

Schroder ISF\*

# Global Climate Change Equity

## Monthly Newsletter

January 2011

We don't often dwell on the observed physical impacts of climate change. However 2010 has proved to be a year of record breaking temperatures and weather extremes.

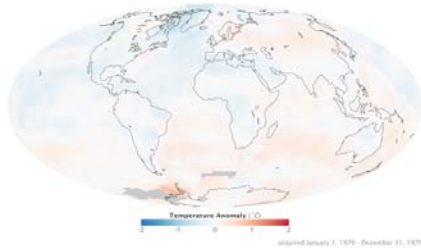
### 2010: A year of weather extremes

At the start of the year many parts of China were in the worst drought recorded in over a century. Meanwhile, as this year draws to an end much of Amazonia in Brazil has experienced its worst drought in the last 40 years and a powerful El Niño is wreaking havoc with food and mining production across South East Asia. 2010 has also seen average temperature records being broken around the world in places as diverse as Pakistan, Moscow, British Columbia and Los Angeles.

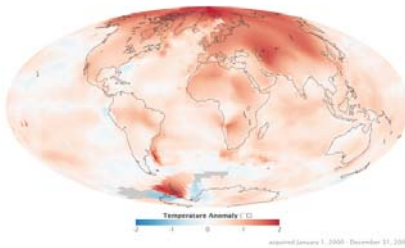
The overall global temperature changes over the last few decades are supported by the NASA global temperature maps shown below, illustrating the trend in temperature anomalies compared to a 1951-1980 baseline.

### Chart 1: Global Temperature Anomaly relative to 1951-1980 baseline

#### 1970-1979



#### 2000-2009



Source: NASA, 2010

### Cancun: Slow progress

We, along with everyone else, had low expectations on the outcomes of the Cancun round of climate change negotiations concluded this month. Thus we were not disappointed, and there were one or two positives to take out of the negotiations:

- **Monitoring, Reporting and Verification (MRV).** There was agreement to establish a framework for the MRV of national emissions. This had previously been a sticking point for US negotiators as China was unwilling to agree to this, and China has now clearly changed its stance on transparency. This shift in stance by the Chinese also indicates a subtle shift in negotiating power at future meets, with China now being able to more directly point the finger at the United States as the nation holding back progress on a global deal.
- **Green Climate Fund.** There was common agreement to establish a green climate fund to provide up to \$100bn per annum by 2020 for developing countries, though the financing mechanisms for this fund still need to be determined.

The asset allocation of climate funds to be distributed has also been addressed with the clear understanding that for some the impacts of climate change are unstoppable and so **adaptation spending** will increase in importance.

### Climate Change Investment Universe Update

Over the three and a half years since launch the Schroder Climate Change Universe has continued to grow, as new geographic regions have embraced climate change policy, and new companies have listed on the public markets. From a starting point of 510 stocks in 2007, our universe has grown to nearly 800 and spans a broad array of market sectors.

### In this month's newsletter

#### Policy developments and climate change news:

- 2010 was a year of extremes.
- There was slow progress in Cancun, with two developments of note.
- The climate change investment universe is expanding.

#### 2011 Outlook:

- Many of the fundamental drivers of the climate change theme are turning up in 2011.
- Energy prices have begun to rise, public climate change concern has increased once more, and business confidence to invest in new solutions is increasing.
- We expect this to be a year of improving fundamentals for climate-related stocks, but it will be as important as ever to be selective on quality.

#### Update on key markets

- Carbon price
- Agricultural commodities
- Power prices
- Oil and gas

#### Stock selection strategy and activity

- With strong liquidity across the world, low interest rates and low bond yields, we believe that equities have a strong outlook in 2011.
- The fastest progress in clean energy and energy efficiency is coming in Asia and South America
- We remain focused on companies with strong balance sheets, sustainable competitive advantage, good management teams and visible growth

#### Investment philosophy

- While the path to a low-carbon economy is predictable, we do not believe it is well understood, or discounted, by the equity market – representing a significant alpha generation opportunity. A broad investment universe gives us the opportunity to select only the best value-for-growth stock ideas across all sectors, and we believe that a portfolio consistently focused on these stocks, will outperform global equities over time.

**The Global Climate Change strategy is a product of the Global and International Equities Team.**

\*Schroder International Selection Fund is referred to as Schroder ISF throughout this document.



