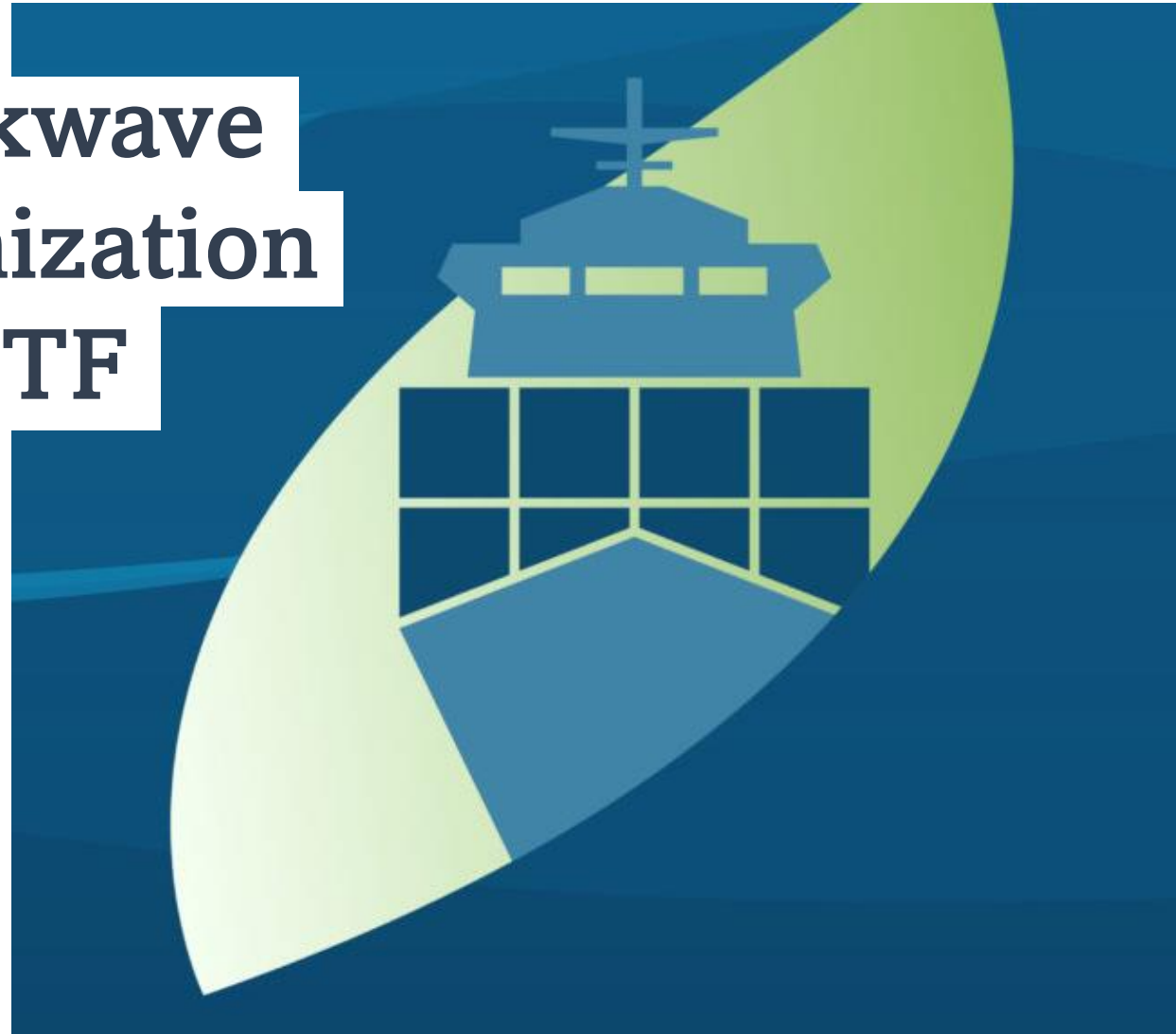


# ETFMG Breakwave Sea Decarbonization Technology ETF

**Harold Malone**  
Principal,  
Sea/Switch Partners



**Marine Money New York Ship Finance Forum**  
November 18th, 2021

# Sponsor Experience



- Top 20 ETF issuer
- Partnerships with market segment experts to bring long-term growth opportunities to investors
- 21 funds in market
- \$7.1 billion AUM\*

