



CLIMATE CHANGE WILL AFFECT THE INDUSTRY

SUMMARY

Comprehending climate change gives a basis for wise decisions to limit climate change. Increasing requirements will have a vast impact on industry, but will also present possibilities to maximize profound shareholder value.

The article Diagnosis: Climate Change (I/II) explained the mechanics and consequences of climate change. It also indicated the reality of current climate change. This article (II/II) discusses how climate change will affect industry.

Climate change is like a serious disease

Curing climate change is like curing a serious disease like cancer. The outcome can't be guaranteed. Half hearted attempts to treat it won't do. Because the question is of life and death, the treatment has to be implemented fast, efficiently and in all areas affected.

Climate change is not cured by excuses

We live on ecological credit. 1,4 earths are needed to sustain our way of life. Because of our actions, increasing emissions of greenhouse gases (GHG) accumulating into the atmosphere have caused a climate change. With our current consumption the point of no return is approaching fast, if not passed yet. Scientists warn that the climate change may become uncontrollable.

Many excuses have been heard for not acting on climate change; the own role in climate change is futile (consumers, small nations), the problem was caused by others (developing countries), why should we do, when the others don't (east vs. west) or actions could be detrimental to the economy (industrialized countries, businesses). Nature does not care about excuses nor does it need any. It needs action.

What we can do is to minimize emissions

To curb climate change we need a viable way to suck and transform GHGs from the atmosphere. This method isn't available yet. Today, there is only one way to limit climate change that is in our control, namely minimizing (preferably eliminating) GHGs that are globally emitted through the use of fossil fuels, industrial processes, and deforestation. This will require willingness to renounce economical and political interests. The question is: how can we help each other to do this?

Comprehension is a key

The goal is clear: secure the future. Comprehending climate change, realizing that it is affecting our living conditions, and that our future is at stake, will pave way for wise decisions, creative solutions and effective implementation. Official decision makers will be able to agree binding relevant global climate targets. This will secure the critical mass needed to globally minimize emissions. Governments will allocate resources to facilitate and make sure the implementation is done. Business executives will include actions on climate change in their business plans. Inventors, technical experts, handy people and lay men will both adapt and implement known methods and create new and feasible ways to eliminate emissions in specific processes, individual production facilities and in everyday life. Everyone will be motivated to implement emission reductions.

A global agreement secures critical mass



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Official decision makers have a chance to obtain relevant and binding climate targets in Copenhagen in December 2009 in the United Nations Climate Change (UNCC) conference. The intentions and interests to confine emissions still differ very much. Europe and US seem to be unison on targeting 80% emission reductions from 1990 level by 2050. China, today the biggest emitter, has plans to double energy use. India's priority is economic growth to end poverty. Many are sceptic to a successful outcome of the meeting. I'm still optimistic. In the past all nations in the world agreed on the need to correct the ozone layer depletion and the unified actions were successful. If we managed then, why shouldn't we be able to do it now when the future of humanity is at stake? By targeting the seemingly impossible you will reach the highest degree of the possible. (Note: climate negotiations have still not been successful)

Emission reductions means change

Let's assume that the Copenhagen meeting agrees global GHG emissions to be maximum 20% of the 1990 level by 2050. The needed emission reduction is ca. 5%/ a as of 2010. This inevitably means changing the ways goods and services are both produced and used, all over the world. Authorities will make sure the reductions are implemented. The actual work has to be done by the businesses and by us as consumers both privately, and as part of businesses.

Increasing requirements have global consequences for the industry

Changing requirements will have vast consequences for the industry. It will have to respond to climate change challenges to a bigger extent than it has done so far. This is logical because almost 50 % of global GHG emissions originate from energy supply and industrial processes. Furthermore, industry has a share in most of the other emission sources. They are forestry, agriculture, transportation, residential and commercial buildings, waste and wastewater.

Stakeholders will put pressure on the industry

Additional pressure will be put on the industry by investors and other stakeholders. For example a coalition of US investors put Exxon Mobil Corp. and Massey Ferguson Energy Co on a "Climate Watch" list claiming the long-term competitiveness of the firms could be hurt by their lack of action on climate change. The number of people demanding sustainably produced goods is increasing. As customers and consumers they have a strong weapon: the decision to buy -or not to buy. The industry will have to answer the call. The challenge is big, but, if it was possible to get a man on the moon, why couldn't it be possible to eliminate emissions too?

Many technical solutions are already available

There are many known and not yet known ways to save energy and eliminate industry emissions. The main categories are carbon free energy and energy efficiency. Where possible, fossil fuels should be replaced with carbon free energy. It can't solve the whole problem because the capacity of renewable sustainable alternatives today is only a fraction of what is needed. However, the situation may change rapidly because a lot of development work is going on. Energy efficiency and material efficiency are ways to manage resources. They encompass elimination of emissions, recycling, re-use and closing technical loops. The International Energy Association (IEA) has estimated that more than 30 % of energy related emissions could be reduced through energy efficiency. Increasing the effectiveness may also be profitable. Dow Chemical Co saved ca. \$4 billion in energy costs 1994-2005 by cutting GHG emissions 32% and DuPont saved \$3 billion 1990-2005 on cutting GHG emissions 60 %.





Climate change gives incentives to maximize Profound Shareholder Value

For many companies shareholder value maximization is top priority. For most employees it's not. Actually they couldn't care less. But, what if they would? I think they sincerely would if Profound Shareholder Value would be maximized. This is done when profits are generated by operating in a way that help to sustain our future on this planet.

Sustainability means focussed action

In practise sustainability in operations means eliminating all forms of waste in every area of business, using energy as efficiently as possible, optimizing material use, transporting efficiently, making sure peoples current and future needs are met and creating new ways of doing business. In fact it is a prerequisite to change business fundamentals in order to operate fully sustainably. To do this you have to grasp the necessity of it, enable it to happen and make it happen.

Sustainability pays

The US based billion-dollar carpet company Interface Inc. is since 1995 working to become a fully sustainable company. So far the work has not only saved more than \$330 million and reduced GHG emissions 60 %, but it has also paid back in customer loyalty and employee spirit. Climate change gives an incentive also for other companies to do this. Smart companies take advantage of all the possibilities the climate change presents.

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