# Schroders

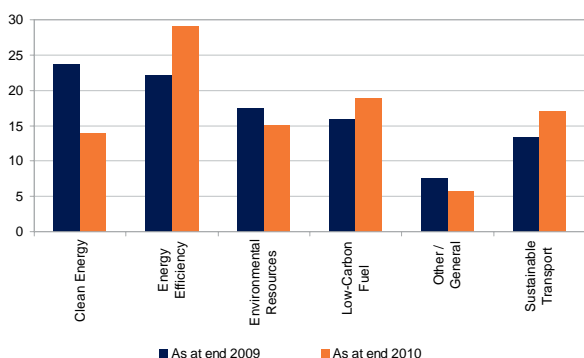
## 2011 Outlook

Many of the fundamental drivers of the climate change theme are turning up in 2011. Energy prices have begun to rise, public climate change concern has increased once more, and business confidence to invest in new solutions is increasing. In general, we therefore expect this to be a year of improving fundamentals for climate-related stocks, but it will be as important as ever to be selective on quality.

Here we give a brief overview of our outlook across the five key investment themes within the climate change strategy for 2011. While the moves are driven by bottom up stock decisions in all cases, during 2010 the key shifts in allocation within the strategy were for increased exposure to energy efficiency and reduced exposure to clean energy stocks. The positive momentum behind *energy efficiency* technologies is likely to continue in 2011, and while we remain cautious for now there is clearly value beginning to emerge in parts of the *clean energy* landscape.

**Chart 3: Schroder Global Climate Change portfolio allocations**

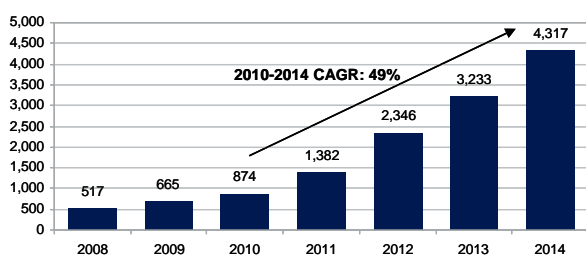
Theme allocation\*



Source: Schroders, based on the Schroder ISF Global Climate Change fund

\* Does not include cash positions of 0.8% as at 31 December 2009 and 4.2% as at 31 December 2010

**Chart 4: Global general lighting LED component market is poised for rapid growth (US\$m)**



Source: Strategies Unlimited, Macquarie Research January 2011

### 1. Energy efficiency

Energy efficiency has seen the most significant increase in allocation over the year and we continue to expect this thematic to perform well in 2011. Whether it is lighting, insulation, air conditioning, video conferencing, lightweight materials or power management systems, energy efficiency investments tend to have very fast pay-back periods. As a result, they generally have significantly higher return on investment than investments in, for instance, new energy generation technologies, and we expect energy efficiency to remain a spending priority for consumers, companies and governments alike.

A couple of specific examples best illustrate the powerful growth in many energy efficiency markets:

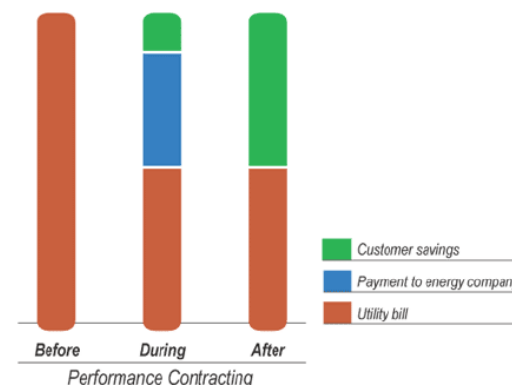
#### Lighting

We have recently built tier one global lighting company **Philips**, which has excellent positioning in LED lighting technology, into one of the largest positions in the strategy. LED lighting is set for explosive growth (chart 4), displacing other lighting technologies as a result of its superior energy efficiency characteristics. The general lighting (as opposed to consumer electronics lighting) market is just hitting the crucial point where payback periods on new investment have fallen to one to two years, making it a highly compelling switch for businesses.

