# Ticker: ACES ALPS Clean Energy ETF

Investment Primer | March 31, 2025

The ALPS Clean Energy ETF (ACES) seeks investment results that correspond (before fees and expenses) generally to the performance of its underlying index, the CIBC Atlas Clean Energy Index (NACEX). The Index is designed to provide exposure to a diverse set of US and Canadian companies involved in the clean energy sector including renewables and clean technology. The clean energy sector is comprised of companies that provide the products and services which enable the evolution of a more sustainable energy sector. Clean energy business segments include, but are not limited to: solar, wind, hydro/geothermal, bioenergy, electric vehicles, fuel cell/hydrogen, and energy management and storage.





## Why Invest in Clean Energy?

The United States and Canada are undergoing a significant long term shift in the electricity and energy sector which is changing how energy is produced and consumed. Renewable energy, primarily wind and solar, now makes up greater than 130% of total capacity additions and is expected to double by 2032, as fossil fuel capacity additions have declined year-overyear. Renewables currently account for a smaller share of the total US power generation at approximately 26%, however the share of investment suggests it's clear the shift in mix is poised to accelerate. While there is significant investment opportunity in the renewable power space itself, clean energy encompasses a wide range of technologies and options – it's not simply adding renewables to the power grid.

#### **US Renewable Electricity Generation**



Source: US Energy Information Administration (EIA), as of 12/31/2022



#### US & Canada Cumulative Installed Power Generation Capacity (GW)

Source: Bloomberg New Energy Finance

Note: Estimates shown as of 10/29/2020 are based on current information and could shift over time.

## Why Invest in a Basket of Clean Energy Businesses?

The United States makes up roughly 12% of global investment in clean energy annually, with nearly \$47bn in renewable energy investment in 2021 according to Bloomberg New Energy Finance. As energy users continue to shift towards a clean future this will continue to expand further, with potential for long term double digit growth in the total investable market. Much of the dollar amount invested in the clean energy sector will show up in wind and solar investment, though there are still significant opportunities in the niche clean energy sectors as well.

To realize the full benefits of the clean energy transformation, tying together all of the advances in renewables and other clean technologies becomes even more critical as the power system infrastructure becomes more decentralized and complex. Innovations in electric vehicles (EVs), energy storage, charging networks, smart grid technologies and digital energy are enabling the next phase of growth. Despite the tremendous progress made to date, the energy transition is just getting started.

Global Investment in Renewable Energy by Sector (\$Bn)



Source: Bloomberg New Energy Finance, as of January 2022

## ACES Clean Energy Segment Break Down



### Solar

While harnessing energy from the sun has been around for several decades, the solar photovoltaic (PV) industry has only recently taken off, and still accounts for only a small amount (0-5%) of electricity generation. While there is some power generation from solar-thermal technology (which concentrates sunlight using mirrors) the majority is still from solar panels arranged together to generate power through the PV process. Solar panels convert sunlight into electricity and the solar supply chain encompasses everything from panel production to installation, project development and asset ownership. Once on the ground, solar panels produce no pollutants like other power plants and require very little maintenance.



#### Wind

Every day the wind blows is an opportunity, and the several-hundred-foot-high wind turbines being installed by the wind industry aim to capitalize on the kinetic energy potential from changes in the weather. The wind industry is now the largest contributor to renewable power generation in the United States and continues to be one of the largest sources of new power generation worldwide along with solar. Companies involved in wind encompass everything from the blade and tower production to full service installation, maintenance, project development and asset ownership.

#### **Energy Management and Storage**

While the wider trends of electrification and renewable buildouts will continue for decades to come, the *delivery, storage and management* of the energy transition will be a key mega-theme supporting the larger trends. Batteries and other forms of energy storage will be key to address intermittency in renewable generation while simultaneously enabling grid services for utilities. Energy management companies and products focus on the efficient delivery of energy (typically electricity); for example a smart grid that monitors and controls electricity flows through wires and improves functionality and reliability for customers. Batteries and energy management are also increasingly intertwined, complimenting each other and enabling a more intelligent and efficient energy system. Collectively, these new technologies represent an unprecedented opportunity to move the energy industry into a new era of reliability, availability and efficiency.

