LAW AMENDMENTS COMMITTEE

Red Chamber, Province House

Monday, October 28, 2019

Bill #204 - Workers' Compensation Act (amended)

11:00 a.m.

- 1. John Traves, Counsel Halifax Regional Municipality
- 2. Jim Roper Fire Service Association of Nova Scotia
- 3. Mary Lloyd, President
 Larry Maloney, Vice President
 Pictou County Injured Workers' Association

Bill #213 - Sustainable Development Goals Act

11:45 a.m.

- 1. Karen McKendry
- 2. William Zimmerman
- 3. Marla MacLeod, Managing Director Meghan McMorris, Community Energy Coordinator Ecology Action Centre
- 4. Jon Peirce
- 5. Robin Tress, Climate Justice Campaigner Council of Canadians

1:00 p.m.

- 6. Christine Saulnier, Nova Scotia Director Canadian Centre for Policy Alternatives
- 7. Geoff LeBoutilier
 St. Margaret's Bay Stewardship Association
- 8. Mike Lancaster, Co-ordinator Healthy Forest Coalition
- 9. Eleanor Kure

- 10. Lisa Strickland-Clark 2:00 p.m. 12 H. Margot Aldrich Darlene Gilbert 11 12. Kevin Smith Julia Sampson Shanni Bale 3:00 p.m. 14. 15. Patrick Yancey Willa Fisher 18 17. David Wimberly 4:00 p.m. 18. Deborah Luscomb 17 19. Susan J. Hauer
 - 19 20. Kira Gilbert 2#21. David Patriquin
 - in 21. (for) Jeningh Mchatchie 22. Alexandre Vance 23 SEE CONTINUATION

LAW AMENDMENTS COMMITTEE

Red Chamber, Province House

Monday, October 28, 2019

CONTINUATION

Bill #213 - Sustainable Development Goals Act

4:00 p.m. 2 1. Justin Cantafio

> Seth Levinson 12 - IA SEE ORIGINAL LIST

4:30 p.m. 3. Emma Goulden

> 4. Ira Reinhardt Smith

Nathan Brett 5.

Lillian Hougan-Veenema & Sophie Kent - Purcell 6.

7. Jennifer Stotland 5:00 p.m.

> Dr. Thomas Trappenberg 8. Green Party of Nova Scotia

9. Jessica Griffin

10. White Thunder

11. Eric Burton

12. Caroline Beddle

13. Lindsey Reinhardt

14 Charles William 15 game Light

kathrin winkler

Sent:

October 28, 2019 10:45 AM

To:

Office of the Legislative Counsel

Subject:

Submission regarding Bill 213

** EXTERNAL EMAIL / COURRIEL EXTERNE **

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RE: BILL 213 SUSTAINANBLE DEVELOPMENT GOALS ACT Monday, October 26 Submission by kathrin winkler

Dear Members of the Provincial Legislature,

I write to you this morning with urgency and with respect. Representation calls you to great privilege and great responsibility. We, as a society, a human family, are moving through a small window of possibility. The house is on fire, and as elected officials you can choose whether we enter deeper into the flames or whether we move towards a breathable, liveable future for all beings.

Five years ago a report, entitled **Now or Never** set the sails for economic development and business expansion in this province. That report was based on the false promise of a vibrant future. There is feeble mention of the environment, let alone any mention of the gathering surge of scientific evidence proving that business as usual has guided us toward mass extinction, social collapse and ecocide.

Old political language that "our economy is thriving' headed the weekend newspaper and it is outrageous to claim, as the honourable Premier did on that front page, that " tough decisions have helped Nova Scotia prosper." Prosper for whom? What is the true cost to future generations of this 'prosperity'? 10,000 Nova Scotians marching for climate action have demanded a new " Now or Never" that speaks the truth and acts on that truth- and what you offer in Bill 213 is not good enough. We can do better. Why not aspire to Norway's leadership - to be carbon neutral by 2030? Don't underestimate the capability we have and the responsibility that is ours - now or never.

The proposed GHG emissions targets are not good enough. It's that simple. We don't get a second chance here. The IPCC Report and the Paris Agreement must be the guide in setting those targets. The targets must be based in science and must represent our fair share. We have to reimagine what 'sustainable prosperity' looks like, because it does not look like greenwashing Muskrat falls or piping waste into the ocean. Sustainable prosperity does not look like a mess of tailing ponds from gold mines, or flushing salt into rivers or clear cutting, or fracking, spraying glysophate, burning coal. It does not look like building a road through old growth forest...or paying lawyers to argue that shall is not an imperative when it comes to consultation with conservationists.

A legislated target of 53% below 2005 levels by 2030, for Nova Scotia fails us all. Bill 213 is a **now or never bill**. We need a legislated target of 50% below 1990 levels by 2030 (equivalent to 58% below 2005 levels by 2030).

This spring while speaking at the Chamber of Commerce, about his role in managing this province to grow population, control government spending, to provide economic opportunity for more job

growth, Mr. McNeil said that, "as a parent, I was never afraid of my children leaving, as a matter of fact I would encourage it...but I wanted them to have a path back."

And the grandchildren? What of our grandchildren? What will that path back look like for them? There will be no land path any more. The oceans will have risen. Will they head back from the mainland by boat over waters too warm for the salmon farms, where the right whale is a distant memory... and in the scorched silence that surrounds the children of our future there will be no birdsong to accompany their burdened steps.

If we fail... all our achievements and progress have been for nothing, and all that will remain of our political leaders' legacy will be the greatest failure of human history. And they will be remembered as the greatest villains of all time, because they have chosen not to listen and not to act." Greta Thunberg

all the best kathrin winkler

I acknowledging that we are in Mi'kma'ki, the ancestral and unceded territory of the Mi'kmaq People. This territory is covered by the "Treaties of Peace and Friendship" which Mi'kmaq and Wolastoqiyik (Maliseet) Peoples first signed with the British Crown in 1725. The treaties did not deal with surrender of lands and resources but in fact recognized Mi'kmaq and Wolastoqiyik (Maliseet) title and established the rules for what was to be an ongoing relationship between nations.

joanmsmith

Sent:

October 28, 2019 10:09 AM

To:

Office of the Legislative Counsel

Subject:

my thoughts on the climate action in legislation and Bill 213

** EXTERNAL EMAIL / COURRIEL EXTERNE **

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Remember we are all wanting the same thing. I am a birth resident in Nova Scotia.. family are here as are yours.... jobs come and go but Mother Earth needs to be sustainable for our future... both immediate and distant. money cannot be cooked, boiled, fried, bar b qued..... nor does it heal our bodies......

food from the forest can..... medicine from the forest can..... water from the forest can...... water for the fields because of the forest bringing CO2 to the air..... can........ animals who live in the forest can...... but not if they do not have any habitat left.... Want to keep the "wild" animals out of the cities? keep their place in nature..... so many MORE reasons to keep our lands and forest free from Drilling, Digging,,, Mining.... Pulp/

YOu work for us...... now please and thank you.... listen to us...... joan m smith 27

James McCurdy

Sent:

October 28, 2019 10:19 AM

To:

Office of the Legislative Counsel

Subject:

bill 213, Sustainable Development Goals Act

** EXTERNAL EMAIL / COURRIEL EXTERNE **

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Hello,

I write to express my opinion on bill 213 in case I am unable to testify in person. I will say simply and clearly that the emission reduction goals described in the act are WHOLLY AND COMPLETELY INADEQUATE. We must move to net-zero emissions at a much faster pace. Further, I challenge the honesty of the carbon emissions accounting which serves as the basis for establishing the present proposed targets. Specifically, using 2004 as the accounting baseline for NS co2e emissions not only falsifies NS accounting data but does not align with standard international protocol where 1990 emissions are used as the accepted baseline.

By using 2004 data the NS government gifts itself with a 4MG credit which falsely suggests more significant ghg reductions than have actually occurred. Other misleading falsehoods in the accounting procedure include failure to include bio fuel and wood heat emissions in the tallys.

It is also misleading to suggest that govt. management has achieved the co2e reductions claimed.

In fact, the bulk of NS reductions have been caused by circumstance, not management. The forest devastation caused by Juan established an exaggerated baseline; economic downturn closed two pulp mills which were both major co2e emitters. These circumstances account for most of the co2e reductions previously claimed.

Climate Change is not an issue that can be managed by "fluff" and "spin" as has been the normal approach to environmental issues by this government. Bill 213 is just another example. We need a substantive change of government attitude. We need a binding commitment to UN co2e reduction targets.

Sincerely,

Kip McCurdy

Selah Koile

Sent:

October 28, 2019 10:43 AM

To:

Premier; Office of the Legislative Counsel

Subject:

Input on NS Cimate Legislation

** EXTERNAL EMAIL / COURRIEL EXTERNE **

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Dear Premier

As an engaged citizen, I am writing to make clear that I am deeply concerned about climate change and want the government to take courageous action in reaching zero carbon emissions by 2030, not 2050 which will be too late.

As a politician, I'm sure you must be worried about the public (and your own) ability to make the sacrifices necessary to reach ambitious goals. I want to clarify that for myself and my family we are already making sacrifices and are prepared to do whatever we need to do to contribute to a cleaner planet for our children to live on. We know that some people will be very upset by having to downsize their excessive lifestyles and I hope and pray that you can see that upsetting a few for the good of many will be a much better legacy in the end.

I also hope that you will see the opportunity being presented; to move into a green economy that is forward-thinking, progressive and full of prosperity for future generations.

Respectfully, Selah Koile, mother of one 4 year old Kentville, NS To the Sustainable Development Goals Act (Bill 213) committee,

I am writing to give feedback on Bill 213 following the second reading. I am a biology PhD student at Dalhousie University who grew up in Pictou County and I, like many Nova Scotians, hope that the province will legislate bold climate goals. I believe that there are many others like me in Nova Scotia who are not necessarily experts on climate science themselves, but who want to ensure that we are doing our upmost to follow the recommendations of climate scientists.

I would like to thank the committee for listening to the feedback from Nova Scotians regarding this important topic. It is refreshing to see that Nova Scotia is on the cusp of legislating the most ambitious climate goals in Canada, specifically by reducing greenhouse gas emissions to 53% below 2005 levels by 2030.

This proposed goal is close to the recommended target outlined by the Intergovernmental Panel on Climate Change (IPCC). However, this goal overlooks the fact that countries that produce a disproportionate amount of greenhouse gases, and that have the monetary ability to implement change, need to aim for higher reductions in emission levels. It is important to appreciate that this perspective has been reiterated by both the IPCC and the Paris Agreement.

In line with this thinking, the Ecology Action Centre's research indicates that Nova Scotia needs to aim for a 58% reduction of greenhouse gases below 2005 levels by 2030 for the province to contribute its fair share. I know that the Ecology Action Centre is also providing feedback on this bill and I would like to add my voice as an individual in support of their argument.

This is a pivotal time for legislating new climate goals and Nova Scotia has the opportunity to establish climate goals that could set a precedence for the rest of Canada. I agree with the principle outlined in the Act that describes the climate crisis as a global emergency. However, if this Act is indeed addressing a global emergency, then it must include goals that are in line with the IPCC's minimum requirements for countries that disproportionately produce emissions. With this in mind, I urge the committee to follow the EAC's recommendations, which are consistent with the spirit of the IPCC's outlined requirements for keeping global temperature rise below 1.5°C.

Thank you for your time,

Gavin Douglas

M Douglas

Sent:

October 27, 2019 5:21 PM

To:

Office of the Legislative Counsel

Subject:

Sustainable Development Goals Act Bill 213

** EXTERNAL EMAIL / COURRIEL EXTERNE **

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To whom it may concern,

I would like to have spoken at the legislature on the subject of Bill 213 at the Law Amendments Hearing tomorrow. However, I live two hours' drive from Halifax and work for a living. To give such scant notice of this crucial Hearing suggests this government does not value the input of citizens.

I am grateful to hear the Province is recognizing that we are in a climate emergency. Now we need to listen to the scientists. The Greenhouse Gas Emissions goals set out in Bill 213 are inadequate. According to the Intergovernmental Panel on Climate Change's (IPCC) Special Report, the world needs to act quickly to limit Global Warming to 1.5C. The IPCC report calls, as does Bill 213, for our province to reach net zero by 2050. That recommendation leaves no margin for the feedback loops we are already witnessing. The data coming in about global heating is relentlessly bad. In order to have the best chance of retaining a habitable planet, those countries that have disproportionately benefited from the fossil fuel era, including Canada, should be aiming for net zero emissions by 2030. This would be no small feat but it would be better and cheaper than coping with the consequences of our failure to act quickly.

According to the IPCC report, "the rate at which we decrease GHG emissions will determine whether or not we overshoot 1.5C or 2C of global temperature rise" (p. 15). In other words, even if the goal is net zero by 2050, we need to move fast now. The most rapid decreases in emissions should happen as soon as possible, rather than being delayed. Bill 213's interim goal of reducing GHG Emissions by 53% below 2005 levels by 2030 is inadequate. It would leave Nova Scotia producing 11.2 million tonnes of CO2e per year. The Ecology Action Centre has calculated that aiming for a 50% reduction below 1990 levels by 2030 would reduce that figure by 1.4 million tonnes. That's better but not enough. Net zero by 2030 would be a far safer target. It would require greater resolve and resources but then this is an emergency. We need to act accordingly. Like planting a tree, the best time to have acted is thirty years ago. The second best time is now.

Yours sincerely,

Nina Newington

Mount Hanley, Nova Scotia

Riley Scanlan

Sent:

October 27, 2019 5:38 PM

To:

Office of the Legislative Counsel

Subject:

Sustainable Development Goals Act Amendments Hearing

** EXTERNAL EMAIL / COURRIEL EXTERNE **

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To whom this may concern,

I am emailing regarding the amendments hearing on Monday, October 27, 2019. I am a student at Acadia University and unfortunately cannot attend the hearing on Monday. That said, as a concerned citizen of this province, I feel it is my duty to voice my opinion on Bill 213. The goals set out in Bill 213 are not aggressive enough. We must cut our emissions by more, and sooner. We need to set aside more money to support clean, sustainable development. We also need to invest in carbon sequestration technology to reverse the damage we have already done. We need to tax carbon emissions and incentivize clean energy. I urge you to think not only of future generations but of those living today that are already impacted by climate change. This is truly a matter of all human rights.

We need targets that will reflect what the science has shown. Please keep this in mind when amending the Sustainable Development Goals Act Bill 213.

I sincerely thank you for your time and the work you do,

Riley Scanlan

Wolfville NS

Donna Crossland ·

Sent:

October 27, 2019 5:57 PM

To:

Office of the Legislative Counsel

Subject:

My feedback on SUSTAINABLE DEVELOPMENT GOALS ACT (Bill 213)

** EXTERNAL EMAIL / COURRIEL EXTERNE **

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Re: SUSTAINABLE DEVELOPMENT GOALS ACT (Bill 213)

I am writing to express grave concern on the proposed amendments to EGSPA.

The new version weakens the Act's emphasis on the environmental aspect of sustainable development, and does not set an adequate target for reducing carbon. It follows the bare minimum levels that have been suggested, with no room for error. The risks are far too high to take such a chance. We can and should do more.

Also, the province's focus on using forest biomass, much of it cut directly from our forests specifically for generating electricity, must be addressed in the new act. Biomass must be removed from the list of renewable electricity sources, as it clearly increases our carbon footprint and removes our ability to reduce carbon by removing the trees. Also the shipping of biomass off our coasts must be stopped and this Act could assist with this endeavor. Other countries who burn are Nova Scotia biomass are clearly NOT DOING THEIR SHARE at reducing their carbon footprint. We should not be liquidating the very 'machines' that can soak up carbon, our trees! Please add this to the Act.

Furthermore, I am gravely concerned by what appears to be the under-handedness of my government, quietly announcing on a Friday that public input is sought on this Act on the following Monday. This is not sincere or adequate consultation. You can, and must, do better.

Sincerely,

Donna Crossland MScF



This email has been checked for viruses by Avast antivirus software. https://www.avast.com/antivirus

Soren Bondrup-Nielsen

Sent:

October 27, 2019 6:17 PM

To:

Office of the Legislative Counsel

Subject:

Re: Bill 213

** EXTERNAL EMAIL / COURRIEL EXTERNE **

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Hello,

I am sorry that I will not be able to be at the hearing but I do have some comments.

The Provincial Government declared a climate emergency and kudos for that!

However, Bill 213 is far too weak.

Climate change is the kind of event that causes civilizations to go extinct. Climate change in the past caused the end of civilizations eg. Greenland, end of the Bronze Age, the Anasazi, Angkor Wat and more. Climate change causes failure of agriculture. With no food people migrate, die out or go to war. This is what we are in for if we do not act now and in a serious way. So, please adopt some real measures to curb carbon dioxide emissions and take climate emergency seriously.

Sincerely,

Soren Bondrup-Nielsen Professor Emeritus Biology, Acadia University. From: Jeannie Chisholm

Sent: October 27, 2019 6:57 PM

To: Office of the Legislative Counsel

Subject: Nova Scotia Sustainable Development Goals Act Bill 213

** EXTERNAL EMAIL / COURRIEL EXTERNE **

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Congratulations to the Nova Scotia government on the proposed Nova Scotia Sustainable Development Goals Act. Congratulations as well for explicitly stating that the climate crisis is a **global emergency** requiring **urgent** action. This Act leads the way in Canada for GHG reduction targets, an essential step. However as it currently reads parts of the Act are insufficient in having this policy congruent with the science of GHG emissions and to cover our province's fair share of emissions reductions https://ecologyaction.ca/sites/default/files/images-

documents/Press%20Release%20Backgrounder.pdf

The substance of the Act needs to match the language. Emergencies require moving faster with more ambitious targets to mitigate catastrophic climate change effects provincially and globally.

The next steps for the Act to be bolder and more responsive to the current crisis are: to have clear targets, time lines and funding in place; the goals need to be clear, timely and measurable-are we getting to where we need to go; adressing the province's continuing reliance on coal and developing coal mines; environmental racism; a clear plan for a socially just transition to a green economy with the funds to provide that; the Act needs to be in full adherence with Mi'kmaw rights and sovereignty along with consultation with Indigenous people; public consultation using a citizens assembly, participatory democracy model.

This Bill will be the guide to navigating the climate crisis for the next five years in an ever decreasing time frame for mitigating the worst effects. It's importance cannot be understated.

Sincerely,

Mary Jean Chisholm

Betty Wright

Sent:

October 27, 2019 7:35 PM

To:

Office of the Legislative Counsel

Subject:

Bill 213

** EXTERNAL EMAIL / COURRIEL EXTERNE **

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To Whom It May Concern

Regarding the Sustainable Development Act or Bill 213, I am pleased that Nova Scotia is recognising that we have a Climate Emergency here and all over the world. I am especially glad that our government is taking the first step towards being a leader in this huge challenge that is facing us all.

However, I am dismayed that I won't be able to attend your upcoming session which is open to the public tomorrow so I am sending this e-mail instead to voice my concerns about this impending bill. Upon reading it, my first reaction was that it just doesn't go far enough. The IPCC is saying we must limit our Global Warming effect to 1.5 degrees C by 2050 which your bill is aiming to do. However, the predictions are becoming more dire every day and scientists are saying we must lower our emissions to 0 C by 2030. If we don't do this starting now, then we will be faced with expenditures far exceeding what it will cost us to change over from an oil based province to one on using alternative methods such as solar, wind, and any other method that will be easier on our environment.

As far as I can see we have no choice but to make that change starting right away. If we had listened to Science 30 years ago we wouldn't be in this emergency situation. So now we must listen or we'll live to regret it in ways we haven't even considered.



Virus-free. www.avg.com

Jont Openheart

Sent:

October 27, 2019 8:13 PM

To:

Office of the Legislative Counsel

Subject:

STRONGER ACTION NEEDED (bill 213)

** EXTERNAL EMAIL / COURRIEL EXTERNE **

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To Whom It May Concern in the provincial government of Nova Scotia

I will not be able to attend the public amendments hearing this Monday October 28th, but I would please like these comments to be added and heard. If there had been more notice given to the public I would have been able to make arrangements to come to the hearing itself...

We are in a climate crisis.

This is not a political game. This is not a time where you should be trying to dupe us, or win points. You should be

trying to set the most ambitious targets anywhere in the world. Canada is wealthy and well-placed to be setting an example

to the rest of the world. Let alone scraping by and making nowhere near the degree of changes necessary to reduce Nova Scotia's

carbon emissions enough.

Listen to the science. Listen to the protestors. Listen to your children, actually LISTEN to them. It is THEIR future you are denying,

with your lies and your bluster. The tide is turning. Be on the right side of history.

Jont Whittington,

Concerned resident

Halifax Nova Scotia

Albert & Eva Evans

Sent:

October 27, 2019 8:32 PM

To:

Office of the Legislative Counsel

Subject:

Bill 213

** EXTERNAL EMAIL / COURRIEL EXTERNE **

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I Legislators,

Thank you for Bill 213. I would like to see the reduction in 7b) changed from 2005 levels to 1990 levels. "By 2030 emmissions at least 50% below levels emitted in 1990."

Also I would like to see a dedication to increasing clean electricity generation in NS. Namely by 2030 to have 90% of our electricity coming from renewable sources. We must move rapidly away from burning coal. Dramatically decarbonizing Nova Scotia's electricity grid is technically and economically possible by displacing coal, oil and largescale biomass with increased levels of domestic wind, imported hydro, solar, small-scale biomass and community-scale projects.

Thirdly I would like to see immediate implementation of the Lahey Report with full implementation by 2023. I feel this is necessary for the conservation and restoration of Nova Scotia's forests and their biodiversity.

Thank you, Eva Evans

Avondale, NS

Robert Adamson

Sent:

October 27, 2019 8:39 PM

To:

Office of the Legislative Counsel

Cc:

Premier; garyburrillmla@gmail.com

Subject:

Comments on Bill 231

** EXTERNAL EMAIL / COURRIEL EXTERNE **

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I am a Halifax resident and professor of biomedical engineering at Dalhousie University. I am writing in regards to Bill 231. While I commend the government for finally committing to a plan to reduce carbon emissions in Nova Scotia, I want to express my concern that the current version of the bill does not reduce emissions quickly enough. Its targeted 53% reduction by 2030 and 100% by 2050 represents an inadequate measure by an advanced economy to limit global warming to 1.5C given that developing economies will not be able to make comparable reduction commitments. Nova Scotia is fully capable of phasing our coal-based electricity generation faster by investing more heavily in renewables. We have the expertise and the infrastructure in place to do so and with interest rates near all time lows, it is nearly criminal that all developed world governments are not borrowing to finance faster de-carbonization of their electrical generation systems, Nova Scotia very much included. The government should be proposing a more aggressive schedule for cutting coal burning for electricity to zero, and I will be very disappointed if the government locks us into the current, inadequate reduction targets by passing Bill 231 in its current form.

As a voter I consider climate change and carbon reduction the number one issue that will determine my vote. Bill 231, as currently formulated is inadequate to the challenge we face. As a Nova Scotia citizen I expect the government to strengthen and accelerate its targets before it becomes law.

Regards, Rob Adamson

Rob Adamson
Associate Professor
School of Biomedical Engineering
Electrical and Computer Engineering Department
Dalhousie University
(902)497-8579

Jillian Oderkirk

Sent:

October 27, 2019 9:21 PM

To:

Office of the Legislative Counsel

Subject:

Public hearing Monday on Bill 213 - Sustainable Development Goals Act

** EXTERNAL EMAIL / COURRIEL EXTERNE **

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To whom it may concern,

Thank you for bringing forward Bill 213. I found the notice of public opportunity to provide input at this hearing far too short to attend the hearing in person. I am concerned that the target being set of net zero by 2050 is too long in the future and too risky. This is because the 2018 IPCC report requirements were conditional on two major assumptions that are not bearing up. The first is that we could invent technologies to capture carbon from the air on a massive scale. Such technologies do not exist and are not on the horizon, so this is a false assumption. The second assumption is that feedback loops would not start soon; however, this is also a false assumption as the thawing of the arctic permafrost has accelerated far faster than expected, releasing methane and other emissions into the atmosphere in an accelerating manner. To give our province a chance of a livable future we must be more ambitious and lower net carbon emissions to net zero by 2030 at the very latest. This effort might be challenging but it will also give our population a common purpose and we can put our province to work on a just and rapid transition to a more self-sustaining and healthy society. Nova Scotians are strong, creative and resourceful and we can rise to this opportunity to lead by example by putting a high value on clean air, clean water, healthy food and a green future. Believe in us and lead us into a better tomorrow.

Jillian Oderkirk Wolfville, NS

Helga Guderley

Sent:

October 27, 2019 10:16 PM

To:

Office of the Legislative Counsel

Subject:

Comments on Sustainable development goals Bill 213

** EXTERNAL EMAIL / COURRIEL EXTERNE **

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Unfortunately, I do not have time to attend tomorrow's meeting, but as a concerned citizen, I feel that it is my duty to speak out.

I am glad that the province is putting forward a bill of this nature, and that climate change is identified as an emergency. However, I am very concerned that the greenhouse gas reduction goals are not strong enough and most importantly that compliance with the dictates of the law will be judged by Cabinet and reported to the legislature not in a more transparent fashion. The bill provides no mechanism for reaching the goals. Apparently another bill will be tabled in a year's time that will provide these mechanisms. The world's scientists (of which I am one) know that we have little time to turn around the greenhouse gas problem. Every year's delay during which environmental practices continue as usual brings us nearer the precipice. We need to stop the devastation of our forests, reduce and eliminate the use of coal and fossil fuels and continue to enhance the use of renewable sources of electricity. We have made progress, but business as usual for another year until we get our goals and mechanisms in order is not an option.

Finally, Nova Scotia has seen too many cases in which laws were passed and not obeyed by the government (Species at Risk). We have seen laws gutted when they didn't suit the government (Natural Resources Strategy). We have seen the government ignore the dictates of the courts when conflicts of interest have been indicated. This behaviour makes the public sceptical as to whether a bill with such weak language will actually be worth the paper it is printed on.

Take home messages from my email:

Strengthen the emission targets

Stop the environmental devastation occurring in our forestry industry Broaden the cap and trade program to allow small businesses and wood lot owners to benefit from carbon credits.

Thank you for considering these points!

Helga Guderley Boutilier's Pt.

Niki Clark

Sent:

October 28, 2019 9:03 AM

To:

Office of the Legislative Counsel

Subject:

SUSTAINABLE DEVELOPMENT GOALS ACT (Bill 213)

** EXTERNAL EMAIL / COURRIEL EXTERNE **

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To Whom It May Concern,

I would like to comment on Bill 213, but cannot get to Halifax today. Please add my comments to those received from the public this morning.

I appreciate that this bill will respond to our Climate Change Emergency, but it is not adequate to address the Climate Change Crisis facing us as we delay any significant actions. We must strive to achieve net zero GHG emissions by 2030 or face certain extinction for our species as well as nearly all living organisms on the planet. Please do not delay further. Knowing now the consequences, delaying adequate action would be tantamount to criminal negligence.

Sincerely yours, Dr. Niki R. Clark Granville Beach, NS

Niki R. Clark, Ph.D. NIKIAN Enterprises

Granville Ferry, Nova Scotia

Jennifer MacLatchy

Sent:

October 27, 2019 8:29 AM

To:

Office of the Legislative Counsel

Subject:

Sustainable Development Goals Act - bill 213

** EXTERNAL EMAIL / COURRIEL EXTERNE **

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To Whom it May Concern,

I am unable to attend the law amendments hearing on Monday morning, but I wanted to express my concerns.

Now is a crucial time to act — we don't have much time left to reduce our emissions in order to prevent catastrophic climate change. Therefore it is vital that Nova Scotia listen to scientists and take immediate action to address our carbon footprint. We must stop the destruction of our forests for pulp and paper or for biofuel, because we need these, both to sequester carbon, and for habitat for creatures who are endangered because of human activities. We must halt oil and gas projects that threaten the environment and that would emit more carbon into the atmosphere (Alton Gas).

We must declare a climate emergency, and then actually act like it. We must do everything we can to leave a legacy of an inhabitable Nova Scotia, and planet, for future generations.

Sincerely, Jennifer MacLatchy

Andrea McIntyre

Sent:

October 27, 2019 8:32 AM

To:

Office of the Legislative Counsel

Cc:

Andrea McIntyre

Subject:

climate change

** EXTERNAL EMAIL / COURRIEL EXTERNE **

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Hello,

thank you for receiving my concerns about climate change. I am writing to say that everyone I know is losing sleep and productive walking hours worrying about climate change. Young people (my two adult sons and their many friends) seem to be paralyzed by this: young, intelligent, capable youth are failing in post secondary education, depressed and anxious, unable to build a future when they anticipate disaster and see no meaningful action by leaders.

We do what we can to reduce our contributions individually but we are desperately aware that change must happen in orders of magnitude beyond what individual citizens can achieve.

Please commit to zero emissions by 2030. Please INVEST NOW in a carbon-free economy. PLEASE MOBILIZE as if this were war on our doorstep.

We can build a future that embraces our new realities and leaves no one behind. We have creativity, a unifying challenge, and the motivation that only comes under pressure. The time is now.

We don't expect you to have all the answers. We just need you to commit. MOBILIZE. ACT NOW while we CAN make a difference.

We have an abundance of academics in Nova Scotia, an abundance of indigenous knowledge keepers, and everyone in between. Nova Scotians are resilient, capable people. Together we can adapt. Please, please please. Make a bold, large, magnificent decision to commit 100% to responding to climate change and together we can create a carbon-free future and live to see what achieve.

sincerely,

Andrea McIntyre M. Div, MSW

Sarah O'Toole

Sent:

October 27, 2019 9:47 AM

To:

Office of the Legislative Counsel; Premier; office@antigonishmla.ca

Subject:

SUSTAINABLE DEVELOPMENT GOALS ACT (Bill 213)

** EXTERNAL EMAIL / COURRIEL EXTERNE **

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Respectfully submitted to the Office of the NS Legislation, Premier MacNeil, and MLA Delorey

I commend your office and the NS government for acknowledging the climate crisis as an emergency and would like to add my voice to those who are speaking on the reading of Bill 213 Sustainable Development Goals Act.

As a concerned member of the public the proposed new GHG emission reduction targets (read below)

- (b) by 2030, at least 53% below the levels that were emitted in 2005; and
- (c) by 2050, at net zero, by balancing greenhouse gas emissions with greenhouse gas removals and other offsetting measures:

reflect a timeline which does not even meet the modest targets of the 2030 declaration, which was 50% below 1990 levels by 2030. Meanwhile other countries, such a Costa Rica and Iceland, will be net-zero within a few years.

