



#Decarbonize Virtual Town Hall

COP21

Global Youth Whitepaper on Climate Change



Prologue

On November 13, 2015, over 200 high school student leaders, representing fourteen nations from six continents, in partnership with The Centre for Global Education and TakingITGlobal, came together in a Global Virtual Town Hall to discuss the youth's vision for the future of their planet given the reality of Climate Change. From Accra to Alberta, Stockholm to South Africa, the youth exchanged ideas, debated alternatives, and ultimately created a document that represents their voice on the relationship our species should have with the planet we all call home. The Global Virtual Town Hall, an "archetype of grassroots democracy," (Senator Grant Mitchell, Canada) was the culmination of over two months of online teamwork, 25,000 hours of student collaboration, and the passion of over 10,000 youth to engage in a global conversation and have their voices heard.

In the two months prior to the Virtual Town Hall, student leaders, systematically chosen to represent our planet's diverse populations, collaborated on a weekly basis to exchange ideas, work with and listen to experts, and create a common framework. Concurrently, the students were equipped to use an arsenal of Web 2.0 tools (YouTube, Twitter, cell phone voting, Google Docs, H.323 Video Conference, discussion boards, blogs, etc.) to collaborate, build consensus, and create community regardless of time or location.

Starting with a National Dialogue, in which individual schools consulted their own nations, countries were then engaged in a Bilateral Collaboration, in which Global North and South schools were partnered to address key concerns transitioning to a post-carbon society. This was followed by a series of collaborations in which countries were encouraged to wrestle through these critical issues, in increasingly large groups, in the effort to build global consensus over the two month period of time.

The Global Youth White Paper on Climate Change, written collaboratively by students all across the globe, is the direct result of these interactive and collaborative projects. The evolution of the document involved equipping leaders with knowledge and technology, having those leaders facilitate a larger conversation among their peers, locally and globally, taking the data generated to their community at large for feedback and direction, and then synthesizing the results in the student white paper. It represents the voices of over ten thousand youth, introduced to the complexities of climate change, unified through the power of 21st century technology, and sharing a passion to contribute to the dialogue taking place on the future of our planet given the critical reality of climate change.

Participating Countries

Edmonton, Canada - Queen Elizabeth High School & Lillian Osborne High School

Churchill, Manitoba, Canada - Duke of Malborough (with representation from the Cree, Dene and Inuit people)

Bozeman, Montana, USA - Bozeman High School

Lima, Peru - Franklin D. Roosevelt School

Brasilia, Brazil - Taguatinga High School

Stockholm, Sweden - GLocal College

Accra, Ghana - Lincoln Community School

Pretoria, South Africa - Willowridge High School

Taichung City, Taiwan - Affiliated High School of Chung-Hsing University

Patalia, India - Yadavindra Public School

Walkerville, Australia - Wilderness School

Manila, Philippines - South City Central School

Introduction

The students who collaborated on this synthesis of global youth opinion are diverse by many means. Each of us is an individual, with a different worldview and distinct identity which has been shaped by the countries we live in and the education we have received. Our lives have each been impacted in various ways by climate change, and our respective governments have taken unique actions towards this issue. Despite these differences, we are united in our demand for change.

In the pages that follow, we outline the three means by which we believe this change can be instituted on a global basis: policy demands, education and a call to action. All nations must show the same unity as youth on these points to create tangible action in response to climate change.

Section I: Moving Forward on Climate Issues

Young people from around the globe have addressed six key concerns relating to the transition to a sustainable world. We, the global youth, recognise the need to apply the values demonstrated within these policies in all aspects of our unified fight against climate change. We have done so within our schools and communities, and have expressed our opinions to government leaders. We, young people from all over the world, know that we can and must do more.

Energy

We demand that governments enact the following policies to create environmentally sustainable and efficient energy systems in an effort to reduce our contribution to climate change:

- Transition from a dependence on fossil fuel energy to an increased use of environmentally sustainable and efficient green energy production methods
- Conduct investigations to determine the most appropriate policy solutions to reduce production and consumption levels of fossil fuels and to determine viability of alternative green energy production
- Regulate, monitor and reduce fossil fuel production and consumption through carbon taxation

Today's young generation believes that energy consumption and production are critical issues that must be addressed by collaborative action. Young people around the world share a common goal of transitioning from a dependence on fossil fuel energy to use of high efficiency green energy production methods. Having said this, we acknowledge that the future of energy cannot be resolved by a one-size-fits-all solution. Our plan to create sustainable energy systems must be achieved through a network of initiatives that take into consideration regional factors such as geography, climate and availability of natural resources, and implement individualized green energy plans in each region. In order to move forward, investigations must be conducted within each region to establish the most appropriate policies and strategies regarding the production and consumption of fossil fuels and determine which forms of alternative green energy production are most viable and readily available in that region. It is also important to note that there are environmental consequences to some renewable energy sources. For example, hydroelectricity requires dams, which disrupts marine life and leave people unable to fish. Therefore, we must ensure that our alternative energy systems are environmentally sustainable.

