

Kamal Meattle's remarks at Bry Air Award Ceremony, January 8, 2010.

Copenhagen was a failure in finding a solution to Global Warming and Climate Change.

It was a success because we now have a general recognition that we have a Problem that needs immediate and collective attention.

This is a good first step, but time is running out for all of us.

The challenge is to find a solution that involves all the countries in the world to agree to keep the temperature rise to below 2 degrees centigrade and to do this we will need to collectively limit the CO₂ levels in the air, to under 450 ppm.

We are already at 390 ppm and increasing it by 3 ppm or more each year.

We have a consensus that we cannot have a temperature rise of more than 2 degrees centigrade as after this there will be uncontrolled consequences.

For example, the Polar Ice will melt and millions of square kilometers of earth's surface will stop reflecting sunlight back into space and this will further increase the earth's temperature.

This is imminent as the Arctic Ice may melt as early as in 2013.

The Oceans absorb nearly 1/3 of the CO₂ and with increase in ocean water temperature the ability of oceans to absorb CO₂ is expected to reduce, as Carbonic acid increases in water with increasing temperatures.

The effects of this will be felt by areas closer to the Equator and the countries in this region will be hurt more.

The first consequence to this will be our Food Supply. Already with increased world's population we find that the stored capacity of food grains is less than 50 day supply to feed all on earth.

This has reduced to 1/3 of what was available before. It is estimated that India will lose about 25% of its food supply if this happens.

The UNFCCC - IPCC forecast is that the Himalayan Glaciers will dry up by 2035.

This is not going to happen on New Year's Day 2035 but progressively as we move towards 2035 in the next 25 years.

This means that the holy Ganges River will dry up by then along with the Brahmaputra, Indus, & Mekong.

They will become monsoon drains.

This will mean that over ½ billion people will be affected living in the Indo - Gangetic Plains in Haryana, Punjab, UP, Bihar, Bengal etc.

We will all fight over Water as 60% of the world's population is expected to be living in cities with a population of more than 1 million in the next 15 years.

The question is what can we do as a country, businessmen and engineers?

India has committed to reduce energy consumption by 25%.

We can reduce emissions in the future by switching from Coal based energy to Solar, Hydro, Nuclear, Wind or Geo thermal (the Earth's temperature is > 200 degrees centigrade about 2,000 meters below ground level).

The lowest hanging fruit – the low cost solution is Energy Conservation.

HVAC is an important component of this as there is a growing preference for working and living in air-conditioned spaces and HVAC takes up as much as 59% of the total building electricity load for an air-conditioned building.

We find that we can reduce this to 39%.

We have experienced this in our new Project called www.greenspaces.in and in a retrofit (soon a USGBC LEED Platinum (EB)) at Paharpur Business Centre, New Delhi, www.pbcnet.com, where the use has gone down to 40%.

Today, 40% of the World's energy is used by buildings and it is about 30% in India and 60% in USA.

If we are to achieve our national Goal of reducing energy by 25%, we can easily look to the 75% of India that is yet to be built and make sure that the new buildings are all Energy efficient and certified Green – IGBC or TERI Griha.

IGBC Green building registered projects are about 322 Million sq. ft at present and this is very little compared to the potential.

Water, Energy, Waste Management together with Indoor Air Quality are very important verticals in any building and we need to stress on health and quality of indoor air more than we have in the past.

Simply watching temperature and Humidity is a thing of the Past.

Why? Because, we spend most of our time indoors, at work, at home, partying or traveling.

We need to measure Smell, Bacteria, Fungus, NO_x, SO_x, PM 2.5's, VOC's, Ozone, CO₂ and many more parameters.

We have to compare them with Ambient Air, which unfortunately, is polluted and unacceptable, in most cities.

We have learnt how to 'grow fresh air'.

If you cannot get it, grow it.

"Air is happiness – Let's keep it fresh," wrote Deepak Pahwa in his New Year 2010 Greeting card.

How True!

We should consider setting up an Indian Chapter of the International Society of Indoor Air Quality and Climate (ISIAQ), which is based out of USA, unless there is already one.

We have the technology to achieve conservation, recycling of waste and also keep our Indoor Air, Fresh.

What is missing for a solution to our Global Warming problem? The will to Act, and do it Now.

“The era of procrastination of half measures, soothing expedients, of delays, is coming to its close.

In its place we are entering a period of consequences”, said Winston Churchill on November 12, 1936.

This statement is applicable and relevant to the Global Warming Challenge, today.

Will our leaders rise and do what they have to do or will they take a selfish view and walk the easy path?

Historians will record this for posterity.

I now will read out a very relevant Extract from the Speech of His Majesty, Jigme Khesar Namgyel, while delivering the Madhavrao Scindia Memorial Lecture on December 23, 2009 in New Delhi.

Please remember that he will be 30 years old on February 21, 2010.

I believe that any real and lasting solution to global issues can only come through a universal wave of human empathy, desire and passion for the common good.

Global problems are problems that face mankind and our planet.

Government might mediate problems at the global level, but its effects are felt by people, like you and me.

While we know it is an accepted process that governments and large institutions debate the issues, negotiate and bargain on the concessions to be made we tend to forget that in protecting our own constituencies, we jeopardize the world and thus ourselves and our own future generations.

Global problems cannot be solved by protecting local self-interest.

As I said before, I risk sounding idealistic – but the fact is that I believe it is only when we are willing to bear the embarrassment of being a little innocent that we will be able to say – “Let us place the interest of humanity, not national populations and constituencies, above all else. Let us take political risks and strong decisions in addressing the needs of humanity.

The answer to global problems will come closer at hand when we grasp that universal simplicity – that sense of shared planet and a shared fate for those who walk on it.

We need shared human endeavour not just negotiated change.”

Thank you