I urge this government to listen to the citizens it claims to represent and respectfully urge you to set us on course for net-zero by 2025, and to create a citizen's assembly to oversee a rapid and just transition to safe energy, including full respect for Mi'kmaw rights and sovereignty.

Sincerely, Sarah O'Toole

Sarah O'Toole

Alisha Joudrey

Sent:

October 27, 2019 10:14 AM

To:

Office of the Legislative Counsel

Subject:

Bill 213

** EXTERNAL EMAIL / COURRIEL EXTERNE **

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To whom this may concern,

I am writing to share my thoughts about Bill 213.

My love for the planet started at a very young age. I always loved being outside. My favorite day at school was earth day. I always took pride in recycling, saving power and being kind to the earth.

This has not changed as I've grown older. Now that I am mother these things have became even more important to me.

On the small scale I feel as though my family and I are doing everything we can to reduce our carbon footprint. Just to name a few things; we are eating mainly local and vegetarian, walking instead of driving when we can, trying to buy products in bulk and with the least amount of wasteful packaging.

With that being said I don't think there is a lot more my family and I can do. I now feel that it is up to the government to step up and do it's part. The climate needs our help. I am scared for my son, and the world he is going to be growing up in. We need to protect more of our forests and reduce our emissions.

We are in a climate emergency. Please keep all our children's futures in mind when making the decisions regarding Bill 213.

Please preserve the beauty of Nova Scotia. Stop deforestation and reduce our carbon emissions.

Thank you, Alisha Joudrey Beaver bank, NS

LA MacPherson

Sent:

October 28, 2019 9:53 AM

To:

Office of the Legislative Counsel

Subject:

BILL NO. 213 (as introduced)

** EXTERNAL EMAIL / COURRIEL EXTERNE **

Exercise caution when opening attachments or clicking on links / Faites preuve de prudence si vous ouvrez une pièce jointe ou cliquez sur un lien

Good morning,

Circular economics has been my research interest since realizing the Our Children's Trust lawsuit was heading to courts. The children were looking for a reparation and I formed a provincially funded business around the reparation they are looking for, starting in 2015. My provincial funding started on October 23, 2019.

Talk of environmental sustainability and circular economics interests me greatly since I've been recruiting digital platform designers who could help the municipal approach to activating these important sector supports.

Regards,

Lloyd Allan MacPherson

Alder Point, NS

To the Law Amendments Committee

Re: Bill 213, Sustainable Development Goals Act

October 28th, 2019

Hello.

My name is Jen Hall, and I am a resident of Halifax. I am writing to express some concerns I have about Bill 213, the Sustainable Development Goals Act, as it currently stands.

Section 2 (a): The definition of "circular economy" used in this Bill falls short of the more generally accepted meaning of the term, in my view. The term 'circular economy' originated in the 1970s and has been popularized by the Ellen MacArthur Foundation and numerous academics. It is generally taken to mean an economy which relies on closed-loop manufacturing systems, which minimize both the inputs of resources and outputs of waste by taking the waste products from one system and using them as food for another. The idea of the circular economy exists in opposition to the linear economic model where resources are harvested, consumed in the making of products, and then thrown 'away' at the end of their lifespan. The definition used in this Bill does not include any mention of closed-loop systems or the reuse of waste products as resources for other systems. Instead, it focuses on extracting the maximum value from all resources used, which, while laudable, is still in line with the linear economic model that we have now. In a true circular economic model, the waste from a particular product is foreseen and factored into the design of a system of production at the beginning; waste is not a byproduct that needs to be investigated for recoverable resources, but an integral part of the system.

- 2 (h) The definition of 'sustainable prosperity' sounds very nice, but there is an increasing body of evidence suggesting that continued economic growth is not sustainable, and is in fact responsible for a lot of greenhouse gas emissions. I am concerned that the focus on 'economic growth' will, again, trump efforts to cut greenhouse gas emissions, as the actions that we have to take in order to reduce our carbon emissions will inevitably have economic impacts. I personally would like to see the language of 'economic growth' removed from this Bill if possible. For this reason, I am skeptical of the long-term objective for the province set out in 5 (1).
- 4 (a) It is lovely to see the Mi'kmaq concept of Netukulimk included in this Bill. However, I am deeply concerned by the fact that this Bill makes no mention of respecting Indigenous rights and sovereignty, which are integral parts of addressing the climate crisis and creating an 'inclusive economy'. The closure of Alton Gas, and the closure of Boat Harbour are two concrete steps the government could take to reduce Nova Scotia's environmental impact while also supporting the well-being and prosperity of the Mi'kmaq. I am concerned that this Bill and this government will pay lip service to Mi'kmaq knowledge and presence by including this concept, while simultaneously failing to respect their rights and sovereignty.
- 5 (2) In my view, the actions proposed by the government towards achieving 'sustainable prosperity' are insufficient and fail to address the severity of the crisis that we face. "Raising awareness", "programs", and "initiatives" to "encourage" Nova Scotians to make progress towards sustainable prosperity are a waste of time if we do not successfully cut our greenhouse gas emissions. I am disappointed that the

government does not have more concrete plans of action to suggest, and I am disappointed that the government is still focused on raising awareness of this issue when the time for that has long since passed.

7 (a) (b) (c) The greenhouse gas reduction targets proposed in this act are (as I'm sure you will hear from many other people) insufficient. The EAC recommends a reduction of GHGs of 50% below 1990 levels, or 58% below 2005 levels, which will give us the best chance of keeping global heating to 1.5 degrees above pre-industrial levels.

I am also deeply concerned by the fact that there is no plan indicating how we will reduce emissions. There is a plan in this Bill to promote 'sustainable prosperity', vague as it may be, but our number one priority needs to be reducing GHG emissions, and fast. The IPCC report argues that the largest cuts to our emissions need to happen as fast as possible, and any legislation made by this government needs to reflect this fact. I would love to see a plan for the next decade (which is all the time we have left to avert catastrophic global heating) with yearly targets for reductions in emissions. For this reason, I do not believe that annual reports by the Minister to the House, as explained in 12 (1), are anywhere near sufficient. The pace of the changes we need to make is such that monthly reports would be more appropriate, if not weekly.

Please understand that I am writing as a young person (I'm 25) whose life will be deeply impacted by the decisions we make now. I have been watching governments fail to adequately address climate change for my entire life, and I am very frustrated by the lack of understanding and inaction that is endemic in government around this issue. This may be the most important bill passed in this sitting of the Legislature, and I implore you to open yourselves to feedback from the public and take the time to get this right. We can no longer avoid doing what must be done.

Thank you,

Jen Hall

jessica frenette

Sent:

October 28, 2019 10:52 AM

To:

Office of the Legislative Counsel

Subject:

Sustainable Development Goals Act

** EXTERNAL EMAIL / COURRIEL EXTERNE **

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To whom it may concern,

We MUST take bolder action regarding the Climate Crisis and Sustainable Development in Nova Scotia. Right now, Bill 2013 has very weak targets for decreased carbon emissions. If we do not listen to the science behind the IPCC report there will be dire consequences. We need to do our fair share for our future generation and the future of this beautiful province we live in. We need to consider the Environmental Racism our First Nations communities are facing and fight for Climate Justice.

I beg you, please take today's public hearing seriously. Our futures depend on the actions we take right now.

Jess Frenette

STEPHANIE NICOLETTI

Sent:

October 28, 2019 11:00 AM

To:

Office of the Legislative Counsel

Subject:

Sustainable Development Act (Bill 213)

** EXTERNAL EMAIL / COURRIEL EXTERNE **

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To whom it may concern:

Well it concerns all of us. My concern is for my granchildren who cannot yet vote or voice their concern about their future.

Your Bill 213 is not enough. Too little too late. You have the opportunity now to do more for the future of all

Novas Scotian. Do it!

Stephanie Nicoletti

Port Lorne

Nova Scoita

Madeleine Putnam

Sent:

October 28, 2019 11:07 AM

To:

Office of the Legislative Counsel

Subject:

Bill 213

** EXTERNAL EMAIL / COURRIEL EXTERNE **

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To whom it may concern,

On behalf of my classmates and peers, I would like to add my voice to the chorus of those calling for more appropriately extreme measures to be taken in the face of the climate crisis.

In addition, I would like to urge the members of the legislature to consider the consequences of letting natural gas be used as a means of reaching emissions reductions targets. Allowing environmentally disastrous projects such as Alton Gas to continue would be unjust and counter productive to the goals laid out in the proposed bill.

Thank you for your consideration,

-Madeleine Putnam

Cindy Littlefair

Sent:

October 28, 2019 11:23 AM

To:

Office of the Legislative Counsel

Cc:

Lisa Roberts

Subject:

Bill 213: NS Climate legislation targets

** EXTERNAL EMAIL / COURRIEL EXTERNE **

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Thanks for doing what you're doing October 28.

Net-zero by 2025, please.

Cindy

Kate Pepler

Sent:

October 28, 2019 11:24 AM

To:

Office of the Legislative Counsel

Subject:

Bill 213: climate emergency

** EXTERNAL EMAIL / COURRIEL EXTERNE **

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Hello,

In regards to Bill 213, you must listen to the scientists and take bolder action.

The IPCC Report is actually a very conservative report based on consensus. We need bolder action than the IPCC report calls for.

Bill 213 has very weak targets for carbon emissions.

It is not enough to do our fair share, and does not take into consideration climate justice for developing nations. We are in a unique place of privilege, and we need to do our part as a global community to support those who cannot. Climate change does not know boundaries.

We NEED a socially just transition; free from environmental racism and green-washing.

(ie: Muskrat Falls hydro-electric project is not a good example of renewable energy: it has flooded Indigenous lands with mercury)

Wr are in a CLIMATE EMERGENCY - now is your chance to ACT LIKE IT.

Kate Pepler

Tynette Deveaux

Sent:

October 28, 2019 11:26 AM

To:

Premier; Office of the Legislative Counsel

Cc:

info@lenadiab.ca

Subject:

Feedback on Bill 213

** EXTERNAL EMAIL / COURRIEL EXTERNE **

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Please accept my submission for the Law Amendments Hearing for Bill 213 below (and attached). I had hoped to deliver it to the House in person, but I understand all the speaking times are taken up today. I hope additional days will be added to hear from members of the community on this important bill. Thank you.

Dear Premier McNeil and Members of the NS Legislature,

I don't wish to debate the science on climate change with you. I think it's pretty clear. The Ecology Action Centre has done a good job outlining the shortcomings of Bill 213 and what the government needs to do to make it stronger. The NDP has also raised some important concerns.

Criticisms notwithstanding, I'd like acknowledge that you've taken an important first step here. And I thank you for your efforts. But I'm asking you to further.

Like many of you, I'm a parent. I've thought about what I would do to save my child from harm. I'm sure you have too. If a bear were rushing toward my child, I wouldn't run for cover and leave him there. And I wouldn't try half measures to save his life, or take my time with his rescue, leaving no margin for error. I'd give it everything I've got—and then some.

That's what I'm asking of you.

My question for you is, What would it take for you to be brave? For you to be *real* leaders on climate change? I'm not talking about just being better than the province next door. I mean being a true leader, one who's willing to do everything in their power to tackle climate change.

You have an opportunity to be heroes. You have an opportunity to forgo politics as usual and to join forces with Nova Scotians who want to preserve this amazing province and do right by the world and future generations. You have an opportunity to have leave a legacy that recognizes you were on the right side of history and maybe even set an example for others to follow.

But to do that, you're going to need to be brave. You're going to have to step out of your comfort zones and drop the narratives you fall back on that keep you stuck in a limited world view. You're going to have to really listen to people, not just pretend to listen and then do what you had planned to anyway.

If you find it in you to be brave, I for one will be back to cheer you on and thank you. I imagine many of the people who've come out to the legislature for the hearing on Bill 213 would do the same.

I believe you have it in you.

Thank you,

Tynette Deveaux

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Emily LeGrand

Sent:

October 28, 2019 11:35 AM

To:

Premier; Office of the Legislative Counsel

Subject:

Sustainable Prosperity Act comments

** EXTERNAL EMAIL / COURRIEL EXTERNE **

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October 28, 2019

Dear Members of the Legislature,

Thank you for your proactivity on responding the urgency of the climate emergency with the Sustainable Development Goals Act.

My primary concern with the Act is the emissions target for 2030. We are already experiencing climate changes that are dramatically impacting people's lives, landscapes, other species and economies as I type. The wildfires in California today are a case in point. This is associated with the 1 degree C of warming that has already occurred. The targets being cited now are based on 1.5 degrees of warming. Because our planetary systems are nonlinear and complex, the extra half of a degree could bring disproportionate disruption.

The window of opportunity to put on the breaks is now, in the ten years before 2030. Therefore, we need stronger targets for emissions levels for 2030. Please revise the act to be in alignment with the Nova Scotian "2030 Declaration" https://ecologyaction.ca/sites/default/files/images-documents/2030%20Declaration%20with%20Signatories%20-%20Aug%2027_0.pdf which proposes a 2030 emissions target of 50% below 1990 levels, rather than the currently proposed 53% below 2005.

More dramatic, and decisive action is an opportunity for Nova Scotia to be a leader, a role model and a case study on the global level. Nova Scotia has not benefitted from participation in the business as usual global economy. A deeper commitment to a sustainable, inclusive economy is an opportunity to actually improve the lives of Nova Scotians. This transition can draw upon people's latent ingenuity, put many more people to work doing things that feel meaningful, allow more people access to affordable transportation, and help people become healthier through getting more incidental exercise and eating healthier food. This transition can be done in ways that improve our equity and social, physical and psychological wellbeing.

And of course, with strong 2030 targets comes the need to action now, before the end of the year, and a detailed ten year plan of action. We can't wait.

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Sincerely,

Emily LeGrand

marjorie stock

Sent:

October 28, 2019 11:45 AM

To:

Office of the Legislative Counsel

Subject:

Re:Bill 213

** EXTERNAL EMAIL / COURRIEL EXTERNE **

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Dear Gordon Wilson,

Please be advised that the release of salt brine, a deleterious substance, contravenes the Federal Fisheries Act and is harmful to ecosystem sustainability. Sustainability is the Goal of the N.S. Legislature as decided by voters and stakeholders.

No permits may be granted to Alta Gas for these specific reasons.

Thank you, Sincerely,

Marjorie Stock

Sent from Outlook

Celes Davar

Sent:

October 28, 2019 11:46 AM

To:

Office of the Legislative Counsel

Cc:

Keith Irving; Premier

Subject:

URGENT: Input re Draft Climate Legislation and Sustainable Development Goals Act

** EXTERNAL EMAIL / COURRIEL EXTERNE **

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Attention: Legislature considering the new Sustainable Development Goals Act

Having reviewed the proposed Act, I'd like to commend the legislature for moving in the direction of a net-zero target.

However, I'd like to register my concerns that:

- 1. We were not provided much time to provide citizen input.
- 2. I care about this act as a landowner of a small patch of Acadian forest, and as a tourism operator in this province.
- 3. That the targets for achieving net zero are too far into the future. We have decisions to make about use of oil and gas reserves, reducing our dependence on carbon based fuels, increasing our reliance on renewable energy, and adopting approaches to utility grids, electric vehicles and regenerative agriculture and forestry, along with the planting of millions of trees that need to be accelerated.

Thank you for considering this input at such a critical time, when very little advance notice was provided about this input.

Celes Davar

Celes Davar	
West Brooklyn, NS	

Steven Wilton

Sent:

October 28, 2019 11:46 AM

To:

Office of the Legislative Counsel

Subject:

Bill 213

** EXTERNAL EMAIL / COURRIEL EXTERNE **

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Dear legislature,

I want to use my voice to briefly express deep concern with regards to climate change and how we can take action as a province in response to this urgent matter. I think we need to be leaders and we need to listen to the abundance of scientific literature and set goals that reflect the seriousness of the issues facing us and our planet. I feel strongly that we need to enact the 2030 Declaration. The main goal I think that it is important to address is as follows, as quoted from the 2030 Declaration:

Government of Nova Scotia to set strong greenhouse gas targets -50% below 1990 levels by 2030 -and, in doing so, transition to a low carbon economy. We must meet this target, and transition our economy, in a way that recognizes the structural inequities of race, gender, income, and the ongoing impacts of colonization and environmental racism in our province. Taking this action now will prevent the worst impacts of climate change, which is already affecting our health, livelihoods, and communities.

Thank you for your time, Sincerely, Steven Wilton

Seth Levinson

Sent:

October 28, 2019 12:05 PM

To:

Premier; Office of the Legislative Counsel; Darrell Samson

Subject:

SUSTAINABLE DEVELOPMENT GOALS ACT (Bill 213)

** EXTERNAL EMAIL / COURRIEL EXTERNE **

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Law Amendments Hearing for the public re: SUSTAINABLE DEVELOPMENT GOALS ACT (Bill 213)

Dear Premier McNeil.

As a resident of Nova Scotia, and concerned citizen of this planet, there is not a single thing more important to me than hearing from you about binding actions based on science that your government will take to address the climate emergency.

Unless the hundred or so scientists and climate specialists who signed the IPCC report are all wrong, the IPCC report tabled earlier this year makes it very clear, no one is doing enough. They also make it clear that we need to move into emergency action mode. This is an emergency. The fires currently raging out of control in California are only one example of that. I've lived on the Eastern Shore for 15 years and twice have been evacuated for forest fires striking at typically the wettest period of the year... spring.

Consider for a moment that for decades, science has combed the universe for signs of life. To date, they've not found a single system where they've confirmed that even microbes could survive. And yet, here we are, on the only planet in the known universe that sustains countless life forms!—and collectively we are destroying the very conditions for life. Billions of years in the making, and in less than a century, we're incinerating this precious jewel of a planet which we call home.

As the impacts of climate change worsen, our collective denial will morph into panic. By then—it has been made clear—it will be too late to have any impact on the horror that awaits us all. The time to act is today. Anything short of an emergency-level response to the climate emergency is laughable. The tired argument that pits the economy against climate action is absurd. What good is any kind of economy if we're all dying?

"Only when the last tree has died, the last river has been poisoned, and the last fish has been caught will we realize that we can't eat money." —proverb attributed to the Cree Nation

As leaders in this province, as representatives of all people of Nova Scotia, please, do your job. Lead. Blaze trails. Show Canada and the world that we can meet this formidable challenge with resourcefulness, ingenuity and speed. Please face head on and with eyes wide open, the climate emergency that is banging the door down.

This is an immense opportunity. We can't afford to miss the boat. According to the most conservative warnings, we won't have another chance. This is it.

Respectfully submitted, Seth Levinson East Lawrencetown, NS

Seth Levinson

Anne Stieger

Sent:

October 28, 2019 11:42 AM

To:

Office of the Legislative Counsel

Cc:

Premier; kody@kodyblois.ca

Subject:

Input Bill 213, Sustainable Development Goals Act

** EXTERNAL EMAIL / COURRIEL EXTERNE **

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Dear members of the NS Legislature,

I am writing to provide further input for Bill 213.

I am a young entrepreneur and business counsellor, 32 years old and living in rural Nova Scotia.

This feedback is based on the bill cited as introduced here, as that was the latest version I could find: https://nslegislature.ca/legc/bills/63rd 2nd/1st read/b231.htm?fbclid=IwAR3HJLXxwJY3fwmraG0N7Rp1 Uca m DI5LD8ZLRbk8t-KJ64lHu8dfEuV74

(In the future, more clarity on updates accepted from first hearings would be much appreciated, to ensure citizens can provide informed input!)

First of all, I would like to highlight that the Legislature, in the future, needs to give more notice to all citizens to provide input - posting this on a Friday afternoon quietly and having the hearing the following monday is not acceptable, and not supportive of a strong, healthy democracy.

Secondly, I would like to say that I appreciate many of the efforts made in this act, including the reference to the sustainable development goals, concept of inclusive economy and Netukulimk.

A few things I am concerned about, and suggestions to make this bill stronger:

- Section 7 targets
 - 7b
 - the suggested target is too low I would like to see
 - a target of at least 50% below 1990 levels by 2030. This is in line with the 2030 Declaration
 already signed by many Nova Scotian organizations, including many that represent youth (who
 will have to live with the consequences of our current (in)actions)
 - https://ecologyaction.ca/sites/default/files/imagesdocuments/2030%20Declaration%20with%20Signatories%20-%20Aug%2027 0.pdf

• 7c

- this phrasing is ambiguous I agree that we need to be net zero by then, but I would suggest that it include a further reduction target and/or emissions limit, as well.
- We need to further reduce emissions after 2030 and then also use offsets to then arrive at net zero (e.g. measure outlined here
- https://www.drawdown.org/)
- I say this for 2 reasons
 - We need to plan for lag
 - effects in the complex system of the climate which we are impacting, thus it would be safe to plan for a "buffer" of additional reduction
 - This poses an amazing opportunity
 - for Nova Scotia to be a leader in sustainability for rural places and would allow us to create a strong, thriving, green nova scotian economy that would allow us to break free from the vicious cycle we are currently in that is based on unlimited growth &
 - measured by GDP (which is long established to be impossible on a finite planet); that system currently "forces" decision-makers to give natural resources to extraction business in return for jobs or money. Imagine a NS where we are leaders in Green Economy,
 - having created a new sustainable economic model that allows us to thrive as a province! This is our opportunity to set us up strongly for this shift, and to make it a just transition!

- "Netukulimk does meeting this principle
- mean we uphold all of the tenants in the treaties? If not, the act needs to include this. The treaty is
 much more specific and we have not held up our end of this historically.

- · Section 9a (communities
- fund)

- · This is a great idea as
- supports will be needed for this transition. Bridgewater is a great example of what is possible here to support not only communities, but also citizens individually, to ensure this transition is just for all.
- http://www.energizebridgewater.ca/
- I would like to see bolder
- steps here, not only using tax dollars to support this transition, but also forcing large businesses who are big resource users or polluters to be part of the solution: businesses need to start carrying the true costs of their operations (incl. Environmental
- costs & clean-up which are currently often left to tax dollars)

- Section 8d and 2a clean
- inclusive growth & circular economy
 - 2a the concept of circular
 - economy and clean growth (8d) are a decent start, but they are counter-intuitive to the fact
 that we need to act fast and make big shifts this will include shifts in the models and mindset
 we use to measure economic success.
 - · So long as we keep referring
 - to growth, and measure success via GDP, we will not be able to start living within the scientifically well-established planetary boundaries (see University of Stockholm here:
 - https://www.stockholmresilience.org/research/planetary-boundaries/planetary-boundaries/planetary-boundaries.html)
 - Thus, let's stop using the
 - word "growth." (8d) the concept of infinite growth is counter to the fact that we have planetary and resource limits. The concept comes from the financial market economy, which does not account for paying for or managing 'externalities' like waste, pollution
 - or CO2 emissions. This means using this term while trying to lower CO2 emissions is counterintuitive. "Growth" should be replaced with "thriving" to ensure that we grow the economy within planetary limits. The model that's most helpful for understanding this
 - · today is the Doughnut Economy see links below
 - Circular economy (2a) is

- not comprehensive enough for the complexity of our economic and climatic systems, and it is still extraction based; let's look at regenerative economy! Circular economy seems to leave many loopholes. For example, under the circular economy, couldn't coal continue
- to be mined and shipped other places? Wouldn't it still be ok to use massive amounts of energy (and CO2 emissions) to recycle plastic and put more of it out into the environment? It places no limits on how much pollution can be put into the environment while
- · recycling things?

• The

- Doughnut model is more descriptive in terms of providing what we need within the planetary boundaries
- https://www.kateraworth.com/doughnut/.

brief

• article here https://www.theguardian.com/commentisfree/2017/apr/12/doughnut-growth-economics-book-economic-model

and

TED talk here
 https://www.ted.com/talks/kate_raworth_a_healthy_economy_should_be_designed_t
 o thrive not grow?language=en

Overall, my ask is that we set more ambitious targets now to shape a fast & fair transition towards living within the planetary boundaries. Stop telling us it's not possible – it's a matter of the will-power of politicians to stand up for what is needed to provide a liveable future for your citizens - and as a young citizen (Im 32), I expect that the government will do its job to protect a liveable future for me, my nieces, and my unborn children.

Thank you for your time and work on this. We're all in this together, living in the same economy, breathing the same air, and drinking the same water.

Thanks kindly, Anne Stieger

Duncan Ebata

Sent:

October 28, 2019 11:26 AM

To:

Office of the Legislative Counsel

Cc:

Premier

Subject:

Feedback on Nova Scotia's draft climate legislation

** EXTERNAL EMAIL / COURRIEL EXTERNE **

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Dear members of the legislature and Honourable Gordon Wilson,

I'm a business owner and youngish entrepreneur. I've owned sustainable tech companies, marketing companies, I have a rental property business, and I love Nova Scotia. I'm here because of the warmth and power of community here in Nova Scotia.

For starters, thank you for making this bold move to get Bill 213 through, it is critical at this time to set the standards for the next 4 years, not knowing what the next government will do. Thank you for including inclusive economy and "Netukulimk.

Here are some suggestions of how the bill can be more comprehensive:

- "Netukulimk does meeting this principle mean we uphold all of the tenants in the treaties? If not, the
 act needs to include this. The treaty is much more specific and we have not held up our end of this
 historically.
- 2. If our current economy is producing more GHG emissions then is possible for the planet and there are jobs in this, can the act including transitioning those jobs to sustainable jobs and incentivize sustainable entrepreneurship?
- 3. In regards to 7b in Bill 213, at a minimum, our GHG emissions need to be at least 50% below the GHG levels in 1990, given the current climate change research and net zero by 2030. How can the act right a way make sure we make goals within 2 years that enact this? How can the bill expressly provide the conditions for acting right away? Every community in Nova Scotia should be doing what Energize Bridgewater and Glooscap are doing in terms of energy efficiency and alternative energy.
- 4. 9a is a good idea but could go further Ensure that citizens receive adequate support to ensure this is a just transition, and all businesses are asked to do their part (without passing all costs on to the consumer but by using a portion of their profits to ensure they are not negatively impacting the environment, including emissions as well as clean air, water, food, etc.) eg in limiting emissions from home heating Bridgewater example http://www.energizebridgewater.ca/
- 5. 8(d) clean inclusive growth.
 - Let's
 - stop using the word "growth." Growth and infinite growth is tied to the narrative of
 resource economy can continue to extract forever and that any jobs will do, and that if
 the the economy grows we will be prosperous and this simply isn't how it works when
 - we have limits to how much we can extract. The concept of infinite growth is counter to the fact that we have planetary and resource limits. The concept comes from the financial market economy, which does not account for paying for or managing "externalities"

- like waste or GHG emissions. Using this term while lowering GHG emissions is counter-intuitive. "Growth" should be replaced with "thriving" to ensure that we grow the economy within planetary limits. The model that's most helpful for understanding this today
- is: https://www.ted.com/talks/kate raworth a healthy economy should be designed to the hrive not grow?language=en
- 6. 2a: Circular economy good start, but it's not comprehensive enough for the complexity of our economy and it is still extraction and recycling based; let's use regenerative and thriving economy models instead! Circular economy seems to leave many loopholes. For example, under the circular economy, couldn't coal continue to be mined and shipped other places? Wouldn't it still be ok to recycle plastic and put more of it out into the environment? It places no limits or framework for how much pollution can be put into the environment while recycling things? The Doughnut model is more descriptive in terms of providing what we need within the planetary boundaries while meeting the needs of society. https://www.kateraworth.com/doughnut/

Thank you for your time and work on this. We're all in this together, living in the same economy, breathing the same air, and drinking the same water.

Warmly,

Duncan

Duncan Ebata

Social Entrepreneur & Community Builder

Projects at: duncanebata.com/welcome

May it be acknowledged that Wolfville is located in Mi'kma'ki, the ancestral and unsurrendered territory of the Mi'kmaq People. Pronouns: he/him

Alisha Christie

Sent:

October 28, 2019 12:48 PM

To:

Office of the Legislative Counsel

Subject:

Response to bill 213 - Citizen Input

** EXTERNAL EMAIL / COURRIEL EXTERNE **

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Good afternoon,

I am a 22 year-old resent graduate of Acadia University, who grew up in Cumberland county. I am emailing to bring attention to the Bill 213 Legislature considering the new Sustainable Development Goals Act

After reviewing the proposed Act, I would like to excise my right as a citizen to commend the legislature for moving in the direction of a net-zero target. However, I'd like to register my concerns as well.

Concerns are as follows

- 1.
- 2. Citizens were not provided
- an appropriate amount of time to provide citizen input. Especially when it comes to an Act that will have a dramatic impact on citizens.
- 4
- 5.
- 6.
- 7. I care about this act as
- 8. a I am a youth in Nova Scotia who wants to be able to build a life in this province.
- 9.
- 10.
- 11. The targets for achieving
- 12. net zero are too far into the future, they are unacceptable and do not meet true needs.
- 13. We have decisions to make about use of oil and gas reserves, reducing our dependence on carbon based fuels, increasing our reliance on renewable energy, and adopting approaches to utility grids, electric vehicles and regenerative agriculture and forestry,
- 14. along with the planting of millions of trees that need to be accelerated.
- 15.
- 16.

Let's not have Nova Scotia fall as the canary of the coal mine do to our inability to act quick on the climate crisis.

Thank you for considering this input at such a critical time, when very little advance notice was provided about this input.

Signed a concerned citizen, -Alisha Christie

Community Program Designer and Environmental Educator

May it be acknowledged that Wolfville is located in Mi'kma'ki, the ancestral and unceded territory of the Mi'kmaq People. Pronouns: she/her

Jen Hall

Sent:

October 28, 2019 1:22 PM

To:

Office of the Legislative Counsel

Subject:

Feedback: Bill 213

** EXTERNAL EMAIL / COURRIEL EXTERNE **

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To the Law Amendments Committee

Re: Bill 213, Sustainable Development Goals Act

October 28th, 2019

Hello,

My name is Jen Hall, and I am a resident of Halifax. I am writing to express some concerns I have about Bill 213, the Sustainable Development Goals Act, as it currently stands.

