

ClimateChangeCorp.com

Brands

Top 20 companies: Climate change leaders show the way

[CCC Newsdesk](#)

ClimateChangeCorp.com picks its favourite firms set to inspire others to follow their environmental lead

By Mike Scott

Climate change has gone from being a marginal issue to being at the forefront of business leaders' minds. The scientific evidence has been growing for years and this year's [IPCC reports](#) appear to have settled the debate about whether man-made climate change is happening.

However, the issue's move to the centre stage has come about thanks to a range of disparate events, including Hurricanes Rita and Katrina, which devastated the Gulf of Mexico coastline of the US in 2005 and were attributed, wrongly or rightly, to climate change.

Al Gore's Oscar-winning film [An Inconvenient Truth](#) brought the subject to a mass audience, while [The Economics of Climate Change](#) by Sir Nicholas Stern, helped explain why action now was vital, rather than leaving future generations to deal with the problem.

The establishment of the [European Union's Emissions Trading Scheme](#), also in 2005, is starting to focus minds on the cost of carbon, but there is a case for saying that it was another event in the same year that really focused the minds of the business community – the launch of GE's [ecomagination](#) initiative.

When a company as focused as GE announces that there is money to be made in providing environmental solutions, other companies sit up and take notice.

The companies highlighted in the following pages cover a range of economic sectors, illustrating that the climate change challenge is one that affects every section of the business community.

They are by no means the only companies in those sectors that are taking action, but they have all taken a lead on the basis that early action is not only vital for society as a whole but for the future performance of their business.

The opportunity picks show that it is not just the big beasts that are taking action – many of the most interesting and innovative technologies are emerging from smaller companies and some of the biggest growth stories will come from there, too.

The list also demonstrates that climate change benefits do not just come from the obvious areas such as wind turbines. Demand for products as diverse as high efficiency ball-bearings, 'smart meters', low energy computer monitors, financial services and household goods is driven by climate change.

ClimateChangeCorp.com's top twenty climate friendly companies, large and small:

1) Oil and gas

Leader: [Statoil](#)

Ranked the top oil and gas company in the Dow-Jones [Sustainability Index](#), the Norwegian oil and gas company has been storing CO₂ from its Sleipner West field in a saline aquifer under the North Sea since 1996, in response to Norway's introduction of a CO₂ tax.

The Norwegian government's 70% stake and policy that the country should be carbon neutral by 2050 are significant drivers in Statoil's environmental efforts. The company aims to cut its CO₂ emissions by 1.5bn tonnes a year by 2010.

It has invested \$12.5m in the World Bank's [Community Development Carbon Fund](#), which provides finance to projects in the poorer areas of the developing world. In Sweden and Norway, it sells biofuel blends at its petrol stations.

Opportunity Pick: [Cosan](#)

Brazil's largest sugar and ethanol producer is set to raise up to \$2bn on the [New York Stock Exchange](#) and is expected to scale up production and accelerate acquisition activity in Brazil and Central America, leaving it well-placed to profit from explosion in demand for biofuels.

Sugarcane is a far more effective feedstock for ethanol than the corn that is used in the US and tariffs on Brazilian biofuels in Europe and the US are likely to come down over the long term.

Brazil has by far the most developed biofuels market in the world and the land to expand production to meet demand. The company says that cellulosic ethanol technologies will be more effective for sugarcane bagasse (the waste product from producing sugar) than for corn, further boosting the economics of its product.

2) Power generation

Leader: [Iberdrola](#)

The Spanish utility is the world's largest provider of renewable energy, and has grown rapidly in recent years through acquisition, most recently buying [Scottish Power](#) earlier this year.

It has more than 44GW of renewable assets at different stages of development, 95% of it wind power. Most of its current capacity is in Spain, but its pipeline is strongest in the UK, the rest of Europe and, principally, the US. It also has biomass, solar and mini-hydro capacity.

Opportunity Pick: [Ocean Power Delivery](#)

A Scottish wave power company, OPD has leapt ahead of its rivals in attempts to bring its devices to market. Three of its [Pelamis](#) devices, which use the motion of the waves to drive hydraulic rams and produce energy, are being deployed in the world's first commercial marine energy project in Portugal, and four machines are set to be installed in Orkney in a Scottish Power-funded project that will be the world's biggest commercial wave project.

There are also plans for seven Pelamis machines [Wave Hub](#), off the coast of Cornwall, which should be up and running by next year.

3) Retail

Leader: [Whole Foods Markets](#)

Despite the controversy over co-founder John Mackey's e-mail comments about the company's closest rival, which it wanted to buy, Whole Foods is going from strength to strength.

