Enriching the Climate Change Conversation: How Telling Our Own #ClimateStory Can Urge Action

Abstract

To respond to the urgency of solving the climate crisis, we need to transform our awareness of the problem into action. However, this has proven to be challenging as we still lack an engaging and persuasive conversation that can influence people's mindset and behavior. We have rich scientific knowledge about climate change, but science alone cannot do all the work. In fact, in our effort to make science a catalyst for action, we find ourselves numbed by the sheer scale of the problem that is made more overwhelming by statistics and scientific jargons. To rise above this challenge, we need to shift our engagement approach toward humanizing climate change through our own stories – celebrating the diversity of human experience, values, and disciplines.

Reflecting on my personal story as part of the international community working in the field of green growth and climate change, I shared anecdotes to depict what is really happening on the ground and what needs to be done to drive action. I revealed practical insights on how to navigate through the complex politics of climate change by finding the common ground with politicians. My interaction with different stakeholders – from scientists, policy makers, investors, civil society groups to indigenous people and the general public – revealed that while climate change is obviously a science, climate change *communication* is an art with complex language nuances requiring tailored framing skills that most technical people are not well trained to do. Moreover, I also used my experience living in the Middle East to emphasize a more positive relationship between fossil fuels and clean energy.

In conclusion, I highlighted the critical role of storytelling in social movements, emphasizing how the human psyche tends to think deeper and find meaning through stories than through numbers. While storytelling has done wonders in many areas of human achievements such as in the arts and business, it can also be a useful tool for science, especially climate change. Aiming for knowledge co-creation by enriching climate science with human experiences and knowledge across disciplines can go a long way in helping us better connect with ourselves and our shared humanity in the context of the climate crisis. In conclusion, I cannot stress enough the intrinsic value of stories to overcome our apathy toward climate action. Thus, I challenge everyone to share their own #ClimateStory to keep adding to the conversation because that's the best thing we can do in the first place.

Introduction

As we experience more frequent and intense natural disasters, the need for solutions has never been so urgent. Globally, the year 2018 witnessed more unprecedented events – the wrath of super typhoon Yutu in the Pacific, wildfire rage in California, heat wave in Japan, drought in Australia, and floods in Kerala, India, among others. This trend makes the 2018 special report of the Intergovernmental Panel on Climate Change (IPCC) all the more timely. The report echoes the worsening consequences of global warming and the call for rapid and radical change, citing more than 6,000 scientific references with inputs from experts around the world.[1]

The science behind climate change is thus crystal clear. It has a long history that dates back in the early 19th century when scientists started to talk about greenhouse effect. Since then, climate change has become more visible in both academic and policy discourse. The historic Paris Agreement marks a new beacon of hope toward a renewed global consensus to reduce emissions and adapt to climate impacts.

The presence of sound science and a global climate accord is necessary; however, it is never sufficient to achieve a climate-resilient world. The greater gap exists on how science and policy can urge actions that lead to positive outcomes. Action starts with awareness and in the context of climate change, we are much more aware of the issue now than before. For example, the Yale Program on Climate Change Communication reveals that in 2018, around 70% of Americans believe that global warming is happening, an increase of seven percentage points since 2015. Moreover, 62% are somewhat worried about it. But while most Americans are aware of the problem, the survey revealed that only 35% discuss the issue at least occasionally.[2] This is a serious concern because as what Dr. James McClintock, Professor at the University of Alabama, noted: "If we can't even talk about climate change, we certainly will never be able to fix it."[3]

My own take of the survey results is that public awareness of the climate crisis may be high but shallow since being aware of the problem does not necessarily urge people to talk about it, let alone find solution. Furthermore, a proactive climate response remains a daunting challenge in a global economic system that relies heavily on fossil fuels – from trade, transport, agriculture to household consumption. Scientists have already warned about the serious consequences of continuous fossil fuel use and while cleaner energy alternatives are fast catching up, many countries are still dependent on oil for energy security and development.