Section 2 (a): The definition of "circular economy" used in this Bill falls short of the more generally accepted meaning of the term, in my view. The term 'circular economy' originated in the 1970s and has been popularized by the Ellen MacArthur Foundation and numerous academics. It is generally taken to mean an economy which relies on closed-loop manufacturing systems, which minimize both the inputs of resources and outputs of waste by taking the waste products from one system and using them as food for another. The idea of the circular economy exists in opposition to the linear economic model where resources are harvested, consumed in the making of products, and then thrown 'away' at the end of their lifespan. The definition used in this Bill does not include any mention of closed-loop systems or the reuse of waste products as resources for other systems. Instead, it focuses on extracting the maximum value from all resources used, which, while laudable, is still in line with the linear economic model that we have now. In a true circular economic model, the waste from a particular product is foreseen and factored into the design of a system of production at the beginning; waste is not a byproduct that needs to be investigated for recoverable resources, but an integral part of the system.

- 2 (h) The definition of 'sustainable prosperity' sounds very nice, but there is an increasing body of evidence suggesting that continued economic growth is not sustainable, and is in fact responsible for a lot of greenhouse gas emissions. I am concerned that the focus on 'economic growth' will, again, trump efforts to cut greenhouse gas emissions, as the actions that we have to take in order to reduce our carbon emissions will inevitably have economic impacts. I personally would like to see the language of 'economic growth' removed from this Bill if possible. For this reason, I am skeptical of the long-term objective for the province set out in 5 (1).
- 4 (a) It is lovely to see the Mi'kmaq concept of Netukulimk included in this Bill. However, I am deeply concerned by the fact that this Bill makes no mention of respecting Indigenous rights and sovereignty, which are integral parts of addressing the climate crisis and creating an 'inclusive economy'. The closure of Alton Gas, and the closure of Boat Harbour are two concrete steps the government could take to reduce Nova Scotia's environmental impact while also supporting the well-being and prosperity of the Mi'kmaq. I am concerned that this Bill and this government will pay lip service to Mi'kmaq knowledge and presence by including this concept, while simultaneously failing to respect their rights and sovereignty.

5 (2) In my view, the actions proposed by the government towards achieving 'sustainable prosperity' are insufficient and fail to address the severity of the crisis that we face. "Raising awareness", "programs", and "initiatives" to "encourage" Nova Scotians to make progress towards sustainable prosperity are a waste of time if we do not successfully cut our greenhouse gas emissions. I am disappointed that the government does not have more concrete plans of action to suggest, and I am disappointed that the government is still focused on raising awareness of this issue when the time for that has long since passed.

7 (a) (b) (c) The greenhouse gas reduction targets proposed in this act are (as I'm sure you will hear from many other people) insufficient. The EAC recommends a reduction of GHGs of 50% below 1990 levels, or 58% below 2005 levels, which will give us the best chance of keeping global heating to 1.5 degrees above pre-industrial levels.

I am also deeply concerned by the fact that there is no plan indicating how we will reduce emissions. There is a plan in this Bill to promote 'sustainable prosperity', vague as it may be, but our number one priority needs to be reducing GHG emissions, and fast. The IPCC report argues that the largest cuts to our emissions need to happen as fast as possible, and any legislation made by this government needs to reflect this fact. I would love to see a plan for the next decade (which is all the time we have left to avert catastrophic global heating) with yearly targets for reductions in emissions. For this reason, I do not believe that annual reports by the Minister to the House, as explained in 12 (1), are anywhere near sufficient. The pace of the changes we need to make is such that monthly reports would be more appropriate, if not weekly.

Please understand that I am writing as a young person (I'm 25) whose life will be deeply impacted by the decisions we make now. I have been watching governments fail to adequately address climate change for my entire life, and I am very frustrated by the lack of understanding and inaction that is endemic in government around this issue. This may be the most important bill passed in this sitting of the Legislature, and I implore you to open yourselves to feedback from the public and take the time to get this right. We can no longer avoid doing what must be done.

T	hai	nk	yo	II.
	IIU	1111	YU	u,

Jen Hall

Wendy Watson Smith

Sent:

October 28, 2019 2:21 PM

To:

Office of the Legislative Counsel

Subject:

Fwd: Bill C-21

** EXTERNAL EMAIL / COURRIEL EXTERNE **

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Correction Bil213

----- Forwarded message -----

From: Wendy Watson Smith

Date: Mon., Oct. 28, 2019, 2:07 p.m.

Subject: Bill C-21

To: <legc.office@novascotia.ca>

You have stated that we are in a climate emergency and yet your targets for carbon reduction do not come close to what is needed.

Mitigating factors such as tree planting instead of deforestation is vital. And the way that biomass production is done in this province is anything but green technology.

Development of gold mining and open pen fish farming go contrary to protecting our environment and are completely unsustainable.

Honor the Boat Harbour Act and Clean up and Green Up this Act.

Wendy Watson Smith

Mushaboom Harbour

Ruth Waters

Sent:

October 28, 2019 5:30 PM

To:

Office of the Legislative Counsel

Subject:

Sustainable Action Plan

** EXTERNAL EMAIL / COURRIEL EXTERNE **

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While I applaud the fact that there is a proposed climate change action plan- it is far too slow and definatly the bar is set waaaaay too low. Please rethink.

M.Ruth Waters

Sent from my Bell Samsung device over Canada's largest network.

Tony L

Sent:

October 28, 2019 5:46 PM

To:

Office of the Legislative Counsel

Subject:

environment bill 213

** EXTERNAL EMAIL / COURRIEL EXTERNE **

Exercise caution when opening attachments or clicking on links / Faites preuve de prudence si vous ouvrez une pièce jointe ou cliquez sur un lien Hello,

As the province moves to stop climate change, we need to also stop stores from being open day and night seven days a week. These stores with the lights on burn fossil fuels. You can go in these stores a number of times and no one is shopping. Lights to contribute to climate change. Street lights that are on all night also contribute to climate change. Why not have sensor lights? If there are no movements the lights will go off. Lights are no different than plastic. This also contributes to the climate crisis. Why not bring back a ban on Sunday shopping? Close stores an evening a week and have stores open no later than 9 or 10? We are in a climate emergency, lets not pick and choose. Mother nature will do it if government does not.

Tony Lohnes

Blockhouse, N.S



Virus-free. www.avast.com

Joan O'Keefe

Sent:

October 28, 2019 6:03 PM

To:

Office of the Legislative Counsel; Honourable Lena Metlege Diab (Lib)

Subject:

Bill 213

** EXTERNAL EMAIL / COURRIEL EXTERNE **

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Dear Legislators,

I hope that the Ssstainable Development Goals Act will be stronger and clearer and lived out well.

I am sorry this Bill 213 was introduced on Friday and Law Amendments was in session today...well I think it was. I did not know until late last night, got notes from friends today...So many of us were at our "day jobs" and not able to rearrange commitments on short notice and not be sure we could get on the agenda this afternoon if calling this morning.

Thank you for your attention to this Bill. I hope and pray it will be stronger.

Sincerely,

Joan O'Keefe sc

Sustainable Development Goals Act - Law Amendments submission Karen McKendry, in part representing the Environmental and Sustainability Education Caucus October 28, 2019

Good morning. My name is Karen McKendry, and among other things, I am an environmental educator. I moved to Nova Scotia in 2005 to work on a Master's degree at Dalhousie University. Outside of school, I was keen to engage kids in hikes and nature-based activities in the wilds of Nova Scotia, but found there was no organization focused on this in the province. So I founded my own – the Young Naturalists Club, a nature club for kids and families that teaches people about the wild species and spaces of Nova Scotia. As I got more involved in the environmental education movement in the province, it became apparent that there were some glaring holes in environmental education in Nova Scotia. Unlike other provinces, environmental education was not enshrined in the public school curriculum here, and there were few opportunities for adults to engage in environmental education in their workplaces, or personal lives.

Environmental education is simply education about the issues impacting the environment, as well as actions we can take to improve and sustain the world we all depend on. It is a process that allows learners to explore environmental issues, engage in problem solving, and take action in an informed way. It covers topics like climate change, biodiversity loss, clean energy, pollution, waste and recycling, and more. Environmental education is NOT advocacy from a particular point of view. Rather, it focuses on examining environmental issues from different points of view, and encourages critical thinking and problem solving in advance of action. Environmental education creates leaners who with higher environmental literacy – their improved understanding of the natural world and their role in it gives them the skills and motivation to make responsible decisions that considers their relationships to natural systems, communities and future generations. It lends itself well to exactly the kind of emphatic and multi-disciplinary approaches that we are realizing we need in a swiftly changing world.

Recognizing that the environmental literacy gaps in Nova Scotia would not be addressed by my actions alone, I joined Nova Scotia's Environment Education Caucus, now called the Environmental and Sustainability Education Caucus. This network of educators – both in classrooms and outside the school system – strives to raise the profile of environmental education and sustainability education, and improve the capacity for teachers and learners to access great quality programs. The groups involved in the caucus have visited hundreds of classrooms over the years, with their curriculum-linked environmental education programs, thanks to interested, resourceful teachers who saw the value of

environmental education. We have given talks for teachers in training, and most recently put on our second professional development day for teachers and educators entirely focused on environment education programs that teachers can access across Nova Scotia. But we're always on the outside looking in – without a requirement to seek out environmental education resources and programs, only a fraction of teachers have discovered what we have to offer, and the extensive world of environmental education resources that can be brought into the classroom.

In 2007, while I was still a grad student and just getting the Young Naturalists Club off the ground, a new piece of provincial legislation was introduced – the Environmental Goals and Sustainable Prosperity Act. I was SO EXCITED! Here I was, in Nova Scotia, right while the country's most ambitious goals around many aspects of the environment were about to be enshrined in law! I read the wording of the new Act and found it both inspiring... and lacking in one way. I had just learned of the Law Amendments feature of the legislative process in Nova Scotia, and so mustered up all the courage I could, and signed up to speak to the Law Amendments committee about EGSPA. In my comments, I commended political leaders on bringing forward this progressive, needed piece of legislation, but pointed out that "This Act tells us what we have to do, and when we have to do it by, but not why. It is lacking a vital component — and that component is environmental education." Environmental education would connect the dots for people — why we need to take the specific actions described in the Act in order to both prosper financially and conserve and restore the natural systems that sustain us.

Twelve years later, the Act is now being renewed and replaced, and there is still a serious lack of prioritizing environmental education, and Nova Scotia is now a laggard on this front. In the last 12 years, the British Columbia Ministry of Education developed curriculum maps to aid in teaching environmental education across all grade levels. Ontario enacted a policy in 2009 to guide incorporation of environmental education into *all grades* and in *all subjects*. They crafted a set of Standards for Environmental Education, and incorporated learner expectations for every grade level, and every subject, by 2017. Both Ontario and BC introduced teachers to networks that support bringing environmental education into the classroom, networks just like the ESEC here in Nova Scotia. And in New Brunswick, more than \$8.4 million of the funds the province collects through their Environmental Trust Fund will go this year to many community-based environmental education projects, and research initiatives. We have an Environmental Trust Fund in Nova Scotia too... but it just sits dormant every year, even though its original purpose was to fund environmental education and other conservation projects.

Environmental education is not new, and its needed more than ever before. The public school system is where the largest population of learners are educated, and those learners are going to be the citizens and leaders of Nova Scotia in an increasingly unfamiliar future. We can better equip students with the knowledge and skills they need to work on environmental issues, if this Act states environmental education as a priority. Currently, the word "education" does not appear in bill 213 at all. Specifically, I recommend that environmental education be included in section 4, the principles section. It could be added as clause 4 a) v). The Act could be changed to state:

"This Act is based on the following principles:

- (a) the achievement of sustainable prosperity in the Province must include all of the following elements:
- (i) Netukulimk,
- (ii) sustainable development,
- (iii) a circular economy,
- (iv) inclusive economy, and
- v) environmental education."

Improving environmental education, for youth and adults, is foundational for achieving the aims of the Act, including over the long term. There are a variety of creating ways to do this, and I want to be a part of conversations that explore these options, and the conversations around the regulations stemming from the Act. For example, Ontario created a working group, led by Canadian astronaut and educator Roberta Bondar, to develop a policy framework for bringing more environmental education into Ontario's public schools. The province of New Brunswick worked with a local academic to create a plan for how to implement aspects of the province's Climate Change Action Plan through environmental education, awareness, and capacity building.

Improving everyone's understanding of the natural world, and our relationships with it, is possible, and essential to becoming a more sustainable society. I also view it as crucial to achieving the aims and ultimately the goals that will come from this Act. The Sustainable Development Goals Act takes Nova Scotia in a more sustainable and successful direction. However, this it will only be effective and supported if we all understand WHY we are doing this – environmental education answers that question. How awful would it be to gain national recognition as a "green and sustainable province," and

when an average Nova Scotian is asked why their home province took this bold step, they say "I don't

know."

Thank you for your time and consideration. I've brought for you a more detailed definition of

environmental education and an explanation of why it is needed in the new Act, and I encourage you to

get in contact with me or any other member of the environmental education community on how the

wording of this Act can be improved, and how regulations that support environmental education could

be developed.

I've also brought a little treat for you, if you can answer some questions from me:

Bonus questions:

I've brought some cookies that are sweetened with maple syrup. From what species of maple does

maple syrup come from? Name another species of maple native to Nova Scotia.

Some of the cookies are in the shape of acorns. From what kind of tree to acorns come from? Many

species of wildlife are attracted to and feed on acorns in the fall, from deer to weevils. Also of note, the

word "acorn" was removed from the Oxford Junior Dictionary in 2015. Apparently it is no longer being

used as often by children, compared to some more modern words like "broadband." If we don't make

learning about nearby nature a priority in our school system, we contribute to the demise of

appreciating our natural world.

Appendix: Why Environmental Education in EGSPA

EAC Proposed Goals for a renewed EGSPA:

"Goal #10: Integrate Environmental and Biodiversity Education into the provincial public school curriculum by 2023."

What is environmental education (EE)?

- o "A process that allows learners to explore environmental issues, engage in problem solving, and take action to improve the environment" (USEPA)
- "It ensures all students will have many opportunities to acquire the knowledge, skills, perspectives and practices they need to become environmentally literate citizens." (Ontario MOE)
- "Environmental education raises awareness of issues impacting the environment upon which we all depend, as well as actions we can take to improve and sustain it." (Project Learning Tree)

EE is not...

 Advocacy from a particular point of view. Rather, it focuses on examining environmental issues from different points of view, and encourages critical thinking and problem solving in advance of action.

Why have EE?

Some of the well-studied benefits of EE are:

- EE can deeply engage students in their learning, showing them applicability of their knowledge and skills into their everyday lives and communities.
- o EE is cross-curricular, and can be part of teaching in many subject areas (e.g., math, language arts, social science, physical education, science).
- EE has been proven to improve test scores, and can also make learning more engaging and meaningful, for both teachers and students.
- EE can be an excellent way to incorporate Indigenous world views and ways of knowing into students' learning journeys.
- o Education is the key to addressing environmental and sustainability issues.

Where's EE in the Nova Scotia curriculum?

- EE is not explicitly 50included in the NS curriculum. Currently, interested, resourceful individual teachers work aspects of environmental education into their practice.
- EE does not go against any of the goals of the <u>Atlantic Canada</u> <u>Framework for Essential Graduation Competencies</u>. In fact, incorporating EE would be in-line with learner objectives in the framework, and would support current initiatives to include more inquiry-based learning and place-based learning in classrooms (something that EE is well suited to).

What are barriers to adding EE to the curriculum?

- o In examinations of barriers for teachers in incorporating EE into their practice, the most common challenges are lack of resources, time constraints and heavy workload, and lack of institutional support. These barriers already have partial solutions in Nova Scotia.
 - There is a wealth of both EE classroom resources, and resource people, available to Nova Scotian teachers already, but many teachers are unaware of these resources at their fingertips.
 - EE can be quite cross-curricular, addressing outcomes across several subject areas through one resource or lesson, thereby reducing preparation workload for integrated curriculum teachers.

Has integrating EE into curriculum been successful in other places?

- Yes! Ontario enacted a policy in 2009 to guide incorporation of EE into all grades and in all subjects. They crafted a set of Standards for Environmental Education, and incorporated learner expectations for every grade level, and every subject, by 2017.
- Yes! In 2008, the British Columbia Ministry of Education developed curriculum maps to aid in teaching environmental learning and environmental experiences across all grade levels.
- Both Ontario and BC introduced teachers to networks that support bringing EE into the classroom (Ontario = <u>OSEE</u> and <u>BEAN</u>, BC = <u>EEPSA</u>). There are similar networks in other provinces (including Nova Scotia, the <u>ESEC</u>), and nationally, <u>EECOM</u>).

What is the fit for an EE goal within EGSPA?

- o Important progress on environmental challenges in Nova Scotia has been made because of the goals and timelines set out in the original EGSPA of 2007. What we had to do, and when we had to do it by, was made clear in EGPSA. However, a focus on teaching everyone why taking action is important, and how we are all connected to the natural world, has been lacking in the Act. Environmental education in the public school curriculum, as a goal in the renewed EGSPA, would help to close the environmental literacy gap in Nova Scotia.
- To help create the citizens of tomorrow, who truly understand and strive towards sustainable prosperity, we need to provide young learners with a journey that teaches them about the environment, lets them explore their connections to it, and equips them with the skills take action in favor of sustainability, wherever they go.

Karen McKerly

EAC Proposed Goals for a renewed EGSPA:

"Goal #10: Integrate Environmental and Biodiversity Education into the provincial public school curriculum by 2023."

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- "A process that allows learners to explore environmental issues, engage in problem solving, and take action to improve the environment" (USEPA)
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Why have EE?

Some of the well-studied benefits of EE are:

- EE can deeply engage students in their learning, showing them applicability of their knowledge and skills into their everyday lives and communities.
- EE is cross-curricular, and can be part of teaching in many subject areas (e.g., math, language arts, social science, physical education, science).
- EE has been proven to improve test scores, and can also make learning more engaging and meaningful, for both teachers and students.
- EE can be an excellent way to incorporate Indigenous world views and ways of knowing into students' learning journeys.
- o Education is the key to addressing environmental and sustainability issues.

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What is the fit for an EE goal within EGSPA?

- Important progress on environmental challenges in Nova Scotia has been made because of the goals and timelines set out in the original EGSPA of 2007. What we had to do, and when we had to do it by, was made clear in EGPSA. However, a focus on teaching everyone why taking action is important, and how we are all connected to the natural world, has been lacking in the Act. Environmental education in the public school curriculum, as a goal in the renewed EGSPA, would help to close the environmental literacy gap in Nova Scotia.
- To help create the citizens of tomorrow, who truly understand and strive towards sustainable prosperity, we need to provide young learners with a journey that teaches them about the environment, lets them explore their connections to it, and equips them with the skills take action in favor of sustainability, wherever they go.

My name is Bill Zimmerman. I am a retired P. Eng. and I live in Wolfville.

I graduated from the Massachusetts Institute of Technology with a Masters in Engineering and returned to university to obtain a Masters in Political Science from the University of Hawaii, did further study at the London School of Economics.

In 1972 I attended the first UN Conference on the Human Environment as part of my work on a fellowship studying the importance of human values in technical decision making.

I was on the organizing committee for the People and Energy conference in Halifax in 1975.

My engineering consulting work included nine years with the Institute of Man and Resources in PEI which, among many achievements, established Canada's first wind test site.

I was a participant in the Science Council of Canada's Soft Energy Path Study and a founding member of the Associate Committee on Solar Energy for the National Research Council.

As a Town Councillor in Wolfville from 2004 to 2012, I chaired the UNSM Green House Gas Reduction Committee, which later became the Sustainable Practices Committee, from 2005 to 2007 and served on the Ministers Advisory Council on Energy Efficiency and Conservation 2007-2009 representing UNSM.

I attended UN COP 11 in Montréal representing UNSM in 2005.

I share this with you because while I, like so many millions around the Globe, am also given hope by the inspirational work of Greta Thunberg, I am old enough to be her grandparent and I just wanted you to know that, with my life partner, I have been at this for over 50 years now, in my case both in a professional capacity but also as an active citizen.

I bring this background to this hearing on Bill 213, the Sustainable Development Goals Act.

I must admit that I am troubled by the use of "prosperity" throughout the Bill. The word has connotations of the "fairy tales of eternal economic growth" that Greta challenged in her address before the UN. Thus I take "prosperity" to mean "doing well", in a social context, as "she is **prospering** in that school. "

With my definition of prosperity in mind my comments are as follows:

Section 1

(c) I would suggest that an "inclusive economy" must provide a base level of income so that most people can actually participate in the economy.

Possibly relevant goals:

Child poverty will be eliminated by 2030.

Minimum wage will reach a living wage by 2030

Section 2

(h) I would recommend that "economic growth" be replaced with "economy"

Section 4.

(a) In this section Netukulimk is the key and overriding element. It would be interesting to hear how a Mi'kmaw elder would explain the meaning of Netukulimk.

I certainly endorse the elements and principals subject to my comments on the meaning of an "inclusive economy".

Section 6

(b) I am not sure what is meant by "cleaner" energy or transportation.

Does this mean decarbonizing? If so, why not use that term. At the same time, the decarbonizing of transportation and space heating will require significant changes to our energy infrastructure. This would be much easier if Nova Scotia Power was a publicly owned utility.

Section 7.

- (a) Why is this even in the act?
- (b,c) I find that stating emissions targets based on a % reduction from emissions in a particular year to be somewhat confusing. In recent discussions I have found people using widely varying numbers for emissions in a given base year. At the same time, the choice of a specific base year can make the reductions more or less impressive. I would endorse adopting the EAC goal of no more than 9.8 MT CO2e in 2030 with net zero emissions by 2050.

Section 8

First, what is "clean" growth and precisely what is "growing"? The "Climate Change Plan for Clean Growth" will be a lynchpin of this act and the process of developing it must include broad and meaningful consultation with the Mi'kmaw People, municipalities and the general public.

What role will the Round Table have in this process? How are appointments made to the Round Table? Does it reflect the population of Nova Scotia?

Section 9

There are few details on "The Sustainable Communities Challenge Fund" so it is hard to comment but I am not sure that "competitive opportunities" is the best way to proceed. I would prefer collaboration and co-operation between communities.

Section 12

(1) The annual report should be made to the people of the province, not just the House of Assembly.

Section 14

This section is the key to the success or failure of the act in producing meaningful progress as there are only three stated goals in the Act (all in Section 7, one of which is essentially irrelevant). Presumably other goals will be developed and presented as regulations. The process of determining these goals is very important and should include consultations as in Section 8.

Conclusion

This legislation seems well intentioned but is thin on details of exactly how the government will proceed. The devil is in the "regulations" and the "Climate Change Plan for Clean Growth". There will be difficult choices to make and it is best to have the decision making process as transparent as possible with meaningful participation by the people.



Ecology Action Centre Presentation on Bill No. 213 The Sustainable Development Goals Act

We would like to begin by acknowledging that we are gathered here today on the unceded and unsurrendered territory of the Mi'kmag people.

I am Marla MacLeod, Managing Director of the Ecology Action Centre. I am going to speak more broadly to the Sustainable Development Goals Act and then my colleague Meghan McMorris, Community Energy Coordinator, will speak more specifically to our proposed amendments.

We, the Ecology Action Centre, welcome the renewal of EGSPA, now titled the Sustainable Development Goals Act. We think it is highly beneficial for a society to set some strong environmental, economic and social goals and develop consensus around those goals. EGSPA has done much for Nova Scotia and a renewed Act can do even more in this time of climate emergency, biodiversity crisis and reconciliation. We believe the Act has benefitted rural and urban Nova Scotia and we would ensure that this continues to be the case.

We welcome the recognition in this Act that sustainable prosperity is important to all Departments and that there is a defined role for the Premier. As noted by the Roundtable in their letter, the Sustainable Development Goals Act needs to be at the centre of government operations and policy. There is a clear opportunity to integrate the work of the One Nova Scotia Initiative and that of Sustainable Development Goals Act.

We support an annual progress report and a five year review of the Act.

We welcome the renewal and expansion of the roundtable membership. It is critical to have Mi'kmag, African-Nova Scotian and youth representation at the table. We applaud the sentiment of the inclusion of Netukulimk. We urge authentic consultation with Mi'kmaw communities to fully understand this concept and what it would mean for public policy to implement it fully. We would encourage the province to follow BC's lead and adopt the United Nations Declaration on the Rights of Indigenous Peoples.

We support the title of the Act if the Government is serious about sustainable development. This would include transitioning to a low carbon, green and inclusive economy. This transition needs to happen if we are to address the climate and biodiversity crises and address environmental racism in Nova Scotia.







We do not support creating regulations for the purpose of moving most of goals into the regulations. The original architects put the goals in the Act for a reason. As legislators you can understand the heightened value of having the goals in the Act.

We are proposing 13 new goals for the Act. Some of them are new areas that issue forestry or environmental racism, others are updated versions of existing goals in the Act (both achieved and in progress). We have provided you with a copy of these proposed goals.

We would like to talk specifically about the climate goal. With the adoption of strong climate goals we see the opportunity for the Government of Nova Scotia to work closely with the Federal Government and in particular take advantage of any funding programs.

We also support robust in person consultation on all goals and the rest of the Act. We realize that the time for action on climate was yesterday, but thoughtful and open consultation is important for creating social license and as much consensus as possible. We would suggest that the consultations start as soon as the House rises.

Our first proposed amendment is to Section 7(b) which currently states that the Provincial government will legislate a greenhouse gas emissions target of 53% below 2005 levels, by the year 2030. We, the Ecology Action Centre, propose that the target be amended to 58% below 2005 levels, by the year 2030.

We applaud the government for setting a target of net-zero emissions by the year 2050, but sections 2.4.1-2.4.3 of the IPCC Report clearly state that "the rate at which we decrease GHG emissions will determine whether or not we overshoot 1.5°C or 2°C of global temperature rise". 'Overshoot' refers to a peak followed by a decline in global warming2.

The speed at which we move towards a target of net-zero emissions in 2050 will also determine the extent of the impacts of climate change on Nova Scotia. Therefore, a faster decline in GHG emissions, and a target of 58% below 2005 levels by 2030, will create a higher chance of staying within 1.5°C of global warming, and decrease the potential impacts of climate change within the province.

While all jurisdictions must reduce their GHG emissions, both the IPCC Report and the Paris Agreement state that our emission reduction targets must reflect our fair share. The consideration of jurisdictions doing their fair share comes from the concept of "common but differentiated responsibilities", which was enshrined in the internationally agreed upon United Nations Framework Convention on Climate Change, in 1992. Almost 30 years later, it remains a core piece in 18 sections of the IPCC Report and Article 2 of the Paris Agreement.





According to the independent and scientific analysis, of Climate Action Tracker, a GHG emissions reduction target of 58% below 2005 levels in the year 2030 would represent Canada, and its jurisdictions, fair share. Furthermore, it is the minimum necessary reduction required to be compliant with a 1.5° C global warming target.

Finally, according to a report done by economic consultant Gardner Pinfold, we know that Nova Scotia stands to benefit from almost \$9.8 Billion in added GDP between now and 2030, if it sets a GHG target of 58% below 2005 levels by 2030. Of that \$9.8 Billion, nearly \$6.3 Billion would be added income for Nova Scotians.

Our second proposed amendment is to Section 14 (1) of Bill 213, which refers to public consultations. We propose that it be amended to explicitly specify that the consultations be in-person and participatory.

The IPCC Report states that climate planning and action must be "...implemented in a participatory and integrated manner" (4.3.3, 4.4.1, 4.4.3).

Taking a participatory approach to consultations would involve:

- Knowledge sharing
- Using existing community and sector relationships (I.e. community and network relationships)
- Respecting and leveraging community strengths and resources
- Including communities in the design of the consultations
- Engaging in co-learning and capacity building
- Raising the voices of underrepresented communities and communities currently subject to environmental racism
- And holding consultations based in treaty.

All communities are different. The IPCC emphasizes this in its call to action to have governments pursue "place-specific" pathways, as they have the highest potential for also increasing the well-being of a place (5.3.3). Communities have different strengths, economic realities, comparative economic advantages, power dimensions, existing networks and community groups, concerns about climate change, and needs for climate change education, mitigation and adaptation. The IPCC Report emphasizes that there will be robust differences in the effects of climate change between regions and communities. For this reason, all communities in Nova Scotia must be engaged fully and in a participatory manner, so that sustainable development can occur within the context of their differentiated situations and realities.







Many communities in Nova Scotia are leaders and are already planning and implementing innovative solutions to combat climate change, protect the environment, and foster a green economy. We propose that the Province team up with these leaders to host consultations to continue to build momentum.

Finally, community-based academic research has proven that participatory methods have a higher chance of increasing trust, perceptions of legitimacy, and creating approaches to complex issues, such as sustainable development, that are more likely to succeed.

With GHG targets based in science and fairness, and the robust inclusion of all communities and stakeholders in the development of the goals, the Sustainable Communities Challenge Fund and the Climate Change Clean Growth Strategy, the Sustainable Development Goals Act has the potential to lay the foundation for a future where all Nova Scotians, our ecosystems and biodiversity can thrive. A future where the success of our economy is not at the expense of the well-being of our environment and communities. A future of inclusion, empowerment, innovation and resilience. This is a future worth being bold for. Thank you.





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Brief on Bill No. 213, The Sustainable Development Goals Act **Ecology Action Centre Submission to Law Amendments**

Background:

On October 23, 2019, the Provincial government of Nova Scotia introduced the <u>Sustainable</u> Development Goals Act1, which aims to "achieve environmental goals and sustainable prosperity" within Nova Scotia. Understanding the larger context within which this Act exists, is critical in understanding the amendments that the Ecology Action Centre (EAC) is proposing to the Act.

In 2016, the Paris Agreement was signed by 197 countries, all agreeing that they would pursue efforts to limit global warming to 1.5°C in order to limit the effects of climate change².

In October of 2018, the Intergovernmental Panel on Climate Change (IPCC) published a Special Report on Global Warming of 1.5°C. The report states that globally, governments must take on more ambitious greenhouse gas (GHG) emission reduction targets and pathways in order to avoid irreversible effects of climate change, including flooding, sea level rise, drought, extreme weather events, food insecurity, ocean acidification etc. It also noted, that no signatory to the Paris Agreement had established a GHG reduction target that would limit global warming to within 1.5°C3.

Since the release of the IPCC Special Report on Global Warming of 1.5°C, there has been increasing civil unrest on the subject of climate change. Between September 20-27, 2019, approximately 7.6 million people participated in climate strikes globally. 10,000 people took to the streets of Halifax in protest, and more marched in solidarity in Truro, Middleton, New Glasgow, Antigonish, Sandy Cove, Baddeck and Sydney.

