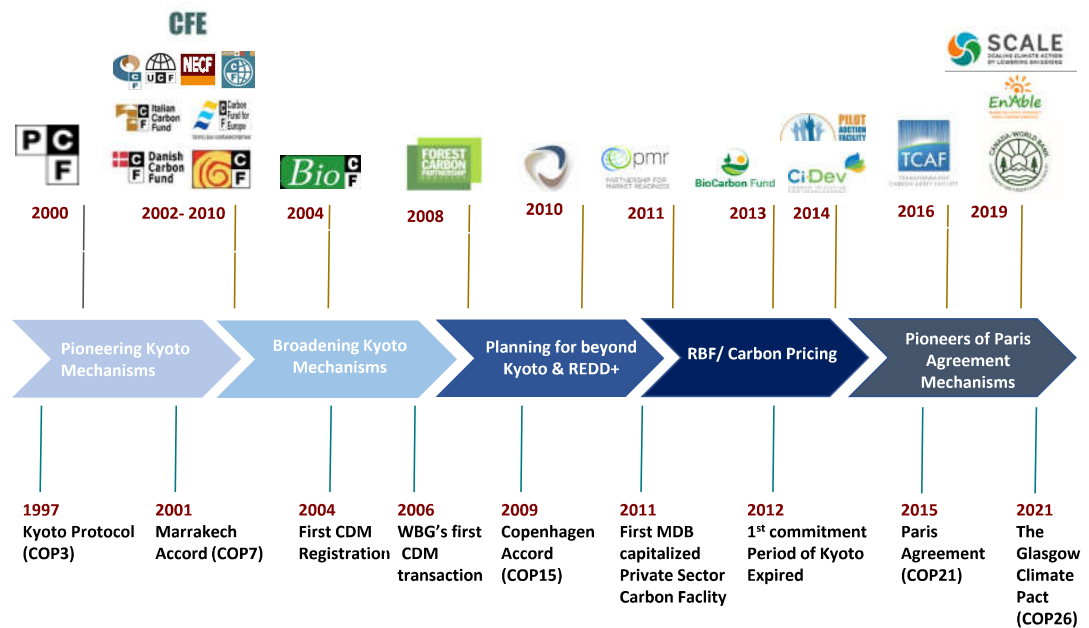
## • How is the World Bank contributing?

- Funding
- Capacity building
- Partnering
- Innovating
- Sharing knowledge



## The World Bank has been involved in carbon markets for over 25 years

- First carbon fund (Prototype Carbon Fund) launched in **1999** with **\$180M**
- **Around \$4.4B in active funds currently under management** (\$5.1B with closed funds included)
- More than **US\$1.6B already disbursed for Emissions Reduction (ER) payments**
- More than **210M tCO<sub>2</sub>e** avoided so far
- Operations in **67 countries** since inception



## We build countries' capacity to develop and implement carbon pricing instruments



Measuring, reporting, and verification systems



Data and registries



Emissions projections and Nationally Determined Contributions



Stakeholder engagements and communications

# We help countries identify, design and implement best practice approaches to carbon markets



Economic modelling



Policy mapping



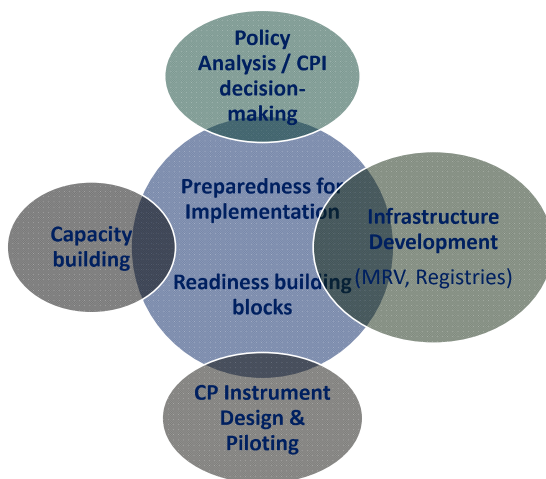
Policy interactions



Cost-benefit analyses



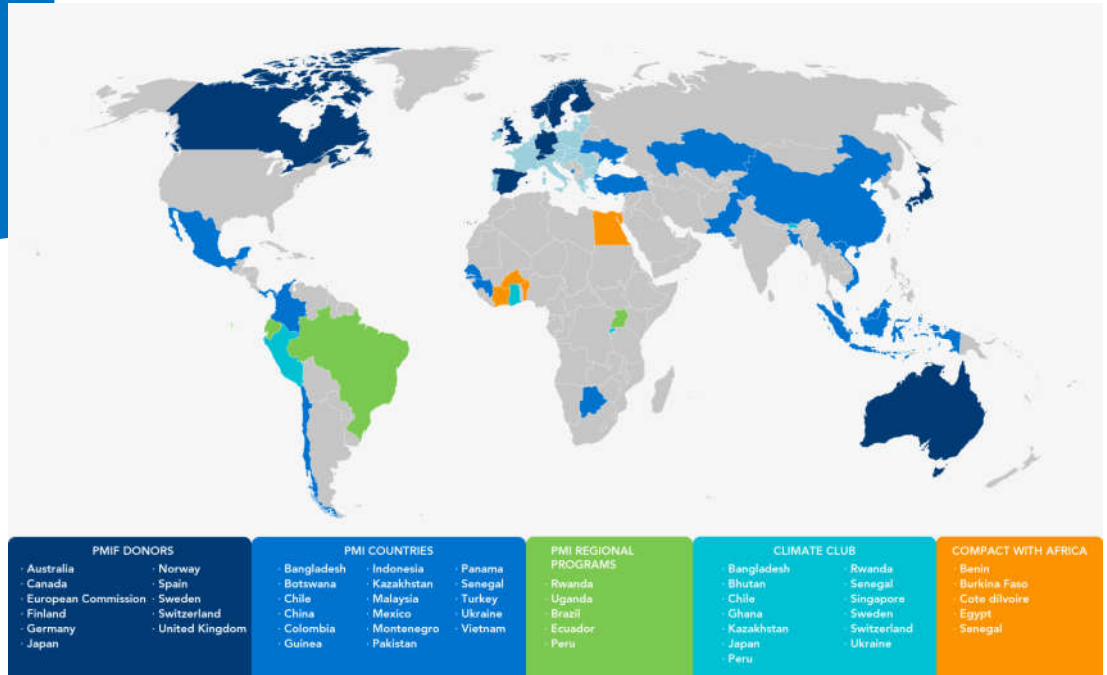
# We support countries from Readiness to Implementation...