In this essay, I argue that we are not progressing fast enough to address the urgency of solving the climate crisis because we still fall short in creating a more engaging and persuasive conversation that puts enough human touch to the highly scientific yet politicized issue of climate change. We have enough science to prove it, but in our effort to make science drive action, we find ourselves lost and overwhelmed in the sea of statistics and scientific jargons. To rise above this challenge, we need to shift our engagement approach toward humanizing climate change through our own stories.

Let me start with myself.

My job in international development

For the past years, I've been working for an international organization that works in different countries in implementing projects related to green growth and sustainability. My job involves providing technical assistance to governments in planning and implementing policies on green growth and climate change in collaboration with the public and private sector as well as civil society.

As part of the international community that is helping find solutions to the global climate crisis, some of the projects that I've worked on include developing national and local climate change plans and green growth strategies, conducting climate risk and vulnerability assessments, and delivering capacity building workshops on greenhouse gas emissions reduction and climate change adaptation. My experience covers the regions of Asia, Latin America, and the Middle East.

The communication gap

While working with scientists to obtain their inputs in the policy process on sustainable development, I observed the lack of incentives for them to apply their work in policymaking. I once met a Nigerian professor in environmental engineering whose research portfolio on climate change has been so impressive as proven by his numerous accolades. Despite his track record, it's a pity that his work – which includes well-thought-out policy recommendations – does not reach the decision makers because there is no platform to do it.

In some countries, the scientific institutions embedded in the academic community have been actively undertaking climate studies, but the outputs only stay in the libraries. Academicians mostly live by the "publish or perish" rule, in which publication is used as one of the criteria for promotion and tenure. In most cases, academic studies are seldom used as inputs to policies due to the lack of binding incentives for academicians and policymakers to work together toward a common goal. Maximizing the impact of scholarly research on the broader society will require changes in the academic merit system to include policy influence as one of the success metrics. Governments can enable this by providing incentives and outlets for the academicians to communicate their work to a wider audience.

I also noticed, in many cases, how experts do not always speak the language that the ordinary people can understand, which thus leaves a communication vacuum. This reminds me of a striking remark from Susan Joy Hassol, a climate change communicator, who said that "scientists are from Mars and the public is from Venus." For example, a senior public official once told me about the difficulty of understanding even the IPCC's summary of technical reports that are especially written for policymakers. He also jokingly mentioned the need for a summary of the summary! Feeling empathetic, I told him that he was not alone in the struggle and shared my own difficulties in synthesizing scientific reports as part of my job.

Translating climate science to layman's language is never easy and most scientists and technical experts are not well trained to do this. To be effective communicators, I learned the hard way that we can only connect with the audience if we put ourselves into their shoes and speak their own language. During a workshop on climate change, for instance, I delivered a presentation to a group of municipal officers and my talk included a few slides on climate trends. In my intention to impress, I spewed out technical jargons like "representative concentration pathways," "climate modelling," "uncertainty," and "oceanic circulation." Because of this, I ended up talking to a confused and sleepy audience, and I could not blame them. This experience taught me an important lesson: communicate to express, not to impress.

The best stories are personal

When our team went to a remote island for field work, we had the chance to interact with indigenous people to know firsthand how climate change affects their local community. Those who have lived there for a long time have shared very interesting narratives about how their local climate has changed through the years and how it has been affecting their livelihoods. For instance, farmers talked about how their harvests have declined due to irregular rainfall patterns while fishermen voiced out their frustration over diminishing fish catch due to dying corals and frequent heavy storms.

As I connect their anecdotes with top-down climate projections, their stories really make sense and can be used as a form of traditional knowledge to validate existing climate data and even fill the gaps. That was also the time when I felt more connected to the issue because instead of hearing about melting ice caps and dying polar bears in the Arctic (which I hardly relate to having born and raised in a tropical country), listening to the raw stories from the locals did not just feed my mind but also appeal to my emotions. In my opinion, their personal testimonies bring climate change closer to home and thus evoke a more powerful message than global climate statistics. It puts a human face to the problem that seems so abstract or distant for most people. It was indeed an eye-opening experience as it exposed me to the sad reality that the people who least contributed to the problem are the ones bearing most of its impacts.