The hundreds of scientists from the IPCC, and the public are calling for more ambition on climate change, and the sense of urgency is unignorable.

Proposed Amendments to the Sustainable Development Goals Act:

Whereas Section 7(b) refers to a 2030 GHG target of 53% below the levels that were emitted in 2005, the EAC proposes it be amended to a GHG emissions reduction target of 58% below the levels that were emitted in 2005, by 2030.

https://www.ipcc.ch/sr15/, Section 2.2, 2.3.5







¹ https://nslegislature.ca/legc/bills/63rd 2nd/1st read/b231.htm

² https://unfccc.int/sites/default/files/english paris agreement.pdf



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The EAC proposes to amend the GHG target for the year 2030 based on concerns raised by both the IPCC report and the Paris Agreement.

First, according to the IPCC Special Report on 1.5°C of Global Warming, "the rate at which we decrease GHG emissions will determine whether or not we overshoot 1.5°C or 2°C of global temperature rise"⁴. 'Overshoot' refers to a peak followed by a decline in global warming, achieved through anthropogenic removal of CO2 exceeding remaining CO2 emissions globally⁵. Despite a decline, following an overshoot, the effects of an overshoot of global warming would still occur and be disastrous.

Section 7(c) of the Act, which sets a target of net zero emissions by the year 2050, is an important step in the right direction, but the speed at which we move towards it will also determine the extent of the impacts of climate change on Nova Scotia. A faster decline in GHG emissions will create a higher chance of staying within 1.5°C of global warming, and not going past it.

Secondly, while all jurisdictions must reduce their GHG emissions, both the IPCC Special Report on 1.5°C of Global Warming and the Paris Agreement state that our emission reductions targets must reflect our fair share. The consideration of jurisdictions doing their fair share comes from the concept of "common but differentiated responsibilities", which was enshrined in the internationally agreed upon United Nations Framework Convention on Climate Changeⁱ, in 1992. Almost 30 years later, it remains a core piece in international climate agreements, and is included in both the Paris Agreement, and the IPCC Special Report on 1.5° C of Global Warming.

IPCC Special Report on 1.5°C of Global Warming:

"Collective efforts at all levels, in ways that reflect **different circumstances and capabilities**, in the pursuit of limiting global warming to 1.5°C, taking into account equity as well as effectiveness, can facilitate strengthening the global response to climate change, achieving sustainable development and eradicating poverty (high confidence). {IPCC-1.4.2, 2.3.1, 2.5.1, 2.5.2, 2.5.3, 4.2.2, 4.4.1, 4.4.2, 4.4.3, 4.4.4, 4.4.5, 4.5.3, 5.3.1, 5.4.1, 5.5.3, 5.6.1, 5.6.2, 5.6.3}" (pg. 23)"

Paris Agreement:

Article 2:

"(a) Holding the increase in the global average temperature to well below 2°C above pre-industrial levels and pursuing efforts to limit the temperature increase to 1.5°C above pre-industrial levels, recognizing that this would significantly reduce the risks and impacts of climate change"

⁵ https://www.ipcc.ch/sr15/, Glossary





⁴ https://www.ipcc.ch/sr15/, Section 2.4.1, 2.4.2, 2.4.3

"2. This Agreement will be implemented to reflect equity and the principle of common but differentiated responsibilities and respective capabilities, in the light of different national circumstances."iii

As noted above, both the IPCC and the Paris Agreement clearly state that targets set by any jurisdiction must be based in science and must also be equitable, meaning they should represent a jurisdiction's fair share. The Climate Action Tracker6 is a collaboration between Climate Analytics7 and the New Climate Institute8. It conducts "independent scientific analysis that tracks government climate action and measures it against the globally agreed Paris Agreement aim of "holding warming well below 2°C, and pursuing efforts to limit warming to 1.5°C.""1v

According to this independent and scientific analysis, a GHG emissions reduction target of 58% below 2005 levels in the year 2030 would represent Canada, and its jurisdictions, fair share. In addition, 58% below 2005 levels by 2030 is the minimum necessary reduction required to be compliant with a 1.5° C global warming target.

Whereas Section 14 (1) refers to public consultations, the EAC proposes it be amended to read "inperson and participatory consultations".

Section 14(1) of the Sustainable Development Goals Act, states that "The Governor in Council shall, after public consultation and before this Act comes into force, make regulations establishing goals to achieve sustainable prosperity consistent with the principles and focus areas set out in this Act"vi.

On October 23, 2019, the Honourable Minister of Environment Gordon Wilson stated that "...as we move forward, expanding on how we consult is important. The online [consultation] was to get a general feel. Consultation will be more extensive"vii.

While there has been language that implies that the consultations that will be held to inform the regulations under the Sustainable Development Goals Act will be more than online consultations, the EAC proposes to include explicit language within the Act, to ensure that consultations are in-person and robust.

Section 4(b) of the Act clearly states that "the achievement of sustainable prosperity is a shared responsibility among all levels of government, the private sector and all Nova Scotians". If the task of sustainable development is a shared-responsibility, then arguably, the development of the parameters and actions that will be developed to achieve sustainable development, must be

⁸ https://newclimate.org/





⁶ https://climateactiontracker.org/

⁷ https://climateanalytics.org/

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inclusive of those who share in the responsibility. The IPCC Special Report on 1.5°C of Global Warming also states that climate planning and action must be "...implemented in a participatory and integrated manner" (4.3.3, 4.4.1, 4.4.3).

Taking a participatory approach to consultations would involve greater involvement of those who affect, and are affected by, sustainable development. Participatory consultations would involve:

- Knowledge sharing
- Using existing relationships (I.e. community and network relationships)
- Community strengths and resources
- Co-learning and capacity building

Sharing knowledge in an engaging and inclusive way, will:

- Illuminate situated knowledge and innovation
- Reveal social, economic and political contexts
- Reveal Interplay of evidence and power

All communities are different. The IPCC emphasizes this in its call to action to have governments pursue "place-specific" pathways, as they have the highest potential for also increasing the well-being of a place (5.3.3). Communities have different strengths, economic realities, comparative economic advantages, power dimensions, existing networks and community groups, concerns about climate change, and needs for climate change education, mitigation and adaptation. The IPCC Special Report on 1.5°C of Global Warming emphasizes that there will be robust differences in the effects of climate change between regions and communities. Differentiated effects of sea-level rise, flooding, drought, ocean acidification, decreased aquaculture and ecosystem services, extreme weather events, and species loss, will impact Nova Scotian communities differently depending on their current vulnerabilities.

For this reason, all communities must be engaged fully and in a participatory manner, so that sustainable development can occur within the context of their differentiated situations and realities.

Finally, community-based academic research has proven that participatory methods have a higher chance of increasing trust, perceptions of legitimacy, and creating approaches to complex issues, such as sustainable development, that are more likely to succeed^{viii}.

In the midst of calls to action, and deep feelings around fairness with regards to climate change, it is critical that the provincial government undertake the Sustainable Development Goals Act consultations in an inclusive and participatory manner.







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https://unfccc.int/resource/docs/convkp/conveng.pdf,

Knowledge/Dokumente_Dateien/Toolbox/LK_A_Participatory_Methods.pdf





https://www.ipcc.ch/site/assets/uploads/sites/2/2019/05/SR15_SPM_version_report_LR.pdf

^{**} https://unfccc.int/sites/default/files/english_paris_agreement.pdf

https://climateactiontracker.org/about/

v https://climateactiontracker.org/countries/canada/

vi https://nslegislature.ca/legc/bills/63rd_2nd/1st_read/b231.htm

vii Bill 213 Announcement and Briefing, 11:45am, Red Room

viii https://www.livingknowledge.org/fileadmin/Dateien-Living-

Press Release Backgrounder

The recently announced Sustainable Development Goals Act includes a legislated climate target of reducing greenhouse gas (GHG) emissions by 53% below 2005 levels by 2030. This is currently the most ambitious GHG reduction target in Canada, but is still insufficient. Several European countries have set more ambitious targets, and the science and international agreements are clear in stating that Nova Scotia must do more.

For over two years, the Ecology Action Centre has advocated that Nova Scotia should have a legislated GHG reduction target of 50% below 1990 levels by the year 2030. This target represents the minimum emission reductions required by Canadian jurisdictions in order to do our fair share of keeping global temperature rise to below 1.5°C. This considers Nova Scotia's fair share of reductions, based on the internationally agreed upon understanding that all jurisdictions have "...common but differentiated responsibilities" based on economic ability, current emissions and historic emissions.

Comparison of Targets

2030 Targets	Reduction from 1990 Base Line	Reduction from 2005 Base Line	Million Tonnes of Provincial CO2e/yr
New Provincial Target	43%	53%	11.2
EAC Target	50%	58%	9.8

According to these targets, in the year 2030, Nova Scotia will emit 11.2 Mt CO2e. If the EAC target was adopted, the emissions in the year 2030 would be 9.8 Mt CO2e.

Why a Difference of 1.4 Mt CO2e Matters

According to the Intergovernmental Panel on Climate Change's (IPCC) Special Report on 1.5°C of Global Warming, "the rate at which we decrease GHG emissions will determine whether or not we overshoot 1.5°C or 2°C of global temperature rise" (p. 15). This means that in the context of getting to net-zero global emissions by 2050 the most rapid decreases in emissions should happen as soon as possible, rather than being delayed.





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Scientific Targets vs Equitable Scientific Targets

The IPCC Special Report on 1.5°C of Global Warming states that "global net anthropogenic CO2 emissions [must] decline by about 45% from 2010 levels by 2030 (40–60% interquartile range), reaching net zero around 2050 (2045–2055 interquartile range)" (pg. 12). For Nova Scotia, 45% below 2010 is equivalent to about 53% below 2005, which is the target found in the Sustainable Development Goals Act.

This target, however, ignores the fact that Canada and Nova Scotia have a greater obligation to reduce emissions than the global average. Figure 1 highlights that not all countries have the same level of emissions.

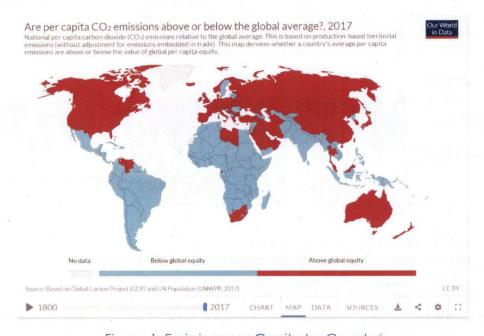


Figure 1. Emissions per Capita by Countryii

While all countries must reduce their emissions, both the IPCC Special Report on 1.5°C of Global Warming and the Paris Agreement state that our emission reductions targets must reflect our fair share, and reflect that some jurisdictions emit more than others, and some have the monetary ability to reduce emissions faster. The consideration of jurisdictions doing their fair share comes from the concept of "common but differentiated responsibilities", which was enshrined in the internationally agreed upon United Nations Framework Convention on Climate Changeⁱⁱⁱ, in 1992. Almost 30 years

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later it remains a key piece in international climate agreements, and is included in both the Paris Agreement, and the IPCC Special Report on 1.5° C of Global Warming.

IPCC Special Report on 1.5°C of Global Warming:

"Collective efforts at all levels, in ways that reflect different circumstances and capabilities, in the pursuit of limiting global warming to 1.5°C, taking into account equity as well as effectiveness, can facilitate strengthening the global response to climate change, achieving sustainable development and eradicating poverty (high confidence). {IPCC-1.4.2, 2.3.1, 2.5.1, 2.5.2, 2.5.3, 4.2.2, 4.4.1, 4.4.2, 4.4.3, 4.4.4, 4.4.5, 4.5.3, 5.3.1, 5.4.1, 5.5.3, 5.6.1, 5.6.2, 5.6.3\" (pg. 23)\"

Paris Agreement:

Article 2:

- "(a) Holding the increase in the global average temperature to well below 2°C above pre-industrial levels and pursuing efforts to limit the temperature increase to 1.5°C above pre-industrial levels, recognizing that this would significantly reduce the risks and impacts of climate change"
- "2. This Agreement will be implemented to reflect equity and the principle of common but differentiated responsibilities and respective capabilities, in the light of different national circumstances "v

Nova Scotia's Fair Share

According to both the IPCC and the Paris Agreement, targets set by any jurisdiction must be based on science and must also by equitable, meaning they should represent a jurisdiction's fair share. The Climate Action Tracker is a collaboration between Climate Analytics and New Climate Institute. It conducts "independent scientific analysis that that tracks government climate action and measures it against the globally agreed Paris Agreement aim of "holding warming well below 2°C, and pursuing efforts to limit warming to 1.5°C.""vi

According to this independent analysis, global warming could reach over 3°C and up to 4°C if all countries in the world emitted the same amount as Canadavii. Furthermore, it states that "Canada's climate commitment is at the least stringent end of what would be a fair share of global effort, and is not consistent with the Paris Agreement's 1.5°C limit, unless other countries make much deeper reductions and comparably greater effort."viii

Figure 2 illustrates that Canada's policies are insufficient with keeping global warming at or below 1.5°C or 2°C of warming, and presents confidence ranges for emissions reductions for 2.0C and 1.5Ccompliant pathways. This shows an estimated value of 50% below 1990 levels by 2030 to be the minimum reductions necessary to be compliant with a 1.5C target.







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Figure 2. Climate Action Tracker, Canada Profile (Retrieved Oct. 21, 2019)

While the target found in the Sustainable Development Goals Act (53% below 2005 levels by 2030) is the most ambitious in the country, it still does not set us on a pathway of keeping global warming within 1.5°C or 2°C of warming.

Is it Possible?

Globally, there are countries who are have set more ambitious GHG reduction targets than the one advocated for by the EAC. The following countries are on track for achieving their targets and are leading the way in demonstrating that it is, in fact, possible:

United Kingdom: 57% below 1990 by 2030





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Germany: 55% below 1990 by 2030

Norway: Carbon neutral by 2030

Conclusion

Both the IPCC Special Report of Global Warming of 1.5°C and the Paris Agreement state that GHG targets must be based in science and must represent a jurisdiction's fair share. A legislated target of 53% below 2005 levels by 2030, for Nova Scotia, is a failure on both of these key components because it sets us on track to overshoot 2 degree C of global warming and it is not based on our differentiated responsibility and capability. For this reason, the EAC continues to advocate for a legislated target of 50% below 1990 levels by 2030 (equivalent to 58% below 2005 levels by 2030).





Overshoot implies a peak followed by a decline in global warming, achieved through anthropogenic removal of CO₂ exceeding remaining CO₂ emissions globally. See also Overshoot pathways and Non-overshoot pathways (both under Pathways). (IPCC Glossary)

https://ourworldindata.org/share-co2-emissions

https://unfccc.int/resource/docs/convkp/conveng.pdf,

https://www.ipcc.ch/site/assets/uploads/sites/2/2019/05/SR15_SPM_version_report_LR.pdf

v https://unfccc.int/sites/default/files/english_paris_agreement.pdf

vi https://climateactiontracker.org/about/

vii https://climateactiontracker.org/countries/canada/fair-share/

viii https://climateactiontracker.org/countries/canada/fair-share/



Thirteen Goals to Advance the Environmental and Economic Wellbeing of Nova Scotia

What have Environmental Goals Done for Nova Scotia?

The Environmental Goals and Sustainable Prosperity Act became law in Nova Scotia in 2007. It had the backing of all parties in the Legislature and continues to enjoy all party support. The Act was innovative in its integration of environment and economy and the first to enshrine these kinds of goals in legislation. To this day, there is no comparable legislation in Canada, and perhaps North America.

Setting and meeting climate and other goals has resulted in a number of benefits for Nova Scotia:

- Environmental benefits: Almost 13% of Nova Scotia's land is now protected, and nearly 40% of our electricity will be from renewable sources by 2020.
- Economic benefits: Investments in energy efficiency, renewable energy, local agriculture, and eco-tourism are creating thousands of jobs and entrepreneurial opportunity for Nova Scotians.
- Policy benefits: Strong, clear climate and environmental targets have helped to place Nova Scotia in a leadership position in reducing GHG emissions in the past and can help our Province regain this lead when it is most needed and beneficial in the years to come.
- Province-wide benefits: Goals on local food, renewable energy efficiency, water quality and more have brought economic and environmental benefits to communities across Nova Scotia.

The green and sustainable economy is one of the fastest growing and vibrant areas of the Nova Scotian and global economies. If well managed, the green economy can be a source of technological and product innovation and entrepreneurial opportunity, that attracts and retains immigrants and youth, and benefits both urban and rural communities in Nova Scotia.

What More Could Goals Do?

Our planet is experiencing a climate and biodiversity crisis. A renewed Act with ambitious and legislated goals would help ensure healthy, vibrant and sustainable communities for all Nova Scotians, by addressing these ecological challenges through a just transition to a more sustainable economy. Nova Scotia is uniquely positioned to be a world leader in working toward a sustainable future.





With the integration of inclusion, equity and justice in the Act, Nova Scotia can ensure that a transition to a cleaner and greener economy benefits all Nova Scotians. We invite Nova Scotians to consider how a renewed Act could advance reconciliation and social cohesion in Nova Scotia, honouring the Peace and Friendship Treaties, the UN Declaration of the Rights of Indigenous Peoples and the Calls to Action from the Truth and Reconciliation Commission.

The Government of Nova Scotia recently released an action plan to support the International Decade of People of African Descent and advance equity for African-Nova Scotians. A renewed act can support and align with this initiative.

Not all people are affected equally by environmental issues. Climate change exacerbates the existing disparities and inequities within our communities. We must meet all environmental and climate goals, and transition our economy, in a way that recognizes the structural inequities of race, gender, income, ability, and the ongoing impacts of colonization and environmental racism in our province.

This means that those who already face greater risks, will be impacted the more by environmental and climate change issues, and they will benefit the least from actionable progress. It is critical then that communities deeply affected by environmental issues should be highly involved throughout decision-making processes in meaningful and culturally appropriate ways, and that solutions to these collective problems are designed specifically to benefit these communities.

Our transition must centre the rights of Mi'kmaw people and follow treaty rights and responsibilities under the Peace and Friendship Treaties here in Mi'kma'ki. Our transition must also centre the voices of African Nova Scotians and other peoples at the margins. Finally, our transition must respect traditional and local perspectives, knowledge and experiences, and the findings of inclusive, accessible, transparent, culturally appropriate, and timely consultations. Together, we must work toward a fair, sustainable, and prosperous future to ensure we leave no one behind.

The Government of Nova Scotia recently released an action plan to support the International Decade of People of African Descent and advance equity for African-Nova Scotians. A renewed act can support and align with this initiative.

We have set out 13 possible new goals below, which we believe will result in significant environmental, economic and social benefits for our Province. We think these goals would be strong goals for Nova Scotia to adopt, but we also offer them in the spirit of fostering dialogue. The following goals will ensure that:

Reduced GHGs







The Province Reduces Greenhouse Gas Emissions to 50% Below 1990 Levels by 2030.

Nova Scotia's current climate goals are not science-based, do not reduce emissions enough to avoid catastrophic climate change, and are not legislated. Meeting this new goal would put Nova Scotia in line with its fair share of emissions reductions to keep global warming below the Paris Agreement's target of 1.5°C. This goal is supported by more than 40 other organizations through the 2030 Declaration and would create more than 180,000 jobsyears in Nova Scotia between now and 2030. This is an overarching goal that would be met by reaching EAC's other climate and energy goals.

Renewable Energy

90% of Nova Scotia Electricity Needs are Supplied with Renewable Energy by 2030

In 2017, Nova Scotia still relied on coal for about 55% of its annual electricity needs and now has the dirtiest electricity grid in Canada. Dramatically decarbonizing Nova Scotia's electricity grid is technically and economically possible by displacing coal, oil and largescale biomass with increased levels of domestic wind, imported hydro, solar, small-scale biomass and community-scale projects. This goal is a key mechanism to reduce our province's overall GHG emissions and will ensure fewer Nova Scotians are made sick or die by air pollution each year. Meeting this goal would create more than 35,000 jobs-years in Nova Scotia between now and 2030.

Reducing Energy Poverty

100% of Eligible Social Housing Net-Zero is Energy Ready (NZER) by 2030

This goal will help Nova Scotians living in social housing save energy, save money and be more comfortable in their homes- thereby contributing to their quality of life and reducing energy poverty within the province. This goal is achieved through reducing energy consumption in all eligible existing social housing by 60% or more, and ensuring all new construction is built to NZER standards. This goal would create more than 9,000 jobs-years in Nova Scotia between now and 2030.

Energy Efficiency

The Province Increases the level of total electricity system efficiency (Demand Side Management) to 3% per year by 2030

Nova Scotia has a strong history of energy efficiency programming, but we consistently limit ourselves in what is possible to save energy, create jobs, address energy poverty and make all Nova Scotians more comfortable in their homes. Increasing the level of total electricity system efficiency to 3% per year by 2030 would nearly triple the work happening in the efficiency sector. This can be achieved by purchasing more demand-side management programming through Efficiency Nova Scotia

Zero-Emission Vehicles



Nova Scotia will sell 100 per cent zero-emission vehicles by 2040, with sales goals of 10 per cent by 2025 and 30 per cent by 2030 along the way.

The 27% of GHG emissions in Nova Scotia are from the transportation sector. Electric vehicles are approximately 50% cleaner than single combustion engine vehicles and will increase as the energy grid shifts to renewables. A commitment to selling electric vehicles is needed in order to reduce our carbon emissions from the transportation sector and increase the number of vehicles sold in Nova Scotia.

More Green Jobs

Nova Scotia will Create 15,000 green jobs every year between now and 2030

Meeting the first five goals alone will substantially increase the economic prosperity of the green economy in Nova Scotia and aim to create over 15,000 green jobs per year in the province by the year 2030. These jobs are "green" owing to their focus on development of renewable energy resources, saving energy through efficiency and reducing energy consumption. Not all the jobs are incremental (new additions) since some result from the changing nature of work done by Nova Scotians ("green shifting"). The Just Transition for workers in Nova Scotia should be front-and-centre in the planning toward the opportunities in this growing, green economy.

Zero Waste

Nova Scotia will achieve zero waste by 2030 through the creation of a circular economy. Atlantic Canadians want to see action on plastics and other waste. Nova Scotia has the opportunity to reclaim a leadership role in waste reduction and recycling through the expansion of extended producer responsibility programs, product bans and other measures. A strong goal would spur the expansion of the recycling industry and encourage companies looking to address the plastic crisis.

Climate Adaptation in Communities

The Province will build climate change adaptive capacity and resilience by making resources available to Nova Scotia municipalities to take action on their adaptation priorities by 2022.

In 2013 municipalities across Nova Scotia developed Municipal Climate Change Action Plans (MCCAPs) focused on how their municipality planned to respond to climate change. These plans are a great resource for Nova Scotia. They need to be updated to reflect current climate science and the concerns of communities disproportionally affected by climate change. A provincial Climate Change Action Fund funded by Nova Scotia's Cap & Trade Green Fund and which also leverages additional Federal Government funds would make it possible for municipalities to implement the plans and achieve their adaptation priorities.





Ensure Environmental Equity

The Province will establish a Provincial Environmental Equity Working Group to address inequities in climate action and adaptation, and foster resiliency in 2020.

The Environmental Equity Working Group will have representatives from multiple provincial departments, impacted communities, community groups and academia and will prioritize the active participation of Mi'kmaw and African-Nova Scotian communities in decisionmaking, recommendations and actions. The Working Group would be mandated to engage those communities who are disproportionately impacted by climate change to cocreate solutions that support climate change adaptation and fair inclusion within the changing economy and explicitly focus benefits to those communities. Approaches would honour the resilience and resourcefulness of communities as part of environmental sustainability.

End Environmental Racism

The Province will update its existing environmental decision-making process to include a race-equity lens by 2021.

The purpose of the race-equity lens is to ensure that hazardous industries and waste sites are no longer disproportionately sited near or in Mi'kmaw and African-Nova Scotian communities. By 2022, the government will identify and facilitate remediation of sites, so that the long history of environmental racism is no longer a factor in Nova Scotia. This will be accomplished in partnership through shared decision making with Mi'kmaw and African-Nova Scotian communities.

Protecting Areas

At least 17 percent of the total land mass of Nova Scotia is legally protected by 2025.

A major new United Nations Report finds that "nature is declining globally at rates unprecedented in human history – with over a million species at immediate risk and the rate of species extinctions accelerating, with grave impacts on people around the world." This rapid decline in species is also happening here in Nova Scotia. Canada is a signatory to the Convention of Biological Diversity which commits to 17% land protection nation-wide (Canada Biodiversity Target 1), and Nova Scotia has the ability to protect species and conserve ecosystem services, through more protected areas.

Sustainable Forestry

The Province will implement the Independent Review of Forestry Practices (The Lahey Report) by 2023.

The government of Nova Scotia has held two in-depth reviews of forestry practices in the last ten years – both calling for significant reform - and it has made many commitments to







reduce clearcutting and other ecologically harmful practices, but little has actually changed during this time. Committing to fully implement the most recent (Lahey) Report in leaislation will ensure forestry is improved in Nova Scotia. Improving forestry practices will help to conserve and restore Nova Scotia's forest biodiversity.

Environmental Literacy

Environmental and Biodiversity Education is integrated into the provincial public school curriculum by 2023.

As per Canada's Biodiversity Target 18: "Youth education and awareness of biodiversity is essential if Canada is to grow its next generation of conservation and sustainable development leaders, mainstream biodiversity and meet its biodiversity conservation goals. Mainstreaming the understanding and importance of biodiversity will create a culture of appreciation, conservation, and action." Environmental education relates to all school subjects, and can be taught in a place-based, age-appropriate way at all grade levels, as part of life-long learning about our connection to nature.

Additional Measures

These goals should be embedded into an updated and renewed Act. Goals that have been met should be removed. Goals that have not been met, such as the local food goals, should be retained with a new target date. The Act should also include provisions to measure more effectively the growth of the green economy and a just transition to a low carbon economy. The Roundtable should advise not only the Minister of Environment but the Premier; a renewed Act needs to be part of the Government's core economic policy. The membership of the Roundtable needs to renewed and the the Province should ensure there is Mi'kmaw, African-Nova Scotian and youth representation.

For more information please contact Mark Butler, Policy Director, action@ecologyaction.ca or the staff member most knowledgeable about a particular goal.



Nova Scotia Needs New Climate Goals



crisis, we need an ambitious plan
— strong, measurable goals to
take action, create jobs and leave
no one behind.

Nova Scotia has set strong goals in the past. They allowed us to achieve our previous climate targets, created thousands of jobs, and build more than 100 community and Indigenous-owned renewable energy projects.

But there are currently no legislated climate and environmental goals past the year 2020.

Strong, measurable climate goals are our best chance at addressing the climate crisis, creating tens of thousands of jobs and strengthening the green economy in a way that ensures no one is left behind.

The Ecology Action Centre commissioned an extensive economic cost-benefit report titled, Nova Scotia Environmental Goals and Sustainable Prosperity Act Economic Costs and Benefits for Proposed Goals. It outlines the effects that achieving these goals will have on reducing emissions, and on our communities through direct, indirect and induced impacts to GDP, jobs and taxes.







The goals considered in this report are:

 Goal 1: Reducing GHG emissions 50% below 1990 levels by 2030

Meeting this goal would put Nova Scotia in line with its fair share of emissions reductions to keep global warming below the Paris Agreement's target of 1.5°C. This overarching goal is met through goals 2-5.

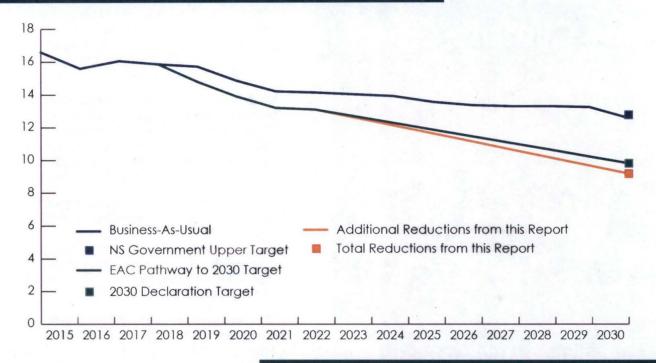
 Goal 2: Supplying 90% of NS electricity needs with renewable energy by 2030
 Dramatically decarbonizing Nova Scotia's electricity grid by displacing coal, oil and large biomass with wind, hydro, solar, small scale

biomass, and community-scale projects.

- Goal 3: Making 100% of eligible social housing Net-Zero Energy Ready (NZER) by 2030
 Saving energy and making people more comfortable in their homes by reducing energy consumption in existing social housing by 60% of more, and ensuring all new construction is built to NZER standards.
- Goal 4: Tripling energy efficiency in the electricity sector by 2030
 Saving money and avoiding the need for new electricity system infrastructure by increasing the level of total electricity system efficiency to 3% a year.
- Goal 5: Reducing car dependence, and electrifying personal and Public transport
 This goal includes public transit and active transportation promotion, battery electric buses (BEBs), higher occupancy vehicles, and promotion of hybrid and electric vehicles.
- Goal 6: Growing Nova Scotia's green economy Meeting goals 1 through 5 will substantially increase the economic prosperity of the green economy in Nova Scotia and aim to create over 15,000 green jobs per year in the province by the year 2030.



Nova Scotia Greenhouse Gas Emissions Pathways



The positive economic impacts of legislating and achieving the outlined goals are immense. Nova Scotia stands to benefit from nearly 180,000 job-years between now and 2030. Not only is this an employment opportunity, but it is also an opportunity for innovation, entrepreneurship, youth retention, immigration and being a world leader in the just transition for workers.

Beyond creating almost 15,000 jobs per year, these goals will reduce GHG emissions, reduce the pollution that makes us sick and upgrade our homes to make us more comfortable.

Economic Impacts for 2019-2030 (12-year total)

(\$M 2019)	Direct	Indirect	Induced	Total NS	Canada
Output	\$10,949	\$3,323	\$2,825	\$17,096	\$22,561
GDP	\$5,839	\$1,936	\$2,022	\$9,797	\$12,392
Income	\$4,284	\$1,381	\$624	\$6,289	\$8,117
Jobs (FTE)	133,483	22,590	23,685	179,759	207,384
Fed tax*	\$523	\$187	\$100	\$810	\$1,064
Prov tax*	\$569	\$235	\$145	\$948	

It's hard to argue with the 12-year benefits of committing to ambitious climate goals and to strengthening the green economy.