#### Business Energy Savings Programs

**Ameresco** undertakes energy efficiency programs for public and private organisations in the US (new boiler, heating, insulation and air conditioning systems etc), participating in both the consultation and implementation phases. Through the use of Energy Savings Performance Contracts, or ESPCs, the company commits to the customer that a project will meet agreed savings targets. Ameresco then assists the customer in obtaining third-party financing for the cost of construction, limiting the upfront cost to the customer. The savings from the project are used to pay off the loan over time. **Honeywell** also has good exposure to this business, which is growing strongly.

**Chart 5: Energy Savings Performance Agreements Limit Upfront Customer Costs**



Source: Ameresco, Oppenheimer, 2010

## 2. Clean Energy

In 2010, of the 113 groups in the Dow Jones Global Index, Renewable Energy Equipment came in 113<sup>th</sup>! This was despite oil prices being strong – the historical sector correlation with oil broke down as power prices left renewable energy less affordable relative to fossil fuels.

For 2011 we expect to see three key developments for renewables:

- Modest improvement in global power prices driven by higher economic growth and higher coal prices
- Consolidation among European renewable equipment producers
- As domestic growth slows, Asian equipment companies and developers to come unstuck domestically and begin to attack foreign markets in their search for growth

While valuations are attractive in many cases (charts 6 and 7), the industry will likely need regulatory drivers and a further improvement in energy markets globally for better performance.

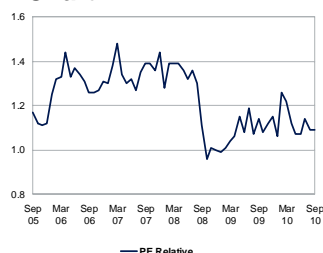
**Chart 6:** Price/Book relative to market (MSCI World) – Clean Energy median

**Chart 7:** Price/Earning relative to market (MSCI World) – Clean Energy median

**Chart 6:**



**Chart 7:**



Source: Schroders, Factset

On the regulatory front, China and Germany both have significant capacity issues with their electricity grids, and European politicians are increasingly bothered by the rising cumulative cost of solar subsidies. In the US, a Republican House of Representatives will not be favourable to new climate regulation so 2011 could be a disappointing year for renewable energy sector public policy developments.

In 2010, China will account for around 47% of the newly installed wind power (17GW) and Germany will around 55% of the solar market (8GW). This concentration risk is not good for either industry, and we expect to see a healthy broadening out of the end markets in 2011, particularly in the solar sector.

**Chart 8: 2010 global installed wind and solar (estimates)**

	Wind	% of Global	Solar	% of Global
Spain	1,000	3%	200	1%
Italy	900	2%	1,500	10%
Germany	1,800	5%	8,000	55%
France	900	2%	600	4%
UK	1,000	3%	50	0%
US	5,000	14%	900	6%
China	17,000	47%	400	3%
India	1,800	5%	50	0%
Brazil	300	1%	-	0%
<b>Global</b>	<b>36,035</b>	<b>82%</b>	<b>14,630</b>	<b>80%</b>

Source: BofA Merrill Lynch

In 2010, we observed subsidy cuts in Germany, Spain, France, Italy, and the Czech Republic. Going into 2011, we expect further subsidy cuts to be communicated in Germany and France as well as natural declines in Italy. With the prospect for installation caps in a number of key end markets, there is a high likelihood of growth disappointment in solar.

Given these numerous headwinds, we remain very selective in our exposure to renewable energy sectors, with a focus on clear cost or technology leaders among our select holdings, such as **Trina Solar**, **SMA Solar**, and **Hansen Transmissions**.

## 3. Low Carbon Fossil Fuels

2010 was a bad year for natural gas markets but particularly so in the US. Three key factors compounded the weakness.

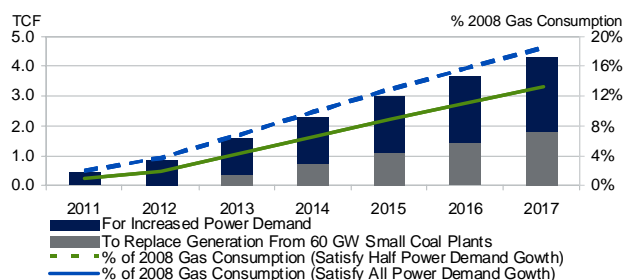
1. International energy champions were financing investment in increased unconventional drilling to learn the technology.
2. Three year land rights came with drilling requirements to keep the lease, leading to uneconomic drilling decisions.
3. Companies were well hedged in 2009 and 2010 at higher prices, and thus continued to produce.

