

Dear CACOR Colleagues

(The background is in the email at the bottom of this thread)

Can you please assist me in channeling Cacor expertise into this Commons Group gathering?

One of the key items the Commons Group will be discussing on April 16 will be the Talanoa Dialogue (the other being the 1988 Toronto Conference on the Changing Atmosphere).

Fiji and Poland, will preside over this year's Dialogue / negotiations. The Dialogue will include a preparatory phase and a high-level political phase. The Dialogue will seek to answer three central questions about climate action:

- Where are we?
- Where do we want to go?
- How do we get there?

I believe the United Church Group plans to attend but I'll know better after the Commons Group meeting. From my Google enquiries, there appears also a portal where individuals can contribute their ideas.

I am not an expert on Climate Change so I would appreciate the views of our Cacor Climate Change experts input to these three questions which I can table (as their input) at this meeting.

As noted in an earlier email, I will encourage this re-constituted Group to include some Cacor experts in the field.

My only significant contribution, based on my previous negotiating experience, is in relation to the last question.

I agree with the intent of expanding the dialogue to include common folks and businesses etc. but this is not enough. Just as in the Montreal Protocol we need call out the climate change deniers; make every student aware of the issues and the dramatic consequences for the world they are going to inherit. As the Hopi Indians said "We don't inherit this planet from our parents, we borrow it from our grandchildren". Along with this "borrowing" comes custodial responsibilities.

Talk alone is not enough. We need a global student uprising as we now see happening in the USA regarding gun control. The challenge is how do we create this uprising?

Cheers
Vic Buxton

On Mar 21, 2018, at 7:45 PM, Vic Buxton <vic.buxton@sympatico.ca> wrote:

Hello Art

The email I sent you earlier was based on the incoming email below.

As I explained to you today, the Commons Group was a group of senior officials and experts that met 'in camera' in meeting rooms at the House of Commons once or so per month for about 10 years to discuss matters of extreme environmental importance (example, the collapse of the East Coast Fishery). It was Chaired by David McDonald, Chair of the House of Commons Environmental Committee and organized by Elizabeth May. I was a member because I was the leadership technical person at Environment Canada on the regulation of toxic chemicals and the spokesperson often appearing on Canada AM etc. The meetings stopped because Elizabeth, David and others were just too busy and/or out of town too frequently.

We often had Ministers and the opposition critics at these meetings. (Example, John Fraser on fisheries issues). The idea was to examine and discuss the root causes and viewpoints on what measures are/were necessary to mitigate the problems. There were also staff from the parties but it was to be bi-partisan participation and that these discussions would not take place in a political context. Depending on the topic identified, experts would be invited to make presentations and participate in the subsequent discussions.

Anyway, I told Gary I would attend and suggested he consider having a few CACOR experts invited as guest speakers or routinely attend as well. He has not replied to my request as yet.

If he doesn't get back to me, I'll reintroduce the CACOR participation idea with David McDonald and Elizabeth May when we meet.

Vic Buxton

From: Gary Sealey [mailto:gary.sealey@gmail.com]

Sent: March-16-18 7:03 PM

To: undisclosed-recipients:

Subject: Invitation to your meeting of The Commons Group Monday April 16 in Ottawa at Parliamentary Offices 131 Queen Street in Room 851

The Commons Group

*An informal gathering of persons interested in
ethical dimensions of the Global Commons*

Greetings,

Alanna, David, Eric, Heather, Jennifer, Jim, John, Liz, Marilyn, Peter, Ralph, Roger, Scott, Stephen, Vic, Vicky!

We are pleased to confirm your invitation to the next meeting of the Commons Group, Monday, April 16th, in Ottawa at the Parliamentary Offices at [131 Queen Street](#), between O'Connor and Metcalfe, in Room 851.

We are preparing to host you at 9:00 a.m. for informal conversation and updates over light refreshments. Your meeting will begin at 9:30 a.m. and would adjourn between 4:30 p.m. and 5:00 p.m. A no-cost buffet lunch will be provided at noon.

