

# Decarbonizing Maritime: BSEA – the World's First Green Shipping ETF



Kongsberg Maritime



Democratizing Shipping | Decarbonizing Maritime

[breakwaveadvisors.com](https://breakwaveadvisors.com)

**BSEA**  
**LISTED**  
NYSE ARCA

# 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

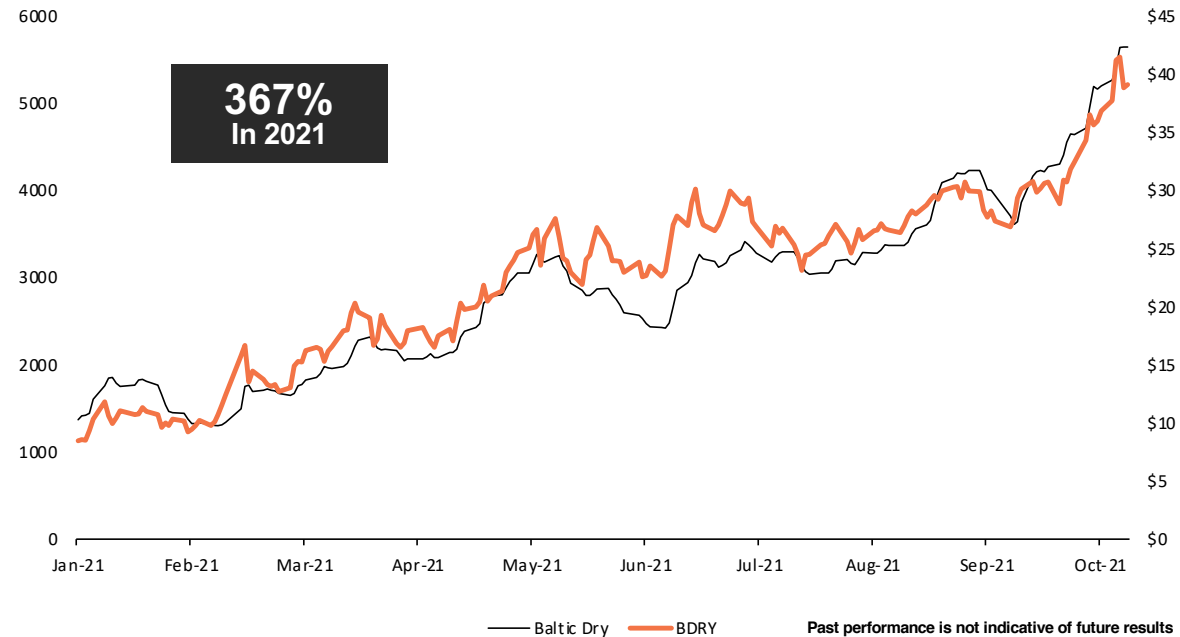
# BDRY

## LISTED

### NYSE ARCA



#### YTD Performance: Breakwave Dry Bulk Shipping ETF [BDRY]



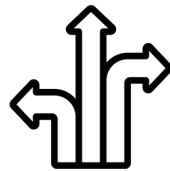
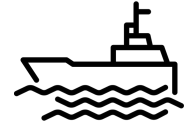
- As close of an investment to **spot dry bulk rates** as one can reasonably achieve given market constraints
- Easy, **convenient access to dry bulk futures** without using a complex and expensive freight futures account
- Equity-like product with **intraday pricing, market/limit orders, ability to go short**, etc.

