Global Energy Transition
Not just an opportunity but a necessity
The potential impact of climate change is well known with consensus agreeing that change on a global scale is urgently needed. 195 governments signed the 2015 Paris Agreement to limit a global temperature rise to “well below” 2°C. Today, we remain off-target, with our analysis pointing to a 3.8°C rise.

If we are to achieve our climate goals, the clean energy transition will play an essential role. How we produce, distribute and consume energy will have to change which will require monumental investment.

And therein lies the huge investment opportunity.
Transitioning to a new world

It is clear that a global transformation is required to meet our climate targets. It has been estimated that $120 trillion of investment is required across the energy value chain in order to do so. This is an enormous amount of investment. For example, even if half of this investment was made, significant opportunities would still be created. This level of investment will create significant opportunities for companies to generate strong real earnings growth, translating into more value for shareholders.

The transition to a zero-carbon world requires whole-scale change across the board. So opportunities are not limited to just the renewable energy generators. The way we use electricity, the way it is stored and how it is distributed needs to be updated. So the pool of investment opportunities is extremely deep.

The world has set clear targets to make the energy system more sustainable

California
50% of electricity in Nevada must be renewable by 2030 and 100% must be carbon-free by 2050
100% of all electricity in California must be from zero-emission sources by 2045
Target of 5 million zero-emission vehicles in California by 2025 and 250,000 EV chargers

Texas
Renewable Portfolio Standard (RPS) has a target of 10,000 MW of renewable energy capacity by 2025

Massachusetts & Pennsylvania
100% of electricity in Massachusetts to come from renewables by 2050
Proposed bill for 100% renewable power in Pennsylvania by 2050

Brazil
23% of all electricity (other than hydropower) to be from renewables by 2030
Two new energy auctions per year to increase renewable capacity

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United Kingdom
30% of all electricity should be produced by renewables by 2020
Emissions to be reduced 80% compared to 1990 levels by 2050
Proposed plan for net zero-emissions by 2050

EU
32% of all electricity should be produced by renewables by 2030

Germany
Complete coal phase out by 2038

China
Target for 35% of all energy to be from renewable sources by 2030
By 2020, 12% of all conventional passenger cars should be zero-emissions vehicles

Spain
100% of all electricity from renewables by 2050

India
Target of 230GW of renewable power by 2022

New Zealand
90% of all electricity to come from renewable sources by 2025

Source: Google, Schroders, August 2019
Opportunities across the entire value chain

Earnings growth opportunities will emerge across five different areas:

1. Clean energy generation
2. Energy storage
3. Electric transport infrastructure
4. Transmission and distribution
5. Smart-metering and demand response
Renewables are nothing new, so why now?

Three structural drivers have begun to work together, creating a powerful investment environment for companies at the forefront of the energy transition.

1. **Environmental concerns and policy support**
   Our estimates show that current government pledges are a long way from achieving the sub-2°C Paris agreement target so we expect policy to be enhanced in the coming years, leading to higher rates of investment into the energy transition space.

2. **Renewable energy is now cost-competitive**
   Renewable energy has become cheaper than traditional fuel sources like gas and coal. So from a purely economic perspective, renewable energy makes the most sense. And we have begun to see a shift around the world where utility companies and corporates are shifting to renewables as the energy source of choice.

3. **Increased consumer demand**
   There is strong consumer demand for technologies that use renewable energy. Electrical vehicles, solar-powered homes and self-administering energy storage are just some examples of areas that are rapidly growing.

It really is the economics as much as anything that are driving [the energy transition] and it will win in the end.

Michael Bloomberg, CEO of Bloomberg L.P (September 2018)

Spotting the winners

These structural drivers underpin three key trends which are creating earning opportunities across the energy supply chain.

1. **Decarbonisation of power generation**
   Renewable energy generation will need to increase from 20% to around 85% of the entire energy mix by 2050. This will benefit utilities companies who specialise in renewables, electrical equipment companies, and energy storage companies who can deploy electricity when required.

2. **Electrification of energy use**
   A higher proportion of final energy consumption will come from electricity, increasing from 20% today to c. 45% by 2050. Many countries and regions will require significant upgrades to their existing electricity grid and infrastructure which will benefit companies involved in this area.

3. **Increased efficiency of consumption**
   Energy is often wasted between the point of production and the point of consumption. Improving the efficiency of how energy is transported and managed creates opportunities for energy storage companies and those involved in smart meters, demand response and other intelligent technologies.
Introducing Schroder ISF* Global Energy Transition

Schroder ISF Global Energy Transition is an actively managed, global equity fund that aims to deliver long-term capital growth by investing in the best-performing companies driving the transition to a low-carbon economy.

- **Exposure to the entire energy value chain**: The energy transition will impact the whole supply chain so we don't limit the opportunity set solely to the energy producers. We also invest in energy distributors, equipment manufacturers, storage specialists and the technology companies facilitating energy consumption.

- **100% free of fossil fuels and nuclear energy**: Our investment universe of ~2000 stocks is screened. We exclude companies involved in fossil fuels or nuclear energy and also apply screens based on financial metrics and ESG restrictions.

- **Aiming for long-term, sustainable growth**: We apply a proven investment process to build a high-conviction fund of between 30–50 companies, diversified by geography and sector, aiming to deliver long-term, sustainable growth.

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We’re just at the beginning

The investment case has only just started. Since 2017, the falling cost of renewables, rising consumer demand alongside the growth of energy storage utilisation have enabled companies’ margins and returns on equity to grow to attractive levels. And we see continued expansion.

This is a multi-decade theme where capital will be reallocated on an unprecedented scale, creating investment opportunities across a multitude of sectors and industries, all linked to the transition to a zero-carbon world.

Learn more at: schroders.com/energytransition

*Schroder International Selection Fund is referred to as Schroder ISF throughout this document.
Risk considerations: The counterparty to a derivative or other contractual agreement or synthetic financial product could become unable to honour its commitments to the fund, potentially creating a partial or total loss for the fund. The fund can be exposed to different currencies. Changes in foreign exchange rates could create losses. A derivative may not perform as expected, and may create losses greater than the cost of the derivative. Equity prices fluctuate daily, based on many factors including general, economic, industry or company news. The fund uses derivatives for leverage, which makes it more sensitive to certain market or interest rate movements and may cause above-average volatility and risk of loss. In difficult market conditions, the fund may not be able to sell a security for full value or at all. This could affect performance and could cause the fund to defer or suspend redemptions of its shares. Failures at service providers could lead to disruptions of fund operations or losses. The fund may be concentrated in a limited number of geographical regions, industry sectors, markets and/or individual positions. This may result in large changes in the value of the fund, both up or down, which may adversely impact the performance of the fund.