Commons Group Meeting Theme:

1988 Toronto World Conference on the Changing Atmosphere...Breakthrough or Breakdown?

Will the *Talanoa Dialogue* in **2018** initiate profound change?

Where are we? Where do we want to go? How do we get there?

We hope you will be able to join us for this important gathering and discussion.

Please confirm by email to Gary Sealey at gary.sealey@gmail.com

Look forward to seeing you on Monday, April 16th at 9:00 a.m.!

Elizabeth May, David Hallman, David MacDonald and Gary Sealey

Vic:

We spoke at our last luncheon.

The Commons group sounds excellent and I would welcome an invitation to attend/support.

My focus has been on energy and the necessity to curtail the use of fossil fuel for individual transportation, home electricity efficient generation and consumption as well as domestic internal climate control (heating and cooling). Rather than only conducting a dialogue on the necessity for other people to take action in this field, I have spent the last three years building a domestic microgrid to demonstrate how to totally stop burning fossil fuels while maintaining cost effective and resilient energy use. My entire home is now a laboratory that permits me to be "off grid" almost at will. I have invited everyone at CACOR to come and witness the facility in full operations and some Board members have taken the invitation. Further, I have invited the entire membership of the Ontario Professional Engineers (Ottawa branch of 8,500 members) and some of their board have made visits. They are now actively working out how they can get more of their membership to see what is possible and where I am going next.

Further, I have had very encouraging support from Ontario's IESO (Independent Electricity System Operator) and have made presentations and applications to be part of their Future Electrical Grid transformation to embrace microgrids and EV charging in their new business model. Over the next months they will be developing pilot demonstration projects and I wish to be part of this activity.

In the meantime I am an "energy island" managing electrical energy generation, flows and storage while maintaining grid connection to sell power to the grid. This is positive cash flow besides the substantial savings by not buying electrical power FROM the grid, not buying gasoline, not 100% heating with natural gas. The IESO and Provincial Safety Inspection and approved energy island hardware in place right now includes:

- 6 kW Net Metering rooftop photo voltaic (PV) generation array (20 panels)
- 10 kW microFIT rooftop PV generation array (39 panels)
- Three Tesla PowerWall 2 AC batteries for 39 kWh storage
- A Mitsubishi Electric Vehicle (EV) with 14 kWh battery and Level 2 (30 amp) charging station
- A Nest E thermostat
- Control room with three workstations (software development, soldering table and operator position), displays and computer assets.

This microgrid has three major advantages: local, independent and intelligent.

As soon as the ground thaws, I shall be adding a Ground Source Heat Pump and very unique in-ground heat exchanger that will be totally integrated with the above hardware for a resilient combined electrical and thermal energy flow and storage management system. I shall include the ability to predict energy needs hours, weeks and a year in advance and to conduct energy generation and storage at time now for use in the immediate future and for next winter. Much has been learned to date and verification of the entire system will be conducted over the coming months and seasons. Of course cost benefits will be supported with hard evidence for any interested party to review. Expanding the scale to a shopping centre, government building, apartment building, or airport has its own problems but this is the ultimate target for complete decarbonization. This system will contribute to climate change mitigation, provide comfortable personal extreme weather disaster survival, and improved personal cash flows.

My next formal presentation on this system will focus on the computer architecture and the control system on 11 April 2018. Very technical. Perhaps far to technical for policy driven people. However, I have a great deal of material for policy people as well.

If this is of any interest, I can talk with some authority on what it is like to develop and live in a living laboratory. I can also demonstrate the living laboratory to anyone who wants to visit. This is a standing invitation to anyone who reads this message.

I do hope I have, at least in part, addressed your three questions with my personal investments and actions.

Art Hunter

From: Madeleine Aubrey [mailto:madarte@sympatico.ca]

Sent: March-21-18 7:54 PM

Thank you Vic!

This is a wonderful initiative. I hope they will accept your proposal.