Now is the time to seize this opportunity by legislating ambitious, equitable and inclusive climate goals so all Nova Scotian communities can prosper in a sustainable economy, and experience a high quality of life. Together, we can reduce emissions, create thousands of jobs and leave no one behind.

Read the full report and find out more about setting ambitious climate goals in Nova Scotia at: www.ecologyaction.ca/GreenJobsReport



Presentation to N.S. Legislative Committee

Oct. 28, 2019

By Jon Peirce

Let me start by relating a personal anecdote that made me aware of the idea of environmental emergency many years ago. As a young English professor at Susquehanna University in Pennsylvania, I was only about an hour's drive from the nuclear reactor at Three Mile Island when it had its meltdown. The thought that we might all be annihilated drove us all—faculty and students alike—to near-distraction, to the point where it was impossible to think about anything else. After a day of this, I knew I could not teach in such an environment, and fled to Toronto, where my wife was then living. I spent a week there, not returning to Pennsylvania until it was clear that the emergency was over. If only for that week, I was an environmental refugee, fortunate to have a safe haven to which I could repair in my hour of need.

Fast forward some 40 years. As I drove home from church yesterday, I heard of the terrible plight facing Californians. There, persistent wildfires—in large measure the result of climate change—have become so severe as to cause the state utility to shut off electricity to nearly one million homes, so that electric sparks will not worsen the fires. Many have already been forced to evacuate their homes; many more will be forced to do so in the days ahead. I don't even want to think about the hundreds of thousands, if not millions of Californians who will be forced to the state's already overcrowded highways in an attempt to find safer conditions.

This is not the first climate emergency California has faced. Some years ago, a drought became so severe that experts were saying the state might soon have

to choose between water for residential purposes and water for business and industry. As the state's population increases, the looming water shortages can only become worse. Before long, it may be necessary for the state to start paying residents to leave in order to have adequate water supplies for those who remain.

Fortunately we are not yet in a situation as dire as that of California. But we've already seen considerable evidence of climate change, as in the increased frequency and severity of hurricanes and other wind storms, and in the temporary pollution of what were previously considered pristine seas off our South Shore. Our own situation is becoming urgent.

The bill being proposed as an important first step in dealing with the ongoing climate emergency, and I support it. True, some may say the targets set in the bill should be "higher." Perhaps they should. But in the larger scheme of things, targets are just numbers, which can be modified if necessary. What's important is that we all recognize the urgency of the situation, and stop "thinking to rule," so to speak, in the belief that things will somehow return to normal if only we ride more bikes and use fewer plastic bags. It won't, and these "retail" measures alone would be far from adequate to meet even less stringent targets than the relatively moderate ones put forward in the bill. We need to start thinking about some of the big, wholesale changes we'll need to make if we're to have any chance of pulling through at all. If the bill can get us to start focussing on these big changes—and I think it can—then it will have done a major service.

What are some of the new directions we should be taking? We could do worse than to start by taking a look at one of the bill's key principles, sustainable development. To me, at least, sustainable development entails protecting what are arguably the province's two most important industries: seafood and tourism.

Anything that puts these two industries at risk is a big no-no. The type of resource [sic] development we're seeing in the pulp mill along the Northumberland Strait and in mines elsewhere in the province is putting these industries at serious risk. No one wants to eat fish from polluted waters, and tourists don't want to come to swim or boat in polluted waters, or to camp beside them. So if we are serious about this bill, and about truly sustainable development—bearing in mind that world-wide fossil fuels are being phased out—we're going to have to get out of the energy business, or at least that part of it involving coal or petroleum, and also out of mining.

The second set of wholesale changes need has to do with transportation, which according to a recent study is the source of 28% of all Canadian greenhouse gas emissions. The greatest part of this clearly comes from cars and trucks. Except to a limited extent in Metro Halifax, it is all but impossible to live without a car in Nova Scotia. The passenger rail network, which when I first came to Halifax as a graduate student in 1970 provided twice-daily service to Montreal and service to Yarmouth and the Annapolis Valley as well as to eastern Nova Scotia and Cape Breton has shrunk to thrice-weekly service through Amherst and Truro to Halifax. There have also been major reductions in bus service over the years. While other parts of the world (including even parts of that socialist hotbed, the U.S.), are modernizing and expanding their rail services, Nova Scotia is on the verge of becoming a transportation orphan.

What's needed is a major rebuild of the rail system. Entire dayliner runs could be put in for the cost of a few miles of highway twinning. Rebuilding the rail system would set in motion what the economists call a "virtuous cycle." Rebuilding the system would create many good jobs; maintaining it would create many more—all this in addition to reducing the number of cars and trucks on the

road, and the amount of greenhouse gas emitted. A decent passenger rail system, with service to most parts of the province, would also mean that many seniors who really shouldn't be driving but now drive because they really have no alternative could get off the road. This in turn would lead to fewer accidents, reduced health care costs, and more. For far too long, rail has been judged by a different standard than highways and air travel; subsidies to it are viewed in a different and far more negative light than subsidies for roads or airports. Yet rail is the cleanest and greenest way to travel, by a country mile. John A. Macdonald built the country by building a transcontinental rail line. We can rebuild it, and save our environment into the bargain, by rebuilding and modernizing our rail service, currently amongst the worst in any developed Western country. But to do this important job, we need to stop thinking in automatic pilot, and recognize a rail system as an investment rather than a cost.

The wages of sin is death. We've all, both as individuals and as a society, sinned against Mother Earth, against our own children and grandchildren, and against our fellow creatures and inhabitants on the planet—animals and plants alike. Going on as we have is simply not an option; the results would be too horrific even to contemplate. Finding a new way to live is absolutely imperative.

But we must not think that this new way will entail sacrificing our well-being. It will not require us to don the hair shirt of asceticism. If we go about things right, we can have a better life while helping to save the planet. What sane person could say he or she actually enjoys driving to downtown Halifax and trying to find a parking spot on Spring Garden Road? Isn't it easier and pleasanter (not to mention cheaper) to use public transit to get to downtown Halifax? As for longer-distance transportation, what sane person could say he or she actually enjoys flying to Montreal or Ottawa, packed in with others like cattle being sent to the Chicago

stockyards? Don't you think that many of us would make the energy- and planet-saving switch to train travel for this journey, if only there were trains available at reasonable cost that could make the journey within a reasonable time frame? And what person with even a minimal appreciation of good food would pick the stale, mouldering Chinese garlic if truly fresh garlic from our local farmers were regularly available?

In other words, the way of life is the better way, the joyous way. The money needed to bring it about—and there's no use pretending that the amount will not be considerable—should be viewed not as a cost, but an investment, one that will pay big dividends in anything but the very shortest term. Let us therefore embrace the way of life wholeheartedly, using this bill not as a be-all or end-all, but as a starting-point, a springboard for further investigation and inquiry. If we stick to the bill's principles (like sustainable development) in the changes we make, both individually and collectively, we won't go wrong.

No, this bill isn't perfect. But it is a good start and I would therefore urge that it be passed as quickly as possible. Needless to say, political will is required to ensure that there is money and expertise made available to implement the necessary changes to our economy, our transportation system, and our agriculture. Without such political will, all that will be done will be of the nature of tinkering. It will continue to be business as usual—and it will in all likelihood lead to our destruction. But the bill puts us in a better position than we would be in without it. Now it is up to us.

Thank you.



The Environmental Goals and Sustainable Prosperity Act, since it's enshrinement in law in 2007, received the backing of all parties in the Legislature. This support continues today. Perhaps one of the best pieces of environmental legislation in Canada, the Healthy Forest Coalition strongly recommends that the EGSPA Act be updated to address the increased urgency of the threats to biodiversity in Nova Scotia but to also retain what made the Act so impactful in the first place; hard environmental goals and targets with hard deadlines.

Almost 13% of Nova Scotia's land is now protected, and nearly 40% of our electricity will be from renewable sources by 2020. However, the Healthy Forest Coalition believes that the use of forest biomass should be removed from the list of renewable sources as the works of Mary Booth and other studies on forest ecology and carbon sequestration have shown.

The EGSPA has not only brought environmental benefits but economic benefits as well. The Act helped to work towards a more sustainable future for our industries and rural economies.

The proposed Sustainable Development Act must continue to have strong environmental conservation goals, targets, and timelines in order to continue to bring the benefits that Nova Scotia has benefited from over the past 12 years.

More Goals are Needed for an Environmentally and Economically Sustainable Future

The Healthy Forest Coalition supports the Ecology Action Centre's call for the addition of 12 goals that should be incorporated into the Act. I will briefly list those proposed goals here:

Goal 1: Reducing GHG Emissions 50% Below 1990 Levels by 2030

Goal 2: Supplying 90% of NS Electricity Needs with Renewable Energy by 2030

Goal 3: Making 100% of Social Housing Net-Zero Energy Ready (NZER) by 2030

Goal #4: Tripling Energy Efficiency in the Electricity Sector by Increasing to 3% per year by 2030

Goal #5: Nova Scotia will sell 100 per cent zero-emission vehicles by 2040, with sales goals of 10 per cent by 2025 and 30 per cent by 2030 along the way.

Goal #6: Nova Scotia will achieve zero waste by 2030 through the creation of a circular economy.

Goal #7: Building climate change adaptive capacity and resilience across the province by making resources available to Nova Scotia municipalities to take action on their adaptation priorities by 2022.

Goal #8: At least 17 percent of the total land mass of Nova Scotia is legally protected by 2025.

This goal is of particular importance to Nova Scotia as our province, fragmented by roads and development, is in the midst of a biodiversity crisis. Committing to 17% protection is the minimum that Nova Scotia can do to uphold the national standard commitment. It is not acceptable that Nova Scotia expects the rest of the country to meet this standard while we trail behind, forcing other provinces to make up our shortfall.

Goal #9: Full implementation of the Independent Review of Forestry Practices (The Lahey Report) by 2023.

With two extensive reviews of forestry practices in a period of less than 10 years, it is essential that the recommendations of the Lahey Report be carried out. Nova Scotia, it's forestry industry and ecology, cannot afford to continue the status quo and undergo another expensive review. The change must come now.

Goal #10: Integrate Environmental and Biodiversity Education into the provincial public school curriculum by 2023.

Goal #11: Create 15,000 green jobs every year between now and 2030

Goal #12: In 2020, establish a Provincial Environmental Equity Working Group to address environmental racism and inequities in climate action and adaptation, and foster resiliency.

My name is Lisa Strickland-Clark.

I'm a psychologist and I have re-scheduled clients at short notice and driven two hours to be here today.

I would like to add my voice to those of people saying that this Bill does not have stringent enough targets and it needs to move more quickly through the legislative process. I will not go into the details of the Bill as I believe others will do that. I would like to focus on some basic principles.

Before I do that, I'd like to remind people of what we are facing here. This is an excerpt from a recently published report by the US Army College called 'Implications of Climate Change for the US Military'

Sea level rise, changes in water and food security, and more frequent extreme weather events are likely to result in the migration of large segments of the population. Rising seas will displace tens (if not hundreds) of millions of people, creating massive, enduring instability. This migration will be most pronounced in those regions where climate vulnerability is exacerbated by weak institutions and governance and underdeveloped civil society. Recent history has shown that mass human migrations can result in increased propensity for conflict and turmoil as new populations intermingle with and compete against established populations. More frequent extreme weather events will also increase demand for military humanitarian assistance.

I want to focus on four key areas:

Firstly, The

Precautionary principle

The **principle** implies that there is a social responsibility to protect the public from exposure to harm, when scientific investigation has found a plausible risk. These protections can be relaxed only if further scientific findings emerge that provide sound evidence that no harm will result. The Principle has central components: taking preventive action in the face of uncertainty; shifting the burden of proof to

the proponents of an activity; exploring a wide range of alternatives to possibly harmful actions; and increasing public participation in decision making.

The precautionary principle is relevant here.

Secondly the conservative nature of the IPCC report

Bill 213 draws upon the IPCC report as a guide. That report is now 1 year old and it is becoming clear that the targets outlined in that report are overly conservative and that swifter more far reaching change is needed.

The IPCC report is known for its conservative nature.

A recently published book by climate scientist *Dale Jamieson*, *Michael Oppenheimer and Naomi Oreskes* s addressed **Scientists underestimating the speed of change The book:**

Discerning Experts: The Practices of Scientific Assessment for Environmental Policy.

STATED THAT

While climate skeptics and deniers often accuse scientists of exaggerating the threats associated with the climate crisis, the available evidence suggests the opposite. By and large, scientists have either been right in their assessments, or have been unduly conservative.

When new observations have provided more or better data,

the findings for ice extent, sea level rise and ocean temperature have generally been worse than previously thought.

Scientists actively seek to find their common ground, and to focus on those areas of agreement. In some cases, where there are irreconcilable differences of opinion, scientists may say nothing, giving the erroneous impression that nothing is known.

How does the pressure for un-equivocality lead to underestimation? Consider a case in which most scientists think that the correct answer to a question is in the range one to 10, but some believe that it could be as high as 100. In this case,

everyone will agree that it is at least one to 10, but not everyone will agree that it could be as high as 100.

Therefore, the area of agreement is one to 10, and this will be reported as the consensus view. Wherever there is a range of possible outcomes that includes a long, high-end tail of probability, the area of overlap will lie at or near the low end.

For political leaders and business people, we think it is important for you to know that it is extremely unlikely that scientists are exaggerating the threat of the climate crisis. It is far more likely that things are worse than scientists have said. We have already seen that the impacts of increased greenhouse gases in the atmosphere are unfolding more rapidly than scientists predicted. There is a high likelihood that they will continue to do so, and that the IPCC estimates – that emissions must be rapidly reduced, if not entirely eliminated, by 2050 – may well be optimistic. The fact that this conclusion is hard to swallow does not make it untrue.

Thirdly, the law of physics

How close to the precipice do we want to go? How much of a gamble do we want to take?

What we are dealing with here is not subject to opinion or good intentions. It's not an optional add on that we can take or leave. We are dealing with the law of physics. If I leave an ice-cube on the counter-top and go out for an hour, when I get back it will have melted. It doesn't matter how much I've been hoping it won't melt or how convincing I was when I spoke about it to interested parties while I was out. The ice has melted.

The ice on our planet is melting at an unprecedented speed and drafting a well-intentioned Bill that we hope will do the job is not going to change things.

This is an emergency and it needs to be treated as such, from today onwards.

What are the characteristics of an emergency?

When we are in emergency mode we are focused on..

	Normal mode	Emergency mode
Priorities	Many balanced priorities	Solving the crisis = One top priority
Resources	Distributed across priorities and saved for future	Huge allocation of resources towards solution
Focus	Distributed across priorities	Laser-like focus
Self-esteem source	Individual accomplishment	Contributing to the solution

In an emergency speed of response is crucial. This Bill gives a deadline of Dec 2020 for the creation of a strategic plan. What kind of emergency can wait for a year to be implemented?Another important issue is how do we begin to lead

the public into emergency mode? More characteristics of an emergency include:

Normal political-paralysis mode	Emergency mode	
Crises are constrained within business-as- usual mode	Society engages productively with crises, but not in panic mode	
Spin, denial, and 'politics as usual' are employed	The situation is assessed with brutal honesty	
No urgent threat is perceived	Immediate, or looming, threat to life, heatth, property, or environment is perceived	
Problem is not yet serious	High probability of escalation beyond control if immediate action is not taken	
Time of response is not important	Speed of response is crucial	
The crisis is one of many issues	The crisis is of the highest priority	
A labor market is in place	Emergency project teams are developed, and labor planning is instituted	
Budgetary 'restraint' is shown	All available / necessary resources are devoted to the emergency and, if necessary, governments borrow heavily	
Community and markets function as usual	Non-essential functions and consumption may be curtailed or rationed	
A slow rate of change occurs because of systemic intertia	Rapid transition and scaling up occurs	
Market needs dominate response choices and thinking	Planning, fostering innovation and research take place	
Targets and goals are determined by political tradeoffs	Critical targets and goals are not compromised	
There is a culture of compromise	Failure is not an option	
There is a lack of national leadership, and politics is adversarial and incremental.	Bipartisanship and effective leadership are the norm	

This Bill needs to contain the most stringent targets possible; zero emissions by 2025. It needs to shorten the deadlines for action. The Premier needs to be involved on a daily basis, not once a year.

It needs to be our number one priority and placed at the centre of the lives of Nova Scotians and to be treated as the emergency which it is. Citizens assemblies should be formed to oversee the process as this cannot be left to one party to implement. We cannot afford to fail.

Thank you.

Leading the Public Into Emergency Mode

Introducing the Climate Emergency Movement



Margaret Klein Salamon, PhD Follow
May 24 · 44 min read



Imagine there is a fire in your house.

What do you do?

What do you think about?

You do whatever you can to try to put out the fire or exit the house. You make a plan of action.

Your senses are heightened, you are focused like a laser, and you put your entire self into your actions. You enter emergency mode.

The climate crisis is an unprecedented emergency. It is the United States' top national security threat, public health threat, and moral emergency. Humanity is careening towards the deaths of billions of people, millions of species, and the collapse of organized civilization. States under severe climate stress, such as Syria, are already starting to fail, bringing chaos, violence, and misery to the region. The world order itself is crumbling, in significant part due to climatic and resource pressures. The climate crisis acts as a "threat multiplier" making not only severe storms, but also war, nuclear exchange, and epidemics more likely. Britain is leaving the European Union, and America's political system, undermined for decades by corruption and bad faith, is in dire peril.

How we react to the climate crisis will shape centuries and millennia to come. Given the stakes, and the extremely short timetable, it is imperative that we strive to maximize the efficacy of our actions — from ourselves as individuals, from our nation, from the global community of nations, and from the organizations that are trying to avert this catastrophe.

In this paper, I will introduce the psychological concept of "emergency mode" which is how individuals and groups function optimally during an existential or moral crisis — often achieving great feats through intensely focused motivation. I will argue that the goal of the climate movement must be to lead the public out of "normal" mode and into emergency mode.

My argument has huge implications for the climate movement's communication style, advocacy, and strategy. Because emergency mode is contagious, the best strategy is for climate activists and organizations to 1) go into emergency mode themselves, and 2) communicate truthfully and emotionally about a) the climate emergency, b) the need for emergency mobilization, and c) the fact that *they are in emergency mode*, as clearly and emphatically as possible.

The initial publication of *Leading the Public into Emergency Mode* in 2016 suggested this approach as a "New Strategy for the Climate Movement." I am absolutely thrilled to report that in the 3 years since publication, this approach — both as a policy program

and as a mode of campaigning and communicating, has been adopted by an extremely energized set of organizations. My claim that embracing the truth and campaigning for an emergency response to the climate crisis would be highly effective is proving true. The climate emergency movement has exploded onto the US and global political scene, and is growing all the time.

This updated and revised essay 1) explains the theory and practice of "emergency mode," and 2) introduces the organizations and campaigns that comprise the Climate Emergency Movement, as humanity's best hope.



Breakthrough: a Climate Emergency Movement now exists!

I founded and now direct a national volunteer based think tank and advocacy organization called The Climate Mobilization (TCM) that is based on an understanding of emergency mode, as well as the transformative power of climate truth. We launched in 2014, telling the truth about the Climate Emergency — it is an acute and existential threat to us all — and advocating for a WWII-Scale Climate Mobilization to eliminate emissions in 10 years or less, and initiate a massive drawdown program.

For the first four years of existence our language, vision, and timelines were relatively marginal — though they inspired fierce devotion in our volunteers and supporters. Our

strategy always centered around "inception" and "pollination" meaning that if we could "de-risk" our approach and prove its viability, then other larger groups would begin taking it on.





At the end of 2018, the dam finally burst and the Climate Emergency Movement has emerged, finally, as a powerful force. This movement tells the truth about the scale of the crisis, and demands a "Green New Deal" or a WWII-scale climate mobilization — a 10 year transition to zero emissions plus drawdown. Led by Alexandria Ocasio-Cortez and the Justice Democrats in Congress, the Sunrise Movement, Zero Hour, School Strikers, and Extinction Rebellion in the streets, this movement has burst forth with tremendous force and momentum. As of the time of this writing, more than 500 cities in 4 countries have declared a "Climate Emergency," and most of the major Democratic Presidential candidates have stated that they support the Green New Deal.

The Climate Mobilization is proud to have made critical contributions to these breakthroughs, by developing, building, and spreading the Climate Emergency Declaration campaign, through policy development such as the *Victory Plan* and more. (See our "impact page" for more about how we paved the way.)

We have been able to achieve all of this because we have entered emergency mode! We are extraordinarily focused on and dedicated to the mission: spreading climate truth in order to commence WWII scale climate mobilization that eliminates emissions in 10 years, restores a safe climate, halts the 6th mass extinction of species, and creates a regenerative economy.

This paper is based on a combination of theory and practice. I have researched social movements, flow states, and more, to develop the concept of emergency mode, and these ideas have been developed and refined through my experience in running TCM, collaborating with other organizations, and attempting to communicate about the climate crisis to people from all walks of life. I will make specific suggestions for the climate movement in the second half of this paper. But first, we must understand emergency mode.

Emergency Mode: Optimal Functioning in an Existential (or Moral) Crisis

Most psychological and sociological writing about the climate crisis has warned climate "communicators" of the risks of triggering primitive and pathological responses to crisis: "fight or flight," panic, and the devastation caused by Post Traumatic Stress Disorder. Because of these bleak portrayals, many political and organizational leaders have dared not convey the horrifying truth of the climate crisis, since they operate under the mistaken belief that the only response to emergencies is panicked chaos.

But aside from panic, individuals and groups can also respond to emergencies with reason, focus, dedication, and shocking success. Emergency mode is the mode of human psychological functioning that occurs when individuals or groups respond optimally to existential or moral emergencies. This mode of human functioning — markedly different from "normal" functioning — is characterized by an extreme focus of attention and resources on working productively to solve the emergency.

We are all, at times, confronted with emergency situations. Children, and adults who are overwhelmed by the situation for whatever reason, enter either panic mode, in which they act without thinking, or are paralyzed and unable to act. Children, for example, will often hide during house fires. However, healthy adults respond to emergencies by entering emergency mode.

	Normal mode	Emergency mode
Priorities	Many balanced priorities	Solving the crisis = One top priority
Resources	Distributed across priorities and saved for future	Huge allocation of resources towards solution

Focus	Distributed across priorities	Laser-like focus
Self-esteem	Individual accomplishment	Contributing to the solution
source		

Emergency mode occurs when an individual or group faces an existential threat, accepts that there is a life-threatening emergency and reorients by:

- 1. Adjusting their hierarchy of priorities so that solving the emergency is the clear top priority
- 2. Deploying a huge amount of resources toward solving the crisis
- 3. Giving little priority to personal gratification and self-esteem enhancement for their own sake, and instead seeking them through engagement with the emergency. People seek to "do their part" to solve the crisis and build their skills to contribute more effectively.

Emergency mode is a fundamental departure from "normal" mode of functioning. In normal mode, the individual or group feels relatively safe and secure, does not recognize any immediate existential or major moral threats — either because there is none, or because they are in denial — and therefore:

- 1. Maintains a portfolio of priorities
- 2. Attempts to distribute focus and other resources wisely among them
- 3. Gives considerable weight to personal gratification, enjoyment, and achievement

Long Emergencies

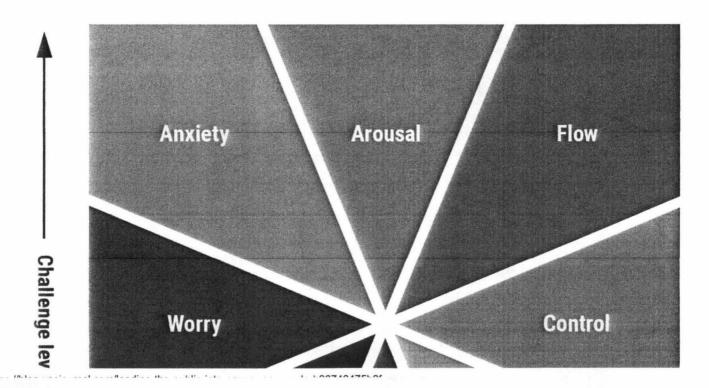
Usually emergencies take hours or days to resolve, but people can and do also enter long emergency modes that last for years. These "long emergencies" include diseases like cancer, which is life-threatening but not immediately curable, acute poverty, in which the person struggles daily with the emergency of meeting basic needs, and war. For these long emergencies, the business of normal life must be integrated into the emergency response. For doctors, nurses, paramedics, crisis counselors, hostage

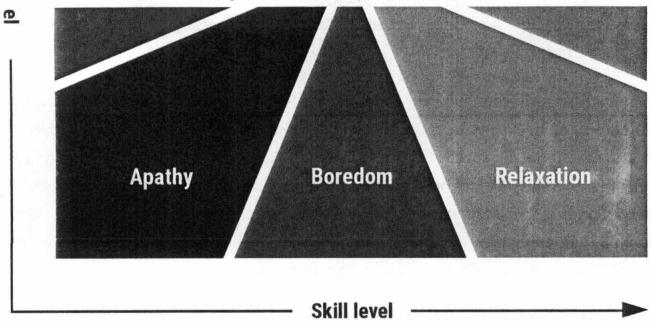
negotiators, firefighters, police officers, soldiers, and (hopefully) climate campaigners, emergency mode is a regular, on-going experience.

There is also *moral* emergency mode, when an issue of grave injustice becomes elevated to the status of an existential threat. People in emergency mode are the driving force behind most, if not all, successful social movements — whether it is moral (fighting for principles, and the safety of others), existential (fighting for your own safety, and the safety of others) or a combination. These people have decided that nothing, not even survival, is more important than the struggle. They dedicate themselves to it fully and utilize all of their capabilities in the service of victory.

Emergency mode is a state of enhanced performance, characterized by flow states. Mihaly Csikszentmihalyi, the psychologist who discovered flow and pioneered its study calls it the "optimal state of consciousness," it's a state in which "we feel our best and perform our best." When people are in emergency mode, they experience heightened focus, perception, and abilities. A McKinsey study found that executives who experienced flow states are five times more productive. Csikszentmihalyi describes flow as:

Being completely involved in an activity for its own sake. The ego falls away. Time flies. Every action, movement, and thought follows inevitably from the previous one...your whole being is involved, and you're using your skills to the utmost.





Flow is most likely to occur when the task is challenging, but our level of skill is high. Flow can be triggered by facing danger, though it is not a state of high anxiety. Steven Kotler wrote *The Rise of the Superhuman* about flow in extreme sports. Kotler argues that flow can be triggered by situations that involve serious consequences and risks.

In all other activities, flow is the hallmark of high performance, but in situations where the slightest error could be fatal, then perfection is the only choice — and flow is the only guarantee of perfection. Thus, flow is the only way to survive in the fluid, life-threatening conditions of big waves, big rivers, and big-mountains... Necessity, as they say, is the mother of invention. Or, as Danny Way (professional skateboarder) explains: "It's either find the zone or suffer the consequences — there's no other choice available."

Kotler, Steven. The Rise of Superman: Decoding the Science of Ultimate Human Performance (p. 22).

In short emergencies such as a fire, individuals stay in an emergency flow state the entire time — they never take their mind off the emergency. If the individual is in long emergency mode, however, these emergency flow states are experienced frequently, but other elements of life, such as rest, recreation, and close relationships, are also maintained. Speaking personally, I entered emergency mode 6 years ago — since my friend challenged me to "actually try to solve the climate crisis," and have worked, sometimes struggled, to stay close with friends and family, and to relax. Indeed,

balancing one's intensive work on solving the emergency and all other activities can be one of the most challenging elements of facing a long emergency.

On the other hand, living in emergency mode can be extremely rewarding. Flow states in general are sought after, and a key indicator of psychological health. People enjoy being fully engaged in activity — "in the zone" — utilizing their entire capacity, whether they are playing sports, performing musically, studying intensely, or responding to an emergency. As Csikszentmihalyi described the rewards of flow:

The best moments in our lives are not the passive, receptive, relaxing times...The best moments usually occur if a person's body or mind is stretched to its limits in a voluntary effort to accomplish something difficult and worthwhile.

I have spoken with Emergency Room doctors, firefighters, and climate campaigners who report being hooked on the sense of purpose, feeling that they are useful, and the relief from self-involvement that their immersive work provides.

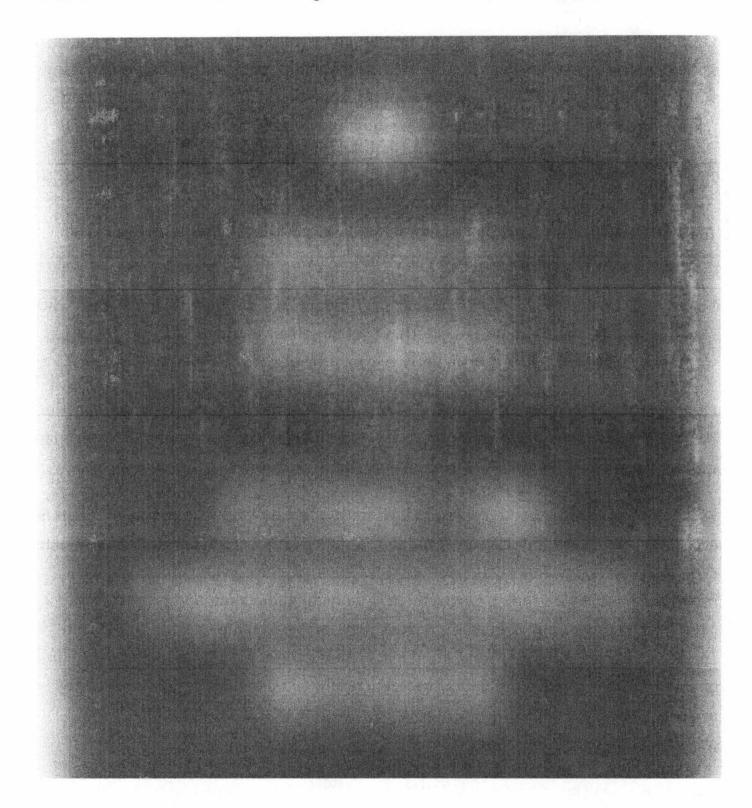
People must feel competent to handle the emergency in order to enter emergency mode. If you are overwhelmed, you may panic. If you feel helpless, you cannot enter emergency mode, regardless of how acute the moral or existential threat.