#### Bioenergy

Bioenergy is composed of different forms of energy sourced from nature (plants) or other renewable organic sources. Biofuels (ethanol, biodiesel and renewable diesel) are already being used to power vehicles today and support farmers while using less fossil fuels in the process. Biomass encompasses the more productive use of scrap material that might otherwise end up in a landfill (municipal waste) or sustainably harvested nonfood crops (wood pellets) for electric power generation. Renewable Natural Gas (RNG) is also sourced from landfills and agriculture (dairy farms) to harness the power of methane that would otherwise be released into the atmosphere and contribute to greenhouse gas emissions.



#### Hydropower/Geothermal

Hydro and Geothermal are the slow and steady contributors to the renewable energy transition. Hydropower to create electricity has been around for more than a century and remains largely the same – using water flowing downhill to spin a turbine. Geothermal harnesses the power of the earth's core energy producing heat to do the same. While wind and solar technology is rapidly evolving and ramping, hydropower and geothermal are relatively mature with a slower growth profile. However, both hydro and geothermal provide unique benefits to the power system with a steadier production profile versus more intermittent renewable generation (solar and wind).



#### **Electric Vehicles**

Electric vehicles (EVs) represent perhaps the most fundamental change in transportation since the horse and buggy became obsolete. While the majority of cars and trucks produced today still use traditional internal combustion engines, there are more electric vehicles produced every day, and all major car companies have an electric offering or plans to rollout electric models in the near future. EVs are also a key catalyst for the expansion of energy storage technology like lithium batteries. EVs encompass the full supply chain for electrified transportation along with the infrastructure required to support it (charging networks and related equipment).

#### Fuel Cell/Hydrogen

Fuel cells use chemical reactions to produce energy, somewhat similar to a regular battery. While batteries store chemicals for later energy delivery, a fuel cell generates energy from combining separately sourced chemicals, most typically hydrogen and oxygen, and are often for larger-scale applications. When hydrogen is used for fuel cell reactions, water is produced – a more environmentally friendly emission. This emerging segment has numerous potential applications including everything from transportation to long-duration storage and portable power generation. In addition, the opposite reaction of running electricity through water using an electrolyzer generates hydrogen, which can then be used as a clean fuel source. When the source of electricity is from renewables, then the whole process is carbon free.

## Why Invest in the ALPS Clean Energy ETF (ACES)?

The Fund's underlying index has a differentiated pure-play approach which concentrates on companies, based in the US or Canada, whose primary operations are focused across the clean energy sector.

- Clean energy pure-play companies
- · Diversified across sub-segments
- US or Canadian based companies

## Methodology - Constituent Criteria

- Company derives a majority of their value from clean energy businesses
  - Definition of value determined based on company segment reporting with precedence to EBITDA, gross profit, revenue, capacity or other asset mix
- Must be listed on US or Canadian exchange
  - US or Canadian based as determined primarily by headquarters, asset base, customer base as monitored by investment committee
- Minimum float adjusted market capitalization of greater than \$100 million USD
- Minimum median trading liquidity of greater than \$1 million USD median over last 60 trading days prior to the selection date



Solar	24.81%
Electric Vehicles	23.97%
Wind	17.90%
Bioenergy	10.84%
Hydro/Geothermal	10.21%
Energy Management & Storage	9.47%
Fuel Cell/Hydrogen	2.80%
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Source: Bloomberg L.P., as of 3/31/2025, subject to change

## Clean Energy Index Characteristics

Symbol	NACEX	ECO	CELS
Full Name	CIBC Atlas Clean Energy Index	WilderHill Clean Energy Index	NASDAQ Clean Edge Green Energy Index
Number of Constituents	36	63	48
Median Market Cap (\$Mn)	\$1,311	\$938	\$2,165
Wgt Avg Market Cap (\$Mn)	\$47,643	\$19,827	\$70,169
Weight of Top 10	52.07%	19.26%	58.09%
Large Cap (>\$10Bn)	20.53%	14.32%	26.86%
Mid Cap (\$2-10Bn)	54.42%	29.65%	53.69%
Small Cap (<\$2Bn)	25.05%	560.30%	9.45%
Dividend Yield	1.29%	2.66%	1.10%
Price to Book (P/B) Ratio	1.43x	1.24x	2.06x
Overlap by Weight	100%	30.16%	53.98%

Source: Bloomberg L.P., as of 3/31/2025

## Important Disclosures & Definitions

## An investor should consider the investment objectives, risks, charges and expenses carefully before investing. To obtain a prospectus containing this and other information, call 1-866-759-5679 or visit www.alpsfunds.com. Read the prospectus carefully before investing.

