
Air & Water Quality

As the world's population continues to grow and the world becomes increasingly urban, the demand for potable water, unpolluted air and pure water for industry grows with it. The demand for clean water and air is such that companies which can purify water and filter out pollution are likely to grow with this demand.

Solutions – Air filtration, catalytic converters, water filtration, water purification, pollution control.

Carbon Trading

There is almost a global consensus that global warming is scientific fact and that we need to take action to reduce our carbon emissions. Market based solutions have therefore come to the fore, whereby companies have a carbon quota. If they exceed this quota, they can buy unused permits on the open market and companies with excess permits can sell theirs. Furthermore, companies which reduce carbon emissions can sell these emission benefits on to companies which need to offset their polluting activities. This is known as carbon trading.

Solutions – carbon trading, carbon reduction technologies

Education & Learning

As the world industrialises and becomes wealthier, and as technology increases the pace of change, the need for education and learning grows steadily, particularly in the developing economies of China and India, but also for business learning in more mature economies where 'continuing professional development' is becoming the norm.

Solutions – educational software and hardware, training, colleges

Energy Efficiency

As the costs of energy rise, so more and more companies and organisations are incentivised to reduce their energy costs. Thus companies which can help them do this by improving efficiency will find their services of increasing value.

Solutions – LED lighting, metering, efficient boilers, clean coal technology, power transmission

Energy Storage

There are many needs for storing energy – portable devices like computers, fuel cells for cars, and energy for remote communities. Fuel cells could revolutionise the car industry and reduce their environmental impact considerably whilst energy storage may also allow us to have a more decentralised energy system.

Solutions – fuel cells, hydrogen storage and generation, batteries

Environmental Consultancy

Almost every major project has to consider its environmental impact. Many companies do not have the skills or resources to do this, nor may they want to as it is probably not a core competency. This has led to a burgeoning demand for environmental engineers and consultants that can advise on the environmental aspects of any project.

Solutions – environmental engineering, control engineering

Healthcare

The world's population, at least in developed countries, grows steadily older. This means that the pressure on healthcare grows inexorably. As new cures are found, so new epidemics arise. Allergies and stress related illnesses are a mark of modern society. The demand for drugs, care for the sick and healthcare equipment is underpinned by these demographic changes.

Solutions – pharmaceutical research, drug delivery, hospitals, primary care, wound-care, diagnosis, respiratory aids, medical equipment, 'alternative' therapies

Organic Food

Food scares, unexplained illnesses and growing concern over the environmental costs of intensive farming have led to a surge in demand for organically produced food. Yet supply has struggled to keep pace with demand. This presents real opportunities for companies that can address this gap.

Solutions – organic food production, wholesaling and retailing, fair trade food and drink

Renewable Energy

The threat of global warming has spurred governments worldwide to take action to reduce their emissions of greenhouse gases by setting targets for reductions and fostering renewable energies. From a cottage industry, renewable energy is now mainstream and looks set to become the energy of choice as the era of cheap oil comes to a close.

Solutions – wind, geothermal, solar, biomass, wave, tidal, biofuels

Resource Management

We are now coming up against resource constraints – minerals, oil, land, tropical forest and water are all under pressure. Yet, demand is growing as the world continues to industrialise, sucking up further resources. This means that we have to do more with less by recycling, re-using and managing ever increasing volumes of waste. Legislation is also driving demand for waste management, recycling and re-use of 'waste'.

Solutions – waste management, energy from waste, recycling, re-use of mining waste

Safety & Security

A litigious culture and improving standards throughout industry have brought about a sea change in safety standards. This has stoked a demand for the services of companies making controls, locks, surveillance and arrest systems.

Solutions – environmental controls, fire detection and control, internet security, car safety, arrest systems

Sustainable Forestry

Since the 1970s, the world's tropical forests have undergone systematic exploitation, which has resulted in their rapid decline. Given that tropical forests are 'the lungs of the world' and home to a vast range of fruits, medicines and other products, the need for re-generation is pressing. The price of tropical hardwood has also risen on a remarkably consistent basis, presenting a strong business case for sustainable forestry.

Solutions – sustainable tropical hardwood, sustainable reforestation, sale of FSC certified wood

Sustainable Products

Consumers have become increasingly aware of the environmental impact of their buying patterns. Companies have responded by launching products to meet this demand – things like biodegradable cups, environmentally benign washing powder, natural alternatives to synthetic chemicals, natural toiletries, certified timber and so on.

Solutions – 'natural' toiletries, green building materials, biodegradable disposables, natural alternatives to synthetic products

Transport

Better transport links have led to more and more people travelling more and more often. This puts huge pressures on the transport system, particularly in an overcrowded island like the UK. Not only does this generate a demand for more buses, more trains and better infrastructure, but also for products which serve this market such as real time information systems.

Solutions – bus and train operators, public transport infrastructure, electric and hybrid vehicles