*\*AUM is subject to change on a daily basis*



- Relied upon by maritime companies, financiers, equity investors and transaction professionals for more than 30 years
- 22 Global Forums
- Publications, books and data products
- Advisory services



- Current sponsor of BDRY
- Significant experience in maritime investments
- Research
- Considerable following amongst investors



- Mission is to drive maritime decarbonization through thought leadership and delivering practical solutions
- Brings together the technology innovators, capital providers, shipowners, cargo movers, regulators and other parties
- Partnership of seasoned maritime experts

# What is an ETF?

An **exchange-traded fund (ETF)** is a type of security that tracks an index, sector, commodity, or other asset, but which can be purchased or sold on a stock exchange.



**Tax efficiency** – ETFs can typically avoid the capital gains distributions usually associated with mutual funds.



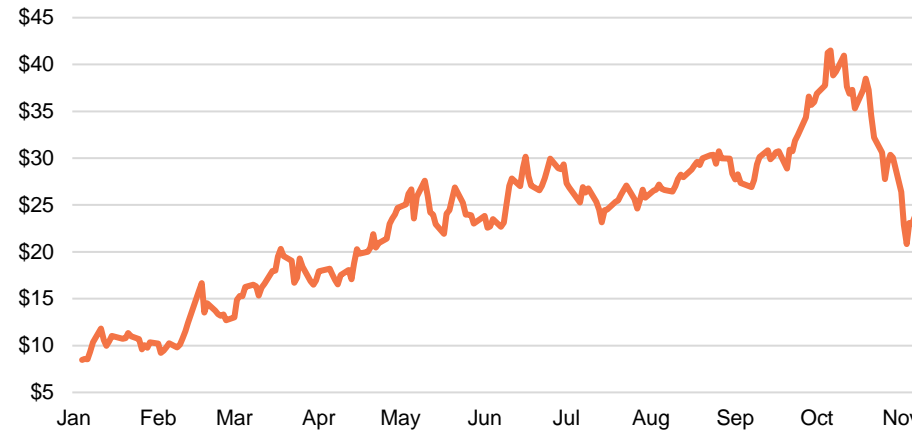
**Avoid single stock risk** – Thematic ETFs can provide pinpoint exposure while still maintaining diversification.



**Global access** and exposure simplified – ETFs provide efficient access to emerging market stocks.

# ETFMG / Breakwave Performance

BDRY YTD Performance



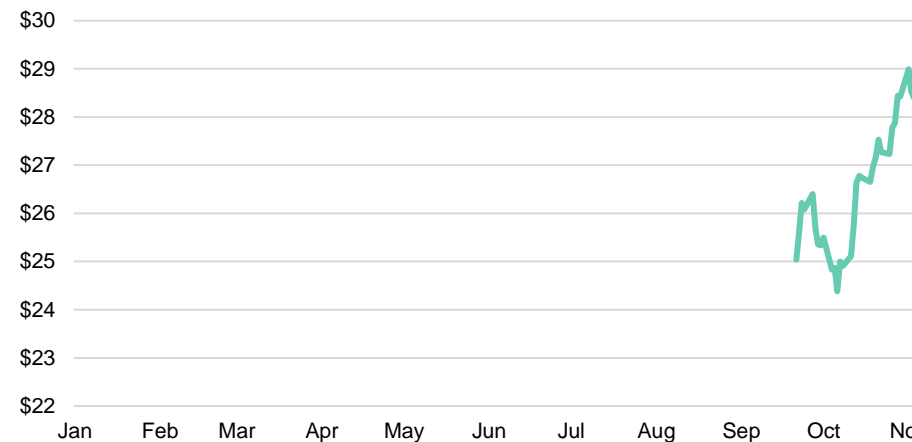
Past performance is not indicative of future results.

## BDRY

### Breakwave Dry Bulk Shipping ETF

BDRY provides long exposure to the dry bulk shipping market through a portfolio of **near-dated freight futures contracts** on dry bulk indices.

BSEA YTD Performance



Past performance is not indicative of future results.

