

# MACKENZIE GLOBAL ENVIRONMENTAL EQUITY FUND: THEMATIC INVESTING

Mackenzie Global Environmental Equity Fund is sub-advised by Greenchip Financial, who have been solely dedicated to environmental themed investing since 2007.

## INVESTMENT THESIS:

### The Global Energy Transition is Driving Investment Opportunity

1. Systemic shift from fossil-based energy to decentralized, renewable power is driving long-term structural change in how we produce, transmit, store, and consume energy.
2. This energy transition is creating new investment opportunities.
3. Investing in more sustainable business models that improve the efficiency of natural resource use can contribute to a reduced carbon footprint.

## INVESTMENT UNIVERSE:

### Environmental Sectors

The portfolio managers look at an investment universe of over 600 companies with a cumulative \$6 trillion market capitalization, from which they build a concentrated portfolio of 30-35 companies. These companies generally fit into six sectors: Clean Energy, Energy Efficiency, Clean Technology, Water, Sustainable Agriculture, and Transportation. The Energy Efficiency sector focuses on companies that provide products and services that improve efficiency in the use of energy, with growth in the sector driven by environmental degradation and resource scarcity.

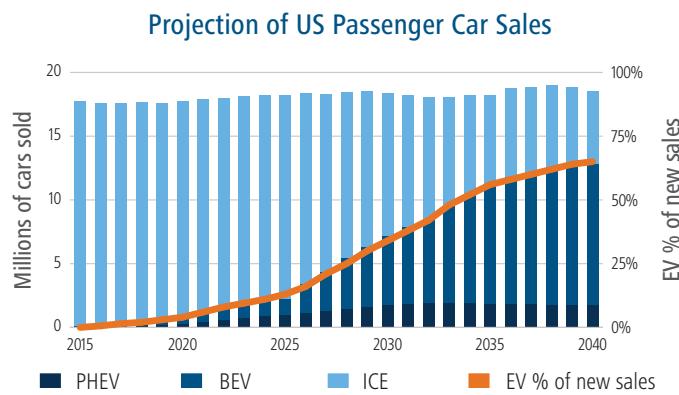
Clean Energy	Energy Efficiency	Clean Technology	Sustainable Agriculture	Water	Transportation
Renewable utilities	Building management and efficiency	Waste management and pollution controls	Food processing/logistics	Water utilities	Transportation operators
Renewable equipment	Lighting	Software and logistics	Agricultural inputs	Water equipment	Transportation equipment
Electric infrastructure	Engineering/Consulting	Advanced materials	Sustainable food retail		
Energy storage equipment	<b>Power management</b>	Metering and monitoring	Sustainable forestry		Diversified Environmental Leaders
Renewable fuels	Automation and drives	Industrial efficiency			

## INVESTMENT THEME:

## Power Management

## 1. Tailwind – energy efficiency

- Demand for power management semiconductors, capacitors, resistors and other components in efficiency applications has potential long-term growth that is 2-3x the rate of traditional uses, and several points higher than the general economy.
- New electric and hybrid vehicles, one of the important end-markets for these power management components, has seen strong demand growth over the last few years. This end-market is expected to continue to grow, which should support increased demand for semiconductors and other component parts (see chart below).
- The dollar content of semiconductors in a hybrid or electric vehicle is \$900 - \$1000 versus \$330 for a traditional internal combustion engine.\*\*



Source: Bloomberg New Energy Finance. Definitions: Plug-in hybrid electric vehicle (PHEV), Battery Electric Vehicle (BEV), Internal combustion engine (ICE), Electric vehicle (EV).

To learn more about the Mackenzie Global Environmental Equity Fund, please contact your financial advisor.

<sup>1</sup> A tantalum polymer capacitor is a passive component of electronic circuits.

\* Since inception of the Greenchip Global Equity Fund in 2008. The portfolio of Mackenzie Global Environmental Equity Fund (the "Fund") will generally include securities that are included in Greenchip Global Equity Fund.

\*\* Source: McKinsey Insights; McKinsey & Company

Commissions, trailing commissions, management fees, brokerage fees and expenses may be associated with investment funds. Please read the prospectus before investing. Mutual funds are not guaranteed, their values change frequently and past performance may not be repeated. This document includes forward-looking information that is based on forecasts of future events as of March 31, 2019. Mackenzie Financial Corporation will not necessarily update the information to reflect changes after that date. Do not place undue reliance on forward-looking information. In addition, any statement about companies is not an endorsement or recommendation to buy or sell any security. The content of this commentary (including facts, views, opinions, recommendations, descriptions of or references to, products or securities) is not to be used or construed as investment advice, as an offer to sell or the solicitation of an offer to buy, or an endorsement, recommendation or sponsorship of any entity or security cited. Although we endeavour to ensure its accuracy and completeness, we assume no responsibility for any reliance upon it. The description above regarding portfolio holdings was provided for indicative purposes only. Those securities may no longer be held by the fund at the time of use of this material.

## 2. Misunderstood business cycle

- The demand cycle has fundamentally changed.
- The industry is in short capacity, and planned capacity expansion is at best expected to maintain the current supply/ demand imbalances.
- Three portfolio holdings in this sector have been taken out since inception of the Greenchip strategy\*.

## 3. Long-term value

- Portfolio holdings AVX, Kemet and Vishay Intertechnology have strong balance sheets and free cash flow generation.
- These companies represent 90% of the global tantalum polymer capacitor market<sup>1</sup>.
- Component pricing is measured in pennies, and with oligopolistic market dynamics there is room for the key players to increase prices and margins.