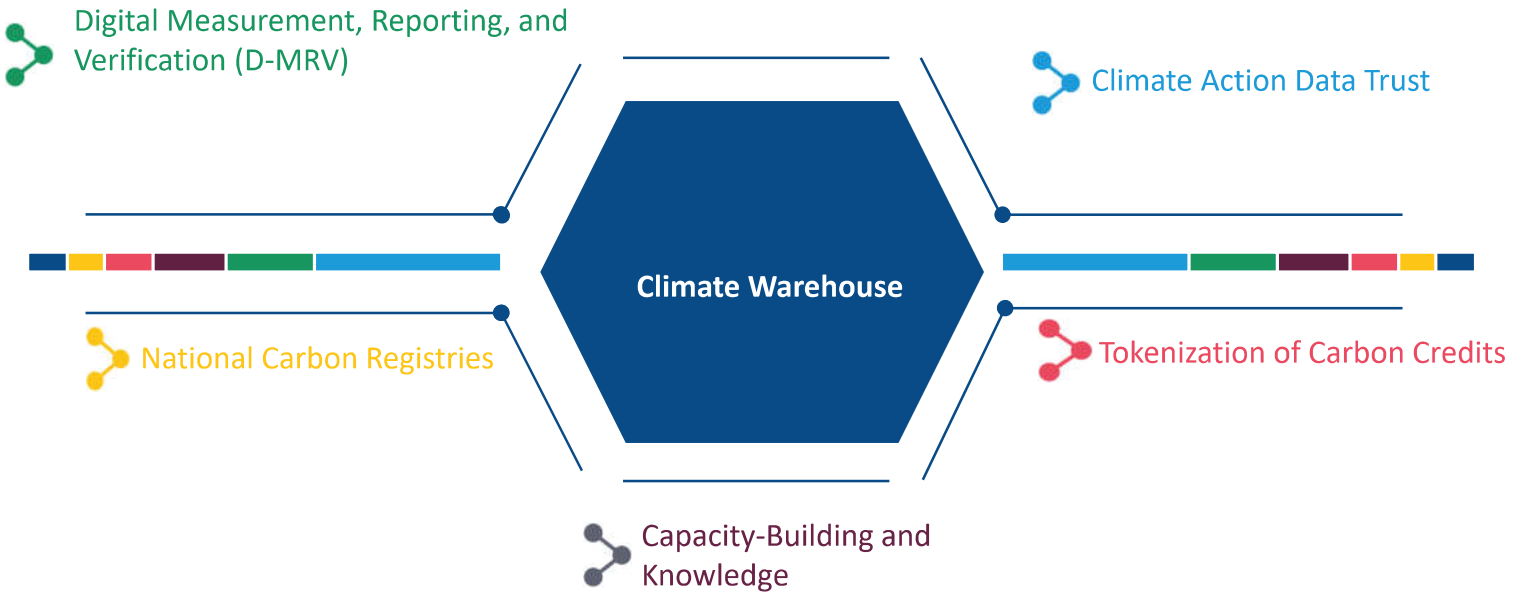
PMI...leverages **knowledge** and **networks** generated by PMR community of policymakers, practitioners, partners



# COUNTRY COVERAGE TO DATE



## We pilot and prototype instruments to bring transparency to the carbon market



## What should be the role of the regulator?

- Maximize legal certainty
- Avoid market abuse



### Maximizing legal certainty



Facilitate efforts through regulatory guidance



Support standardization of legal treatment of carbon credits across jurisdictions



Support drafting of standardized documentation and legal opinions



Work with global standard setters such as UNIDROIT to produce legislative guidance on substantive legal issues



## Some of the issues where guidance is needed



Legal nature of carbon credits



Insolvency and safe harbor



Ownership and fungibility  
- Location of registries



Security of transfers and intermediation



Digitalization and tokenization



Security arrangements

## The role of the regulator will need to be defined



Does the financial regulator need to be involved in the primary market?



Who will be involved in KYC/AML?



What about the secondary market?



Should there be a role for the industry bodies?

Resources:

<https://pmclimate.org>

<https://www.theclimatewarehouse.org>

<https://www.worldbank.org/en/topic/climatechange/brief/world-bank-carbon-funds-facilities>

And you can contact me for more information [frosembuj@worldbank.org](mailto:frosembuj@worldbank.org)