All of this meant that natural gas inventories remained at very high levels despite strong growth of gas usage in industry and power generation. This has kept power prices suppressed and thus continues to burden renewable energy. Whilst US gas prices have been severely impacted the European Gas markets have recovered and did not dip to the same levels given much more oligopolistic behaviour from producers. Recent M&A activity in the gas E&P group highlights the value that private markets and insiders see in North American gas assets, and we should see modest improvements in gas prices as inventories slowly correct from their all time highs in 2011.

Longer term the outlook for natural gas industries is strong for several key reasons:

1. It is becoming a preferred fossil fuel (over coal and oil) in practically every major economy.
2. Higher prices are needed to justify new investment.
3. Rising EU carbon prices will support the price of gas relative to coal and other substitutes.
4. New regulations from the US Environmental Protection Agency threaten up to 30% of the US coal fleet with accelerated closure because of to the economics of retrofitting older plants with new technology. These plants are likely to be replaced with natural gas plants, leading to significant new gas demand in the next several years (chart 9).

**Chart 9: Increased natural gas demand from power demand growth and coal plant retirement**



Source: Credit Suisse

There has been little change in our exposure to this theme, as we have retained or added to positions in companies with low cost of production and good growth in volumes, such as **BG**, **Quicksilver Resources** and **Ultra Petroleum**.

## 4. Sustainable transport

We continue to find this theme very attractive, given the revolutionary shift in vehicle technology ahead, and have increased exposure to a range of sustainable transport companies from materials suppliers to auto manufacturers this year. With fuel efficiency and emission regulations tightening fast, auto companies are working flat out to put new technology into the car. **Borgwarner** are seeing a step change in demand for their dual clutch transmission (Chart 6) and turbo-charging technology – both relatively simple ways to make improvements in gasoline engine fuel efficiency.

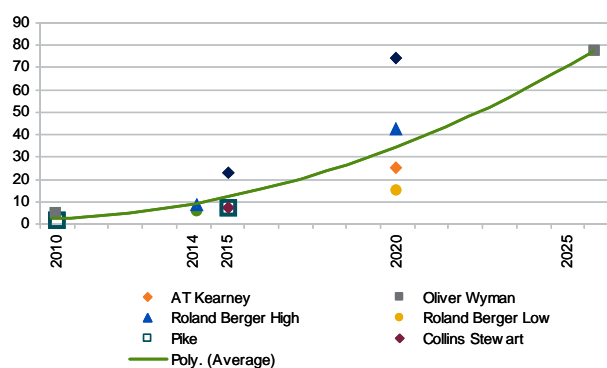
Chart 10: Borgwarner Dual Clutch Transmission



Source: Borgwarner

At the same time, 2011 will see Electric Vehicles (Nissan Leaf) and Plug-in Hybrid Electric Vehicles (GM Chevy Volt, Toyota Plug-in Prius) hit the dealerships from major global auto brands, driving fast growth in battery volumes for the auto market and supporting growth for battery suppliers such as **LG Chem** and **JCI Saft**. Chart 11 highlights the explosive EV battery market growth ahead, with the wide range of estimates for 2020 between \$15bn and \$70bn. This all represent major increases on the 2010 market which was \$2-3bn.

Chart 11: Estimates of EV Battery Market Size (\$bn)



Source: Consultants as per legend, Collins Stewart

## 5. Environmental resources

The environment in 2011 remains supportive of high and rising agriculture prices (see regular key drivers chart section for key crop price charts). Supply disruption is a serious issue in many parts of the world, and consumer inflationary expectations are rising. As we wrote in the December newsletter we believe the only solution to rising pressure on agriculture, water and forestry prices lies in careful management of land and investments in a range of productivity improvements.

While we have made some changes to individual holdings, exposure to this theme remains a major component of the our strategy, through holdings such as **Potash, AGCO, Syngenta, and Monsanto**.