"It is crucial to act on the local, national, and international stages when dealing with climate change"

(Ghana)

A common consensus among all youth is that change must occur at all levels of organization; from individuals to governments. Local governments have the responsibility to implement tariff systems to reduce pollution and excessive energy consumption, and to offer financial incentives for renewable energy production and research on increasing efficiency. They must also provide subsidies to individuals and industries to encourage

investment and use of efficient technologies and products, such as smart grids and high efficiency electric cars. Individuals must take action in their own lives to practice living sustainably, and to pressure their governments to improve energy production systems.

Regulating and monitoring our energy resources is one of the key factors in our plan to transition to green renewable energy. We recognize that regional factors need to be considered when developing

monitoring systems. However, young people from all regions agree that carbon taxation is one strategy to regulate and monitor carbon emissions. For example, high school students in South Africa suggest that carbon taxes be based on carbon footprint size. Similarly, Canada currently uses per-capita-emissions to set their carbon tax. Although carbon taxes may take different forms in various nations, depending on differences in legislative bodies and needs, we believe carbon taxation is an essential strategy to reduce emissions.

Green energy resources are crucial to the development of a modern energy sector. However, in many developing nations green energy is not considered to be of high financial priority. This is true in Ghana, where they are facing an energy crisis. Students from Ghana believe that a financially responsible solution to the crisis would be the allocation of

technologies and expertise from foreign aid agencies and governments. Implementing the solutions from other countries would allow Ghana and similar nations to develop their own green energy resources, and thus provide more sustainable growth of their nation.

“Offering expertise in the form of trained engineers would be of great benefit”
(Peru)

Water and Oceans

We demand that governments enact the following policies to protect our clean drinking water and reduce the negative effects of climate change on our oceans:

- Impose and adhere to water restrictions to reduce drought
- Impose strict penalties on those who cause water pollution
- Invest in sustainable water infrastructure
- Take action to preserve our aquatic biodiversity in freshwater and oceans

“ While it would be difficult to completely stop industry, guidelines and restrictions should be put in place to limit the amount of pollution produced”

(Australia)

Our world's most important resource is water: drinkable water makes up just 2.5% of the water on Earth. We must find a way to effectively manage our limited supply of potable water. Overexploitation of water by large industries, such as textile and agricultural producers, must come to an end through water-use restrictions. Water restriction policy has been recommended by both South Africa and Canada. Both countries agree that there should

be restrictions placed on corporate and civilian water allowances.

Water pollution has disastrous consequences, and there should be strong penalties for those that partake in it. Youth from the Philippines have called for governments to dispose of their citizens' waste in a more sustainable manner. Taiwan proposes a government-imposed manufacturing surcharge on overpackaged products. We also need a moratorium on the production of plastic bags. These take hundreds of years to break down - an intergenerational source of pollution.

Pollution of our water sources also occurs at a corporate level. For example, acid mine drainage, where water runoff from chemical deposits in mines causes massive losses of aquatic life, can destroy entire ecosystems. We, the global youth, believe companies who pollute water should face strong penalties imposed by countries they affect.

Aquatic ecosystems are communities of organisms that depend upon each other and on their environment. Establishment of marine parks, no-boating zones, and implementation of sustainable fishing practices, as suggested by Peru, would help protect marine life. This

“In India, the surface water that was available to each one of us has been polluted and degraded, thanks to all of the industries who pour their effluents into the water”

(India)



protection need not be limited to the oceans; freshwater wetlands, an important carbon sink, also need to be protected. Pollution of freshwater can lead to eutrophication, where oxygen-consuming algal blooms cause other species to die off. Use of climate-smart water management tools can reduce the amount of water and quantity of pollutants used in agriculture. For example, the youth of India suggest a hand-held meter and app called Green Seeker allows farmers to know when and with great precision.

Resilience

We demand that governments enact the following policies to increase the resilience of those countries most impacted by climate change:

- Provide further economic aid to developing countries for sustainable development
- Subsidize sustainable infrastructure projects
- Preserve biodiversity through national parks and wildlife reserves
- Involve community organizations in disaster response and education

The young people of the world believe that we must focus upon three central forms of resilience: economic, ecological and community.