Madeleine

On 24 March, John Hollins email:

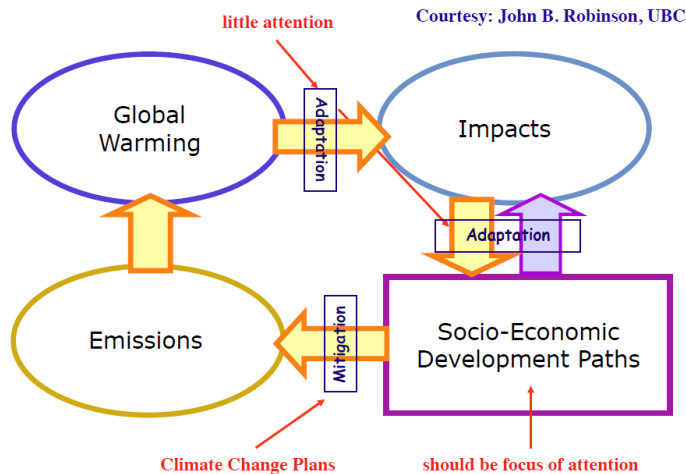
Dear Vic,

Thank you very much for advising us about this event; there is substantial knowledge and insight amongst the membership of CACOR on the issue of global warming.

My involvement in this issue goes back to 1987, when I was invited by Howard Ferguson, at the time ADM of AES, to serve on the planning committee of the 1988 Toronto Conference on the Changing Atmosphere. (Elizabeth May was also a member of this committee, so you and I got to know her at about the same time, although on different issues.) I was responsible for the workshop on energy and the atmosphere at the Toronto Conference, the source of the long-abandoned target of reducing global carbon dioxide emissions by 20 percent of 1988 levels by the year 2005. My primary consultant was Ralph Torrie, who served recently on a panel at a CACOR Workshop.

I almost always refer to the generic issue of global warming, preferring to address the cause rather than just one consequence, although global warming itself is a consequence of economic activity. Here's a slide that I adapted from John Bridger Robinson (UBC) that displays the system involved and which provides a broad framework for discussion. I adapted this slide originally for a presentation to the McGill Alumni Association in 2001, by when it was already abundantly evident that Canada was not going to meet its commitment at Kyoto (1997).

Global Warming: Part of a System



Adaptation to Global Warming: Inevitable, Prepare Now*

John G. Hollins

Attention by civil society and governments to global warming in the 1990's was a sequel to action on both acidic precipitation and depletion of the stratospheric ozone layer. The latter issues had been addressed, with some success, by adopting the strategy of reducing the emissions of the limited number of industries that caused the problems. The same approach was applied to global warming. This was a mistake because a vastly larger number of players would have to be engaged — not just a few industries, but for starters all users of fossil fuels.

Effective attention to global warming required a broader strategy and a wider range of actions. It still does, with much higher stakes than those of the 1990's. The globe has already warmed by 1°C since the nineteenth century, and northern Canada by 2.5°C. Dispassionate prognosis, for example, by the Harvard Project on Climate Agreements, suggests that under the Paris Agreement there is a 50% probability of warming being limited to 2.7°C — and a 50% probability of warming going above 2.7°C, even if all the commitments are met. Compare that with the Paris target of 2°C and the politically popular illusion of 1.5°C!

There are two fundamental considerations:

- There is a moral obligation by current generations to future generations;
- Effective attention to adaptation would add a powerful political argument to the case for mitigation of emissions.

Canada played a significant role in putting global warming on the international agenda. The Canadian government also engaged with provincial and territorial governments, and with non-governmental organizations and one business sector, the insurance industry. For example, in 1994, the Canadian Council of Ministers of the Environment reaffirmed its commitment to stabilize greenhouse gas emissions by the year 2000 and to develop sustainable options to achieve further progress in the reduction of emissions by the year 2005.

The governments and citizens of Canada failed to meet this commitment and every subsequent one; emissions have continued to rise. If Canada, with political will for two of the past three decades has failed and is likely to continue to fail, the prospects for the Paris Agreement are poor — reason enough to pay at least the same attention to adaptation as to mitigation. There is a lot of room: in Canada, we are talking a little, but doing almost nothing.

Mitigation has an effect on the scale of the globe, whereas adaptation is essentially local. Investors in adaptation are more obviously the beneficiaries than investors in mitigation, where benefits may be greater in faraway places. For government and business, adaptation is just sane, knowledgeable risk management, consistent with modern management approaches. Furthermore, the foundation for adaptation was built some 15 years ago with studies in many countries, including Canada. Consequently, a starting place already exists.