## BSEA

### ETFMG Breakwave Sea Decarbonization Tech ETF

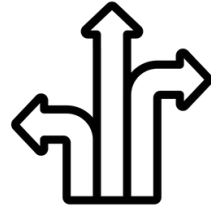
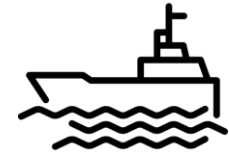
BSEA provides investor access to a diversified set of **global** companies that develop technologies, manufacture equipment or provide services related to **maritime decarbonization**.

# BSEA: Highlights



**BSEA** companies focus on **decarbonizing** shipping, an irreplicable industry that accounts for **80% of global trade.\***

Maritime decarbonization is a critical undertaking in its infancy with potential to grow significantly and **reshape the shipping world as we know it.**



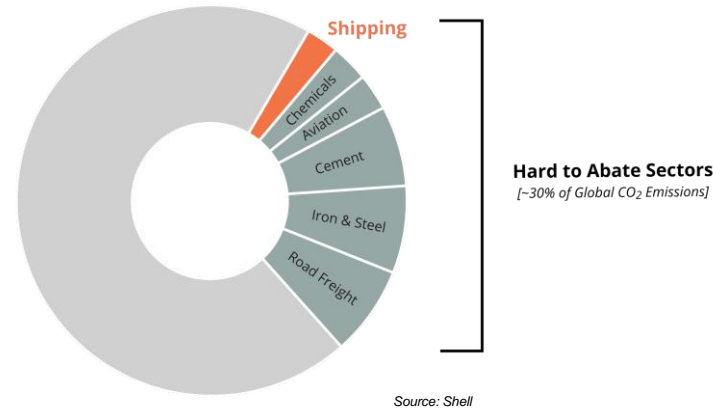
**BSEA** companies have considerable revenue potential, given that **no established path or solution currently exists** to decarbonize shipping.

**BSEA** aims to **capitalize** on the expected growth in new technologies relating to maritime decarbonization and offshore wind developments.



# Decarb Facts

## Global CO<sub>2</sub> Emissions



*“Everything will go fully electric, apart from (ironically) rockets. Ships are the next easiest to solve after cars.”*

—Elon Musk

## The Problem

- **2.5%** of global CO<sub>2</sub> emissions are produced by ships\*
- **100,000** commercial ships globally\*\*
- **‘Hard-to-abate’** sector

\*Source: International Maritime Organization

\*\*Source: Clarksons

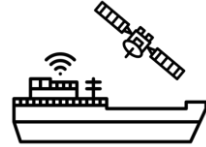
\*\*\*Source: Global Maritime Forum

## The Solution

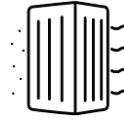
- The IMO has mandated that shipping reduce the carbon intensity by **40% by 2030 and 70% by 2050\***
- The **required investment** is estimated to be between **1.4-3.4 Trillion USD\*\*\***