Economic resilience must be addressed through increasing the provision of economic aid from developed countries to nations more vulnerable towards the effects of climate change. Contribution of monetary resources from developed nations towards the Green Climate Fund, a fund which assists developing countries in their adaptation and mitigation towards climate change could achieve this.

“For Ghana, international aid is crucial to some extent, as the government does not have the resources or proper management to deal with this issue alone”

(Ghana)

Students from the Philippines believe that we must have strong mechanisms in place to ensure transparency and accountability, as well as people’s participation in the disbursement and usage of funds. Subsidies and funding for sustainable infrastructure promotes economic resilience on a national level, ensuring communities are better prepared for looming natural disasters. For example, the government

of the Philippines has taken steps towards these initiatives by passing an act in 2012, known as the People’s Survival Fund, to help communities implement local climate change adaptation plans that will improve their resilience in the face of the impacts of climate change.

Ecological resilience throughout all nations should be promoted through the preservation of biodiversity in key areas, such as marshes around floodplains, in order to mitigate damage to human settlements due to natural disasters. Ensuring that high levels of biodiversity exist within our natural environments positively impact the resilience of these environments towards forest fires, floods and droughts. We can secure this outcome by protecting our national parks and wildlife reserves.

Resilience on a community level must be reinforced through volunteer-led community organizations local populations about disaster management and safety. However, government organizations, global and local charities, as well as non-profits must also be key facilitators and reinforcers of resilience in these situations. For example, Medecins Sans Frontieres has a disaster response plan that includes the recruitment of staff in regions of crisis to assist in humanitarian efforts. Building and infrastructure projects can be designed with adaptations that increase their resilience towards the environmental concerns of the region, such as flood-proof housing. This ensures that necessary rebuilding in the aftermath of disasters is minimal.

Agriculture

We demand that governments enact the following policies to reduce environmental damage from agricultural practices and protect farmers from the impacts of climate change:

- Provide subsidies for farmers to implement sustainable practices that benefit the environment and reduce environmental degradation
- Prioritize domestic consumption over exports along with increased support of small-scale farmers, which would reduce carbon emissions from food transportation
- Protect of farmers by implementing safety nets such as weather-index based insurance

We must ensure that the agriculture industry is as environmentally sustainable as possible. In order to do so, we must first prioritize domestic consumption through the encouragement and support of local, small-scale farming. Not only does this reduce the carbon emissions associated with the transport of agricultural goods across large distances, it will counteract large monocultures by encouraging the production of a variety of crops locally. This will have benefits such as increased land connectivity for

flora and fauna and increased biodiversity. Additionally, biodiversity in the agriculture industry should also be promoted through the increased use of crop rotation and agroforestry.

“Governments must support and encourage alternative techniques of agriculture and farming that are much more eco-friendly, and environmentally oriented”

(India)

Policies of crop rotation and agroforestry further reduce the economic need for deforestation and the resulting loss in biodiversity. A perceived conflict exists between economic development



and ecological sustainability. We believe that this is a false dichotomy: development and sustainability must be interrelated and encouraged. Agricultural practices dependent on increasing arable land and thus deforestation must be discouraged. We propose that subsidies be made to farmers to encourage fallow fields and crop rotation which would promote more efficient agriculture.

The youth are in consensus regarding the actions individuals must take in response to the significant emissions associated with the meat industry. The emissions associated with this sector are greater than those from transport, and as such, meat and animal product consumption must be reduced, for example by the promotion of vegetarian or vegan diets nationwide as suggested by the youth of Peru.

Youth all over the world agree that agriculture must be a sustainable practice to reduce carbon emissions and prevent climate change. This should be achieved by supporting farmers in their transitions to sustainable techniques by implementing an incentive policy for sustainable practices. Such practices include crop rotation, integrated pest management, and the use of alternative energy sources. Others have also suggested implementing education programs for farming techniques such as crop rotation, crop diversity, and water use to improve the sustainability of the agriculture industry. For example, South Korea is developing an irrigation technique which reduces the amount of water used and is far more effective and efficient than most irrigation techniques thus far. Applying these innovations in practice will make agricultural practices more sustainable.

Farmers need to be protected from the increased frequency of drought and extreme weather events. Small-scale farmers, unable to mobilize large financial resources to buffer from interannual crop failures, are particularly at risk. The youth propose a weather index-based insurance as an increased safety net for farmers. An example of this concept in action is the International Finance Corporation's Kilimo Salama program, a safe farming weather-index-based insurance initiative that has had great success. Modeling a system after one such as the IFC Kilimo Salama could provide the necessary framework to get such a plan into action.