Island states, in particular, are already taking action. An example: construction of a two-story mosque in the Maldives where the upper floor provides a safe place for the entire population of an island during a storm surge or a tsunami, a solution that provides a benefit in both the short and long terms. (photo: Dr. Edward Manning, Tourisk, Inc.)



The financial industry in general, not just insurers, is now paying attention to global warming. Central banks, traditionally conservative institutions, are clear. Mr. Timothy Lane, a Deputy Governor of the Bank of Canada, referred to direct economic costs by 2050 of 20 - 40 billion dollars, not counting ecological and social costs. At the other end of the scale, the proportion of Canadian homeowners purchasing overland flood insurance is climbing rapidly. So, some of us get it!

It is high time for the federal, provincial and territorial governments to change their desultory approach to advisory bodies on adaptation and to put some flesh on the bones. If the federal government were looking to really make a difference, an obvious place to start would be to take the substantial subsidies still paid to the fossil-fuel industry and apply them instead to adaptation, for the benefit of Canadians living now who will have to cope with the inevitable consequences of global warming and for the generations to come.

On 25 March Dave Dougherty emailed:

In case it might be of some use, here's my perspective (quite different from Art's) on where are we, where we want to go, and how we get there.

My approach is at what one might label as a higher level, rather than technical. I believe what they are trying to examine is better framed as what's the global problem and Canada's part in it, how do we solve it, and how should Canada contribute to the solution.

Sorry, but I'm going to be brutally honest. No politically correct euphemisms. Also, sorry for the length, but as it developed so many things became important. At least I have kept it much shorter than the hundreds of pages in each IPCC report.

For reference, the Talanoa Dialogue appears to be the latest in the continuing international negotiations under the Framework Convention on Climate Change (FCCC). To me, it looks very high-level and bureaucratic, with emphasis on process, not outcomes, and therefore likely to fail as have all previous attempts.

http://unfccc.int/focus/talanoa_dialogue/items/10265.php

Talanoa Dialogue 2018 - UNFCCC

unfccc.int

"Talanoa is a traditional word used in Fiji and across the Pacific to reflect a process of inclusive, participatory and transparent dialogue. The purpose of Talanoa ...

Where are we?

Scientific research has proven beyond a reasonable doubt that emissions of half a dozen greenhouse gasses--mainly carbon dioxide and methane--have accumulated in the atmosphere and are beginning to affect the climate.

The effects we are already seeing are likely to intensify, especially if we do not very quickly curb our collective emissions.

The effects are not just atmospheric but oceanic, plus they have ramifications for all lifeforms in all ecosystems.

Temperatures are rising virtually everywhere, especially at night and in the winter. The warmer air is carrying more moisture. The poles and currently warming fastest, though the heat is being felt everywhere and the impacts on humanity are going to be worst in the tropics.

We are already experiencing different wind and water current patterns. The jet stream has gone into oscillations never before detected. The northern polar vortex is periodically breaking down, allowing outflows of frigid polar air over the continents.

The icesheets, ice fields, and glaciers everywhere, with a very few exceptions, are melting and flowing more quickly to the oceans.

Oceans and even lakes are suffering acidification as a result of dissolving carbon dioxide.

We are getting desertification on land and at sea as temperatures rise. Even the coral reefs are suffering from repeated bleaching and death.

In both air and soil, moisture levels are becoming more variable, droughts more common and intense, with periodic flooding from intense precipitation events. There are shifting seasonal variations and storm intensities that are getting outside our collective experience--some expect we'll soon need a new category (6) for hurricanes of intensity we hadn't ever seen before.

As we cut forests and the land becomes devegetated via drought, land instability and flooding are increasing greatly, putting many human settlements in danger. Sea level rise is also threatening huge numbers (in the hundreds of millions) of people with flooding of their homes. We are also getting more, and more intense, heat waves--in some places, asphalt is melting (e.g., Australia), airplanes are grounded because the hot air is not dense enough to provide lift (e.g., Arizona, USA), and thousands of people are dying (e.g., India).