# Decarbonization Technologies in Development

## Onboard Systems



Trip Optimization Technologies



Carbon Capture & Storage



Sail Technologies

## Green Fuel Production & Infrastructure

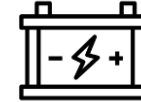


Green H2 & Ammonia Production & Infrastructure



Methanol Production

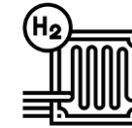
## Propulsion Solutions



Marine Battery Manufacturing



Nuclear Power Solutions



Marine Fuel Cell Technology & Manufacturing

## Offshore Energy



Renewable Offshore Energy Production Technology

# BSEA Core Constituents

|                                    | Symbol   | Listing Location |
|------------------------------------|----------|------------------|
| Advent Technologies Holdings, Inc. | ADN:US   | USA              |
| Aker Horizons ASA                  | AKH:NO   | Norway           |
| Alfa Laval AB                      | ALFA:SS  | Sweden           |
| Ballard Power Systems Inc.         | BLDP:US  | USA              |
| Ceres Power Holdings plc           | CWR:LN   | UK               |
| Chart Industries, Inc.             | GTLS:US  | USA              |
| FREYR Battery                      | FREY:US  | USA              |
| Hexagon Composites ASA             | HEX:NO   | Norway           |
| ITM Power Plc                      | ITM:LN   | UK               |
| Kongsberg Gruppen ASA              | KOG:NO   | Norway           |
| McPhy Energy S.A.                  | MCPHY:FP | France           |
| Methanex Corporation               | MEOH:US  | USA              |
| Nel ASA                            | NEL:NO   | Norway           |
| New Fortress Energy                | NFE:US   | USA              |
| Nexans S.A.                        | NEX:FP   | France           |
| PowerCell Sweden AB                | PCELL:SS | Sweden           |
| Siemens Energy AG                  | ENR:GR   | Germany          |
| Vestas Wind Systems A/S            | VWS:DC   | Denmark          |
| Wärtsilä Oyj Abp                   | WRT1V:FH | Finland          |
| Yara International ASA             | YAR:NO   | Norway           |





# Environmentally Focused Investing

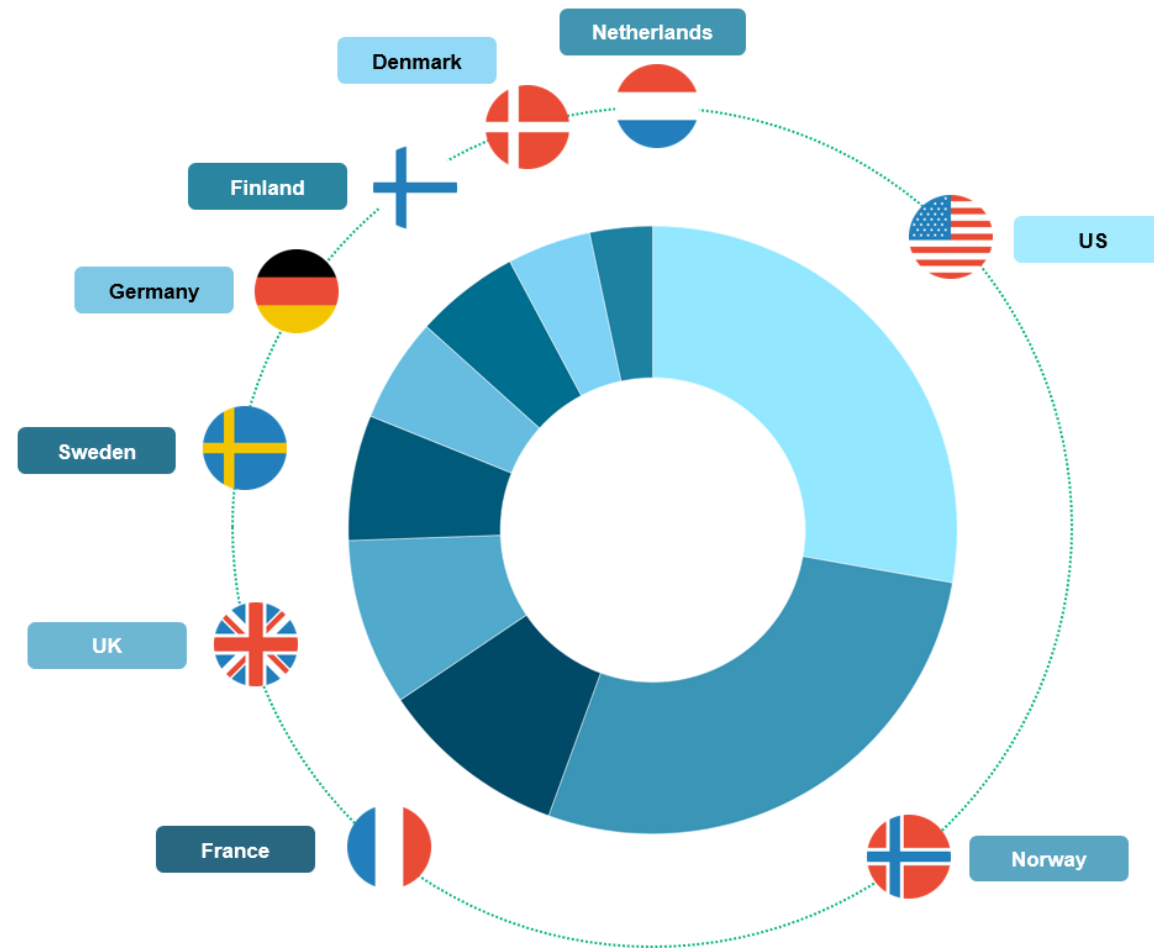
**BSEA** focuses on the development and implementation of technologies that will create a **greener planet**, including technologies focusing on marine decarbonization.