The company is surfing the wave of ethical consumerism both in the US and, with the opening of a flagship food hall in London, spreading into the UK, whose organic market is predicted to be worth £2.4bn by 2011.

It is committed to buying as much locally-grown seasonal food as it can, to reduce food miles and encourages reduced packaging and energy conservation. It also composts its food waste, cutting the amount it sends to landfill, its new stores are built with green building techniques and its fleet is being converted to biodiesel.

Opportunity Pick: [Waitrose](#)

The employee-owned UK supermarket chain focuses on locally-sourced produce, selling more than 1,200 products from within a 30-mile radius of its stores.

The company grows produce on its own farm in Hampshire, which is partly powered by wind and solar power and certified to [LEAF](#) (Linking Environment and Farming) standards and grows its own feedstock for biofuels.

It has initiatives to reduce the number of miles driven per £million sales and supports research into community renewables initiatives. It has committed to cutting its CO₂ emissions by 10% by 2010, from 2001 levels through a carbon management programme.

4) Transportation

Leader: [MTR Corp](#)

MTR operates Hong Kong's mass transit railway system. It is set to merge [Kowloon-Canton Railway Corp](#) and has won a profile-lifting seven-year deal to help operate a new London rail service that will be a vital link for the 2012 Olympics.

In Hong Kong, an eight-year, HK\$2bn platform screen doors (PSD) retrofit programme in all its 30 underground stations contributed to a 15% cut in energy use from 2002-2005. The installation of regenerative braking systems, an automatic control system that drives trains at optimum energy usage and monitoring of individual carriages to optimise air-conditioning has also cut power use.

Opportunity pick: [Johnson Matthey](#)

The company supplied platinum to Sir William Grove, inventor of the fuel cell, in 1839. Since then, it has become the world's largest supplier of catalysts and components for fuel cells and is one of the companies best-placed to profit from the hydrogen economy when it eventually arrives.

It is also the biggest maker of catalysts to control emissions from vehicles, supplying one third of all catalysts ever made and a leader in catalysts that reduce volatile organic compound emissions from industrial processes.

Its CRT system can be retrofitted to diesel engines in buses, trucks, trains and stationary applications.

5) Engineering

Leader: [SKF](#)

The Swedish company is the world's largest rolling bearing manufacturer. Its bearings reduce the friction involved with rotation and movement and therefore reduce energy consumption.

As industry strives to reduce energy consumption SKF is likely to see increased demand for its products, which are found in everything from oil refineries to in-line skates to the A-380, the world's largest airline.

Its bearings can also be found in solar panels and wind turbines and its drive-by-wire products cut energy use and pollution by replacing hydraulic and mechanical processes. The company has a target of cutting its own emissions by 5% every year.

Opportunity Pick: [Westport Innovations](#)

Canadian company Westport Innovations has developed a mechanism for running diesel engines on directly injected natural gas.

The technology offers significant reductions in emissions, nitrogen oxides and particulates, compared to conventional engines. The company believes natural gas vehicles provide the bridge from petroleum to hydrogen.

Hydrogen-enriched Compressed Natural Gas (HCNG) improves combustion and offers a viable path, using readily available commercial vehicles, towards the eventual goal of pure hydrogen fuel, as well as offering immediate and material environmental benefits over even natural gas.

Its products are used in heavy-duty and light trucks, buses and passenger cars.

6) Household Goods

Leader: [Unilever](#)

One of the world's largest household goods and food producers, Unilever has reduced CO₂ emissions in its manufacturing operations by more than 30% over the past decade in absolute terms.

In 2006, it sourced 14.8% of its energy from renewable sources, of which 8.2% it generated itself. The company has installed video-conferencing facilities in five regional offices to help reduce business travel.

It has introduced ice-cream cabinets that use hydrocarbon (HC) refrigerants instead of CFC or HCFC gases. HC cabinets use up to 9% less energy than older technologies and HC refrigerant does not increase the concentration of greenhouse gases.

Opportunity pick: [Ecover](#)

The Belgian company offers phosphate-free cleaning products based on environmentally-friendly ingredients and produced using low-energy manufacturing processes at its eco-factories – it has just opened its third plant in Boulogne to cope with increased demand.

Because the company's products use plant and mineral-based ingredients rather than fossil-fuel-based chemicals, their total carbon footprint is much lower than traditional cleaning products and they are biodegradable.

7) Financial Services

Leader: [HSBC](#)

The world's third-biggest bank was the first to announce it would go carbon-neutral. It has introduced a range of energy efficiency measures, buys renewable electricity and offsets the emissions it cannot remove.