Bill McKibben reports that the question he is most often asked is "What can I do?" This is accurate to my experience as well — millions of Americans want to help fight the climate crisis, but don't know how to do so effectively. The more the climate movement can provide *structures* for people's engagement — providing directions and support for people who are ready to tackle the climate emergency — the more people will go into emergency mode. Effective, transparent leadership is also critical in enabling people to enter emergency mode. Confidence that leaders and decision makers are competently addressing questions of strategy and policy for the emergency mobilization allows participants to focus on their contribution.

Essential to long emergencies is the human capacity for dedication and commitment — the mind state that brings a person back, over and over, to the emergency issue despite inevitable interruptions and temptation to avoid the issue. It also takes a good deal of courage, and ability to stay calm under intense stress. The famous "Keep Calm and Carry

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On" posters from wartime United Kingdom addressed this challenge. We could translate them into this framework as meaning, "Don't Panic and Stay in Emergency Mode."



Groups in Emergency Mode

In emergency mode, members of groups — such as organizations, or even whole countries — work productively together in a coordinated way to solve a crisis. The vast majority of people contribute their best effort and available resources. People fill

different roles and take on complementary projects in order to ameliorate the crisis. While the profit motive and self-interested behavior are not eliminated in a long emergency, working for the common good to create solutions, rather than focusing on their own comfort or advantage, becomes the norm. People gain satisfaction and pride from helping the group or the wider emergency project, and they feel motivated, even driven to do so.

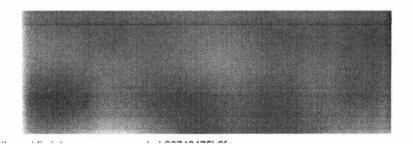
Humans evolved in tribes, and *group* success was vital to the survival of each individual. Psychologist Jonathan Haidt describes human nature as "90% chimpanzee and 10% bee" to illustrate our evolved, combination of social but self-interested (chimpanzees) and group-oriented behavior (bees).

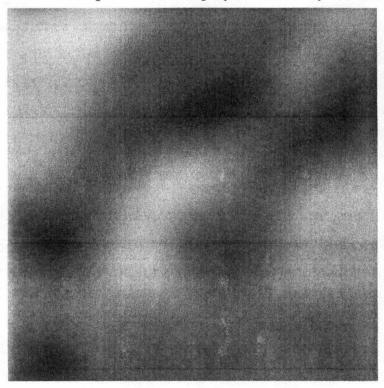
We are like bees in being ultra social creatures whose minds were shaped by the relentless competition of groups with other groups. We are descended from earlier humans whose groupish minds helped them cohere, cooperate, and outcompete other groups. That doesn't mean that our ancestors were mindless or unconditional team players; it means they were selective. *Under the right conditions, they were able to enter a mind-set of "one for all, all for one" in which they were truly working for the good of the group, and not just for their own advancement within the group.*

By far the most powerful trigger for the "hive switch" is a catastrophic event that clearly signals the arrival of an emergency, particularly an external attack. The surprise attack on Pearl Harbor led the United States to "flip the hive switch" and enter emergency mode in an incredibly powerful, productive way.

The United States in Emergency Mode: WWII

After years of stubborn, isolationist denial of the threat and clinging to "Normal Functioning" as Germany swept through Europe, the surprise attack on Pearl Harbor ended American isolationism and initiated the example par excellence of America in emergency mode: full-scale mobilization.

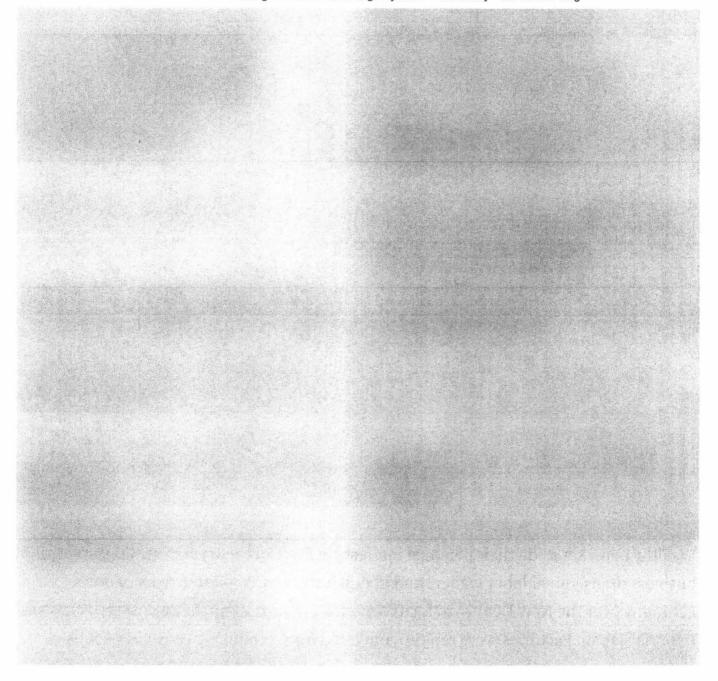




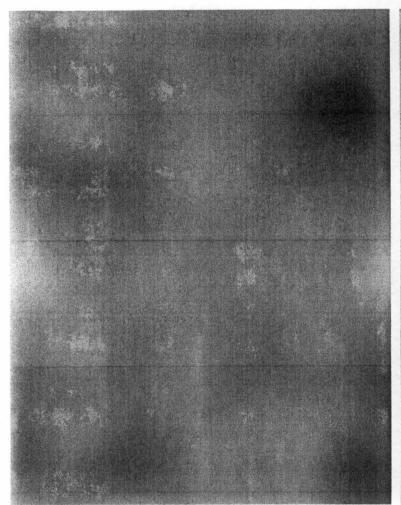
Economic mobilization is an emergency restructuring of a modern industrial economy, accomplished at rapid speed. It involves the vast majority of citizens, the utilization of a very high proportion of available resources, and impacts all areas of society. It is nothing less than a government-coordinated social and industrial revolution. Mobilization is what happens when an entire nation enters emergency mode, and the results can be truly staggering.

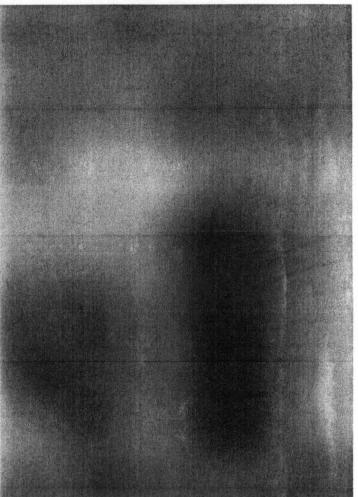
In *Climate Code Red*, David Spratt and Philip Sutton highlighted the differences in normal political mode and emergency mode, drawing heavily from WWII:





During WWII, the country joined together with a spirit of unity, sacrifice, and common purpose. Young men sacrificed their lives fighting for their country. Women surged into factories to produce war materiel. Native American "code talkers" helped transmit secret messages for the allies. Citizens invested their available cash reserves in war bonds. The federal government instituted a sweeping rationing program in order to ensure a fair distribution of scarce resources on the home front — and to share the sacrifice equitably. Gasoline, coffee, butter, tires, fuel oil, shoes, meat, cheese, and sugar were rationed, and every American received a fair share. "Pleasure driving" was banned, the Indy 500 was shut down, and a national speed limit of 35 miles per hour was established. Comprehensive wage and price controls were put in place to combat inflation.





Wealthy elites set aside their personal interests in favor of the war effort. Conservative business titans joined labor leaders and liberal bureaucrats — after years of bitter acrimony over the New Deal — to focus America's industrial might against the Nazis and Imperial Japan. Factories were rapidly converted from producing consumer goods to producing tanks, guns, bombs, and planes — shattering all historical records for war production. Taxes were also increased significantly, particularly on high earners, who paid a steep "Victory Tax," the most progressive tax in American history. The top marginal income tax rate on the highest earners reached 88% in 1942 and a record 94% in 1944.

By entering emergency mode and mobilizing for total victory, the United States accomplished truly staggering feats. By 1944 the United States had produced 229,600 planes — more than three times the original, highly ambitious, goal set out by President Roosevelt three years earlier. In response to a cutoff of critical rubber supplies in Southeast Asia, the federal government launched a crash program that scaled up synthetic rubber production from under 1% to about 70% of total U.S. production — a

100-fold increase — in about four years. In 1943, reclaimed rubber from citizen scrap drives provided about 50% of domestic rubber production.

We also made huge advances in the sciences. The first computer was invented, as were blood transfusion and radar technology. The Manhattan Project successfully built the world's first atomic bomb in less than three years — a morally fraught but nonetheless stupendous feat of planning, cooperation and scientific ingenuity.

Despite all the resources that were diverted to the war effort during this multi-year emergency, the United States also managed to maintain — and in some cases expand — its basic systems including infrastructure, education, health care, and child-care, and in large measure made sure that the basic needs of the civilian economy were met.

We need not have an overly rosy view of that time period to appreciate its transformative effects, and the transformative potential of mobilization, generally. One glaring problem were racist policies and attitudes — the military itself and many of the industrial mobilization jobs were segregated, and more than 100,000 Japanese Americans were interned. However, during the Mobilization, major strides were made towards both racial and sexual equality, as well as fair employment practices.

Moving Towards Emergency Mobilization

Emergency mobilization on this scale is precisely what we need if we are to prevent a global cataclysm and restore a safe and stable climate. We need to transition away from fossil fuels and carbon-intensive agriculture as soon as possible, draw down all the excess CO2 and cool the planet below present levels. This will happen only with public planning coordinated by the federal government, global cooperation, massive public investment, forceful regulations and economic controls, and full societal participation. The Climate Mobilization provides an in-depth look at what such a mobilization would look like in our *Victory Plan*.

Factors That Prevent Emergency Mode

Given the increasing public awareness of the existential risk posed by climate change, why hasn't the transition to emergency mode happened by now? It turns out the threat posed by climate change is fundamentally different from the one we faced during World War II, making it more difficult for society to enter emergency mode. We can still get

there — indeed we must get there to have any chance of bringing the climate crisis under control — but it will take some planning and effort. To understand what is needed, it will help to take a closer look at the psychology of emergency mode.

The psychological capacity for both normal mode and emergency mode arose over hundreds of thousands of years of human evolution. Individuals and groups who usually manage broad and diverse interests, but are able to snap into intense focus when in danger, have the best overall survival prospects. The challenge is when to enter emergency mode, when to continue business as usual, and how to trigger a switch in mode.

The factors that trigger an emergency response are also products of evolution. Psychologist Daniel Gilbert argues that humans are wired for a reflexive response to threats that are "intentional, immoral, imminent, and instantaneous." When threats, such as terrorism, contain all of these characteristics it can trigger significant overreactions. But if a threat, such as the climate crisis, does not contain these elements and is instead unintended, caused by actions that are regarded as normal and moral, with the worst impacts in the future and the disaster unfolding over decades, then an emergency response will not immediately be triggered and the risk of under-reacting is very high.

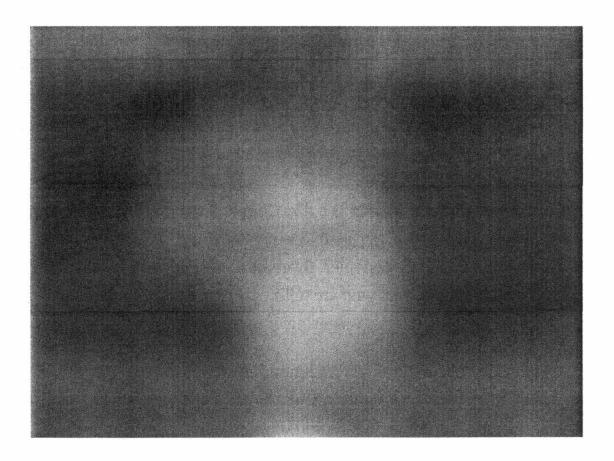
We cannot count on people entering emergency mode reflexively. Rather, we need to accomplish it through education, organizing, and setting an example. Thus I argue that the role of the climate movement should be to enter emergency mode themselves and lead the public there.

Pluralistic Ignorance (ie Social Proof)

The way we respond to threats — by entering emergency mode or by remaining in normal mode — is highly contagious. Imagine the fire alarm goes off in an office building. How seriously should you take it? How do you know if it is a drill or a real fire? Those questions will be predominantly answered by the actions and communications of the people around you, particularly people designated as leaders. If they are chatting and taking their time exiting the building, you will assume that this is a drill. If people are moving with haste, faces stern and focused, communicating with urgency and gravity, you will assume there is real danger and exit as quickly as possible.

Psychologist Robert Caladini describes the concept of pluralistic ignorance:

Very often an emergency is not obviously an emergency...in times of such uncertainty, the natural tendency is to look around at the actions of others for clues. We can learn, from the way the other witnesses are reacting, whether the event is or is not an emergency. What is easy to forget, though, is that everybody else observing the event is likely to be looking for social evidence, too.



Or as researchers Bibb Latané and John M. Darley put it, "Each person decides that since nobody is concerned, nothing is wrong. Meanwhile, the danger may be mounting to the point where a single individual, uninfluenced by the seeming calm of others, would react."

This is a critical point, with grave implications for the climate movement. To evaluate whether we are currently in a climate crisis, the public will look to each other — and particularly to the climate organizations, writers, and leaders. Are they calling it an emergency? Does the tone of their writing and statements convey alarm and a passionate desire for massive action to avert imminent crisis? Are they demanding an emergency response? Are they acting like it's an emergency? Are they themselves in

emergency mode? If the answer to these questions is "no," the individual will conclude that there must not be an emergency, or that emergency action is hopeless because the leaders are apparently unwilling to coordinate emergency action. This suggests the sad, dangerous conclusion that NGOs who communicate with euphemism and advocate carbon gradualism are actually preventing the public from entering emergency mode.

Gradualism

The mainstream environmental movement, and Democratic Party, has been stuck in gradualism for decades, calling for a multi-decade reduction of fossil fuel use through policies such the Clean Power Plan and carbon pricing. Furthermore, virtually no mainstream environmental groups call for actions to draw down (or sequester) excess greenhouse gases, which must begin now on a massive scale and are essential if we are to avoid a climate catastrophe and restore a safe climate.

Gradualists use euphemistic assessments of the Climate Emergency to make their policies seem appropriate, and advise people to use "positive" language when communicating, and not to "scare people." Gradualists will go as far as to "tone police" organizers, authors, or filmmakers who are telling the truth about the Climate Emergency, criticizing them as fear-mongering or hysterical.

This attitude misleads the public and blocks Americans from entering emergency mode. We cannot expect the public to support policies that are more aggressive than what Greenpeace or the World Wildlife Foundation is calling for. Organizations that claim to be protecting the climate have a special duty to reckon with climate truth, and advocate the only solution that could actually protect humanity and the natural world: emergency mobilization.

Helplessness

A sense of helplessness is preventing many people from entering emergency mode in response to the climate crisis. Our political system seems beyond repair, the culture in the thrall of denial, and the scale of the crisis is staggering. Widespread feelings of helplessness also represent the failure of leadership from official climate movement leaders and politicians to offer an honest assessment of the crisis, advocate for solutions that actually stand a chance of working, and invite individuals to take part in that

solution. The advocacy of obviously inadequate solutions worsens the despair and cynicism of the public.

Massive dissatisfaction, anger, despair, and fear lie beneath the surface of the American electorate on the climate crisis. A recent poll by Randle and Eckersley investigated how people from the US, UK and Australia evaluate the current threats facing humanity with some staggering results:

Overall, a majority (54%) rated the risk of our way of life ending within the next 100 years at 50% or greater, and a quarter (24%) rated the risk of humans being wiped out at 50% or greater. The responses were relatively uniform across countries, age groups, gender and education level, although statistically significant differences exist. Almost 80% agreed "we need to transform our worldview and way of life if we are to create a better future for the world."

A quarter of respondents think that humanity has a 50% chance of near-term-extinction, and almost all respondents agreed that transformative change is necessary — yet we are continuing with business as usual and daily life as usual! This suggests a paralyzing degree of helplessness across society.

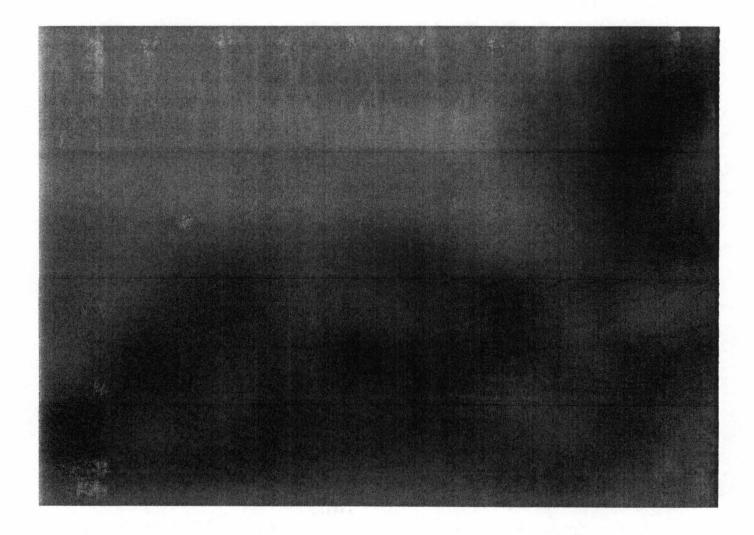
Rise of the Climate Emergency Movement

It's clear our mainstream politicians and climate organizations are not up to the challenge of leading the public into emergency mode, and are therefore not capable of mounting and adequate response to the climate crisis. Fortunately, a new front is rapidly emerging on the global stage that is geared toward doing just that: The Climate Emergency Movement.

The Climate Mobilization was a pioneer in this movement, spending years promoting maximal intensity mobilization in relative obscurity. In fact, at the beginning of 2018, we were the only national organization advocating for a 10-year transition to zero emissions plus drawdown. Our "Move the Movement" campaign focused on getting the broad climate movement to accept the climate truth — the fact that we face an extinction-level ecological breakdown and that we are massively behind schedule to address it — as a core principle and to use truth-telling as tactic for achieving the changes needed to restore a safe climate. We approached this goal with a variety of tactics, including

thorough public and behind-the-scenes criticism of insufficient policy proposals, as well as our general messaging focused on the climate emergency.

Up until recently, standing for this position was unpopular and made for a lonely reality, with the big nonprofits, foundations, and so-called "Climate Communicators," all of whom urged organizations like TCM to avoid "fear tactics," recommending that we instead communicate optimism in order to avoid scaring the public into paralysis or chaos. But today, the Climate Emergency Movement has captured the public imagination and is rapidly gaining power. As the reality of climate breakdown sets in, the old paternalistic strategy is dying off. Along with it, the fetishization of markets as some kind of mythic force that must not be disturbed by government action is also starting to dissolve. It is becoming clearer by the day that we must tell the truth, that we must act boldly, and that we must do so at incredible speed.



The shift away from incrementalist goals and toward a real fight for the survival of our species has been so rapid that it is almost hard to conceptualize the change in tone and

seriousness. In some assessments, it began in earnest in 2016 at Standing Rock, where the Indigenous Water Protectors showed the country what heroism looks like, as they withstood months of abuse from police and private security forces, and continued their nonviolent, highly spiritual direct action of blocking the Dakota Access Pipeline.

Today, there is a militant movement of young people marching in the streets and occupying the offices of elected officials, embarrassing representatives who refuse to act with urgency. The street theater and direct action tactics of Extinction Rebellion have changed the consciousness of the United Kingdom and have helped achieve declarations of Climate Emergency in 53 local government jurisdictions, including London, the biggest city to date to declare and commit to a 10-year transition to a zero-emissions economy. Overall, 500 local governments, representing over 50 million people around the globe have joined the Climate Emergency Declaration Campaign. In the United States, the Green New Deal is shaping the Democratic Party platform around a 10-year national mobilization to achieve a carbon-neutral economy.

The Climate Mobilization has played an integral role in shaping and supporting these efforts, both directly, through our organizing and influence network and our successful campaign to inform the Democratic Party primary and platform in 2016, and indirectly, through sector-leading publications like the Victory Plan, which describe the necessary goals of a serious climate movement.

Successful Social Movements Utilize and Spread Emergency Mode

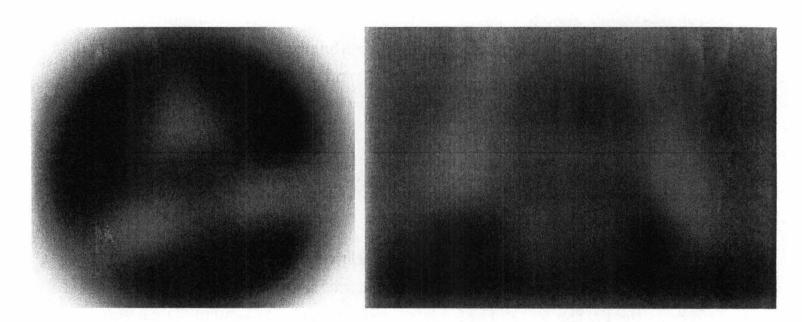
Although The Climate Emergency Movement is relatively new, it is part of a proud, extremely effective tradition of social movements that have levered emergency mode to confront existential threats, and its leaders can draw inspiration and guidance from past movements that have achieved great success using this approach. For example, In the 1980s, HIV, the virus that causes AIDS, was decimating the gay communities in New York, San Francisco and other large cities, and it was spreading at a horrifying speed. The government was failing the victims — giving them virtually no help, and failing to research and treat this growing epidemic. The government's failure to act swiftly and effectively, or even acknowledge the epidemic, was largely due to pervasive homophobia.

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Larry Kramer — the now iconic AIDS activist — founded ACT UP because existing AIDS groups had failed to enter emergency mode and were continuing to seek solutions through business-as-usual channels, such as holding meetings with government officials and asking for help — strategies that were not working. Kramer helped found and build the Gay Men's Health Alliance — but broke with them over disagreements about strategy and tactics. Kramer criticized GMHA as wanting to be "the Red Cross" because they were focused on appearing mainstream and upstanding and "a morgue" because they were helping people die rather than fighting "for the living to go on living."

Emergency Communication

Kramer knew that he was fighting for his own life and the life of his friends. He had no interest in "business as usual." Kramer treated AIDS with deadly seriousness and encouraged as much (realistic) fear as possible. He told crowds of gay men that if they didn't fight back, they would be dead in a few years. He was inviting others, especially other gay men, to join him in emergency mode, focused intensely on solving the crisis.



ACT UP's slogan, "Silence=Death" referred not only to governmental and media silence on AIDS, but the entire cultural silence around homosexuality. Many gay people were closeted, hoping to protect their careers and avoid discriminatory, dehumanizing reactions from a homophobic culture. The silence around gayness — with most people keeping their sexual orientation at least partially private — posed huge problems for the movement. Gay men, including gay doctors, were *not able to work together with*

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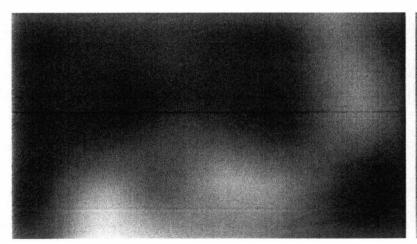
maximum impact, or communicate the emergency to the public, while still in the closet. Larry Kramer wrote in his prescient, biting, landmark essay 1,112 and counting:

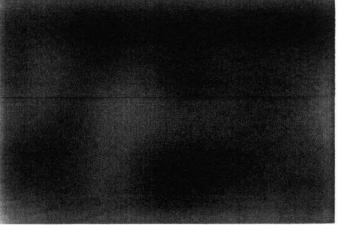
Why isn't every gay man in this city so scared shitless that he is screaming for action? Does every gay man in New York want to die?... I am sick of closeted gay doctors who won't come out to help us.... I am sick of closeted gays. It's 1983 already, guys, when are you going to come out? ... As more and more of my friends die, I have less and less sympathy for men who are afraid their mommies will find out or afraid their bosses will find out or afraid their fellow doctors or professional associates will find out. Unless we can generate, visibly, numbers, masses, we are going to die.

The push to come out and live out of the shadows had a profound impact as the public learned that people they loved and respected were gay, and in danger.

Education and Advocacy

Because the government was failing to provide answers and effective treatment, ACT UP took on significant educational work as well. The Treatment + Data Committee took on the task of becoming experts in the biology of HIV/AIDS — seeking to understand the virus and various treatment options. A glossary of AIDS treatment terms was created and passed out at meetings. ACT UP also produced and advocated *A National AIDS Treatment Research Agenda*, which laid out ACT UP's specific demands for what drugs should be developed and how the process should unfold.





Protest

By demonstrating their courage and tenacity, ACT UP grew in size and power, drawing more people into emergency mode. New members contributed their skills, resources,

and networks to the cause. By keeping their protests non-violent, ACT UP invited participation from a larger group. Erica Chenoweth has demonstrated that non-violent campaigns are much more likely to be successful at involving significant portions of the population, and more successful at accomplishing their overall goals.

(Partial) Success!

With its combination of public protest, private acts of courage, and education & advocacy, ACT UP accomplished many of its aims. AIDS patients won the right to participate in every phase of the drug development process. They won major funding for research, which led to the discovery and deployment of antiretrovirals, a class of drugs that is very successful in treating HIV, potentially keeping the disease from ever becoming AIDS. ACT UP's success laid the groundwork for mainstream acceptance of homosexuality, as well as the continuing struggles for gay rights and equality. It also forever changed the way pharmaceutical drugs are researched and developed.

ACT UP's work has not been completed, however. AIDS has become a global epidemic, with more than 36 million people currently infected, and 1 million people dying from AIDS every year. There is still no cure and no vaccine, something that Larry Kramer and many others continue to work on. But what ACT UP did accomplish was to get people and institutions, especially the Federal Government, and also local governments, hospitals, universities and more — to treat HIV/AIDS like the crisis it was.

Implications for the Climate Movement: Lead the Public into Emergency Mode

Like ACT UP, the climate movement is responding to a direct existential threat.

Understanding that emergency mode allows individuals and groups to function in an enhanced, optimal way, delivering their peak performance, has critical implications for the climate movement.

People who understand the climate emergency must exit normal mode and abandon the gradual policy advocacies and enervated emotional states that accompany it. Instead, we must seek *to restore a safe climate at emergency speed*. To accomplish this, the climate movement must lead the public into emergency mode. First we must go into emergency mode ourselves, and then communicate about the climate emergency and need for mobilization with clarity, dedication, and escalating assertiveness.

Those of us who have entered emergency mode — who understand the mobilization imperative — need to get talkative and loud. We need to spread our message as far and wide as possible. We must not stay "closeted" and appear that we believe everything is fine, or that the Democratic Party are well on their way to containing the crisis, once the Republicans and the Supreme Court get out of the way. Rather we need to "come out" as being in emergency mode and in favor of a WWII-scale climate mobilization that rapidly sweeps away business-as-usual — to our friends, family, neighbors, fellow climate activists, and the public. Like ACT UP we need to spread our message as clearly, loudly and in the most attention-grabbing ways we can.

Big Green, with their hundreds of millions of dollars of funding, and other gradualist organizations, should follow the lead of Sunrise, Extinction Rebellion, and the School Strikers, or they will find themselves facing a different type of existential threat: total irrelevancy.

Seeking Consensus

While we must seek to learn as much as we can from ACT UP and other successful social movements, we must also recognize that the climate crisis poses a challenge unlike anything humanity has ever faced. Full-scale emergency mobilization requires a higher degree of participation and consensus than treating AIDS, implementing civil rights legislation, or even toppling a dictator. In order to initiate the WWII Scale Climate Mobilization that we need, I believe we need a *national consensus* that we are directly threatened by the climate emergency.

ACT UP didn't bring the entire public into emergency mode, but because they entered emergency mode themselves they were able to apply pressure very strategically. ACT UP could be something of a gadfly — alienating many and still achieving their agenda. They were an oppressed minority that needed to move huge bureaucracies, and they did. The climate movement faces a larger task. We must effect change throughout our entire society. We want to "wake America up" to the scale of the threat, and the need for mobilization, as America woke up to the need to mobilize for WWII immediately following the attacks on Pearl Harbor.

Thus we must seek to be as inclusive as possible, while unwaveringly demanding WWII-scale climate mobilization. Our tone must balance emergency-mode, steadfastness,

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assertiveness, and inclusiveness. Pope Francis calls for people to have an "ecological conversion," and we must adopt the attitude of understanding and forgiveness for individuals past denial or climate-damaging activity.

Addressing Helplessness

Many people who understand the scope of the climate crisis are paralyzed by fear and helplessness. Empowerment, the solution to helplessness, is a key element of all social movements.

In the case of the climate crisis, we must educate, or remind people that:

- 1. Social movements can cause immense, rapid change, and the Climate Emergency Movement has tremendous momentum.
- 2. During WWII, America mobilized and achieved a transition more rapid and complete than anyone thought possible.
- We as citizens have the power to change the direction of this country, and if we successfully build political will for full-scale climate mobilization, the results will be staggering.

The best thing that we can do to confront the pervasive sense of helplessness and despair is to rapidly build an effective and public Climate Emergency Movement.

Truth Based Communication

After decades of politicians and environmental organizations downplaying and soft-pedaling the threat, The Climate Mobilization and the Climate Emergency Movement proposes a corrective: *tell the truth*. Yes, it's scary. Yes, the challenge before us is immense. But as James Baldwin wrote, "Not everything that is faced can be changed, but nothing can be changed until it is faced."

While considered "too hot to handle" by gradualists, the truth is actually our movement's greatest strategic asset. The truth is that no human endeavor can succeed on a planet beset by catastrophic climate change. None of our values, joys, or relationships can prosper on an overheated planet. There will be no "winners" in a business-as-usual scenario: Even wealthy elites are reliant on stable ecosystems, agriculture, and a functioning global civilization. For that reason, among others, solving the climate crisis

has the potential to be the most unifying endeavor in human history. I explore this concept in depth in my essay *The Transformative Power of Climate Truth*, and my forthcoming book *Transform Yourself with Climate Truth* will help readers emotionally process climate truth, and integrate it into their identities.

Indeed, Having candid conversations with our friends and family is something that everyone can and should do. If we are silent, our understanding does not become power. 2018 Polling from Yale's Climate Communication Center found that only 9% of Americans hear people they know talk about climate change at least once a week, and only 17% once a month! 74% of Americans hear about climate change from someone they know "several times a year" or less. And yet the same study shows that 29% of Americans are "very worried" about climate change!

