[youtube:http://www.youtube.com/watch?v=FHYqbAjHbT8 auto]The global response to climate change
will dwarf anything we have ever seen before outside of World War. We will see hundreds of new business ideas, responses, innovations, strategies and opportunities. Each will be significant in the next two decades. Taken together they have huge power to help the world – in a profitable and sustainable way.

The science of climate change has firmly captured the attention and passion of most of the world, who are now convinced that rising atmospheric carbon dioxide is a major threat to life on earth. The future is mainly about emotion, not data, or graphs or tables. It does not matter what your or my opinions are about the science related to the global warming debate. The most important factor of all is the rapid shift in public mood, in how people feel about these issues, because that will drive change more than anything else. So understanding the emotional climate is as important as understanding the physical climate, if we want to anticipate the future.

At the same time it has become clear that demand for oil is likely to go on outstripping supply, resulting in far higher prices for energy than was the case in previous decades. The climate change and
oil issues could have developed a decade or more apart but have hit our world at the same moment. The significance of this double event cannot be understated.

As a result, we are now seeing a carbon-related mega-boom – in any product or service that reduces the use of fossil fuels. Global investment in renewables alone is already running at $50bn a year – just part of the vast global spend that we can expect over the next twenty years.

[youtube:http://www.youtube.com/watch?v=hPAfdRf20eM 300 250]Climate change activists try to persuade us to change, or governments to act, and both are important, but the greatest answers to global warming will come from business innovation. Individuals may choose lower energy products, but they can only do so if business makes them. And if business sells them for the same or lower price, consumers need little persuasion. Governments can try to influence behaviour with regulation, taxes and subsidies, but their actions “on the ground” are almost always delivered by business – whether creating a huge tidal dam or a series of new nuclear power stations.

Our future therefore will be transformed not by government officials nor by individual consumers, but by tens of thousands of new business technologies, products and processes –

all designed to do more with less carbon, for economic and emotional reasons. As we will see, most of the tools we need to stabilise or reduce carbon dioxide levels are already here, even allowing for further rapid economic growth in emerging nations. Powerful barriers to climate control are political, cultural, red tape, ignorance and lack of vision. Most of these will be overcome once people can see practical, cost-effective ways to solve the problem.

Future oil prices – expect instability

New products and services related to the Carbon Boom will almost all pay for themselves rapidly so long as energy prices remain an average of more than $80-100 a barrel. And the higher prices go, the shorter the payback period.

These innovations will allow economic growth to continue, emerging economies to thrive, and personal lives to improve – while rapidly reducing demand for carbon. High oil prices mean greater incentives to live a carbon-free existence, and just a 5$ rise can be enough to bring to market a major new technology that otherwise would not be commercially viable.

[youtube:http://www.youtube.com/watch?v=BdG0s8llQrA 300 250]The very innovations society needs to solve global warming will also reduce demand for oil, reducing pressures on supply and eventually lowering prices. Thus we can expect significant price swings over the next twenty years, with supply and demand struggling to remain in balance.

New technologies will scale up rapidly to reduce carbon use, but at the same time emerging economies will continue to grow fast in their energy consumption. These two trends will be finely balanced and small changes will have a large impact – for example closure of several next-generation nuclear generators following an accident, or an unexpected disruption of a major oil field.

Be prepared for “wild cards”: low probability, high impact events that will affect energy and carbon markets. There are hundreds of them and the chances of one or two or even three happening at the same time is therefore far higher than most people think. They will affect your business.

Unstable oil prices will be one of the greatest challenges for corporations, who will find it hard to plan, with few reliable indicators of what long term energy prices will be. Expect global discussions amongst national leaders and energy suppliers about ways to help stabilise energy markets. Expect also huge growth in oil hedging – where companies pay a premium to secure a guaranteed oil price a long way into the future.

But despite all these challenges, the size of the Carbon Boom is already so vast that we can expect high levels of risk-taking, to try to seize opportunity. Success will require close monitoring of key trends, great agility and speed, ability to adapt, flexible leadership , strong contingency planning, bold decisions and nerves of steel.

It’s a $40 trillion new market

Faced with an unimaginable environmental catastrophe, and enormous opportunity, the business response to global warming and carbon saving will dwarf anything ever seen before in the history of the world, in numbers of companies, research efforts and sales. These massive efforts will change forever how we live.

Business leaders are already responding at an astonishing pace, propelled by their own rising energy costs, sense of responsability, by concerns amongst their teams, by consumer pressure, media exposure, shareholder activism, government policy and possible rapid changes in all of these things. But the common factor is shifts in how people feel about the future.

Environment videos

Many more Global Warming Videos by Futurist Dr Patrick Dixon and Sustainagility book.

Articles and Videos on Global Warming

Here are more resources on this site that you may find helpful.

True Cost of Global Warming
How business will help solve global warming with green technology
CARBON DIET to save the World
Global Warming - Science Summary
Future of Oil Prices: Middle East, global economy
Roof Gardens Impact on Energy Saving
Biofuels Controversy and Climate Change
Iceland Volcano Eruption - Geothermal Power Potential
Energy Use Consulting - Boom Industry
Smart Power Regulation - Energy Saving
Green Technology Innovation Awards Chaired by Patrick Dixon
Product Exchanges and Climate Change
Wind Turbines and Global Warming
Solar Cell Roofing and Climate Change
Low Energy Streetlights and Global Warming

Polymer Cement - to save 2% global CO2
Carbon Capture - Climate Change Business
Future of Oil Industry when will oil run out? Kuwait and region
Heat Pumps - to prevent global warming
Cost of global warming - practical answers
The $40 trillion climate change business
Impact of Global Warming on Human Life
The Future of the Environment
Green Technologies innovation will help with climate change
Sustainability, climate change and crazy biofuels policy
Sustainagility: innovation will help save world. Sustainable business future
Sustainable business: $40 trillion green tech boom will help save world
How Green IT saves money and energy, improves image and environment - keynote
Water Wars Risk? Futurist Q&A with Patrick Dixon
Global Warming: green technology will help world
Economic Growth Limits? Sustainability. FUTURIST Q&A