Finding the common ground with politicians

Working with politicians at the local and national level has helped me gain practical insights on how to influence them to act on climate change. Selling climate change to politicians is like a marketing pitch that should appeal to their political interests and values. Despite the differences in political context and culture across countries, I'd like to share these key takeaways:

- *Always simplify***:** Coming from a public policy background, I make sure that our outputs are backed up by reliable data, rigorous methodology, and comprehensive analysis. In this regard, when our team has completed a climate vulnerability assessment for a municipality, we proudly submitted a 230-page report to the local government. This output was a product of three years of research, stakeholder workshops, and expert consultation. Upon receiving the report, the mayor raised this question: "So how do we translate this huge chunk of information into actual policies?" True enough, data cannot speak for itself, especially for politicians. As such, we always back up our technical analysis with a short document that encapsulates the message in the simplest way possible. In many cases, the "layman's version" is even more useful than the long reports because most people do not have time and interest to digest highly technical information.

- *Think short term*: While climate science always talks about what may happen 20, 50, or 100 years down the road, politicians make decisions within their limited political timeframe, usually less than five years depending on the local political context. Instead of focusing on what may happen in the future, shifting the message toward immediate threats – those impacts that we are experiencing right now – echoes louder to politicians because it prompts them to act immediately and take credit for their action. As what the IPCC (1996) noted: "The challenge is not to find the best policy today for the next 100 years, but to select a prudent strategy and to adjust it over time in the light of new information."[4]

- *No-regret or low-regret actions are good conversation starters*: In the initial stage of establishing rapport with politicians, I observed how they tend to shy away from ideas that involve uncertainties and compromise with their constituents. For example, starting the conversation with the topic of carbon tax may not be a good idea because the word “tax” itself has a bad connotation. Alternatively, taking off with no-regret or low-regret climate actions is a good strategy to gain political buy-in. These are low-hanging fruits or the so-called quick wins that are proven beneficial with or without climate change, and thus are more likely to gain political support. For example, recommending adaptation measures such as multi-cropping, income diversification, and water irrigation enhancements are proven to be low-regret solutions that can easily capture the attention of decision makers.

- *Amplify success stories and compelling evidences*: During a meeting with government staff to discuss the potential of greening the industrial sector, the chief officer asked our team if we have case studies demonstrating how the benefits of greening the business value chain can actually outweigh the costs. This incident highlights the value of documenting best cases and establishing a community of practice to serve as useful resources whenever we pitch our ideas to decision makers. The international community can play a key role in this regard considering its wide network of policy practitioners. One of the most critical areas to focus on is gathering success stories on demonstrating the business case for energy efficiency and renewable energy.

- *Downplay uncertainties*: Climate projections are not perfect, hence the uncertainties. Even the most sophisticated climate models cannot exactly predict when and where the next biggest typhoon will strike and how strong it will be. This often irks politicians because policymaking demands predictability. Also, non-scientists might interpret the word “uncertainty” as ignorance just as they perceive “theory” as a hunch or speculation. Making decisions with uncertainties does not sound practical for politicians because the resources are just too limited to be allocated on policy interventions based on incomplete information, especially when such decisions are made alongside other priorities such as jobs, food, education, and health care. While uncertainties are always present in any climate projection, what we know for certain now is that extreme events will continue to increase in both frequency and intensity as what we have been experiencing every year. Even the most conservative projections indicate that the climate impacts are inevitable. Simply focusing on what we already know now is enough to counter all the scientific uncertainties behind future climate risks. As what the precautionary principle of the climate agenda holds, the lack of full scientific certainty is not an excuse for inaction.

