

Sustainable Solutions at CME Group

PRODUCTS AND SERVICES DESIGNED FOR A SUSTAINABLE FUTURE



For nearly two centuries, CME Group has been improving the way markets perform, enterprises do business and economies grow. Our contracts are designed to help global clients manage price risk in today's marketplaces as they develop new technologies and other initiatives to move their industries towards alternative sources of cleaner energy, sustainable agriculture and more. In addition to developing products and services that meet our clients' evolving risk management needs, CME Group is committed to help advance a more sustainable economy overall.

ESG Products

"Every industry, including finance, has been forced to change their processes and approach. As we share our lessons learned and practices related to ESG, I am hopeful that it will spark new ideas and ways we can improve the future."

OWAIN JOHNSON
MANAGING DIRECTOR, RESEARCH AND PRODUCT DEVELOPMENT

E-mini S&P 500 ESG futures

Launched in November 2019, E-mini S&P 500 ESG Index futures were developed to meet the changing risk management needs of our clients, while also offering sustainable product choices that allow them to align their investment decisions with personal or institutional values. Since launched, these futures have continued to gain momentum, achieving \$1.25 billion in record notional open interest during 2020.

Learn more: cmegroup.com/esafutures

E-mini S&P Europe 350 ESG Index futures

Launched in May 2021, E-mini S&P Europe 350 ESG futures were designed to provide an efficient new way to capture benchmark European equity exposure and integrate environmental, social and governance (ESG) exposure into investments.

Learn more: cmegroup.com/europe350esq

CME Sustainable Clearing

We offer the industry's first-ever Sustainable Clearing service to help market participants track and report on how their hedging activities are advancing their sustainability goals. Sustainable derivatives encompass both the trading of products such as carbon offsets, battery metals and bioenergy, as well as interest rate and foreign exchange futures hedging activity that is carried out to support a sustainable business.

Learn more: cmegroup.com/sustainable-clearing

Nasdaq Veles California Water Index futures

Working with our partners at Nasdaq, in December 2020, we launched the first-ever water futures contract designed to help food producers, municipalities and businesses hedge the cost of water used primarily for agricultural and commercial purposes.

Learn more: cmegroup.com/waterfutures

CBL Global Emissions Offset (GEO™) futures

As more companies work to create a low carbon economy, demand for voluntary carbon offsets continues to grow. In March 2021, we launched our GEO futures designed to help clients manage the risks associated with voluntary decarbonization strategies.

Learn more: cmegroup.com/geo



E-mini S&P 500 ESG futures achieved **\$1.25 billion** in record notional open interest during 2020.

Metals Products

A broad array of our precious, base and ferrous metals includes products that are highly recyclable and used in a variety of green technologies, from electric vehicle (EV) parts and batteries, to wind turbines, energy storage and solar panels.

Gold

Recycled gold accounted for nearly 30% of global gold supply in 2019.

Silver

Virtually every electrical connection in a vehicle has silver; electronic vehicles (EVs) are expected to account for 49% of silver use in automobiles by 2040.

Platinum and Palladium

- Main application for both metals is in automotive catalytic converters; these metals act as a sponge to soak up hydrocarbon emissions.
- Scrap recyclers can salvage up to 90% of the palladium found in catalytic converters, making them the most common recycled catalyst.

Aluminum

- 75% of aluminum ever produced is still in use today.
- We offer an Aluminum Auction platform where buyers and sellers can execute the physical transfer of eligible aluminum on a spot transaction basis. Price transparency through the CME Platforms Auction could promote low-carbon practices and increase the accessibility of low-carbon aluminum.

Copper

Key component in virtually every sustainable energy application, including EVs, wind turbines, solar panels and energy storage; copper is the most reused metal on Earth.

Steel

- Can be used infinitely; over 90% of steel worldwide is recycled.
- Recycled Steel futures contract In 2020, around 530,000 tons of recycled steel was hedged on CME Group exchanges, via our Recycled Steel futures contract, which enables risk management for this key scrap market.
- The use of one ton of recycled stainless steel scrap in stainless steel production could reduce CO2 emissions by 4.3 tons.

EV battery metals

- Cobalt and Lithium futures are both tradable at CME Group.
- Along with nickel, cobalt and lithium are the main component metals used in lithium-ion batteries that power EVs.
- Battery metal futures will offer miners, battery suppliers, automakers and merchant traders a way to manage risk, while giving other financial market participants access to opportunities in this growing market.

Many of our metals products adhere to:

- · Organisation for Economic Co-operation and Development's (OECD) Due Diligence Guidance
- · London Bullion Market Association's (LBMA) Responsible Sourcing guidelines

These guidelines provide detailed recommendations to help companies respect human rights and avoid contributing to conflict through their mineral purchasing decisions and practices.





