A new mobilizing force for climate action	2	
Solutions Are On The Rise!	3	
Green New Deal - Vision for the Future	6	
Papa, Tell me a Story - Elli	6	
Case Study in Vaughan - Climate Emergency Declaration - Brianne Wh	ovte 8	,

A new mobilizing force for climate action

Scientists have long been telling the public that the solutions to the climate crisis exist; all that is missing is the political will to compel government to take action. Climate groups have been pressing for years for stronger government action and they have had some, not insignificant successes. In 2018, however, we saw a surge in citizen action on the climate front. The political will is growing!

Two of the most prominent new globally-active climate groups are Fridays for Future, a youth-led climate strike movement started by the Swedish teenager Greta Thunberg, and Extinction Rebellion.

Greta started as a lone climate striker in August 2018. Every day at first, and then every Friday, she stood alone on the steps of Parliament with a sign calling attention to the climate crisis. Inspired by Greta, other students began striking from school on Fridays for climate action and within months, Fridays for Future became a global climate-strike movement.

Since Greta's first strike, over 1.6 million people have participated in over 1350 Friday climate strikes in 125 countries around the world!

Sophia Mathur held the first Canadian climate strike in November in Sudbury. Toronto students followed with a climate strike in December and they have continued to strike on the first Friday of every month, their numbers growing from 100 to over 3000 in May 2019.

There were over 90 climate strikes in May, including Toronto and Montreal where 150,000 strikers marched! Students are marching because it is their future which is at stake. Inspired by Greta, and in a very short time, these students and their supporters have laid the groundwork for mass mobilization for climate action.

As a result of the students' actions both here and around the world, public awareness of the climate crisis has risen dramatically and politicians are responding. In Europe, the EU Chief, Jean-Claude Juncker pledged to spend billions on mitigating climate change. In the European elections support for Green Party candidates surged, in part because of huge Friday protests by the Climate Strike youth.

Extinction Rebellion is a decentralized movement focused on direct non-violent action that started in the UK. Many members of Extinction Rebellion are motivated by a sense of both grief and possibility. Co-founder of Extinction Rebellion, Gail Bradbrook explains, "grief is welcome here – it is an emotional, physical, and spiritual necessity". Poets and scholars alike have long spoken about how grief mobilizes awareness and action, but rarely has this wisdom found its way into large environmental movements.

Pain usefully alerts us to problems that need our attention, and, in the case of climate change and species loss, our grief is a sign that we care deeply. Now is not the time to turn our back on such emotions. As the poet Mary Oliver has written: "You tell me of your despair and I will tell you

mine." For many, the Extinction Rebellion movement has given them permission to grieve, and to share this grief with others. And this could be the most mobilizing force for climate action yet.

The combined efforts of Extinction Rebellion and the youth strikers resulted in the UK government declaring a climate emergency and establishing a Citizens Climate Assembly. Here in Canada, the federal government has also declared a climate emergency, as have more than 30 Canadian cities!

The political landscape is changing fast. The declarations of emergency, the increasing coverage of the climate crisis in the media, and more recently the movement for a Green New Deal – all of this is happening because of citizen action.

However much or little time you have, joining a group to strengthen the political will for action on climate change is one of the most impactful things you can do as an individual.

List of Climate and Environmental groups here in Toronto:

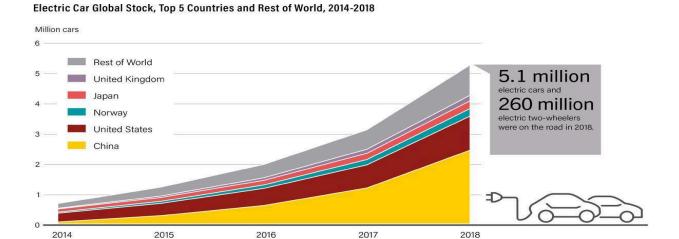
<u>ClimateFast</u>, <u>Toronto350</u>, <u>Extinction Rebellion</u>, <u>FridaysforFuture</u>, <u>ParentsforFuture</u>! For more, see....

https://myclimatechange.home.blog/what-can-i-do-about-climate-change/ or https://climatepledgecollective.org/2019/03/18/toronto-climate-action-review-yelp-for-activist s/

Solutions Are On The Rise!

We love new cars and the most desirable are becoming electric.

Electric car sales are growing fast and Car Manufacturers are planning on coming out with over 80 electric vehicle models over the next four years.



There are about 1.2 billion cars on the road today (we have a way to go).

3,000,000 T 2,500,000 - Car sales per year in the world in 2019 was 78 million (as mentioned above, we have a way to go).

Toyota in 2017 to be marketing and selling more than 10 electric vehicle models by the early 2020s.

The **Volkswagen** plans to be producing 50 fully electric models by 2025.