- *Turn climate risks into opportunities*: Framing how to transform climate risks into opportunities can depoliticize climate change because this resonates well to both sides of the political spectrum. A benefit-oriented approach to green growth that highlights a broad suite of options could provide a common ground for opposing political parties to agree and work together. For example, *The New Climate Economy* report noted that the decisive shift to a low-carbon economy will generate 65 million green jobs, raise USD 2.8 trillion in carbon price revenues, and avoid over 700,000 premature deaths from air pollution.[5] Moreover, a study by RAND Corporation coins a term called "resilience dividend," which refers to the additional bonuses that come with climate-smart investments.[6]

- *Work with bureaucrats, not just with politicians*: This is the lesson I learned the hard way when I saw one of our projects not coming into fruition due to change in political leadership. This risk can be mitigated by strengthening our relationship not just with the politicians but more so with the bureaucrats whose security of tenure in their jobs could guarantee that your project will be supported even after the end of a political term. Indeed, politicians come and go but the civil servants are more likely to stay longer. There was one case when we initially feared that our project will be discontinued after a new political appointee was assigned to oversee our project. But since we had a good working relationship with the technical staff in our partner agency, we simply had to change the name of the project to make it sound like a new initiative because the new appointee did not want the project to be associated with the previous administration for political reasons.

Enough of the dark clouds, focus on the silver lining

We often forget the optimist creed, "every dark cloud has a silver lining" when we talk about climate change as it has always been a gloomy conversation. In movies, the phenomenon has been consistently portrayed as an apocalyptic plot threatening to eradicate all life on earth. In media, natural disasters are reported with minimal attention given to the linkage between human-induced climate change and natural catastrophes. In worse cases, sensationalism and misinformation distort the facts and thus stymie action.

Our current perceptions of the future in the context of climate change are not helping us to act collectively because we focus too much on the doom and gloom, that is – if we don't act now, climate change will lead to cataclysmic tipping points; or if we take the problem seriously and act now, it would mean sacrificing the comforts that we enjoy right now by ditching our cars, not eating meat, or giving up travel. These narratives paint a discouraging, misleading, and unbalanced picture that frames climate change as an insurmountable threat while ignoring the potential opportunities.

From a more upbeat perspective, the challenge of climate change can move us forward to achieve a more climate-resilient and sustainable development path that could generate promising opportunities. This is already happening globally in different scale and pace in the form of green jobs and climate-smart technology. In the United States, for example, it is worth noting that more Americans are employed in the solar energy industry than in the coal, oil, and gas sector combined.[7] In the United Kingdom, experts estimated that energy efficiency has contributed 25% of the country's economic growth since 1971.[8] In terms of market competitiveness, the good news is that renewable energy is now getting cheaper than oil and gas.

While climate change is a global problem, the solutions are mostly local. As such, doing the "positive sales pitch" for climate change at the grassroots level would depend on the local needs and characteristics. Climate resilience may mean improved adaptive capacity from sea level rise and storm surges through effective coastal management plan for a low-lying island in the Philippines. It could mean increased income from crop diversification and water-efficient irrigation system in a farming community in Ethiopia. It could mean improved air quality through electric cars and climate-smart technologies in China's megacities.

Furthermore, thinking about the co-benefits of climate actions also helps us embrace a more win-win perspective toward the issue. For example, walking or riding a bicycle for short-distance commute does not only reduce air pollution but also improve one's health and well-being. Putting up more green spaces

in our cities does not just only lower urban heat, improve air quality, and reduce flooding but also enrich recreational experience and enhance people's mental health. Preserving the mangroves does not just help protect coastal communities from sea level rise and storm surges but also provide economic opportunities through eco-tourism and fisheries.

During one of our stakeholder consultation meetings on climate risk assessment, one participant stressed that we are too focused on the negative impacts of climate change that we totally ignore the positive effects. For example, in some parts of the Middle East, the projected increase in rainfall in the mountains is expected to replenish the groundwater, which could mean higher yields for agricultural crops such as palm trees, tomatoes, etc. If climate change could also lead to such positive outcomes, we might as well take advantage of it.