Shares of ETFs are bought and sold at market price (not NAV) and are not individually redeemable.

Performance data quoted represents past performance. Past performance is no guarantee of future results; current performance may be higher or lower than performance quoted.

All investments are subject to risks, including the loss of money and the possible loss of the entire principal amount invested. Additional information regarding the risks of this investment is available in the prospectus.

Obsolescence of existing technology, short product cycles, falling prices and profits, competition from new market entrants and general economic conditions can significantly affect companies in the clean energy sector. In addition, intense competition and legislation resulting in more strict government regulations and enforcement policies and specific expenditures for cleanup efforts can significantly affect this sector. Risks associated with hazardous materials, fluctuations in energy prices and supply and demand of alternative energy fuels, energy conservation, the success of exploration projects and tax and other government regulations can significantly affect companies in the clean energy sector. Also, supply and demand for specific products or services, the supply and demand for oil and gas, the price of oil and gas, production spending, government regulation, world events and economic conditions may affect this sector. Currently, certain valuation methods used to value companies involved in the clean energy sector, particularly those companies that have not yet traded publicly, have not been in widespread use for a significant period of time. As a result, the use of these valuation methods may serve to increase further the volatility of certain clean energy company share prices.

The Fund seeks to track the underlying index, which itself may have concentration in certain regions, economies, countries, markets, industries or sectors. Underperformance or increased risk in such concentrated areas may result in underperformance or increased risk in the Fund.

The Fund may be subject to risks relating to its investment in Canadian securities. The Canadian economy may be significantly affected by the US economy, given that the United States is Canada's largest trading partner and foreign investor. Any negative changes in commodity markets could have a great impact on the Canadian economy. Because the Fund will invest in securities denominated in foreign currencies and the income received by the Fund will generally be in foreign currency, changes in currency exchange rates may negatively impact the Fund's return.

Micro-cap stocks involve substantially greater risks of loss and price fluctuations because their earnings and revenues tend to be less predictable (and some companies may be experiencing significant losses), and their share prices tend to be more volatile. The shares of micro-cap companies tend to trade less frequently than those of larger, more established companies, which can adversely affect the pricing of these securities and the future ability to sell these securities.

Smaller and mid-size companies often have a more limited track record, narrower markets, less liquidity, more limited managerial and financial resources and a less diversified product offering than larger, more established companies. As a result, their performance can be more volatile, which may increase the volatility of the Fund's portfolio.

The large capitalization companies in which the Fund invests may underperform other segments of the equity market or the equity market as a whole.

The Fund employs a "passive management" - or indexing - investment approach and seeks investment results that correspond (before fees and expenses) generally to the performance of its underlying index. Unlike many investment companies, the Fund is not "actively" managed. Therefore, it would not necessarily sell or buy a security unless that security is removed from or added to the underlying index, respectively.

CIBC Atlas Clean Energy Index (NACEX): an adjusted market cap weighted index designed to provide exposure to a diverse set of US or Canadian based companies involved in the clean energy sector including renewables and clean technology. The clean energy sector is comprised of companies that provide the products and services which enable the evolution of a more sustainable energy sector.

NASDAQ Clean Edge Green Energy Index (CELS): a modified market capitalization weighted index designed to track the performance of companies that are primarily manufacturers, developers, distributors and/or installers of clean energy technologies, as defined by Clean Edge.

Price/Book (P/B) Ratio: the weighted average of the price/book ratios of all the stocks in a portfolio. The P/B ratio of a company is calculated by dividing the market price of its stock by the company's per-share book value.

WilderHill Clean Energy Index (ECO): a modified equal dollar weighted index comprised of publicly traded companies whose businesses stand to benefit substantially from societal transition toward the use of cleaner energy and conservation.

One may not invest directly in an index.

ALPS Advisors, Inc., registered investment adviser with the SEC, is the investment adviser to the Fund. ALPS Advisors, Inc. is affiliated with ALPS Portfolio Solutions Distributor, Inc.

ALPS Portfolio Solutions Distributor, Inc. is the distributor for the Fund.

Not FDIC Insured • No Bank Guarantee • May Lose Value

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