Hyundai and Kia in 2017 aim to bring 38 "green car" models to market in the next 8 years.

GM has a plan to be producing 10 electric vehicle models by 2020 in China.

Ford's intends to be selling 16 electric models in China.

Nissan plans to release 12 new pure electric vehicles by 2022.

Renewable energy is being set up faster than ever

2018 saw the largest annual increase in renewable generation capacity ever, with new solar photovoltaic capacity outstripping additions in coal, natural gas and nuclear power combined. Germany has attained 46% of it's energy from renewable sources. You can buy air/air heat pumps to heat and cool your house from Home Depot.

More Global Plans that show the way it can be done.

A new report just out (April 2019), "Global Energy System based on 100% Renewable Energy – Power, Heat, Transport and Desalination Sectors" get it here \rightarrow Global Energy System Report

"A full energy transition to 100% renewable energy is not only feasible, but also cheaper than the current global energy system," says Hans-Josef Fell, one of the researchers involved with the report

"The outlined global transition pathway stands out as the first to present a 1.5°C scenario that is technology-rich, multi-sectoral, multi-regional and cost-optimal," he added. "Notably, it achieves a cost decline without the reliance on high-risk technologies such as nuclear power and carbon capture and sequestration (CCS)."

There's Gold in Them There Hills

In 2007 Lynn Jurich, Ed Fenster, and Nat Kreamer started "SUNRUN" a company that offers customers either a lease or a Power Purchase Agreement (PPA) whereby homeowners pay for electricity usage but do not buy the solar panels outright, reducing the initial capital outlay required by the homeowner. Sunrun is responsible for installation, maintenance, monitoring and repairs. The owner simply signs up for a long term deal and then pays less for the electricity.

The company went public in 2015 is now valued at 2.1 Billion US\$ and serves over 134,000 families in 22 states. And it's not alone in the entrepreneurial green energy crowd.



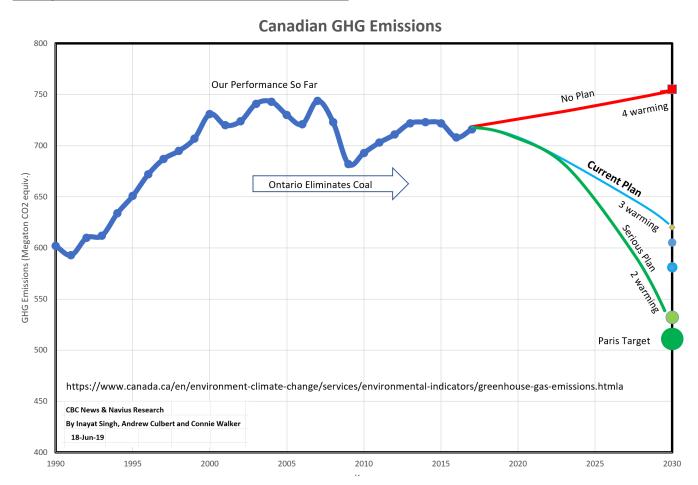
Its an upside down world and that's a good thing. The people are boldly leading and leaders are timidly dragging their heels.

People in the hundreds of thousands are seeing the need for and demanding significant aggressive solutions for climate change.

Cities and States in the hundreds are leapfrogging their Federal governments and putting in place tangible actions to address climate change.

The two Federal governments actions range from: setting back climate change mitigation through denial, to (on the RADICAL side) adding 5 cents per litre to fuel costs (these changes gets lost in the noise of weekly changes in gasoline prices) and approving pipelines that will significantly increase CO2 in the production of the oil and promote further CO2 production in the eventual burning of oil.

Luckily We Have a Problem for All These Solutions!



Our current Federal Climate plan (**Current Plan** in the graph above) will not get us where we need to be in 2030. The government has good intentions but does not seem to see the level of commitment that is required. We need to choose the Serious Plan to keep global warming to under 2 degrees C and be firmly on the path to zero net emissions by 2050. Why?

"not because it is easy, but because it is hard, because that goal will serve to organize and measure the best of our energies and skills, because that challenge is one that we are willing to accept, one we are unwilling to postpone, and one which we intend to win". (JFK moon speech)

The first and most important action we must take is to stop digging the hole any deeper. This means reducing our CO2 emissions now.

Green New Deal - Vision for the Future

Message from the Future, Alexandria Ocasio-Cortez and the Intercept: https://www.youtube.com/watch?v=d9uTH0iprVQ

Papa, Tell me a Story - Elli

Child: Papa.

Father: Yes, darling.

Child: Tell me a story, please.

Father: Sure, which one.

Child: The story about the time Earth very nearly lost her people.

Father: Okay, I'll tell you that one. That's a good one.

A long time ago, the Earth was filled with people, from north to south and east to west. They had different religions or none at all. They looked alike or not at all. Mostly, they got along and lived with love. However, some of the people were afraid and that was the problem.