Climate change is multifaceted

Another angle of the story that we often overlook is the multi-faceted nature of the climate crisis – it's not just about the environment but a whole range of development issues! Before starting my career in international development, I never thought about climate change as my focus area because my interest at that time was on the more mainstream global issues such as poverty, education, and health. Eventually, I realized how working to help combat climate change could be closely linked to broader development outcomes – from disaster risk reduction to food security, livelihood generation and entrepreneurship to gender equality and youth empowerment. In many cases, climate policies are, in fact, good development policies.

A more holistic view toward climate change will help us understand the real gravity of the issue. The best way to frame it is to convey climate change as a "threat multiplier,"[9] thus magnifying economic, environmental, and social challenges. I personally know some people who have lost their homes and livelihoods due to natural disasters. There is growing evidence on the direct and indirect effects of climate change on public health. The US Defense Department even considers climate change as a national security threat, highlighting how extreme events and sea level rise could exacerbate the dangers posed by threats ranging from infectious disease, mass displacement to terrorism.[10] For example, it will be more difficult for the military to provide humanitarian aid in disaster-stricken or conflict-afflicted areas due to disruptions caused by extreme weather events.

I also had an interesting conversation with a staff from UN Habitat who works in Africa. She particularly emphasized how climate change has become a major factor triggering humanitarian crisis in the continent. Many local communities in Africa heavily rely on agriculture. Erratic rainfall patterns and drought do not just destroy their crops and cause famine but also introduce invasive species and new types of diseases, thus affecting public health specifically the most vulnerable. With few safety nets in place, this could trigger massive displacement of people, or in worse cases, social unrest, civil conflict, and humanitarian crisis.

Since climate change cuts across a wide range of development challenges, the role of achieving the Sustainable Development Goals (SDG) on climate action (SDG #13) is vital in achieving other SDGs. As what UN Secretary-General António Guterres emphasized, we need to address climate change to meet the SDG targets because climate change has become "the main accelerator of all other factors"[11] toward achieving the SDGs. Likewise, the World Bank stressed that climate change policies cannot just be the frosting on the cake of development because they must be baked into the whole recipe.[12]

Based on my own experience, crafting a message that links climate change to broader socioeconomic concerns (especially health and economy) resulted in better reception among policymakers who felt the urgent need to act because the scope of the problem is much broader and deeper than they thought. For example, when we had a stakeholder consultation on identifying adaptation measures for a local community, our strategy was to focus our recommendations on the socioeconomic dimensions of climate change adaptation to gain people's support. Therefore, some of the prioritized measures are directly related to their income-generating activities targeting marginalized groups such as providing training on alternative livelihood as well as introducing new climate-resilient crop varieties. Luckily, the mayor passed a municipal resolution acknowledging and adopting our recommendations.

Fossil fuels and clean energy can work together

I am currently based in the UAE because of my job. Living in the Gulf region – which is home to some of the world's biggest oil-producing countries – has helped me embrace a new perspective on how fossil fuel and renewables can work together to achieve energy security and help combat climate change. I'll discuss the UAE as a case study.

After the discovery of oil in the UAE during the 1950s, the country has developed rapidly and now enjoys a high standard of living. Oil revenues were channeled toward improving infrastructure, health care, education, etc. Today, while the UAE is known for breaking world records such as having the tallest building, biggest mall, longest metro and other superlatives, it is not very known to many that the country is also home to the world's largest single-site solar park.[a] Being a hydrocarbon economy does not hinder the UAE from investing its oil revenues on efforts that facilitate the country's transition toward a more sustainable development path. In fact, the UAE was the first country in the Gulf region to ratify the *Paris Agreement*. The UAE has also set a target for power generation from clean energy through the *UAE Energy Strategy 2050* to accelerate the transition toward green growth.