The bank has launched a \$100m partnership on climate change with [The Climate Group](#), [Earthwatch Institute](#), [Smithsonian Tropical Research Institute](#) and [WWF](#) and Sir Nicholas Stern, author of the seminal report *The Economics of Climate Change*, has joined the bank as an adviser on its investments..

It has also introduced a global energy efficiency programme that will enable HSBC offices worldwide to showcase environmental innovation and share best practice.

Opportunity pick: [Triodos](#)

Netherlands-based ethical bank Triodos, which also operates in the UK, Spain and Belgium, was one of the first institutions to invest in wind power in the 1980s, after the Chernobyl nuclear disaster, and solar power in the 1990s.

Triodos [Climate Clearing House](#), a clearing house for CO₂ emission credits, processed its first transactions in 2001. It has invested in companies involved in wind, recycled heat, small-scale hydro-electric power – one of its most recent investments was in Marine Current Technology, which is working to develop the world's first commercial tidal power scheme.

Triodos also offers customers the opportunity to invest in renewable energy projects through its Renewables Fund.

8) Construction & buildings

Leader: [Lafarge](#)

Cement production is one of the biggest emitters in industry, responsible for 5% of all emissions. Lafarge was one of the leaders in establishing the World Business Council for Sustainable Development's [Cement Sustainability Index](#).

It has committed to a 20% cut in net emissions per tonne of cement worldwide and a 10% cut in absolute emissions in industrialized countries by 2010, from 1990 levels.

Lafarge has also committed 11% of its R&D budget to carbon capture and storage and employs a range of energy efficiency measures including using materials ranging from rice husks to bone meal to scrap car tyres to heat its kilns.

The company aims to secure 14% of its fuel from alternative fuels by 2010.

Opportunity Pick: [Itron](#)

With buildings responsible for 40% of carbon emissions, there is a real focus on the sector's energy performance. Itron is a 'smart-metering' company that allows remote meter reading.

Smart meters not only allow utilities to improve efficiency and improve demand response, they can also help consumers manage their domestic energy consumption more effectively.

The meters are vital in tracking energy distributed by micro-generation and sold back to the grid. With an increasing focus on energy efficiency, energy security and distributed generation, the demand for smart metering is likely to be strong and Itron has 50% of the market.

9) Electronics

Leader: [Sharp](#)

The Japanese consumer electronics giant is committed to reducing the environmental impact of all of its products including energy consumption during use. It has a target of 40% of its Japanese sales being from green products by 2010, by which time it also aims to be carbon-neutral.

The company's Japanese manufacturing plant is one of the most environmentally advanced factories in the world. Its 'Green Seal' range of high efficiency products includes its range of LCD televisions, which have received the coveted [EU Eco-label](#).

In addition, it is a world-leading producer of solar cells, which it has been producing for 45 years.

Opportunity Pick: [Delta Electronics](#)

Taiwan's Delta Electronics makes power management components for PCs, helping to make PCs more energy-efficient as well as providing low-energy visual display units.

As a supplier to companies including [Dell](#), [HP](#), [IBM](#), [Intel](#), [Microsoft](#), [NEC](#), [GE](#) and [Sony](#), it is well-placed to benefit from the increased attention on the electricity use of computers.

Its subsidiary DelSolar makes solar cells and is set to expand production to 100MW per year by the end of 2007. Other energy efficiency or environmental products include electronic ballasts, mercury-free displays, AC motor drives, inverters for renewable energies, and fuel cell components.

10) Vehicles

Leader: [Honda](#)

While Toyota's [Prius](#) hybrid has taken most of the plaudits, its Japanese rival, which has its own hybrid range, is rated the greenest vehicle maker overall by the [Union of Concerned Scientists in the US](#).

The company has demonstrated a fully-functional fuel cell vehicle, has a hydrogen production and refuelling station at its Los Angeles research unit and is introducing a clean diesel car to the US in 2009, offering lower emissions of both CO₂ and particulates.

The company is working on new technology to produce ethanol from soft biomass, including waste wood and leaves, and has a unit that sells thin-film solar cells.

Opportunity Pick: [Tanfield](#)

Tanfield's subsidiary, [Smith Electric Vehicles](#) a former milk float maker, is the world's largest manufacturer of road-going commercial electric vehicles.

Its zero emission trucks and vans can travel at up to 50mph and have a range of 150 miles, making them ideal for commercial fleets within a closed environment, such as airports or with defined routes, such as supermarket home delivery services.

It has won orders from [Marks and Spencer](#), [J. Sainsbury](#), logistics company [TNT](#) and [Scottish & Southern Energy](#).

Sales have doubled every year since 2004. The company is building a plant in the US that can produce 1,000 vehicles a year and expects to open another by 2009 that will lift US capacity to 5,000 vehicles a year.

Respond:

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