Child: Afraid of what, Papa?

Father: Afraid of other people and of not having enough. Afraid of change. Afraid to lose.

The people who were afraid of others stuck their fingers in their ears and hummed to themselves so they couldn't hear other people talking to them.

The people who were afraid of not having enough took more than they needed. They took more trees than they needed. They took more fish than they needed. They took more land than they needed. They also took things from deep in the Earth, things that should have stayed in the Earth.

Child: What did they take from deep inside the Earth, Papa?

Father: They took many things but the big problem was the fossil fuels. Today we make our energy from sun, wind, and water. Back in the old days people took coal, oil, and gas from

inside the Earth. They burned those things to make other things move, to build things, and to power things.

What happens when your burn something, darling?

Child: Things get hot.

Father: Right. Burning those things that came from deep inside the Earth made the world hotter. They didn't notice it at first, the Earth is so big and the people weren't burning much. But over time, they burned more and the Earth got hotter.

The scientists noticed and shared their alarm with the leaders and the people. A hot Earth would mean trouble.

Now, remember those people with their fingers in their ears? The people who hoarded because they were afraid. The people who took more than they needed.

Child: Yes, Papa.

Father: It was so hard for those people to listen to the scientists. Their arms were wrapped tightly around their stuff. They had jammed their fingers in their ears. They were humming loudly, too loudly sometimes even for other people to hear the scientists or listen to ideas about how to change.

Unfortunately, people burned fossil fuels more furiously. The Earth changed. Trees caught fire and whole forests burned. Rivers dried up. Valleys and lowlands flooded. The sea water rose. Whole continents changed, many islands vanished, and fresh water turned salty. As the oceans warmed, fish died. As the air warmed, plants died. Without plants to eat, many animals and people died. It was a scary time, especially for those willing to look the problem straight in the face.

Finally, the day came when those who hoarded and hummed with their fingers in their ears let down their guard and realized an ancient truth, one shared by all of the religions and those with none.

Do you know what that truth is, darling?

Child: We are connected.

Father: That's right. We are all connected. People, animals, Earth, trees, water, rain, oceans.

Child: Papa.

Father: Yes, sweetheart.

Child: The people who took more fish and trees they needed. What did they finally do?

Father: They worked with the others. Within 20 years they changed all of the energy from combustible to renewable.

Twenty years is a long time. In twenty years, I hope to have grandchildren. In twenty years you may be a parent yourself. It was hard to stay focused for 20 years. Different leaders came and went. But the people knew what they wanted and the leaders lead.

Your great-grandmother was one of the people who spoke to the leaders. She knew what she wanted and she let them know. She was kind, respectful, and persuasive. She was loud when she needed to be and persistent. She had all of the qualities that Mama and I want you to have. That's why we gave her name to you.

Child: I know Papa. I wish I could have met her.

Father: It will take a long time for the Earth to heal from the damage done by too much dirty energy. You and I will be long gone and many generations will pass before things really feel safe again. But, by making the switch from dirty to clean, we've given Earth a chance to keep her people.

It's time for bed, my little rock.

Child: Goodnight Papa. Father: Goodnight Elli.

<u>Case Study in Vaughan - Climate Emergency Declaration - Brianne Whyte</u>

Declared Climate Emergency in Vaughan: How'd we do it?

Who: Gr. 5 - 8 students at Thornhill Woods P.S, under the guidance of their teacher, Brianne Whyte. Students were apart of the Eco-Committee at their school, along with their supervising teacher, Brianne, and had been having regular meetings working on waste reduction, energy conservation, and climate change action since the beginning of the year. They even organized a school wide Fridays for Future rally and march in their neighbourhood, where all 700 students and staff marched in the streets singing and holding up signs!

Rationale: As a result of the learning and action our Eco-committee was doing regarding Fridays for Future, students were excited to do more to fight climate change.

What: As a follow up action, we decided to write a letter to the city, collect signatures, and send it to the City of Vaughan, urging them to declare a climate emergency. This idea came from Climate Pledge Collective and we used some of their online resources to help us get started. We later decided it would be even more powerful to go to City Hall to present the letter in person, (an idea I got from another teacher on an FFF facebook group who did something similar with a group of Gr. 8 students who gave a presentation on banning single use plastics to their City Council in Brantford.)

How: I started by contacting the city clerk's office, as well as CC'ing our own Councillor at Vaughan City Hall telling them about who we were and that we were hoping to have a meeting with the City Councillors to discuss how Vaughan can become a leader in Environmental Protection. I also pitched it as an opportunity for students to develop citizenship, agency, and learn about local government. I was careful not to mention climate change or to come off as too hostile in this first email, since I think sometimes the words "to urge you to declare a climate emergency" can shut people down.