The country also developed its own *National Climate Change Plan (2017-2050)*, which outlines the UAE's priorities regarding emissions reduction and adapting to the impacts of climate change. One unique objective of the plan is economic diversification, in which the commercialization of environmental goods and services is one of the entry points. The UAE's visionary leadership recognizes the limitation of oil and gas in driving long-term growth, paving the way for discussions about the country's post-oil strategy.[13] In the context of economic diversification, renewables have the potential to serve as one of the alternative growth engines, especially solar power considering the UAE's abundant sunshine. The country is making significant progress toward this vision as it continues to demonstrate the feasibility of clean energy through the record-breaking bids in renewable energy auctions.

According to Sultan Ahmed Al Jaber, UAE Minister of State and Director-General and CEO of the Abu Dhabi National Oil Company, while the UAE value its oil resources, the country sees an even greater opportunity in leveraging the benefits of both new and traditional forms of energy by integrating them into a more creative and productive commercial proposition.[14] The Minister further noted that deploying renewables provides savings and allows hydrocarbons to generate greater value: "Where solar excels at peak hours, natural gas provides a necessary low-emission, low-cost base load power foundation."[15]

[a] The Mohammed bin Rashid Al Maktoum Solar Park utilizes photovoltaic and concentrated solar power technologies to provide clean energy to Dubai. It has a planned capacity of 1,000 MW by 2020 and 5,000 MW by 2030.

The UAE demonstrates how a fossil fuel economy strives to pave the path toward a diversified, decarbonized economy, where the relationship between fossil fuels and renewables is not perceived as a zero-sum game. Moreover, efforts are also underway to make fossil fuels less harmful. For example, the UAE has been greening the oil and gas sector by implementing zero-flaring policy as non-flaring operations for oil and gas reduces emissions. It also deploys carbon capture storage technology, a process of capturing carbon dioxide from large sources and depositing it underground.

Depoliticizing climate change

While climate scientist Katharine Hayhoe once tweeted that "a thermometer is neither Democrat nor Republican," the reality is far from this. Science has informed us that climate change is real, but science alone does not solely determine people's attitude toward the issue as other factors also come into play such as how the subject is communicated, who delivers the message, people's personal experiences and biases, and political ideologies. True enough, climate change has become a politically loaded topic and such polarization has created a great divide that further makes it challenging to mobilize collective efforts toward solutions.

In the context of climate change discussions, using politically correct words is also critical. As an example, a professor from a well-renowned university was invited to share his research about climate change. His presentation was superb but some people from the audience walked out while he was talking because he called a certain territory in the map "wrong." It turned out that the area was a disputed island that has different names depending on the country that is owning it. Unfortunately, the professor was not aware of the issue and thus, those who felt offended totally ignored his message.

As for my job, no matter how hard I tried to take politics out of climate change, political factors have become so deeply entrenched in the system in many countries. For example, when my team organized a workshop on green growth, we were surprised to see banners showing the logos of a political party throughout the venue. As such, we kindly asked our partner agency in the government to remove all logos as we did not want to be affiliated to any political party. A similar incident happened in another country where we had a capacity building workshop on climate change adaptation. It was election season at that time when a government employee asked me if they could distribute t-shirts during the event. I checked the shirts and saw the printed name of a politician who was running for office at that time. I politely declined and emphasized the importance of political neutrality in the way we do our work.

Way forward: keep adding to the conversation

"The future is not some place we are going, but one we are creating. The paths are not to be found, but made. And the activity of making them changes both the maker and the destination. — John Schaar

I guess I've told too many stories from my side and you may argue that I have so much to share because of my job. Truth is, there are many more interesting stories out there if all of us can just share and listen.

There's this story of a Swedish teenage student named Greta Thunberg who started the first school strike for climate change outside the Swedish parliament building. She also spoke at the Katowice Climate Change Conference in Poland and mustered the guts to deliver a powerful message that puts politicians to shame. She inspired thousands of children around the world to join the protest for government action on climate change. One student even made this witty slogan in a placard that went viral online: "I've seen smarter cabinets at IKEA."