**BSEA**  
**LISTED**  
**NYSE ARCA**



**BSEA** invests in companies that develop the technologies to **decarbonize** shipping

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



The decarbonization transition will provide **considerable investment opportunities** that are still in their infancy

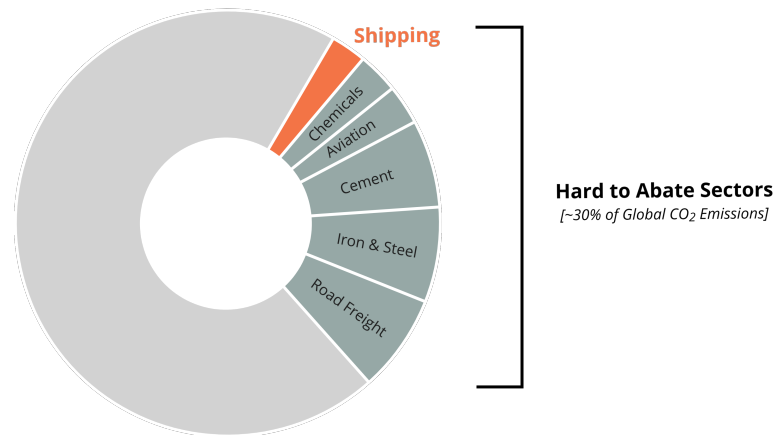
**BSEA** aims to **capitalize on the expected growth** in these new technologies



# Decarbonization Facts

## The Problem

Shipping accounts for **2.5% of global CO<sub>2</sub> emissions** and has been **labeled a 'hard-to-abate' sector**, meaning decarbonization will require specialized technologies and solutions



Global CO<sub>2</sub> Emissions

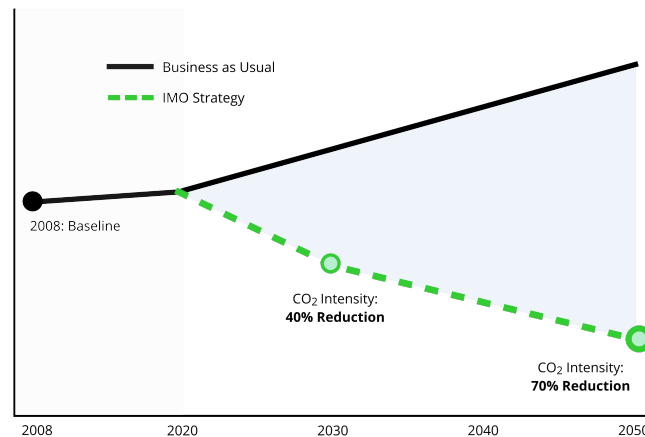
Source: Shell

# Decarbonization Facts

## The Solution

Reduce carbon intensity by **40% by 2030 and 70% by 2050**

**Required Investment of 1.4 to 3.4 Trillion USD**



Maritime CO<sub>2</sub> Emissions: IMO Strategy Targets

Source: DNV GL, IMO

# Decarbonization Technologies in Development

## Green Fuel Production & Infrastructure

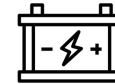


Green H2 & Ammonia  
Production &  
Infrastructure



Methanol  
Production

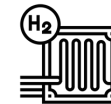
## Propulsion Solutions



Marine Battery  
Manufacturing

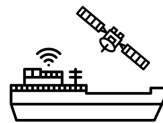


Nuclear  
Power Solutions



Marine Fuel Cell Technology &  
Manufacturing

## Onboard Systems



Trip Optimization  
Technologies



Carbon Capture &  
Storage



Sail  
Technologies

## Offshore Energy



Renewable Offshore Energy  
Production Technology

## Environmental Investing

Environmental investing is about investing in progress, and recognizing that companies solving the world's biggest challenges can be **best positioned to grow**

**BSEA** focuses on the **development and implementation of technologies** to transition the maritime industry to a greener future