I was then surprised to get a few quick responses from the City Clerk and our councillor saying that they would love to meet with the students. The City Clerk then suggested that the best way of going about it would be to attend a "Committee of the Whole Meeting," which is where all the councillors and the mayor meet in the city chambers to hear deputations. We were advised to submit a deputation request, which was due 2 weeks before the meeting, stating specifically what our "ask" was. In the deputation request I clearly stated that we wanted to urge the city to declare a climate emergency and to become a leader in climate action in Canada.

A few days later, I was contacted by the director of the Policy Planning and Environmental Sustainability office, telling me that the deputation request was approved, and their office would like to plan to meet with the students at a community engagement session following the deputation so the students would get a chance to ask questions and share ideas, rather than just giving the deputation.

I was thrilled at this level of engagement, and did not expect it at all. The director of the Policy Planning and Environmental Sustainability office called me later to organize logistics, and he told me that their office had actually been trying to get the council to pass a resolution to declare climate emergency for a while, but there was stalling over debate about the terminology

"emergency" vs. "crisis" and what it would actually mean, etc. The sustainability office was extremely excited when they got wind of the students' deputation because they felt it would be the public pressure needed to finally tip the scales for a win. And they were right!

Since we were set to give a deptuation, the council knew were were coming, so with the help of the Policy Planning and Environmental Sustainability office, they drafted a resolution to declare climate emergency, along with 8 key actions to commit too, and they were prepared to pass it at the actual deputation. So, after my students gave the deputation by reading the letter they had wrote, the mayor passed the resolution right then and there!

After, we were taken to the community engagement session set up by the Policy Planning and Environmental Sustainability office, where they described the new Sustainability initiatives they have been working work, got ideas from the students, and brainstormed with them to build on ideas. They expressed an interest in continuing to work with student groups on these initiatives, so we have agreed to continue working with their office on these initiatives. In fact, Gr. 7 teachers for next school year have already committed to working on climate change as one of their curricular projects, and we plan to work with City Hall and continue this partnership.

Reflections:

Obviously, this is a dream scenario that fell into place because everything was happening at the right time in the right way. But, here are some keys to our success upon reflection:

- Go in assuming positive intentions, with the goal to build partnerships, not to scold or accuse. Think that you are giving the council the gift of an opportunity to do the right thing, and build good optics!
- Find partners that share your values within City Hall. We were so lucky that the Policy Planning and Environmental Sustainability office reached out to us because they were trying to do the same thing we were! In another scenario, I would find a contact at your city hall's sustainability office, or someone who would be aligned with your goals who you could work with within city hall.
- Ultimately, this was a great photo op for the City Government. We took pictures together, the mayor tweeted it out, etc. It looked really good on the mayor to respond directly to kids to say, "yes, we hear you, and we're going to do something about it now." Some of that was self-serving, but I think if you can pitch something in a win-win way, it has an easier time going through!
- Now what: I am very grateful for the opportunity my students and staff have to continue working with city officials to put the sustainability initiatives in place. (I will be on mat leave next year, so unfortunately, it won't be me!) However, I am disappointed with the key actions set out in the resolution. They are vague, weak, and a starting point at best. They fail to set an emissions reduction target, for example. However, the great thing is that we know what they key actions are that the government has committed to with this emergency declaration, and we can hold them to account, and push them toward more actions, with the help of our Environmental Policy partners at city hall.
- My strategy is this would really be to encourage the city of Vaughan to show climate leadership stepping up and leading the way in our province. I got the sense in the mayor's response to our deptution that this is something that they would like to do (and get credit for) because it makes them look good. So, I think playing up that angle is important. Whenever you can give city officials a chance for a feel-good, look-good photo op, they'll usually take it! So couple it with real action and expectations set by students.
- Emotions: Having a group of 10-13 years olds speak to the government about how they are worried for their future, expect their government to do something about it, and reminding them that their fate is in their hands really stirred up emotion in the room. I had no part in the writing or the reading of their letter. It was all the kids in their own words, and I think it was really impactful. Getting youth to take on this action is much more powerful than adults or parent groups.
- Finally, this was pretty easy to do! Contacting city hall, writing up a short deputation request using their form, and then having my students meet a few times to write the letter, do some research on Vaughan's climate change plans, and collect signatures during recesses was really not all that time consuming or difficult. In fact, it was very doable. And it was an incredibly rich learning experience for the students. Their parents were absolutely THRILLED by the whole thing, and wrote us many letters of appreciation for organizing this and for giving the kids this opportunity. I was a bit worried about the politics, but honestly, this issue hasn't come up for us at all this year. Climate crisis really isn't a thing anyone can argue about any more. And doing it at school helps it to become

more mainstream. As long as you are focused on amplifying the voice of students, and not your own, you're doing the right thing!