

GREEN WEDNESDAY NOVEMBER 2009.

“Too Hot Not To Handle”.

“This could be the biggest business opportunity of all time – how to move away from a carbon-based economy to a new economy. “

HBO Documentaries, (2006). Running time: 54minutes.

An emotionally charged documentary about the causes and effects of global warming. Information is presented in a series of brief comments / interviews with climate research scientists / educators. Over the past 100years, the mass consumption of fossil fuels, especially in America, has contributed to a dangerous global warming that is now beginning to adversely impact our lives – and promises to do far greater damage if we continue to ignore its signs. This movie focuses on the effects of global warming on the US.. It also provides some glimpses into possible solutions that we can start to take now.

More heat waves will be common place. The number of heat waves of more than 4 days has tripled in the US in the last decade. In Chicago in 1995, a heat wave of >105°F killed 108 people. In Europe in 2003, 10's of thousands of people were killed. The number of such heat waves is expected to double by 2020.

“What is global warming?” The debate is not that the earth is warming, but that mankind is / has contributed to this and has increased the rate of it happening. Don't be tempted to look at local weather events – there will always be weird highs and lows of temperatures, but look at trends.

“Is it all about heat?” No, it's about increases in extremes of climate events. Increased global temperature increases the rate of ocean evaporation, which leads to more and higher intensity rainfall events. This in turn leads to widespread flooding and contamination of drinking and irrigation water supplies. This will severely affect agriculture and food production capacity. The important thing is to realise how connected everything really is. Imagine changes in the times of autumn leaf colour change, less snow for skiing, changes in bird and animal migration times, - it IS affecting how we live our lives.

“What are these changes and can we live with these changes?” The most significant effect is on water – in the US there is less snowpack. In Western US, 75% of water supply comes from snowpack. Further, of those states that rely on snowpack for their water supply, they supply 75% of the US fruit crops.

“What else could change?”

- Forest fires – these need heat, drought and dead trees – G.W. is giving us more of all of these
- Species extinction – already happening at an alarming rate, e.g. coral reef species
- Tropical diseases – will increase as average temperature increases e.g. already seeing diseases like W. Nile Virus moving further north than previously seen
- More weeds (due to increased CO₂ in the air = foliar fertilizer)
- More noxious pollen e.g. ragweed

- Melting Alaska – the frontline of G.W.. Average warming elsewhere is about 1° so far, but Alaska has warmed by about 5°F. This is due to the less snow cover, so less reflection of sunlight, so more warming, so... vicious circle.
- Rising sea levels. Sea level has been rising for along time, but its thought to be increasing now. Over half of all US residents live within 50miles of the coastline.
- Increased frequency and intensity of hurricanes and other significant climate events.

“Where do we start?”

- Reduce output of GHGs from vehicles – go hybrid. (‘Holy Grail’ is 100mpg)
- 10% of vehicle GHG emissions is done while idling at traffic lights, congestion.
- Consider using ethanol for vehicle fuel (pure grain alcohol). Every gallon of ethanol that replaces a gallon of petroleum reduces GHG emissions by 15%
- Consider using biodiesel made from vegetable sources or vegetable waste. This not only increases the amount of mpg for most vehicles, but also improves performance and cleanliness.

Coal is one of the most serious issues. There are VAST reserves, easily accessible, but it puts out the most GHG’s per unit of energy of all fossil fuels. “The oil age is likely to end not because we run out of oil, but because we find a better way to live.” But we need political will to speed up the change. Washington is the last to change, and most of the current sea of change comes from the public at local level – City of Portland for example.

City of Portland has much being done:

- Incentives for reducing personal use of cars, increasing amounts of transit
- Increased use of ‘pool’ cars that people can use for just a few hours (and these are all hybrids)
- Incentives for building LEED certified buildings and so reducing energy consumption that way
- Reduced use of virgin paper and increased use of re-cycled paper for production of advertising materials such as catalogues
- Private business initiatives such as the hot lips pizza company use of waste heat from the ovens to heat their building, use of local food to reduce transport pollution, use of electric cars for pizza delivery.

The whole effort in Portland is being driven by the public, not Federal legislation.

“Where do we go from here?”

- Solar power
- Wind power
- Geothermal power
- Tidal power

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Remember: “After the final ‘no’, there comes a ‘yes’.