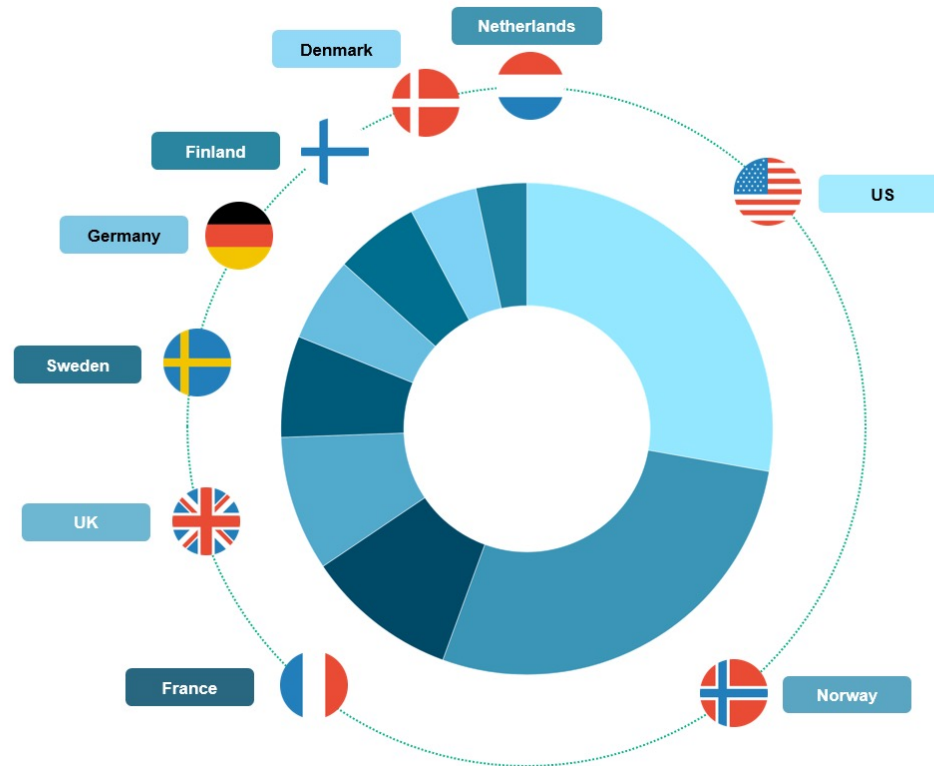
**BSEA** companies **provide solutions to the environmental requirements** being pushed by regulators, government bodies, private enterprises and customers

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



# Global Focus

## BSEA Exposure by Country



# 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



# Sponsor Experience

## BSEA tracks the Marine Money Decarbonization Index (MMDI) developed by:



- Current sponsor of BDRY, best performing ETF of the year
- Significant experience in maritime investments
- Research
- Considerable following amongst investors



- 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



- 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

# Index Performance

## Marine Money Decarbonization Index



*Marine Money Decarbonization Index: Normalized gross performance 9/1/2019-9/1/2021*

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

# BSEA

## Why Invest?

- **Shipping**, as we know it, **will change**
- The investments needed for the transition are **colossal**
- Decarbonization **technologies** are still in their **infancy**
- BSEA aims to **capitalize** on the expected growth in these new technologies
- 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

# For More Information

**MARINE**  
M O N E Y

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



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

**etf**mg<sup>®</sup>

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



**Sea/Switch**  
PARTNERS

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

etfmg<sup>®</sup> | **BREAKWAVE**  
ADVISORS

 **BREAKWAVE**

# 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.

The Fund is distributed by ETFMG Financial LLC. ETF Managers Group LLC and ETFMG Financial LLC are wholly owned subsidiaries of Exchange Traded Managers Group LLC (collectively, "ETFMG"). ETFMG is not affiliated with Maritime Transformation Partners, LLC or Breakwave Advisors LLC.

The Fund is intended to be made available only to U.S. residents. Under no circumstances is any information provided on this website intended for distribution to or use by, or to be an offer to sell to or solicitation of an offer to buy the Fund or any investment product or service of, any person or entity in any jurisdiction or country, other than the United States, where such distribution, use, offer or solicitation would subject the Fund or its affiliates to any registration requirement or be unlawful under the securities laws of that jurisdiction or country.