

ECONEWS

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Promoting the Vision of a Sustainable Vancouver Island

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THE COPENHAGEN CRUNCH

From December 7th - 18th, the world's leaders gather in Copenhagen, Denmark, for the most important conference our world has ever known.

To understand why, you have to lay aside the muttering of those believe global warming to be a massive hoax perpetrated by all the world's climate scientists over 20 years, and pay serious attention to the facts.

The physics of climate science has been solid for over 100 years. Carbon dioxide and related molecules such as methane trap heat in Earth's atmosphere, and their rapidly increasing presence is causing global temperatures to rise. All other contributing factors - such as the changing nature of the Sun - have been examined, and none has been found able to explain the steady although variable rise in temperature.

Right now, if we continue burning fossil fuels, cutting rainforests and raising livestock as usual, the global temperature is on track to increase by up to 6°C or 7°C by the end of this century.

And that spells total catastrophe.

The last time Earth's temperature was this high was during the Cretaceous period, 144 to 65 million years ago. This high a temperature will cause major mass extinctions of life on Earth. Eventually, all ice on the planet will melt, raising the global sea level by 80 metres, and since less oxygen will dissolve in the warmer water, the oceans will become stagnant, further driving mass marine extinctions. On land, super-hurricanes, floods and other extreme events will make normal life impossible, and food production will be only possible in the polar regions, causing most of humanity to starve.

This is a hellish picture - and all within the lifetime of children being born today.

Here's Prof. Hans Joachim Schellnhuber, Director of the Potsdam Institute for Climate Impact Research,

and Chair of the German Advisory Council on Global Change:

"This is a final scientific call for the climate negotiators from 192 countries who must embark on the climate protection train in Copenhagen. They need to know the stark truth about global warming and the unprecedented risks involved."

Carbon Reduction Commitments			
	Developed Nations		Developing
By...	2020	2050	2020
% Needed	25-40	80-90	15-30%
% So far agreed	10-24	40-80	5-20%
Canada	3%	50%	-
* Below the 1990 levels			

2°C has been adopted as the crucial precipice we must not cross; yet even at +2°C, which many believe is already far too dangerous, a billion people will suffer water shortages, most of the world's corals will die, and the Greenland ice-cap may tip into an irreversible meltdown, leading to an eventual 6-metre rise in sea-level.

There are some important numbers that drive things home. In order to hold the line at 2°C we must emit no more than 750,000 megatonnes of carbon in total into the atmosphere.

If we can hold the line there, there is a 75% chance that we can prevent the temperature from rising higher - and conversely, a 25% chance that it will rise higher. So already, we're in alarming territory. Would you put your child on an airplane if there was a 25% chance that it would crash?

Since the start of the industrial revolution in the mid-1700s, we've released 500,000 MT of carbon, 200,000 from deforestation and 300,000 from burning fossil fuels and making cement. That leaves a remaining budget of 250,000 MT and no more.

Right now, we are emitting 10,000

MT a year, and at the current rate of emissions growth, we will exhaust the budget within 20 years.

This is the crux of the matter, and why we can't leave this to the next generation. If we're willing to risk a 50% chance of exceeding 2°C, we can release a further 250,000 MT - but just how selfish do we want to be?

All the evidence shows that our total global emissions must peak between 2015 and 2020, and then decline rapidly. This is why the developed nations need to achieve a 25-40% reduction by 2020, and the developing world a 15-30% reduction. Canada's goal is 3% below 1990; this is nowhere near enough. BC's goal is 19% below.

But let's turn this around. Say we do what's needed, and invest in high speed electric trains, super-efficient buildings, electric cars, fantastic cycling trails, wind, solar and geothermal energy, stopping deforestation, limiting our consumption of beef, and all the other solutions for a zero-carbon world - how bad can that be? That's not a *price* - that's an investment in an incredible future which no longer depends on fossil fuels, no longer has nations fighting and killing over oil and gas supplies, no longer has air pollution and smog, and no longer worries about the collapse of the world's oil supply because we won't need it anyway.

And so what if it reduces the growth of our future GDP? As western cultures, we are massively overweight - we *need* to go on a slimming diet, to have less impact on Earth's overstressed ecosystems. If we fail to do this, our GDP will collapse by close to 100%.

With every year's delay, the risk of catastrophe increases. This is the crunch-time - now.

Guy Dauncey

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