**Constituents** are not necessarily companies that have green operations; rather companies that develop the technologies to transition the maritime industry to a greener future.

**BSEA** companies **provide solutions to the environmental requirements** being pushed by regulators, government bodies, private enterprises and customers.

**BSEA** is the first ETF focusing on the new **green technologies** for the maritime industry.

## BSEA Exposure by Country



# Key Information

**Unique theme** of green technologies for an emerging sector (shipping)

**Targeted sector** with uncorrelated return potential

**Growth industry** vs. shipping which is cyclical

**Difficult to access** companies (i.e. global focus)

**Significant sponsor expertise** in shipping; unique insight on new technologies for ships

**Research supported** process to identify trends and capitalize on them

# Index Composition

## Index Overview

**Index Name:** Marine Money Decarbonization Index (MMDI)

**Index Focus:** Companies that develop technologies, manufacture equipment or provide services related to maritime decarbonization and offshore wind

**Index Provider:** Maritime Transformation Partners (JV of Marine Money, Breakwave and Sea/Switch)

**Index Calculation:** Solactive AG

**Data Distribution:** Bloomberg, Refinitiv, Solactiv AG

**Index Website:** [mmdecarbindex.com](https://mmdecarbindex.com)

## Index Parameters

**Weighting Methodology:** Equal weighting in two tiers

**Core Tier:** 20 companies (80%)

**Tracking Tier:** ~20-40 (20%)

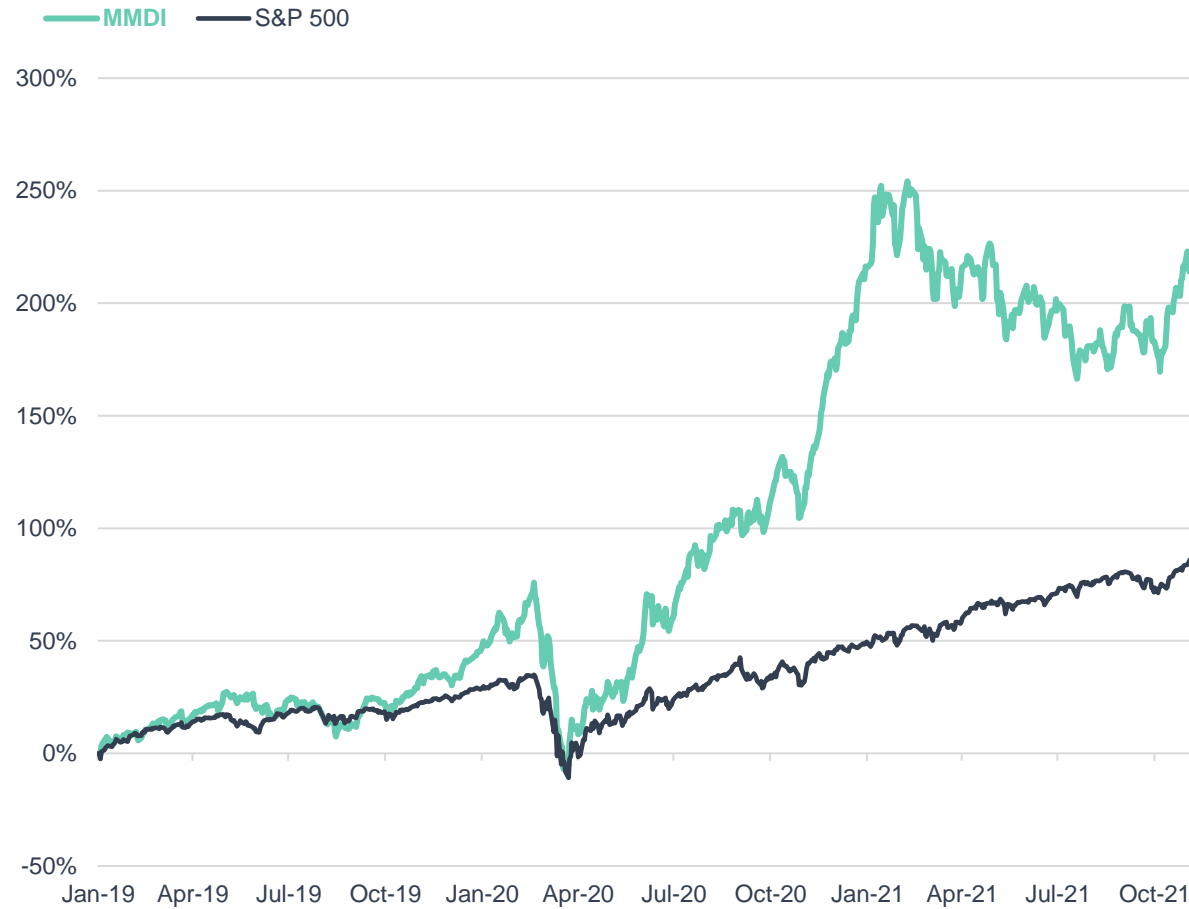
**Current # of Constituents:** 50

**Current Constituent Exchanges:** NYSE, NASDAQ, LSE, OSE, OMX, Euronext, OMXH, OMXC, XETR, FSX

**Reconstitution/Rebalancing Frequency:** March, June, September, December

|                       | Core    | Tracking |
|-----------------------|---------|----------|
| # of Constituents     | 20      | ~20-40   |
| Weight                | 80%     | 20%      |
| Market Cap Req.       | >\$500m | >\$100m  |
| Avg. Volume (6m) Req. | >\$2m   | >\$1m    |

# Index Performance



*Marine Money Decarbonization Index: Normalized gross performance 1/1/2019-11/12/2021*

**Past performance is not indicative of future results.**

# For More Information



[marinemoney.com](http://marinemoney.com)



[etfmg.com](http://etfmg.com)



[breakwavewadvisors.com](http://breakwavewadvisors.com)



[seaswitch.com](http://seaswitch.com)