There's also this story of Ali Alzaabi, a young Emirati who could have pursued his engineering career in the UAE's oil and gas sector like most of his peers. Instead, he chose the road less travelled by joining the solar energy business because he believes that the clean energy transition is imminent, and he wants to be the first to adapt to the changes and seize the opportunities.[16]

There's another story about a human rights lawyer. Her name is Tessa Khan. She offers her expertise on human rights to explore the human dimension of climate change. As an activist, she uses litigation to tackle the far-reaching human rights implications of climate change touching upon the rights to life, food, housing, health, water and sanitation, and self-determination.[17]

There's also this story of a group called *Young Evangelicals for Climate Action*. They are reshaping the way we exercise our faith by adding the lens of environmental stewardship and channeling such synergy with religion to influence climate change politics.[18]

There's also a group of artists who finds pleasure and meaning in putting more life to climate science by adding an artistic flare to it. They track how different art works about climate change are showcased in opera houses, galleries and exhibitions, broadways and theaters, etc.[19]

There's also this great news I heard in the Philippines, where the education department is planning to reform the basic education curriculum to better inculcate climate change awareness to students. It will equip teachers with innovative tools on climate education.[20]

There's also this inspiring story of a group of young entrepreneurs who won a global competition for green start-ups. One of the winners is a team from Morocco who invented a cheap and durable eco-friendly paving stone, which uses less energy and water in production and offers better insulation.[21]

There's also a story about my friend's niece who just found a new source of joy in plant parenting. She's joining the increasing number of millennials who are becoming proud plant parents turning bungalows into "jungalows" because they like to live in a green urban jungle.[22]

These are just some of the stories I heard of – from different places and people – which give us the affirmation that change is happening, although not at the scale and speed that is needed now. But we know that we can achieve more if we get our acts together as soon as we can. Right now, the best that we can do is to let more stories be heard and keep adding to the conversation that tackles both the problems and solutions. We have all the tools available to make this work. Social media is upon us, keeping us more connected than ever.

Devi Lockwood, a journalist-cum-explorer who has documented 1,001 stories about climate change, stressed that telling and listening to stories is an act of activism because listening leads to empathy, and empathy can dismantle apathy.[23] Humans, after all, are storytelling animals,[b] thus revealing our natural predilection to find meaning through stories. If you think your own stories do not count, individual contributions can, in fact, create a ripple effect in shaping and influencing broader societal norms and values. This momentum can provide the bottom-up foundation to break through structural barriers and challenge the status quo.

Skeptics would argue against climate action by saying that individual actions are futile as long as the big corporations and governments fail to act. This reasoning ignores the reality that the end stage of the

[b] See the book, *The Storytelling Animal: How Stories Make Us Human* by Jonathan Gottschall (2012).

business value chain is household consumption and the foundation of an electoral system is the voting population. Whatever the companies produce goes to consumers as the end users; whoever we put in power lies in our hands as voters. Thus, we should not underestimate the power of conscious consumerism and intelligent voting to influence how the system should work for us. We are not helpless as we thought we are because we can make the right decisions now and it should start by being mindful of our lifestyle and being critical of the leaders we put in power.

Going forward, while we continue to support the science of climate change, we should aim for knowledge co-creation by enriching science with human stories from diverse perspectives. This will go a long way in translating facts into relatable narratives to help us better connect with ourselves and with our shared humanity in the context of the present climate crisis. As what educator Marshall Ganz aptly put in his writing *The Power of Story in Social Movements*: "Story telling is how we learn to exercise agency to deal with new challenges … Story telling is how we develop individual and collective identities that define the ends we seek and among whom we seek them … Story telling is how we access the emotional – or moral – resources for the motivation to act on those ends…"[24]

Due to the scale and complexity of climate change, it is now considered as one of the most defining challenges of the current and future generation. Few decades from now, I look forward to that "plot twist" when I see myself, gray and old, feeling proud of my generation because we choose not to be overwhelmed; rather, we choose to overcome – and that could be one of the greatest stories of our time.

And oh, that "plot twist" could start with you…

Disclaimer: *The views and opinions expressed in this paper are those of the author and do not necessarily reflect the official policy or position of his organizational affiliation.*

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