Disrupt pluralistic ignorance! Break the silence! Come out of the "Climate closet" and let your friends and family know how you feel about the climate emergency. Many people worry about the social awkwardness of bringing up the climate emergency — but keep in mind, many of your friends and family are also worried, and will be relieved and appreciative when you do bring it up, especially if you can offer them support and guidance. Be personal, be emotional, be authentic and empathetic. Hear people out and make them feel listened to. Talk about the climate emergency and need for climate mobilization every day, multiple times a day if possible. Consider wearing T shirts, pins, etc from Climate Emergency organizations so that you can communicate your affiliation with the movement without saying anything.

You can communicate climate truth in other ways, depending on your skills and networks. Everyone can and should talk about the climate emergency and need for mobilization on social media, and, depending on your access, I also encourage you to do so on email lists, on blogs, or in mainstream publications. If you make art, or music, you can incorporate these messages.

Emergency Threat.

The climate movement must fully adopt the language of immediate crisis and existential danger. We must talk about climate change as threatening to cause the collapse of civilization, killing billions of people, and causing the extinction of millions of species. These horrific outcomes await us during this century, possibly even in the first half of it if

things truly slip out of control. This is not a matter of "protecting the planet for future generations" but protecting our own lives and those of the people we care about. We are in danger now and in coming years and decades. The climate crisis is, far and away, our top national security threat, top public health threat, and top threat to the global economy.

Emergency Solution

In order to lead people into emergency mode, and avoid panic mode, it is critical that the emergency threat is paired with an emergency solution.

Climate groups must match their emergency rhetoric with an emergency advocacy. Suppose that someone told you, "Help! The house is on fire! Can you please pour a glass of water on it? One glass is all it needs!" You would be confused. If we are really dealing with a house on fire, how could a solution be so simple and easy? You would suspect that there was no crisis, just exaggeration. Likewise, when the scale of the necessary response to the climate crisis is minimized, it prevents people from entering emergency mode. We need to "come out" as being in emergency mode — climate "alarmists," as horrified by the crisis, and as ready to make major changes in our life and the economy, for the duration of the emergency.

I have had the disconcerting experience of advocating that a climate event adopt the ambitious "zero in ten years" timeline, to be told by others on the planning committee, "We agree with you! We totally agree that is what needs to happen. But we can't say that — it will turn people off!" As the popularity of the Green New Deal shows, and the momentum it is generating, advocating a massive response to the Climate Emergency does not "turn people off."

We cannot be silent about the fact that emergency mobilization can only be coordinated by a "big" government that is granted the power to ban ecologically destructive practices and spend without limit to save as much life as possible. We must acknowledge that gradual approaches that prioritize political expediency and the alleged wisdom of the "free market" over the common good are doomed to failure.

We need to eliminate net greenhouse gas emissions in **years**, **not decades**, and remove excess greenhouse gases from the atmosphere until a safe climate is restored. This will take a whole-society, all-out effort.

Let go of False Narratives

Representing the truth, and moving the public into emergency mode means letting go of false or misleading narratives that shield the public (and ourselves) from the frightening truth. Instead, we must fully accept and communicate the truth no matter how difficult it may be. Popular narratives that must be refuted include the idea that we have a significant carbon budget remaining, that 2°C or even 1.5°C of warming above preindustrial levels represent "safe limits", or that climate change will be a problem only in other places or for future generations. We must replace these narratives with the truth that dangerous climate change is already here and presents an existential threat for all of us. However, we must be careful not to encourage an unwarranted sense of hopelessness. We still have an opportunity to change course on climate, though urgent action is needed in all sectors of human activity, including transportation, industry, agriculture and land use. We can and must transform our society, and each of us can help lead the change process. See more overcoming false narratives at the end of this essay.

Overcome Affect Phobia and Welcome all Emotions

Communicating with the required level of honesty will require an emotional shift in the climate movement. For decades the climate movement has emphasized facts and avoided feelings. This is probably in part because scientists report the unfolding climate crisis to us in their objective, often emotionally detached style. Also, because the emotions that the climate crisis inspires are so intense, the climate movement, it seems, has tried to avoid them as much as possible.

My forthcoming book, *Transform Yourself with Climate Truth* is a radical self-help book for people struggling to come to terms and cope with the climate emergency. Yes, the feelings are intense and overwhelming, but we can *use* those feelings as fuel to create rapid and dramatic change. They are part of the solution.

Affect phobia is often official. For example, Columbia University's popular CRED Guide to Climate Communications contains a section, "Beware the Overuse of Emotional Appeals," in which they caution presenters to avoid telling the whole truth about the climate crisis, as this would cause "emotional numbing." So presenters are given strategies including choosing a specific "portfolio of risk" to communicate — such as the link between climate and disease — rather than the whole, frightening truth.

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Affect phobia can also be found in almost any discussion within the gradualist climate movement about what to say or what to advocate. "Fear doesn't work as a motivator" so we shouldn't "make" people afraid as it might "turn them off."

While it is accurate that climate truth overwhelms some people, the climate movement should be focused on *turning people on* — getting more people to enter emergency mode as activists. Further, some people will be "turned off" by climate truth *temporarily*, but will process it over time and then enter emergency mode later. With the truth, we give people the opportunity to face the facts and their feelings, and move forward productively. Without the truth, we deny them this chance.

Another critical reason for organizations and leaders to overcome affect phobia is to provide a safe space to discuss the crisis in the fellowship of others who understand. People who understand the climate crisis are often alienated, feeling that they must act "as if" things are OK in order to get along. Climate advocacy organizations should create a place where people can process the reality and implications of the climate crisis, together. This kind of supportive, generative atmosphere can only occur when the truth is embraced, and we are able to tolerate the emotions that the truth inspires. If the organizational culture is to stay perpetually cheerful and stay away from the horrifying truth of our situation, people will not feel free to express their true feelings.

If you feel the urge to say, "But people can't handle the truth," question whether you may be reacting to your *own* anxiety and your own difficulty processing the climate crisis. Of course it's difficult! Of course people will feel afraid, angry, and grief-stricken. Those are rational, healthy reactions to the surreal and nightmarish reality we find ourselves in. The climate movement should encourage people to acknowledge these feelings and learn to see them as a call to action.

State of The Climate Emergency Movement Ecosystem: May, 2019

The Climate Emergency Movement has gained so much momentum in the first few months of 2019 that it's hard to keep up. Here are a few of the recent developments and the organizations behind them, though by the time this essay is published the list is sure to be out of date.

The Green New Deal. In February, 2019, Rep. Alexandria Ocasio-Cortez and Senator Ed Markey introduced a House Resolution 109, *Recognizing the Duty of the Federal Government to create a Green New Deal* calling for a 10-year "National, social, industrial, and economic mobilization on a scale not seen since World War II and the New Deal" that achieves zero emissions, 100% renewables, full employment, a just transition for workers and frontline communities. As of May, 2019, 104 house representatives and 12 Senators co-sponsored this resolution, including most of the top Democrats contending for the presidency in 2020.

While Ocasio-Cortez was a candidate, she signed The Climate Mobilization's "Pledge to Mobilize", committing to organize with others to spread the truth of the climate crisis and build the power necessary to start maximal intensity mobilization. Ocasio-Cortez has subsequently called for trillions of dollars in investments for that Green New Deal so that it can mobilize on the scale of WWII. Since their inception, The Justice Democrats, who recruited and supported Ocasio-Cortez's election, have been interested in a 10 year mobilization to transform our energy sector. The Climate Mobilization and myself have been dialoguing about this program — which became the Green New Deal — for years. It contains many elements of our *Victory Plan*.

The Justice Democrats is a grassroots Political Action Group that recruits and supports candidates who run a unified platform, featuring the Green New Deal. Current Justice Democrats in Congress include Alexandria Ocasio-Cortez, Ilhan Omar, Ro Khanna, and Pramila Jayapal. The Justice Democrats are recruiting their 2020 candidates, many of whom will primary corporate, gradualist democrats.

The Sunrise Movement is a US based grassroots movement group led by millennials and targeting young people. It seeks to stop the climate crisis and create millions of new jobs in the process. Since the introduction of the Green New Deal, Sunrise has exploded in interest and popularity, and the organization is now shaping up to coordinate the grassroots social movement for comprehensive emergency and maximal climate mobilization in the United States. They are a major new political force and are poised to continue growing in size and influence. They have already succeeded in bringing the climate, and Green New Deal, to the forefront of the 2020 Presidential primaries.

Extinction Rebellion (XR for short), emerged in November 2018 as a major force on "Rebellion Day One", when thousands of rebels occupied five bridges in London. XR

encourages its members and the broader public to accept the hard truths of the climate crisis, and this approach is proving to be remarkably successful. In the last six months XR has expanded globally, especially in Europe, and as of April 2019, it has initiated 2 weeks of rebellion. The nonviolent, open-affiliation group demands that the government "tell the truth about the climate and wider ecological emergency," that the government "enact legally binding policy measures to reduce carbon emissions to net zero by 2025 and to reduce consumption levels," and that a national citizen's assembly is convened "to oversee the changes, as part of creating a democracy fit for purpose."

The principle of Climate Truth has been central to XR's approach from the start. One of their slogans is, "Tell the truth and act like that truth is real." XR emphasizes civil disobedience as its key tactic, and way of expressing that they are in Emergency Mode.

XR also recognizes the importance of grief and mourning. Another slogan is "We welcome everyone and *all parts of everyone*." Your fear, grief, anger, and despair are all welcome. XR supports organizers in acknowledging and responding to the climate crisis and offer seminars on brokenheartedness and grief. Their standard 1-hour talk, "Headed for Extinction and What to do about it" contains several breaks for silent grief.

One important piece of this social movement history is that both Sunrise Movement and Extinction Rebellion were trained by the same person and organization — Carlos Saavedra, the founder of the Anyi Institute. Anyi teaches movements to "frontload their DNA" for rapid growth. In other words, to develop a clear set of goals, demands, and way of operating that can be picked up by *anyone*. If you want to organize an XR or a Sunrise movement event — you are empowered to do so, and do not need permission, as long as you act within the group's stated guidelines and values.

School Strikes The school strikes are a prime example of how transformative climate truth can be, as well as the power of 1 individual to wield it with maximum efficacy. Greta Thunberg, Swedish Teenager, began striking her school every Friday, going instead to Swedish parliament to stand on the stairs and demand an emergency response on climate. Greta has spoken at UN climate gatherings, at Davos, and at other official meetings, offering scorching rebukes and calls to arms, such as telling Business leaders at the World Economic Forum in Davos:

At places like Davos, people like to tell success stories. But their financial success has come with an unthinkable price tag. And on climate change, we have to acknowledge we have failed. All political movements in their present form have done so, and the media has failed to create broad public awareness...Adults keep saying, "We owe it to the young people to give them hope." But I don't want your hope. I don't want you to be hopeful. I want you to panic. I want you to feel the fear I feel every day. And then I want you to act.

Greta's fiercely truthful approach has proven enormously successful, spreading globally. In Belgium, after more than 30,000 students struck, their environmental minister resigned in February, 2019. On March 15, 2019, 1.4 million students left schools around the world demanding, among other things, a Declaration of Climate Emergency and an emergency speed transition to zero emissions.

Greta is firmly committed to spreading climate truth:

I often talk to people who say, 'No, we have to be hopeful and to inspire each other, and we can't tell [people] too many negative things'... But, no — we have to tell it like it is. Because if there are no positive things to tell, then what should we do, should we spread false hope? We can't do that, we have to tell the truth.

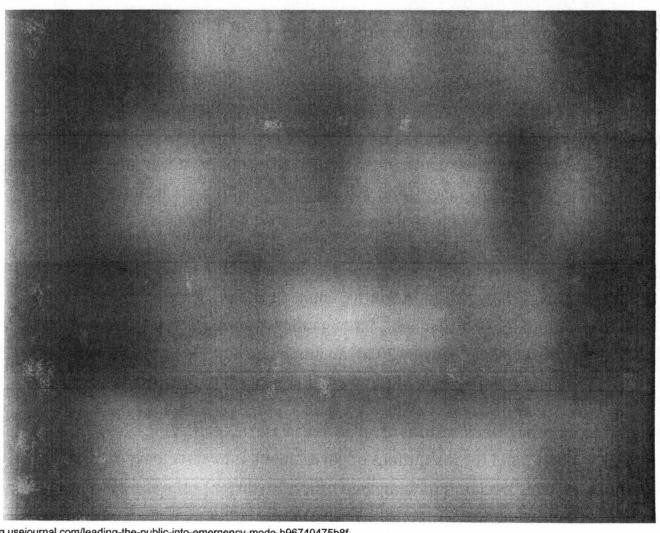
Indeed, Greta's approach to communication is so aligned with my own, in terms of bluntly conveying the truth of the emergency and demanding transformative change, that certain conspiracy-minded bloggers have claimed that I am somehow one of Greta's puppet masters. I have never had a one-on-one conversation with Greta (tho I was on a panel with her over Skype, once), and, while I would be immensely honored if my writing has influenced her, I have no evidence that that is the case.

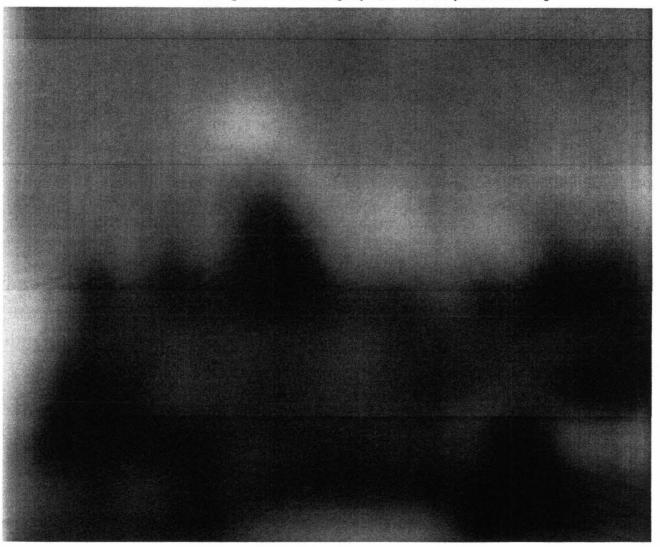
The School Strikes have taken on much of the character of their truth telling initiator. The student-founded organization Youth Climate Strike US, which has brought the strikes to the United States, demands, among other things: a Green New Deal and a just transition to 100% clean energy by 2030, an immediate halt to new fossil fuel infrastructure, and a Declaration of Climate Emergency at the national level.

Climate Emergency Declarations are a powerful tool for spreading Climate Truth and leading the public, and the institutions of government, into emergency mode. The Climate Emergency Declaration Campaign officially started in the city of Darebin,

Australia — whose city government passed the first declaration of climate emergency in December 2016. Because of our local Climate Mobilization chapter, Hoboken New Jersey became the first U.S. city to declare a Climate Emergency in November, 2017.

Working in coalition with international allies and on-the-ground leaders, The Climate Mobilization has helped to spread this campaign to 500 local governments around the world, representing over 50 million people; it is now growing at a compounding rate. Because of Extinction Rebellion's impact, as well as the work of the British Green Party, more than 50 UK cities have declared climate emergency and commit to emergency speed decarbonization. London declared a climate emergency in mid-December, committing to transform its economy to carbon-neutral by 2030. Non-governmental organizations have also declared Climate Emergency. University of Bristol became the first university to declare a Climate Emergency. The XR-affiliated campaign Culture Declares a Climate Emergency has supported hundreds of British cultural institutions and artists in declaring a climate emergency. The Climate Mobilization plans to help spread this into the US as well.





As of May 2019, The campaign is moving to higher levels of government: the United Kingdom, Ireland, Scotland, and Wales have all declared a Climate Emergency. The Climate Mobilization plans to continue supporting Climate Emergency Declarations on every level of government, looking to get one introduced into the House of Representatives in coming weeks.

After a city has declared a Climate Emergency, we advise councilors to not just enact local policy but to become champions for Climate Mobilization — educating the public, working with other local governments to spread the campaign and collaborate on climate approaches, and pushing higher levels of government to declare Climate Emergency and commit to rapid decarbonization. Often, new government bodies must be created in order to complete that work.

Local Chapters of National Groups and Local Climate Justice Organizations

Local and state level chapters of some big green national organizations have joined the

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Climate Emergency Movement, through pursuing the Climate Emergency Declaration campaign, joining with the School Strikers, or in other ways.

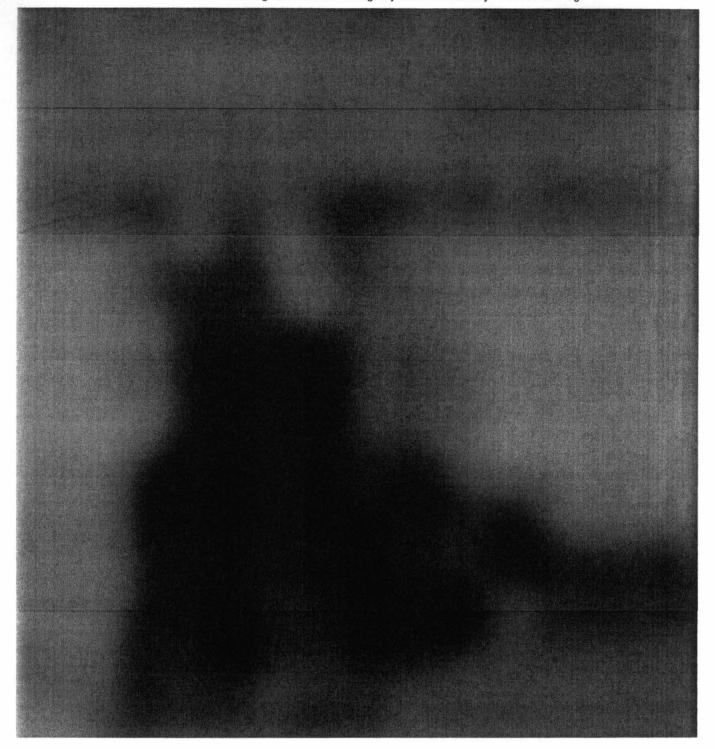
Further, many climate and environmental justice organizations that have been defending their neighborhoods, cities, and rural areas from fracking, oil extraction, mountaintop removal, and other toxic activities, are realizing that the larger climate emergency fight is aligned with their local fights. The LA Leap coalition is an example of how these groups achieve huge wins when they work together in the Climate Emergency frame.

The Climate Mobilization was founded 5 years ago, on the principle of telling the truth and demanding a response that could protect humanity and the natural world: WWII scale mobilization. We have three major programs: Climate Emergency, Climate Truth, and Climate Mobilization.

Our Climate Emergency campaign was described above — we support local TCM chapters, and partner organizations such as chapters of 350.org and the Sierra Club — in winning Declarations of Climate Emergency and making them as effective as possible.

Our Climate Truth campaign is based around my psychological work. My forthcoming book, *Transform Yourself with Climate Truth* is about helping people work through the emotional and psychological blockers to entering emergency mode personally, turning their terror and grief into action, and joining the movement. I am piloting small group conversation formats with the goal of welcoming pain and turning it into action.

Our Climate Mobilization thought leadership team focuses on intellectual production for the Climate Emergency Movement. This work ranges from political and economic analysis to determine optimal pathways to a fully renewable energy system; policy development designed to move governments of any size into an emergency mode of response to climate change; and research into the industrial strategy development and bureaucratic restructuring required to fully mobilize America's economy as we entered World War II. At times this work felt like a thought experiment; it has recently become an essential and influential body of knowledge. We now have an opportunity to directly support serious candidates and influence climate policy at the highest levels.



Join the Movement to Protect Humanity and All Life

I hope that this essay has convinced you that: 1) the Climate Movement's job is to *lead* the public into emergency mode 2) that the Climate Emergency Movement is doing that by entering emergency mode themselves and that 3) This young movement has tremendous momentum and is growing all the time. However, relative to the epic nature of the challenge, the Climate Emergency Movement is still small, and broke. We need all the support we can get. We need you.

The forces arrayed against us are mighty. But on our side is the extremely potent truth — what science tells us and is becoming more apparent all the time — as well as the human desire to survive and protect other people and species. Another important strategic advantage is the WWII experience with the home front economic and social mobilization, which provides a recent historical example of extraordinary, improbable American success through mobilization. It's hard for most people to imagine how we could possibly tackle the climate crisis because of the scale and urgency of what must be done, but the WWII-scale mobilization concept makes it much easier.

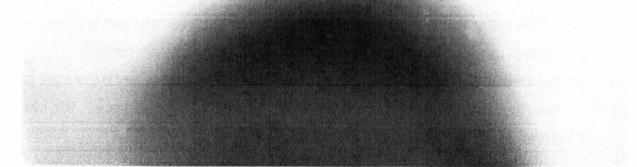
We are now in a time of tremendous consequence. Incredibly, the choices we make now and in the near future matter a great deal to the future of humanity and all life on earth. It's time to leave gradualism, business as usual, and normal mode behind until we have solved the climate problem. The time has come to enter emergency mode, both as a society and as individuals. The stakes could not be higher.

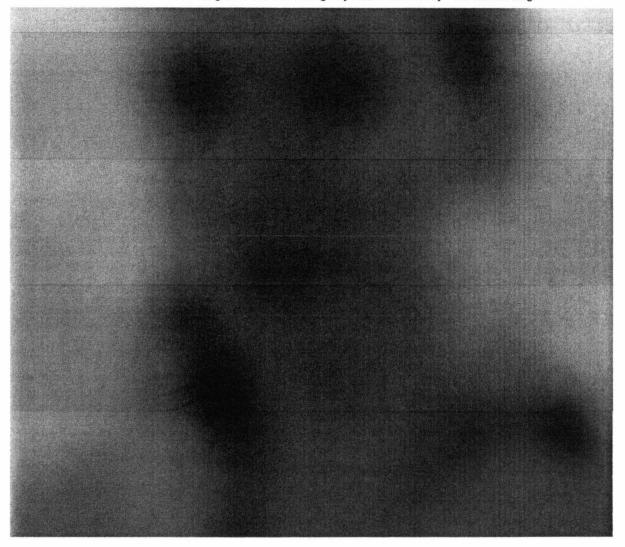
Next Steps

- Volunteer with a Climate Emergency Organization! Extinction Rebellion, Sunrise, the Justice Democrats, the School Strikers, or The Climate Mobilization. Or work to bring your current organization into "Emergency Mode"
- 2. Have frank conversations with people you care about and respect about the climate emergency.
- 3. Support The Climate Mobilization's work with a Donation.

About the Author

Margaret Klein Salamon, PhD

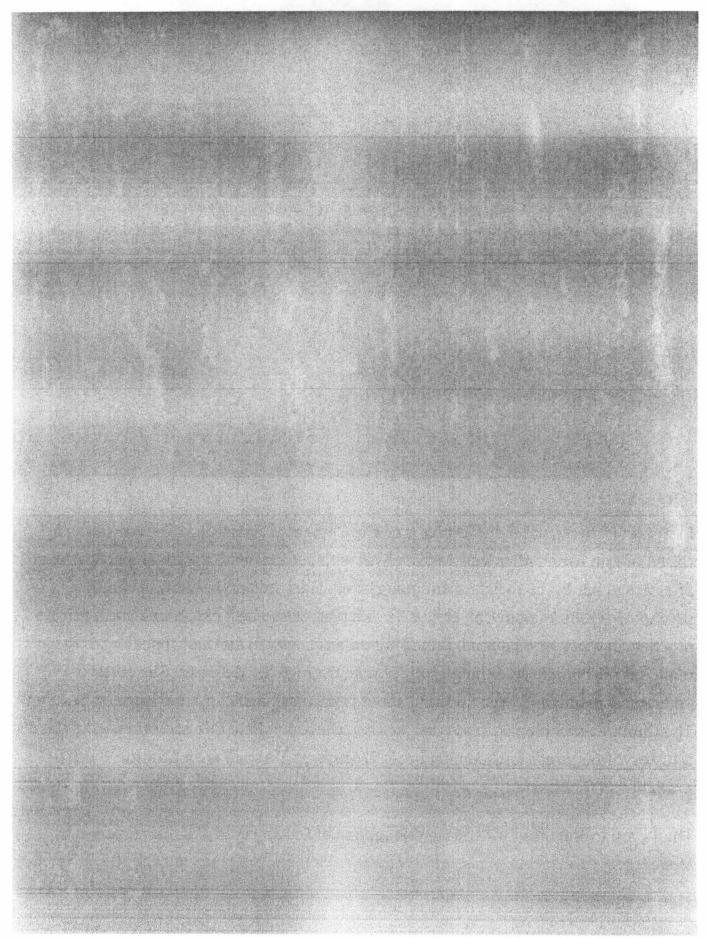


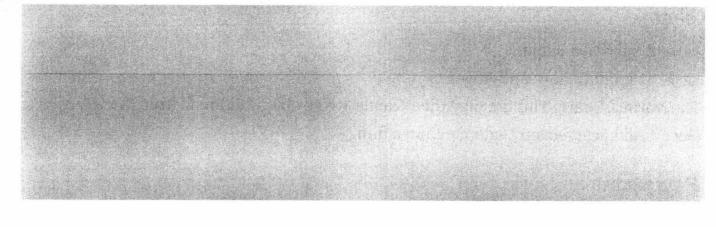


Margaret is the Founder and Director of The Climate Mobilization. She was born and raised in Ann Arbor, Michigan and she lives with her husband in Park Slope, Brooklyn. She earned her BA in Social Anthropology from Harvard and her PhD in clinical psychology from Adelphi University. Her life plan was to be a psychoanalyst in private practice, a writer, and have a family. Those plans began to feel less appealing as the reality of the climate crisis increasingly broke through her defenses. She entered emergency mode, and began writing about psychology and climate change on her blog The Climate Psychologist. From that writing, she found Ezra Silk and others, and the rest is history! Margaret's forthcoming book, *Transform Yourself with Climate Truth* is available on Kickstarter.

Thank you to Jim Streit for editing this version of *Leading the Public into Emergency Mode*.

Overcoming False Narratives





Further Reading

The Climate Crisis

Climate Reality Check and Recount by David Spratt The Uninhabitable Earth by David Wallace Wells

WWII Homefront mobilization

No Ordinary Time by Doris Kearns Goodwin Freedom's Forge by Arthur Herman

WWII Scale Climate Mobilization

The Case for Climate Mobilization by Ezra Silk and Margaret Klein Salamon Unprecedented by David Griffin The Great Disruption by Paul Gilding Striking Targets, Philip Sutton

Climate Emergency

Road to Cop 21 and Beyond: the Missing Lessons of Paris by Michael Hoexter Climate Code Red by Philip Sutton and David Spratt

Social Movements

This is an Uprising by Mark and Paul Engler
The Power of the Powerless by Vaclav Havel
From Dictatorship to Democracy by Gene Sharp

ACT UP and Larry Kramer

1,112 and Counting, Larry Kramer

Films

How to Survive a Plague

Larry Kramer: In Love and Anger.

The Normal Heart (This is a play that Kramer wrote about his break from the Gay Men's Health Alliance, recently, adapted into a film.)

Flow States

Flow by Mihaly Csikszentmihalyi

Flow Genome Project

The Rise of Superman: Decoding the Science of Ultimate Human Performance, by Kotler, Steven.

Read this story later in Journal.

Wake up every Sunday morning to the week's most noteworthy stories in Society waiting in your inbox. Read the Noteworthy in Society newsletter.

Climate Change Climate Emergency Psychology Sustainability Ideas

About Help Leval

The Guardian

The real reason some scientists downplay the risks of climate change

Climate deniers often accuse scientists of exaggerating the threats associated with the climate crisis, but if anything they're often too conservative

Dale Jamieson, Michael Oppenheimer and Naomi Oreskes

Fri 25 Oct 2019 08.00 BST



Ithough the results of climate research have been consistent for decades, climate scientists have struggled to convey the gravity of the situation to laypeople outside their field. If anything, the wider public only recently seems to have awakened to the threat of the climate crisis. Why?

In our new book, Discerning Experts: The Practices of Scientific Assessment for Environmental Policy, we attempted to illuminate how scientists make the judgments they do. In particular, we wanted to know how scientists respond to the pressures, sometimes subtle, sometimes overt, that arise when they know that their conclusions will be disseminated beyond the research community - in short, how scientists are affected when they know the world is watching.

We explored these questions with respect to assessments of acid rain, ozone depletion and sea level rise predictions from the west Antarctic ice sheet.

While climate skeptics and deniers often accuse scientists of exaggerating the threats associated with the climate crisis, the available evidence suggests the opposite. By and

large, scientists have either been right in their assessments, or have been unduly conservative. We noticed a clear pattern of underestimation of certain key climate indicators, and therefore underestimation of the threat of climate disruption. When new observations of the climate system have provided more or better data, or permitted us to re-evaluate earlier conclusions, the findings for ice extent, sea level rise and ocean temperature have generally been worse than previously thought.

One of the factors that appears to contribute to this trend of underestimation is the perceived need for consensus, or what we call "univocality": the felt need to speak in a single voice.

Many scientists worry that if they publicly air their disagreement, government officials will conflate their differences of opinion with ignorance and use this as justification for inaction.

Others worry that even if policy-makers want to act, they will find it difficult to do so if scientists fail to send an unambiguous message. Therefore, scientists actively seek to find their common ground, and to focus on those areas of agreement. In some cases, where there are irreconciliable differences of opinion, scientists may say nothing, giving the erroneous impression that nothing is known.

How does the pressure for univocality lead to underestimation? Consider a case in which most scientists think that the correct answer to a question is in the range one to 10, but some believe that it could be as high as 100. In this case, everyone will agree that it is at least one to 10, but not everyone will agree that it could be as high as 100. Therefore, the area of agreement is one to 10, and this will be reported as the consensus view. Wherever there is a range of possible outcomes that includes a long, high-end tail of probability, the area of overlap will lie at or near the low end.

We are not suggesting that every example of under-estimation is caused by the factors we observed in our work, nor that the demand for consensus always leads to underestimation. But we found that this pattern occurred in all of the cases that we studied. We also found that the institutional aspects of assessment, including who the authors are and how they are chosen, how the substance is divided into chapters, and guidance emphasizing consensus, also generally tilt in favor of scientific conservatism.

Knowing this, what do we do?