Perhaps worst among the changes we are experiencing are the fires. These are becoming more frequent and much more intense. Large numbers of people (tens of thousands at a time) are coming into danger of being burned to death or having their lives disrupted, their homes destroyed. This is why I believe the most apt name for the current geologic era is the Pyrocene Epoch (not the Anthropocene).

Although our experience and expertise in observing climate change and its effects is expanding, we are actually losing capacity to predict what will happen next. Worst, we do not know how societies will change their emission patterns, if at all.

One thing we are beginning to realize (from the geologic record) is that the natural systems that have been absorbing our wastes can pass tipping points at which their behaviour changes drastically into chaotic states, with little or no possibility of return to previous stability.

Our level of emissions has become enormous: over 35 million kilotonnes per year (2015). Let's get that in the correct units: 35 billion t, 35 trillion kg, 35 quadrillion g (35 petagrams [Pg]). In scientific notation that's 35×10^{15} g. For some perspective, there are $\sim 7.5 \times 10^9$ people on the planet and we have an average weight of 62 kg, so the total mass of living humanity is $\sim 46 \times 10^{10}$. Thus, we are emitting ~ 5 t/person.

So far, since about 1750, we've emitted over 48 trillion tonnes of greenhouse gas. Again, correct units: 48 trillion t, 48 quadrillion kg, 48 quintillion g (48 exagrams [Eg]). In scientific notation that's 48×10^{18} g.

As a result of these emissions, carbon dioxide in the atmosphere has risen from ~280 parts per million to 410 ppm. Despite having a much shorter half-life in the atmosphere than carbon dioxide, methane has risen from 0.7 ppm to 1.8 ppm.

We're only beginning to understand the cumulative aspects of the effects of these emissions. We know the main greenhouse gas, carbon dioxide, will last over 200 years in the atmosphere.

The biggest contributors to cumulative emission thus far have been USA (27%), 28 EU countries (25%), China (11%), Russia (8%), Japan (4%), India (3%), Canada (2%), Mexico & Brazil & Indonesia (1% each).

On a per capita basis, the biggest current contributions are Canada (15 t, although one source puts it at 24 t), USA (19 t), Russia (16 t), Japan (9 t), 28 EU countries & Indonesia (8 t each), China & Brazil (7 t), Mexico (6 t), India (2 t). In Canada, we do not really have reasons (excuses) for our high emissions--the Scandinavian countries have dark, cold environments, with long winters, but they emit much less: Finland & Norway (9 t each), Denmark (6 t), and Sweden (5 t).

Scientists have calculated a global carbon budget if we want to limit global warming (what is driving climate change) to 2 degrees C: 2.9×10^{18} g. The remaining carbon budget is only 25% of that, and at current emission rates we will surpass it within two decades. If we want to limit the warming to 1.5 C, we have just 4 years of budget room left.

At present, we can't get agreement on seriousness of the consequences of business as usual or the importance of current and past emission contributions. One of the biggest emitters (USA) is even bent, officially, on increasing its production and use of the fossil fuels that are at the heart of the emissions problem. To our great detriment, the arguments have become political in many countries (Right versus Left), including Canada, USA, and Australia.

Some useful links. More text below.

<https://wri.org/blog/2014/11/6-graphs-explain-world%E2%80%99s-top-10-emitters>

<https://www.theguardian.com/environment/datablog/2017/jan/19/carbon-countdown-clock-how-much-of-the-worlds-carbon-budget-have-we-spent>

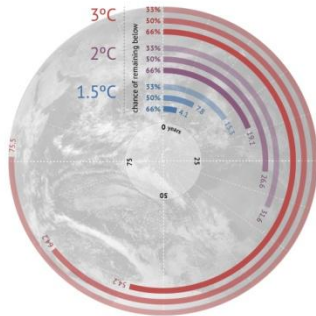
<https://www.carbonbrief.org/analysis-four-years-left-one-point-five-carbon-budget>

<https://data.worldbank.org/indicator/EN.ATM.CO2E.PC>

[CO2 emissions \(metric tons per capita\) | Data](https://data.worldbank.org/indicator/EN.ATM.CO2E.PC)

data.worldbank.org

CO2 emissions (metric tons per capita) from The World Bank: Data



Analysis: Just four years left of the 1.5C carbon budget ...

www.carbonbrief.org

Four years of current emissions would be enough to blow what's left of the carbon budget for a good chance of keeping global temperature rise to 1.5C.