Gold is 100% recyclable

Aluminum is 100% recyclable

Copper is 100% recyclable

Steel is
100%
recyclable



Fossil Fuels and Food

"In the near-term, GEO futures will provide a regulated, market-based solution to address risk management needs. These contracts create a standardized pricing benchmark to help facilitate long-term climate goals that impact our planet for the better."

PETER KEAVEY
MANAGING DIRECTOR OF ENERGY PRODUCTS

Emissions offsets and carbon allowances

As more businesses have pledged to reduce their overall carbon footprint, we have seen an increase in demand for tools to help our clients manage these emerging risks efficiently.

- CBL Global Emissions Offset (GEO™) futures
- Nature-Based Global Emissions Offset (N-GEO™) futures
- California Carbon Allowance futures
- · California Low-Carbon Fuel Standard futures
- European Union Carbon Allowance futures
- Regional Greenhouse Gas Initiative futures

Existing low-carbon products and bridge fuels

- · Natural Gas futures and options
- LNG futures
- Weather futures and options help utilities better manage energy supply and demand around heating degree and cooling degree days

Bioenergy products

- Our Bioenergy futures remain highly active, providing market participants with a tool to manage price risk in renewable transport fuels.
- · CBOT Ethanol futures
- · Chicago and NY Platts Ethanol futures
- · Various European Biodiesel futures

Other new products

Waste-based products, like Used Cooking Oil Methyl Ester (UCOME) futures, are increasingly in demand as a source of clean energy. Our used cooking oil contracts help clients manage the price risks associated with this emerging market and deliver solutions to meet changing consumer preferences.



Our contracts are designed to help global customers manage price risk in today's energy and agricultural ecosystems. Clients can then consider the development and implementation of new technologies and other initiatives such as more environmentally friendly energy and sustainable agriculture.

Market Data

Along with our slate of tradable products designed to provide access to emerging ESG markets, we are providing alternative solutions in the form of data products.

Data is one of the most sustainable products available and helps to power the ESG marketplace. As more investors consider ESG factors for their strategies, we are continuing to develop new data products to help address the growing environmental interests of clients across financial and commodity markets.

CME Group data via Google Cloud

Clients can access CME Group delayed and JavaScript Object Notation (JSON) formatted futures data through Google Cloud. With the addition of these native cloud solutions, it is easier than ever for clients to consume our valuable suite of market data products.

Hemp pricing data

Access benchmark wholesale hemp pricing data alongside nearly a petabyte of historical data for futures and options across every investible asset class.

Indigo Ag

Use satellite-based imagery to understand the status of a given crop with two new datasets: Crop Health Index and NDVI, covering crop conditions and progress.

RS Metrics

View trends and estimates for global copper production based on changes in daily, weekly and monthly growth in raw materials, covering 250 smelters and storage facilities.

Additional resources Sustainable Solutions at CME Group cmegroup.com/esg ESG at CME Group cmegroup.com/company/corporate-citizenship/esg

cmegroup.com About CME Group As the world's leading and most diverse derivatives marketplace, CME Group (www.cmegroup.com) enables clients to trade futures, options, cash and OTC markets, optimize portfolios, and analyze data – empowering market participants worldwide to efficiently manage risk and capture opportunities. CME Group exchanges offer the widest range of global benchmark products across all major asset classes based on interest rates, equity indexes, foreign exchange, energy, agricultural products and metals. The company offers futures and options on futures trading through the CME Globes® platform, fixed income trading via BrokerTec and foreign exchange trading on the EBS platform. In addition, it operates one of the world's leading central counterparty clearing providers, CME Clearing. CME Group, the Globe logo, CME, Chicago Mercantile Exchange, Globex, and, E-mini are trademarks of Chicago Mercantile Exchange Inc. CBOT and Chicago Board of Trade are trademarks of Board of Trade of the City of Chicago, Inc. NYMEX, New York Mercantile Exchange and ClearPort are trademarks of New York Mercantile Exchange, Inc. COMEX is a trademark of Commodity Exchange, Inc. BrokerTec and EBS are trademarks of BrokerTec Europe LTD and EBS Group LTD, respectively. Dow Jones, Dow Jones Industrial Average, S&P 500 and S&P are service and/or trademarks of Dow Jones Trademark Holdings LLC, Standard & Poor's Financial Services LLC and S&P/Dow Jones Indices LLC, as the case may be, and have been licensed for use by Chicago Mercantile Exchange Inc. All other trademarks are the property of their respective owners.

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