# Disclaimer

**Carefully consider the Fund's investment objectives, risk factors, charges, and expenses before investing. This and additional information can be found in the Fund's prospectus, which may be obtained by calling 1-844-ETF-MGRS (1-844-383-6477), or by visiting [www.etfmg.com](http://www.etfmg.com). Please read the prospectus carefully before investing.**

Investing involves risk, including the possible loss of principal. Shares of any ETF are bought and sold at market price (not NAV), may trade at a discount or premium to NAV and are not individually redeemed from the Fund. Brokerage commissions will reduce returns. Narrowly focused investments typically exhibit higher volatility. The Fund is non-diversified, meaning it may concentrate its assets in fewer individual holdings than a diversified fund. Investments in smaller companies tend to have limited liquidity and greater price volatility than large capitalization companies. The Fund's return may not match or achieve a high degree of correlation with the return of the Marine Money Decarbonization Index. To the extent the Fund utilizes a sampling approach, it may experience tracking error to a greater extent than if the Fund had sought to replicate the Index. Diversification does not guarantee a profit, nor does it protect against a loss in a declining market.

The underlying Index's decarbonization criteria, and thus the Fund's investment strategy, limits the types and number of investment opportunities available to the Fund, and, as a result, the Fund's returns may be lower than other funds that do not seek to invest in companies based on decarbonization criteria. In addition, decarbonization investing may affect the Fund's exposure to certain companies or industries and the Fund will forgo certain investment opportunities that are screened out of the decarbonization methodology. Finally, some of the companies are developing new technologies that have not yet achieved full commercialization.

The Fund is a recently organized investment company with limited operating history. As a result, prospective investors have a limited track record or history on which to base their investment decision. There can be no assurance that the Fund will grow to or maintain an economically viable size.

The Index was created by and is owned and maintained by the with Maritime Transformation Partners, LLC (the "Index Provider"), which has not previously been an index provider, which may create additional risks for investing in the Fund.

ETF Managers Group LLC is the investment adviser to the Fund.

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