To scientists, we suggest that you should not view consensus as a goal. Consensus is an emergent property, something that may come forth as the result of scientific work, discussion and debate. When that occurs, it is important to articulate the consensus as clearly and specifically as possible. But where there are substantive differences of opinion, they should be acknowledged and the reasons for them explained. Scientific communities should also be open to experimenting with alternative models for making and expressing group judgments, and to learning more about how policy makers actually interpret the findings that result. Such approaches may contribute to assessments being

more useful tools as we face the reality of adapting to the climate crisis and the disruptions that will occur.

For political leaders and business people, we think it is important for you to know that it is extremely unlikely that scientists are exaggerating the threat of the climate crisis. It is far more likely that things are worse than scientists have said. We have already seen that the impacts of increased greenhouse gases in the atmosphere are unfolding more rapidly than scientists predicted. There is a high likelihood that they will continue to do so, and that the IPCC estimates - that emissions must be rapidly reduced, if not entirely eliminated, by 2050 - may well be optimistic. The fact that this conclusion is hard to swallow does not make it untrue.

And for ordinary citizens, it is important to recognize that scientists have done their job. It is now up to us to force our leaders to act upon what we know, before it is too late.

Dale Jamieson, Michael Oppenheimer and Naomi Oreskes are authors of Discerning Experts: The Practices of Scientific Assessment for Environmental Policy. This piece is largely excerpted from that book

Topics

- Climate change
- Opinion
- comment

Dear Law Amendments Committee and The Honourable Gordon Wilson, Minister of the Environment:

I am writing to address Bill No. 213, cited as the Sustainable Development Goals Act.

I understand from my MLA that public consultation about this most significant piece of legislation will be forthcoming. Can I trust that this process will be open, genuine and inclusive of all those who depend upon this land to sustain them? The government must meaningfully engage with First Nations, Black, Acadian, and newcomer communities; municipalities, workers in all sectors, those who represent society's vulnerable and the general public.

We all love our province and there is much of which we can be proud. At the same time our ongoing history of economic development has too many skeletons in the closet, too many patterns which cause us to call out "Shame, shame!" as we thump the proverbial legislative desk.

Most of us actually believe that our planet is facing an existential crisis.

Canada is also in an era of Truth and Reconciliation.

If we are honest, both issues reflect a harmful legacy of colonization.

So this Act must address two interconnected issues - Climate, and Truth and Reconciliation.

The philosophy of "dominion over all the Earth", which was foreign to the Indigenous Peoples of this land, gave way to the "Doctrine of Discovery", colonialism, and capitalism.

These belief systems, so alive and well today throughout Canada and Nova Scotia, do not represent sustainable development. Business as usual is no longer acceptable.

Unchecked industrial resource extraction — from the sea to the forests and across the land, and all forms of fossil fuel-based industries — is systematically destroying Nova Scotia while adding to our carbon footprint.

Nova Scotia has many ongoing challenges to overcome: to this day we continue to treat ourselves as a developing state, so desperate for economic silver bullets that over and over we sell out our province to the highest bidder in the name of false and desperate economic schemes, of fake "jobs, jobs, jobs" incentives that strip away that which is suppose to sustain us.

Just look at the cautionary tale that Northern Pulp in Pictou County provides. Successive governments have spent and continue to spend millions upon millions from the public purse to prop up a corporate entity and assume its liabilities for decades to come.

The Government of Nova Scotia proudly espouses "We're open for business". Any business? Is there anything to which you would say "No"? This indiscriminate approach is going to leave the province, as seen in Boat Harbour and the Sydney Tar Ponds, with a legacy of horrifying public health statistics, soul destroying blighted landscapes and an environment that will no longer sustain life in any form.

Such an indiscriminate approach to "open for business" is what this new Sustainable Development Goals Act should begin to control. It is Nova Scotia's chance to change direction and stop doing "business as usual". Because this land is not ours to destroy. The Peace and Friendship Treaties did not give up Mi'kma'ki, the ancestral lands of the Mi'kmaw People. And the Land is THE issue to be faced in Truth and Reconciliation.

So which comes first in this Act which reflects a chicken or the egg conundrum? Goals and regulations or Regulations and goals? The Act offers a tone that is warm and fuzzy, using many words that are good to hear, what the drafters think we need to hear. But like the proverbial "white man speaks with forked tongue" I worry. This Act is thin on real substance, has few clear goals and is even thinner on the "How"-to-achieve factor.

And regulations are there to be broken. Yes, we need flexibility in our legislation but rarely does the flexibility work in the peoples' favour. Time and time again regulations afford to those of privilege the ability to achieve exceptions, to always find their way around regulations. Look at something as simple as the original View Planes by-law that established breathtaking views of Halifax Harbour from Citadel Hill. Or the view from the top floor of the new Central Library, now ruined by regulation made subservient to greed. These are not significant examples compared to one of a Federal law change to accommodate Alberta's Alton Gas and its environmental impact on the Shubenacadie River.

You just spent \$52,000 of tax-payer money for a Gold Show, to encourage gold mining development throughout the province. Have you looked beyond your four-year term to think of the the short and long-term effects of open-pit mining on the environment, on peoples' quality of life and health, effects on the water table, the watersheds, infrastructure and the resulting toxic tailings and their effects? Are you including the need for science-based regulations in your plans? How do the short and long-term effects on the healthcare system, the environment, the need for an extensive consultation process, the carbon footprint, ongoing monitoring and cleanup fit into your economic calculations of such developments? Can you honestly say that gold mining fits this definition in the Environment Act: "sustainable development" means development that meets the needs of the present generation without compromising the ability of future generations to meet their own needs.' Or this one in the new Act: "sustainable prosperity" means prosperity where economic growth, environmental stewardship and social responsibility are integrated and recognized as being interconnected?' Have you ever looked into degrowth? What do you mean by 'integrated' and how does 'recognition' affect decision making, action or non-action?

Once again, as per the roll out to the Consultation, your timing seems bent on discouraging public participation. As someone wrote: "The provincial government quietly posted on their website on Friday afternoon that there is a Law Amendments Hearing for the public, on Monday, October 28 at 11:45AM, on the SUSTAINABLE DEVELOPMENT GOALS ACT (Bill 213)." How do you expect people to participate with such short notice? You could have at least contacted those who submitted to the Consultation process to let us know about the First Reading. We spoke to our MLA and he was not certain of the schedule for Readings and the Law Amendment hearing. If he does not know, how are we supposed to know, realistically?

Well, here I am participating once again in spite of your ongoing endeavour to kill my faith in democracy. Rethink GOLD. It is willful ignorance to call that sustainable development! Climate Action and Truth and Reconciliation Action must be fundamental to all that comes next.

Thank you for the opportunity to express and share my thoughts on Nova Scotia's future. Please! Think about what you are doing.

Sincerely I am.

Aloha,

s. j. hauer

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The Chimate Crisis:

Growing Resilience with Tina Clarke

Climate Emergency! Solutions for Survival November 14:

Halifax Central Library, 6:30 pm, FREE

How Shall We Talk About the Climate Crisis?

of Scotland Anglican Diocese, 6:30 pm, by donation An Intergenerational Conversation, St. Margaret

Inner Transition: Truth, Courage, & Unfolding in a

Time of Environmental Crisis, Ummah Mosque Community Centre, 7:30 pm, by donation

November 16-17: Transition Launch Workshop

St. Luke's United Lower Hall in Tantallon, 9 am-5 pm, registration required

For more information and to register go to www.transitionbay.ca/events

Ummah Masjid, Environment Network Anglican Diocese of Nova Scotia and Prince Edward Island Co-sponsored by: Transition Bay St Margarets, Eco-Dharma Action Group, Ecology Action Centre,

November 14th

Climate Emergency! Solutions for Survival

Halifax Central Library 6:30 pm, FREE

sponsored by Transition Bay St Margarets

November 15th

How Shall We Talk About the Climate Crisis?

an intergenerational conversation
St. Margaret of Scotland
Anglican Church
6:30 pm, by donation

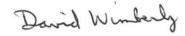
sponsored by Env't Network Anglican Diocese

November 16th

Inner Transition
Ummah Mosque
7:30 pm, by donation

sponsored by Eco-Dharma & Ummah Masjid

For more information, go to transitionbay.ca/events



The Climate Crisis..... Growing Resilience with Tipa Clarke



Transition LAUNCH Workshop

November 16th-17th

St. Luke's United Tantallon registration required

sponsored by



For more information and to register go to... transitionbay.ca/events

Comments to the Public Hearing on the Sustainable Development Goals Act (Nova Scotia) Monday Oct 28, 2019 at Province House

Whereas

- Forests cover ~75% of the Nova Scotian landscape and with surface waters (lakes, streams, wetlands) constitute the pre-eminent habitats of Nova Scotia's terrestrial landscape.
- The natural forest over most of the landscape is a mixed Acadian forest dominated by temperate latitude species, with boreal forest species dominating only under restricted localized conditions such as boggy ground, high elevations and exposed coastal areas.
- We have the most intensively exploited forests in Canada historically and currently.
- As a result of intensive exploitation, our forests are highly degraded in regard to productivity, species composition, old forest biodiversity, carbon storage, and production of high value wood.
- Repeated and extensive burning following settlement by Europeans until the mid-20th century, and clearcutting/management-to-favour-softwoods from the mid 20th century on, has resulted in extensive "borealization" of our forests, which ill-equips our forests to adapt to climatic warming.
- Inherently poor soils over 60% of our landscape in combination with acid rain have exacerbated forest degradation with severe impacts on aquatic biodiversity; it is recognized that clearcutting contributes to forest degradation and aquatic acidification.
- Our increasing supply of "low value wood"/declining supply of "high value wood" has meant forestry in NS has become increasingly dependent on Industrial (Intensive) Forestry methods and systems in order to benefit from economies of scale and to adapt to the loss of high value wood even sawmills now gain much of their profit from chips produced by clearcutting, while those same practices reduce the supply of high value wood (and old forest habitat) over the mid to long term even further. Currently Industrial Forestry is focussed on harvesting in SW Nova Scotia, our last remaining woodbasket (area of old forest and high wood volumes). As Industrial Forestry caters to global markets, this type of forestry continuously reduces the workforce per unit output in order to remain competitive, and thus has progressively become less significant as an employer and source of prosperity in NS; at the same time it has become more dependent on government handouts (direct or indirect) as inducements to remain in NS.
- One alternative market for low value wood being pursued by government if/when one or both of our remaining pulp mills goes under is for bioenergy and the like (biofuels, bioplastics) which are touted commonly without documentation as being carbon neutral. However, there is now an abundance of evidence that many if not most such schemes and notably the Biomass Plant at Port Hawkesbury increase production of CO2 relative to fossil fuels and fossil fuel feedstocks over "meaningful timeframes", i.e. the next 20 to 50 years.
- It is broadly recognized that forests are the most important routes of carbon capture and storage in terrestrial systems globally.

- GHG-related climate change since ~2000, combined with past management practices, has resulted in dramatic increases in frequency, intensity and extent of forest fires in western NA forests, and through much of the Boreal forest, with these forests now becoming net emitters of GHG rather than major sinks for carbon. At the same time, if for different reasons (notably economic desperation), the Amazon and other tropical and subtropical forests that have been major sinks for carbon are seeing increased frequency of fire to the point they also are becoming sources rather than sinks for carbon.
- Such developments put increasing value and onus on those of us in eastern NA, where temperate forests much less prone to fire occur, to manage our forests for carbon capture and storage, especially given that we are also a wealthy part of the world; for NS with its now highly degraded forests, increasing carbon storage in the form of older trees, .e.g. by "proforestation" (essentially increasing the length of harvest rotations), would also greatly benefit biodiversity and in the longer term provide higher value, more inclusive economic opportunities.

I urge that

(i) the need for open, transparent, independent GHG accounting (including e.g., LCAs and models) in all aspects of climate change mitigation be recognized in the Act, e.g., 4 (c) could be modified to read

4 This Act is based on the following principles:

- ... (c) climate change is recognized as a global emergency requiring urgent actions, those chosen in part on the basis of open, transparent, and independent GHG accounting of their potential benefits"
- (ii) that the preeminent role of our forests, potentially, in mitigating climate change, in biodiversity conservation and as a vehicle for sustainable prosperity be explicitly recognized in the Act, e.g. under #6 to add as a focus area
 - 6 Goals and initiatives established under this Act and the regulations must align with the following focus areas:
 - ... (x) our forests and their potential role in climate change and adaptation, biodiversity conservation, and creation of circular and inclusive economies

Detailed goals in relation to climate should subsequently be incorporated in the strategic plan cited under item 8: "Climate Change Plan for Clean Growth". This plan is scheduled to be completed "prior to Dec 31, 2020".

I appeal to the Government to begin public consultations on the Climate Change Plan well before the due date, e.g. on Nov. 15, 2019.

Respectfully submitted by

David G. Patriquin Prof of Biology, Dalhousie University (retired)

Website: www.versicolor.ca

Blog: Nova Scotia Forest Notes www.nsforestnotes.ca

DEFEATED

Bill #213 Sustainable Development Goals Act

CHANGES RECOMMENDED TO THE LAW AMENDMENTS COMMITTEE

PAGE 2, paragraph 7(b) - delete "53% below the levels that were emitted in 2005" and substitute "58% below the levels that were emitted in 2005, or 9.8 megatonnnes".



Submission on Bill No. 213 – Sustainable Development Goals Act Law Amendments, 28 October 2019 Lisa Mitchell, Executive Director, East Coast Environmental Law Association

The East Coast Environmental Law Association is a public interest environmental law charity established in 2007. Based in Halifax, Nova Scotia, we advocate for the fair application of innovative and effective environmental laws in Atlantic Canada through education, collaboration and legal action.

Members of the East Coast Environmental Law Association have been engaged with the *Environmental Goals* and Sustainable Prosperity Act (EGSPA) since its creation in 2007. Most recently we submitted comments to the public consultation process on the 5 year review of the EGSPA on September 26, 2019.

Unfortunately we were unable to attend the Law Amendments session today, which I expect you will understand given the very short notice and the resource challenges faced by small public interest organizations. I have, however, tuned in to some of the live broadcast and I understand that more than 40 individuals will present to the Committee. This is an incredible demonstration of commitment and concern by a broad range of citizens in our province for a law that resonates with them.

Nova Scotia needs clear and strong environmental goals and this is the only provincial statute that provides that focus. Since 2007, EGSPA has been a legal beacon that has demonstrated the provincial government's commitment to protecting current and future generations in this province as we work to mitigate and adapt to significant environmental and climate challenges.

Amendment # 1 Change the Title

Explanation: The government has provided no reasonable explanation for changing the title of the statute and inexplicably uses the original title in the subtitle. To reduce confusion and bring the title of the statute back in line with the purpose of the statute, change it to: The *Environmental Goals and Sustainable Prosperity Act*.

Amendment # 2 Recognize Indigenous Rights that are asserted in the United Nations Declaration on the Rights of Indigenous Peoples in the Act.

Explanation: Although they are important, the Aboriginal and treaty rights that Indigenous peoples in Canada hold under section 35 of the *Constitution Act, 1982*, are limited in many ways. The United Nations Declaration on the Rights of Indigenous Peoples ("UNDRIP") sets a better standard for Indigenous rights recognition, including, but not limited to, Indigenous peoples' rights to:

- refuse or give free, prior, and informed consent to proposed activities within their territories;
- refuse or give free, prior, and informed consent to proposed activities that could affect their rights adversely;
- · access traditional medicines and conserve vital medicinal plants, animals, and minerals; and,
- maintain and strengthen spiritual relationships with their lands, territories, waters, coastal seas, and other resources, and preserve future generations' ability to do the same.

Amendment # 3 Include Goals and in the Act itself

Explanation: As you are aware, the political process to create or amend a statute is very different from the process required to create or amend regulations. Amending a statute requires debate within the House of Assembly; it will give representatives from all parties the chance to make their voices and the perspectives of



their constituents heard. By contrast, regulations can be made by the party in power with little input or feedback from others. Much of the foresight and strength of EGSPA has been in the clear, measurable goals that enabled accountability.

This is not that time to back away from accountability; it is the time to double-down and send a message to Nova Scotians that in order to achieve sustainable prosperity we must set goals and targets are robust and use the most inclusive political processes available. We applied the government for including two climate goals in Bill No. 213, however, new goals and updating current goals that have not yet been achieved should also be included in the Act.

Amendment #4 Core habitat goals for Species at Risk should be included in the Act

Explanation: The *Endangered Species Act* (ESA) defines core habitat as the "specific areas of habitat essential for the long-term survival and recovery of endangered or threatened species..." The process to protect core habitat is not simple. Once identified in a recovery plan, the Minister may exercise his authority to designate core habitat (section 17) and then create regulations to control, restrict, or prohibit activities within core habitat (section 16).²

In the 20 years since the introduction of the ESA not one parcel of core habitat has been identified and only one species (Peregrine Falcon) has been moved to a lower category as a result of recovery efforts. We know that habitat disturbance and destruction is a key contributor to species loss.

Amendment #5 Goals that require the integration of climate and biodiversity science and policy education into Nova Scotia curriculum should be included in the Act.

Explanation: Not only are we in the midst of a climate crisis, we are witnessing the 6th mass extinction, and the first directly linked to human population and consumption practices. This is the time to set clear environmental goals that will save our environment, invigorate a new economy and meet the sustainable prosperity goal of healthy and resilient communities. Education is the foundation to achieving these goals.

_

¹ Endangered Species Act, SNS 1998, c. 11, s. 3.

² *Ibid*, s.16

From: Anne-Marie Conn

Sent: October 28, 2019 5:04 PM

To: Office of the Legislative Counsel < legc.office@novascotia.ca>

Subject: Re New Law on Sustainable Development

** EXTERNAL EMAIL / COURRIEL EXTERNE **

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Dear Sir or Madame;

This is most underhanded on the part of our NS government to post something on Friday pm for input on Monday am on a topic that is so important to the future of our planet and Province.

This type of input is essential if as a group in the Province we are going to move forward and develop laws that are for the common good.

This type of behavior leads to a lack of trust on the part of the electorate.

Please reconsider this and have an adequately publicized time for such a hearing.

Sincerely

Anne Marie Conn

Anne Marie Conn, rscj

Halifax, NS Canada From: Patricia Egli

Sent: October 28, 2019 7:51 PM

To: Office of the Legislative Counsel < legc.office@novascotia.ca>

Subject: Bill 213 amendments

** EXTERNAL EMAIL / COURRIEL EXTERNE **

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To the Law Amendments Hearing Committee,

Due to the very short notice about the hearings regarding the Sustainable Development Goals Act happening today, October 28, I was not able to attend. This is why I am writing you today. I am recommending that burning forest biomass to generate electricity be removed from the list of sustainable, renewable energy sources.

- 1. At the rate at which wood is being burned for electricity, this source of fuel is NOT sustainable: it is harvested much faster than it can grow.
- 2. The burning of green wood at the Port Hawkesbury facility is so inefficient that, per unit of energy produced, it emits more CO2 in the atmosphere than the burning of fossil fuel.
- 3. As biodiversity is threatened at an unprecedented level, clearcutting and whole tree harvesting is exacerbating the problem by vastly increasing habitat loss and fragmentation.
- 4. Trees are the best technology we have for removing CO2 from the atmosphere. Even dead trees, which rot very slowly in Nova Scotia's climate represent a store of carbon sequestered in the forest soil. The more intact forests we have, the more we can sequester carbon released by fossil fuel burning.

Claiming that burning forests to generate electricity is environmentally friendly is green-washing a very destructive practice.

Thank you for your attention. Respectfully submitted, Patricia Stoffyn, Ph.D.

East Jeddore, NS

From: Jillian Tonet

Sent: October 28, 2019 7:52 PM

To: Office of the Legislative Counsel <legc.office@novascotia.ca> **Subject:** SUSTAINABLE DEVELOPMENT GOALS ACT (Bill 213)

** EXTERNAL EMAIL / COURRIEL EXTERNE **

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To the office of the legislature,

I would like to second Christine Saulnier's comments on the proposed Bill 213, the Sustainable Development Goals Act:

FIRST, with regards to emissions targets (7.c): The new provincial target of 11.2 million tonnes of provincial GHG emissions (53% below 2005 levels) by 2030 needs to go further (7 c). The target must be no more than 9.8 Million tonnes or 58% below 2005 levels by 2030. As a signatory to the 2030 declaration and a member of that network, this is equivalent to our call for legislated GHG reduction target of 50% below 1990 levels by the year 2030. This target represents the minimum emission reductions required by Canadian jurisdictions in order to do our fair share of keeping global temperature rise to below 1.5°C. The government has missed opportunities to reduce emissions more quickly with for example, the weak cap-and-trade system—which by its own accounting will only reduce emissions by a total of 0.65 Mt by 2022—or roughly 0.16 Mt per year. A stronger carbon pricing system could have done more.

Despite what we hear, Nova Scotia needs to do more because:

- While NS's Greenhouse gas emissions per capita (tonnes CO2e per person) is below the national average, Canada has one of the highest emissions per capita in the world.
- Nova Scotia is <u>above the national average</u> when it comes to Greenhouse gas emissions intensity (Mt CO2e per \$1 million GDP).

Carbon-pricing is only one mechanism to reduce emissions and it is one that has, unfortunately, side-tracked discussion on why we need to focus not only on reducing demand for fossil fuels but restricting the supply—that means a plan to phase-out fossil fuel production whether used domestically or exported.

SECOND: I am pleased to see that this legislation in section 4 lays out the principles of sustainability and recognizes that there is a climate emergency. I note the terms circular economy and inclusive economy. I caution that this too does not go far enough. The term justice appears nowhere—and to do this right we need a justice-based transition.

There is a recognition that this is not a one dept initiative, but an approach that is cross governmental—one that uses a sustainability lens for all government decisions as it says in section 11, but, merely including it in a Department's mandate is a very weak accountability mechanism. How will it be reported—this must be public and not just to the Minister responsible. Through what cross governmental mechanism will this actually have an impact and be measured? Will the 2020 provincial budget use this lens?

What is required to address the climate crisis is a fundamental reframing of what we measure and how, and who is involved.

My organization, the CCPA, has demonstrated how to uses this lens for government budgets; our alternative budgets use the lens of social and economic justice, as well as environmental sustainability—early this year we wrote the framework for a Nova Scotia Green New Deal.

If we (AND we must) prioritize climate justice then for example there would be goals and targets that explicitly states that while we move towards sustainable consumption and production, we seek to end poverty and improve well-being by ensuring better health and housing, and seeking to reduce inequality.

We must prioritize a just transition and ensure there are supports for workers in terms of income support and skills retraining as well as infrastructure investments in affected communities as they undergo the transition to a cleaner economy. There are lots of lessons from Cape Breton on this front.

A climate justice approach goes further to ensure that the underlying social and economic inequities are addressed—without such an explicit focus this transition risks making these inequities worse. Let's instead take the opportunity to ensure that all those who face costs and risks from the climate crisis and the policies to address it, actually share in the benefits of transition.

THIRD: The Act also establishes a Sustainable Communities Challenge Fund (9.1)— this too I commend with a caveat that there needs to be support directed to those communities who have been disproportionately impacted by the effects of the climate crisis to decrease the barriers they have to participating—ensuring indigenous lead initiatives, African NS lead initiatives—recognizing the affect environmental racism has had, and high poverty rates etc.

FOURTH: I do want to commend the government for requiring public consultation (14, 1.). These consultations must be meaningful and participatory, and not just flipchart, sticky note one-off community meetings where the same people attend, and the same interests dominate.

- Indigenous people and reconciliation must centre in the development of your climate action plans, and requires going far beyond consultation to respecting indigenous rights, treaties and leadership.
- Our youth deserve a say that accommodates them and goes to them and their spaces.
- As with the Fund, there needs to be support directed to those communities who have been disproportionately impacted by the effects of the climate crisis to decrease the barriers they have to participating.

My FIFTH and last point I would like to make is around governance and accountability. There is a lot of cynicism out there about governments not keeping their promises. Much of it is well-founded in evidence. Unfortunately, our electoral system makes it seem as if a government has the support of all the people when in reality it can have far less than even half the voters supporting it and still have all the power to make decisions unilaterally. I do not expect you to prioritize electoral reform, though I would recommend it. I do recommend that you consider placing more of the stipulations that are to be in regulations into this legislation to ensure at least all elected representatives of the people have a say. Section 14.2 that states all the areas for which regulations may be made is very broad and should not just be put into regulations, but enumerated here.

My substantive recommendation, is that instead of section 3 that states that *The Minister is responsible for the general supervision and management of this Act and the regulations*, there be a provision to set up an independent climate accountability body that does the audits and reports on targets and timelines. It would be arms-length from government, and report directly to the entire legislative assembly.

Strengthening governance and accountability requires the public to have more open access to information and decision-making processes.

The root causes of the climate crisis are those that are also undermining our democracy. The government should take this an opportunity to strengthen our democracy while taking bold and ambitious science-based action to address the climate crisis.

--

From: Crissy Goodwin

Sent: October 28, 2019 7:56 PM

To: Office of the Legislative Counsel <legc.office@novascotia.ca>

Subject: Bill 213: Sustainable Development Goals Act

** EXTERNAL EMAIL / COURRIEL EXTERNE **

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To the Office of the Legislative Counsel,

While I could not appear today in person, I would like to voice my support for Christine Saulnier's comments on the proposed Bill 213, the Sustainable Development Goals Act:

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- Our youth deserve a say that accommodates them and goes to them and their spaces.
- As with the Fund, there needs to be support directed to those communities who have been disproportionately impacted by the effects of the climate crisis to decrease the barriers they have to participating.

My FIFTH and last point I would like to make is around governance and accountability. There is a lot of cynicism out there about governments not keeping their promises. Much of it is well-founded in evidence. Unfortunately, our electoral system makes it seem as if a government has the support of all the people when in reality it can have far less than even half the voters supporting it and still have all the power to make decisions unilaterally. I do not expect you to prioritize electoral reform, though I would recommend it. I do recommend that you consider placing more of the stipulations that are to be in regulations into this legislation to ensure at least all elected representatives of the people have a say. Section 14.2 that states all the areas for which regulations may be made is very broad and should not just be put into regulations, but enumerated here.

My substantive recommendation, is that instead of section 3 that states that *The Minister is responsible for the general supervision and management of this Act and the regulations*, there be a provision to set up an independent climate accountability body that does the audits and reports on targets and timelines. It would be arms-length from government, and report directly to the entire legislative assembly.

Strengthening governance and accountability requires the public to have more open access to information and decision-making processes.

The root causes of the climate crisis are those that are also undermining our democracy. The government should take this an opportunity to strengthen our democracy while taking bold and ambitious science-based action to address the climate crisis.

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From: Sadie Beaton

Sent: October 29, 2019 12:59 PM

To: Office of the Legislative Counsel < legc.office@novascotia.ca>

Cc: Robert Devet <rdevet@gmail.com>; Minister, Env <Minister.Environment@novascotia.ca>; Premier

<PREMIER@novascotia.ca>

Subject: Law Amendment Comments for Bill 213

** EXTERNAL EMAIL / COURRIEL EXTERNE **

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My name is Sadie Beaton. I'm a settler here on these unceded Mi'kmaq lands. Many of my ancestors have been settled on these lands since the times when the Peace and Friendship Treaties were signed and I am participating in this law amendments process for Bill 213, an update to the Environmental Goals and Sustainable Prosperity Act, as a practice of my responsibility as a "Treaty person" here.

First of all, I'm curious about the inclusion of "Netukulimk" as a guiding concept in the Act. While it seems laudable, it also seems a bit out-of-place, and leaves me wondering about how it came to be included. I don't pretend to have a deep understanding of the concept, but I appreciate that it is a verb with deep, deliberative meeting related to taking care of each other and respecting nature and natural laws. I have noticed that this word isn't used lightly by the Mi'kmaq rights holders that I know.

Would the roundtable say that they deeply understand the implications of Netukulimk as a guiding principle for Nova Scotia's environmental and economic goals? What has been done to ensure that this government is truly accountable to a true Mi'kmaq understanding of Netukulimk? Would the provincial government consider being accountable to a circle of rights holders and Elders who can advise on the transformational changes that we might need to make in order to truly align with this concept?

Apparently Netukulimk was added into the Act back in 2012. This begs the question of why, even just considering the short definition supplied within the act, have there been continued clearcuts on Mi'kmaw land over the last seven years. Why is Boat Harbour still a thing? And why hasn't the provincial government suspended the permits for the proposed Alton Gas project?

If we are going to renew this Act, I would hope that we would do more than lip service to Netukulimk and truly centre the rights of Mi'kmaw people and the wisdom and authority of Mi'kmaw laws on these lands.

It isn't clear to me how this legislation will help us contend with the disproportionate impacts of the ecological crisis we are facing, either. Nova Scotians and Mi'kmaq rights holders have already let you know that the climate targets you are offering are not enough, and that we need to decarbonize (as well as decolonize) more quickly to do our part to limit climate change impacts. Ecology Action Centre has recommended a bolder set of goals here, and the grassroots climate movement is calling for even more ambitious action, to give us our best chance at a livable future.

I also wonder how this proposed Act will contend with the ways that climate change will continue to exacerbate existing inequities, including those of race, gender, income, and ability - added of course to the ongoing impacts of colonization and racism across the province. How will this Act ensure that these disproportionately affected communities, including African Nova Scotian and Mi'kmaq communities, are

appropriately involved in building solutions, and that they genuinely benefit from the transition this legislation is supposed to support?

There is a growing consensus that we are going to need to radically shift our relationship to this place and this land if we are going to survive the climate crisis. Even the IPCC says that we need to embrace "transformational change." Responding to this crisis means embracing a truly new vision where we recognize that it is up to us to really look after one another's health and well-being, and that the economy is just a small part of a much bigger set of responsibilities that we have to each other.

I don't know what that Act means by "clean growth", but it sounds like the roundtable might need to spend more time talking to the communities who have been on the front lines of these intersecting crises for a long time, and to be brave enough to hear and implement the solutions that they long been offering. It sounds like we could all spend some more time soaking in what the concept of Netukulimk might have to offer us, if we actually opened ourselves to transformational change.

Finally, if we had a government that actually honoured the Peace and Friendship Treaties, I wouldn't even need to ask these questions.

Sadie Beaton

Hello,

Please take stronger action on the climate crisis, and amend the very WEAK Bill 213. -Sustainable Development Goals Act-

-The Act. This will not protect us from the climate crisis. Very disappointed about amendments not being done. Many Nova Scotians are very concerned.

Thank you,

Meagan