Carbon countdown clock: how much of the world's carbon ...

www.theguardian.com

Carbon countdown clock: how much of the world's carbon budget have we spent?



6 Graphs Explain the World's Top 10 Emitters | World ...

wri.org

Recent data reveals only 10 countries produce around 70 percent of global GHG emissions. Here's a closer look at these top 10 emitters—based on our [Climate ...

Where do we want to go?

This is a very difficult matter to establish. It requires determining the extent to which we can we share resources, including the Earth's capacity to accept and deal with our wastes. It depends on the extent to which each country will do its part. The Paris Agreement to the FCCC only contains non-binding voluntary commitments, and those do not total the cuts that we know we need.

Clearly, the biggest emitters, especially on a per capita basis, need to adopt alternative lifestyles at a lower cost to the environment. Art Hunter may be showing how we might do that.

The second big question is whether we can we get less developed countries (LDCs) to develop along a different economic path with low carbon emissions.

My answer is that we need a low-carbon economy. We need to eliminate emissions from fossil fuels by 2030 (not 2050). We still won't stop climate change, but might be able to limit it and its effects to something tolerable. Even so, the world will only be able to accommodate a lower number of people than we have now.

It is likely that we will need to find a way to draw down carbon in the atmosphere (and from the oceans), but don't yet have proven technology to do this, though some are working on it (<https://carbon.xprize.org/>).

[NRG COSIA Carbon XPRIZE Home Page](https://carbon.xprize.org/)

carbon.xprize.org

XPRIZE is an innovation engine and a facilitator of exponential change. We transform how people think about the world's biggest problems and incentivize their ...



How do we get there?

I see no international agreement in sight, despite several decades of negotiation. We need to find countries willing to lead by example, improving their own economies and generously helping others to do so.

Perhaps the lack of agreement is because there is such poor common understanding of the science of global warming and climate change outside the scientific community. Many people who consider themselves well informed seem unaware of the seriousness of our situation. We need to change that. We are in an existential crisis and the enemy we face is ourselves. We must broaden comprehension. We must also counter denialism, though we can't let it preoccupy us and stand in the way of making progress on emission reductions.

We need to ensure poor people aren't made to suffer--rich people can afford to bear the brunt of the burden. Poor people currently face most of the effects in the most serious ways and they are already struggling to survive.

Clearly, we need to reduce carbon-intensive and methane-intensive activities as fast as possible without causing societal collapse. We could start with the phase out exploration for fossil fuels, installation of fossil fuel infrastructure, subsidies for fossil fuel industries, and tax breaks for those industries. Some countries have done this.

We need carbon taxes, cap and trade regulations, outright bans and limits, rationing, and taboos on the use of fossil fuels. Again, this has been started, but it isn't yet having a significant effect: demand for oil, in particular, is at an all-time high (almost 100 million barrels per day and climbing).

We need stricter standards (building codes, zoning, fuel consumption, for example) and to control emissions from all sectors, including shipping (which is currently not regulated).

We need to invest in research and development for alternative and renewable energy (ARE) technologies. We must also give the types of subsidies and tax breaks we have used for fossil fuels for ARE industries, and as rewards for poor people who avoid fossil fuel use. Alternatively, if we can't provide options, we may have to give subsidies to the poor for critical fuel uses, such as home heating and cooling.

We need to shift public investments from supporting car and truck use to mass transit, which should be made free (as it already is in dozens of cities). This ought to go hand-in-hand with tolls on roadways.

Climate change isn't on the same sort of time horizon as political and economic cycles, which are typically concerned with events less than five years out, sometimes even just those in the next quarter. Climate change happens over and lasts many decades to centuries.

