The big question for any climate commentator – or indeed any concerned citizen – is how we are going to bring about the changes in society required to avoid the worst effects of climate change.

It is an important question but one which doesn’t necessarily have an obvious answer.

The simplest route, for any country, would be for the government to communicate, educate, legislate and tax in such a way that would ensure a smooth transition to a low carbon economy.

In 2008 when the UK government passed the Climate Change Act, it enshrined in law a target of 80% emissions reductions by 2050. In doing so it became the first government in the world to introduce a system of legally binding carbon budgets. With the first four carbon budgets already set in law covering up until 2027, even the most sceptical among us must concede that the UK is making progress. However, climate change is not a national problem. It is a global problem.

Progress on the international stage, when contrasted with the emissions reductions demanded by IPCC scientists, has been woefully inadequate and painfully slow. The prevailing economic paradigm does not, as yet, fully price-in environmental degradation. Therefore the nations that do practice it, while others do not, start to lose relative competitiveness.

This reality is highlighted perfectly by the positions of the world’s dominating superpowers, the US and China; neither wishing to concede ground without the other agreeing to act as well.

Consider, for a moment, what this dynamic would look like if our economic system did, in fact, price in the full environmental cost of our actions, including greenhouse gas emissions?

It would certainly level the playing field at the international level. Perhaps more importantly, however, it would make reducing emissions a whole lot easier.

As we know, our existing capitalist system is quite happy to pursue the path of least profit resistance. Imagine if pursuing an environmentally damaging path also, by implication, hampered profit. The rules of the game would have changed and suddenly the system would seek to avoid environmentally damaging courses of action.

The question, therefore, is how to incorporate environmental pricing into the financial system, independent of global government (in)action.

The Environmental Investment Organisation (EIO) is a not-for-profit research body that was set up specifically to try to bring about such a shift through a market-based mechanism known as Environmental Tracking.

Environmental Tracking (ET) is based on the following overarching principles:

- In order to affect radical change in the behaviour of corporations worldwide, the ubiquitous and powerful nature of the financial system needs to be harnessed.
- Within the existing framework of the ‘free market’ capitalist system, corporations need to be given a financial incentive to cut emissions and invest in clean technologies if we are to have a chance of addressing climate change.
- Since a company’s function is to generate shareholder value, if a company’s specific actions can be directly attributed to an increase or decrease in its share price, a new financial incentive would be created that cut right to the heart of a business’ operations.

ET can be seen as a tool designed to link company share price to environmental degradation, and more specifically greenhouse gas emissions. So how does it work?

Each year, the EIO creates a set of public ET Carbon Rankings covering the world’s largest companies (based on market size). The Rankings, which form the bedrock of the ET mechanism, are designed specifically to reward lower greenhouse gas emissions and encourage greater transparency. These actions are encouraged by ordering companies into one of four categories based on their publicly available emissions data:

1. Public, complete & verified;
2. Public, complete & unverified;
3. Public, incomplete (verified or unverified); and,
4. No public data

Where data is incomplete or not reported, companies are benchmarked against their sectoral competitors using the highest reported emissions intensity for that sector, meaning that there is always an incentive to disclose, however high the figure.
Companies in each category are then ranked according to their emissions intensity (emissions tCO2e/SM turnover). This makes the Rankings comparable even though the companies making up the Ranking vary in size.

Once full disclosure is achieved by every company in the Ranking, the most efficient companies would find themselves at the top and the least efficient at the bottom.

The better known the Rankings become, the more pressure they will create since being at the bottom of a prestigious ranking is bad PR for any company. More importantly, however, they form the basis for the second stage of the ET concept.

Once a dynamic ranking system of the world’s largest companies has been created to reward carbon efficiency and greater transparency, it can be used to create a series of stock market indexes designed to link company share price to emissions. Investing passively, or in a stock market index such as the FTSE100 or S&P500, means buying stocks in companies according to the weighting of each company in the index.

Index investing has grown massively since its inception in the mid 1970s. Estimates indicate that at least a quarter of worldwide equity market assets ($50-60 trillion) are indexed in one form or another, and growing year on year. UK pension funds, for example, invest around a third of their money through index funds. This represents an enormous reservoir of financial firepower which, if successfully harnessed, could provide the ability to profoundly influence company behaviour.

ET indexes work the same way as conventional, mainstream indexes: they contain the same companies, and achieve the same performance. The difference, however, is that capital is directed away from the least efficient companies and towards the most.

If enough people start to invest through ET indexes, the collective force of indexed money moving in unison could alter demand for company shares. Since the weightings of companies within the index are linked to the company’s position in the ET Carbon Rankings, the share price will begin to move in line with emissions.

For the first time, pursuing an environmentally damaging course of action would be against the interests of the company and its shareholders.

The theoretical tipping point at which the ET mechanism would begin to influence company share price is unknown. It could require all indexed money to be invested in this way, or it could be as little as 0.1%. Equally, as pointed out by Tony Greenham, head of Finance and Business at the New Economics Foundation, the mere threat of influencing company share price could be enough to achieve the desired effect.