## Investment philosophy

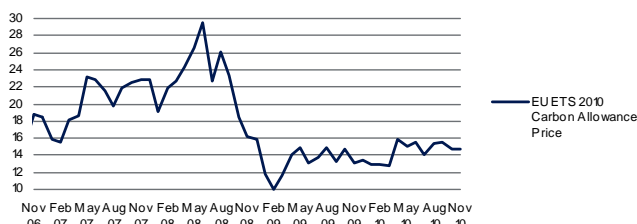
Tackling climate change will have a powerful impact on the global economy. Long-term policy goals to cut greenhouse gas emissions requires nothing less than an industrial revolution to engineer a low-carbon economy. Adapting to some climate change that is already inevitable, and mitigating further climate change, through the transition to a low-carbon economy, will thus affect all industries over time. As such, we believe that a dynamic and evolving universe across all sectors is the best way to capture the investment opportunity.

The Schroder Climate Change Team has undertaken a fundamental analysis of every major sector of the economy in constructing our investment universe. We have created a comprehensive investment universe, from which to select over 700 stocks from developed and developing markets. This broad investment universe also gives us the opportunity to always focus on great investment ideas, not just the 'sexy' stocks of the day. Only the very best value-for-growth stock ideas make it into the portfolio, and we are not afraid to exclude whole sectors if they become overvalued.

While the path to a low-carbon economy is predictable, we do not believe it is well understood, or discounted, by the equity market. As a result, the fast changing growth and relative valuation opportunity that climate change presents to investors represents a significant opportunity for alpha generation. We believe that a portfolio consistently focused on these stocks will outperform global equities over time.

## Update on key markets

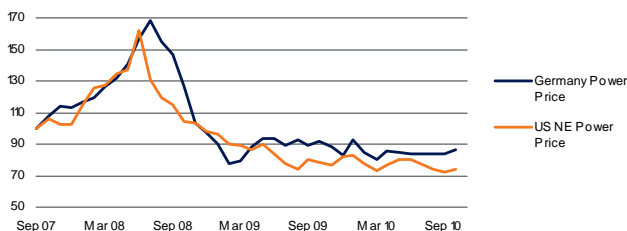
### Carbon Price



Source: Bloomberg

An increase in industrial power demand in 2010 has recently buoyed carbon prices in Europe. Combined with hawkish noises from the EU on the potential for more stringent emission reduction targets (i.e. possibility of 30% by 2020 rather than 20%), carbon prices appear to have established a new range 12-16 euro trading range.

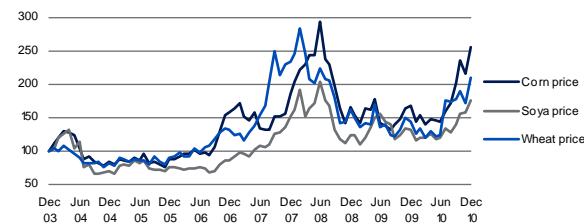
### Power Prices



Source: Bloomberg

Signs of an improvement in power demand are coming steadily coming through in the US and Europe, driven by a strong rebound in industrial power demand. We expect power prices to complete a bottoming process over the next few months and move up strongly over the next 3-5 years, given that at current prices there is little economic incentive for new capacity construction in most generation technologies (not withstanding strong government support programs for most renewables).

### Agricultural Commodities



Source: Bloomberg

Climate change is clearly inflationary for agricultural prices in aggregate, and the fund remains heavily exposed to the value chain of this sector given the higher investment that will be required to contain prices. Recent price trends for wheat and corn have shown significant strength, driven mainly by unfavourable weather conditions in many important agricultural regions.

### Oil/Gas



Source: Bloomberg

US gas remains extremely cheap relative to oil and coal, which will incentivise further fuel switching towards gas in 2010. For environmental reasons, new build plans in power generation are skewed in favour of gas over coal or oil. In addition, at current prices marginal producers are curtailing investment, setting the stage for good medium term performance in the gas price and related companies. We also expect gas to gain traction within transportation markets over the next few years, given the excellent relative price and emission related properties.

## Strategy and outlook

### Stock Selection Strategy and Activity

With strong liquidity across the world, low interest rates and low bond yields, we believe that attractively valued equities have a strong outlook in 2011. While we expect equity markets to be volatile, we believe that many balance sheets are repaired, corporate profitability is high and the outlook for growth is robust. We continue to believe that growth in developed economies will be more muted in contrast with robust and more sustainable growth in many developing economies. Much of the fastest progress on low-carbon investments is coming in Asia and South America, and we are finding increased opportunities in these markets. The risks are ever present and we will continue to see the euro crisis play out in 2011 with the likelihood of sovereign debt restructuring. We are also mindful of the fiscal consolidation that the US will have to embark upon but expect rates to remain low and for inflation to remain manageable.