We need to make it clear that everyone, including politicians and business people, must get on board with this effort or other time cycles (political and economic) won't matter.

On that cheery note...I hope you can find a way to have a good day.

Dave Dougherty

We haven't inherited this planet from our parents, we've borrowed it from our grandchildren.

Thank you Dave!

You have said many things we know but you have put it together in such a succinct and readable way.

With your permission I would like to forward this to as many people I known to a few journalists.

I would also encourage our membership to get permission from you to send it to their networks. One of the great things about CACOR members is their multidisciplinary backgrounds and various networks. We can reach more people this way.

best
Madeleine

I agree and identify with just about everything David has in his note and did it much clearer and succinctly than I could.

Two particular points:

A)

That this commons effort is slanted toward process rather than results

This means emphasizing coordination at the international level or "bureaucracy " than a focus on short and mid term goals which is the obvious need

B)

Not mentioned is a focus on local society and cities which is where most of the ghg emissions and people are found and where impacts from climate change are and will be felt. Except for

significant efforts by some mayors and by former nyc mayor Bloomberg very little attention is being paid here. I regret very much the lack of effective action by Ottawa's mayor and Council in this respect either to address carbon emission cuts or build resilience to impacts- unlike Vancouver Calgary and Montreal and smaller cities such as Hamilton which do have real plans in progress and have had for at least a decade

Unless this commons meeting puts a lot more focus on city level action it will go nowhere in my view

Tally ho

Bill Pugsley

aw c'mon, you guys!

There's no 'budget' at all left for 1.5 or even 2 degrees left.
We blew through those years ago; maybe decades

Zachary Jacobson

Likely the most important point that's not been touched so far is that we've probably started the sixth mass extinction.

Sorry, but I don't have time in the next few days to think through what should be said in one paragraph.

I might be able to get to it later in the week if no-one else does.

Dave Dougherty

30 March 2018 update

I'll try to keep this short--books have been written. So, too,
good articles: <https://www.theguardian.com/environment/2017/jul/10/earths-sixth-mass-extinction-event-already-underway-scientists-warn>



Earth's sixth mass
extinction event
under way,
scientists warn

www.theguardian.com

Researchers talk of 'biological
annihilation' as study
reveals billions of
populations of animals
have been lost in recent
decades

Burning fossil fuels has contributed most of the additional greenhouse gas to the atmosphere, but deforestation has contributed about 10%. In combination with our harvesting of vegetation and wildlife for food and materials, the practice of deforestation--done to produce wood, pasture lands, croplands, plantations, roads, and settlements--has had a very serious side-effect: the initiation of the sixth's mass extinction. We know of over a dozen animals that have disappeared completely in recent years, such as the black rhinoceros (there are only two female white rhinos left, too). Hundreds of others have been hugely reduced in numbers do that it is likely they will soon disappear. Indeed, in the last four decades about half of all large animals have died without replacement. This situation has major implications for the functioning of the ecosystems in which we live and the food supplies on which we rely, and it doesn't begin to touch the plants and other lifeforms.

'nough said.

Dave Dougherty

Just to note that we had developed the matrix as a communication tool for this for CoR and for CACOR. (attached)

My work with UN agencies is on integration of risk management and adaptation approaches for heritage sites and destinations around the world.

To do this, I am often involved in briefings of politicians in the countries where we work – helping them understand the risks associated with their decisions and to discuss methods to assess and reduce them.

I would be interested in participating or inputting if useful.

Ted

Edward W, (Ted) Manning

Two years ago, I presented to the UN French Ambassador a project on reforming the Charter of individual Rights so it can include Common rights. It goes deep into political philosophy and makes place to other approaches such as Chinese philosophy (already in place to present at UN. It is quite remarkable) In a nutshell it is a Magna Carta for the third millennium.

There was a strong attempt to place the project under the banner of the UN embassy in Tokyo but was opposed.

If you were interested, my project is still there but it is not an easy one.

Nicole Morgan

On Mon, Mar 26, 2018 at 5:33 PM, Gary Sealey <gary.sealey@gmail.com> wrote:

Hi, Vic!

Thanks! We have been reading your thread and will come back to you, soon!

Gary