We continue to focus on companies with strong balance sheets, sustainable competitive advantage, good management teams and visible growth.

### Current allocation

Investment theme	% of fund
Energy efficiency	29
Low-carbon fossil fuels	19
Sustainable transport	17
Clean energy	14
Environmental resources	15
Other/general	6

Region	% of fund
North America	44
Europe ex UK	22
UK	14
Japan	10
Emerging markets	6
Pacific ex Japan	4

Source: Schroders, as at 31 December 2010

## Strategy and outlook (cont.)

### December Trading Activity

In *energy efficiency* we took the decision to sell our position in **Itron**. Following a recent meeting with management we were concerned at the lack of order momentum and as such we were not able to justify the company's valuation given the lack of visibility into 2011 and 2012. This smart meter provider has failed to add to its backlog recently and the competitive environment has increased materially raising the risk that their competitive position has been impaired. Similarly we decided to sell our position in **Intersil** following very strong performance and full valuation. We again took the opportunity to trim **Polycom** on strong performance.

Within *clean energy* we sold our positions in two wind farm owner / developers - **NextEra Energy** and **Infigen Energy**. NextEra was sold on full valuation following a rally in US regulated utilities. Infigen Energy was sold as the Australian market is suffering from renewable energy certificate oversupply, hampering generation revenues. We also took the opportunity to further trim our positions in uranium miners **Cameco** and **Paladin** following strong runs on the back of Chinese uranium stockpiling. We also added to our position in **SMA Solar** following recent underperformance and a compelling valuation.

Within *environmental resources* we purchased a new position in **Dionex**, the world leader in Ion Chromatography testing equipment, with various applications in water, food products and bio-technology. However, we also sold the stock in the same month as it was bid for by Thermo-Fisher at a substantial premium.

**Nine Dragons Paper**, the leading containerboard manufacturer in China, was also purchased. The company buys larger, more expensive but more efficient foreign paper-making machines that allow for use of more recycled paper and a lower proportion of virgin pulp in their raw material mix [5% compared to competitors at 12-15%].

We bought a position in **Kubota** the Japanese farm equipment manufacturer. With an attractive valuation and a global footprint we believe this is an attractive way to invest in the farm mechanisation theme.

Within *sustainable transport*, we purchased a position in **Celanese**. The company's core focus is substituting metal products for high grade polymers (plastics) and consequently 50% of their revenues are from auto, where the lightweight characteristics of their products enable reduced fuel consumption. We continue to believe that auto weight reduction and increased fuel efficiency are key secular growth areas in auto.

We also decided to top up our position in **Beijing Enterprises** which falls into our *Low carbon Fossil Fuels* theme. As a natural gas distributor the shares had underperformed on inflation concerns in China with implications on its interest expense and tariffs. We believe this fear is overdone and the valuation looks compelling and as such added to the position

---

**The views and opinions contained herein are those of Simon Webber, Matthew Franklin and Giles Money, fund managers of Schroder ISF Global Climate Change Equity, and may not necessarily represent views expressed or reflected in other Schroders communications, strategies or funds.**

Risk warnings: Investments in equities are subject to market risk and, potentially, to currency exchange rate risk. This fund may use financial derivative instruments as a part of the investment process. This may increase the fund's price volatility by amplifying market events. Important information: This document does not constitute an offer to anyone, or a solicitation by anyone, to subscribe for shares of Schroder International Selection Fund (the "Company"). Nothing in this document should be construed as advice and is therefore not a recommendation to buy or sell shares. Subscriptions for shares of the Company can only be made on the basis of its latest prospectus together with the latest audited annual report (and subsequent unaudited semi-annual report, if published), copies of which can be obtained, free of charge, from Schroder Investment Management (Luxembourg) S.A. An investment in the Company entails risks, which are fully described in the prospectus. Past performance is not a reliable indicator of future results, prices of shares and the income from them may fall as well as rise and investors may not get the amount originally invested. This document is issued by Schroder Investment Management Limited, 31 Gresham Street, London EC2V 7QA, which is authorised and regulated by the Financial Services Authority. For your security, all telephone calls are recorded.