Forests and Land Use

We demand that governments enact the following policies and take the necessary steps to ensure the preservation of the world's forests:

- Create legal, institutional, and financial frameworks that incentivize the preservation of forested lands
- Acknowledge the importance of species bio-diversity and recognize the sociocultural importance of forests, especially to indigenous peoples
- Protect our land by creating national parks and enforcing the preservation of our natural resources

Forests are environmentally and culturally essential to our world. All states and peoples have an important role to play in protecting our forest ecosystems. Forests serve as a valuable carbon sink,

“We believe that before corporations begin development on culturally and biologically sensitive lands, it is critical that the proposed development site is first assessed by both the developer and all the stakeholders”

(Canada)

reducing excess carbon in our atmosphere. Deforestation not only contributes to a feedback cycle of increased atmospheric carbon, it also destroys global biodiversity and the sociocultural elements of humanity linked to forests, such as recreation, ecotourism, and traditional cultural practices.

Globally, forests around the world cover 31% of land area. To protect these forests, and the diversity of species that live within them,

students from South Africa suggest that governments adopt a law that stipulates for every 15 sq. km. of new agricultural land, 10 trees must be planted. This practice aims to balance economic growth and agricultural production with environmental stewardship and species protection. Similarly, students from Sweden propose the global introduction of REDD+ (Reducing Emissions from Deforestation and Forest Degradation) to acknowledge the financial value of carbon stored in forested lands and to incentivize the preservation of this essential biome. Forest preservation strategies such as tree planting and REDD+ should be practiced globally, with adaptations specific to each country.

“Ecotourism is one of the most rapidly growing industries within Peru. Peru needs to invest significantly greater resources into the protection of its national parks”

(Peru)

A major issue that has arisen throughout many countries, including Canada and Brazil, is contention between the government and indigenous groups over the use of traditional lands. The land in question is often used for the implementation of energy technologies, including both renewable and nonrenewable energy (e.g. hydroelectric dams and fossil fuel resource extraction). Through the construction of such projects on sacred sites, traditional landowners' wishes are not being respected. Young people believe that in order to facilitate effective land management in these situations, all stakeholders must be represented in the decision making process.

The youth of the world believe that the most important factor to be considered in the implementation of policy regarding forest management is the accountability of government and industry. Governments must not only set policies that aim to regulate land usage, but enforce them effectively. This can be achieved through the designation of appropriate penalties should these policies be disobeyed, and reinforcement of these punishments through diligent monitoring systems. All decisions made and actions taken by governments must reflect the values of the people they govern. Companies must



also be accountable to the environment in their land usage. Not only should they obey government regulations to the best of their abilities, they should make changes as a collective to reinforce environmentally sustainable land usage. When making decisions that have the potential to significantly impact our environment, companies must consider the long-term consequences of their actions, not short-term profit.

Global youth recognize the need to distinguish between passive (undeveloped) land and developed land in order to understand and implement the policies required to protect and regulate land usage. Land is continuously abused by economic developments such as deforestation projects and unsustainable agriculture. By moving towards energy sources that are less invasive of the land, such as wind farms instead of oil extraction, we can protect the land's natural integrity and purpose in our collective fight against climate change. As well, by implementing waste management systems similar to those of Edmonton, Canada, which recycles and composts the majority of municipal waste, we can reduce the amount of land required for landfills. Conservation of natural undeveloped land is of great importance to young people around the world, and we demand the protection of land by creating national parks and enforcing the preservation of our natural resources.

Aid

We demand that governments enact the following policies and take the necessary steps to work together with our fellow people to collectively solve climate change:

- Implement efficient green technologies in countries, and provide civilians with the skills to use them
- Ensure transparency and communication between governments receiving and donating aid
- Ensure aid comprises a variety of types, including monetary, knowledge transfer, and technologies

The young people of today have come to an agreement that the only way to combat climate change

“For Ghana, international aid is crucial to some extent, as the government does not have the resources or proper management to deal with the issue of climate change alone”

(Ghana)

long-term benefits. Additionally, there is a lack of communication between donor countries and local communities about what their needs are and how the issues may best be solved.

Young people all across the world agree that in order to build a sustainable future, countries with abundant resources have a responsibility to aid countries lacking the resources to deal with climate change. Such responsibilities from wealthy countries include providing the necessary funds to meet the goals of developing countries, as well as providing the necessary skills to implement these goals. This should involve, for example, sending experts to transfer crucial technological expertise to local citizens. By providing the skills that local people need to independently solve local issues, donor governments can promote long-term resilience as opposed to short-term monetary aid. Another added benefit to the transfer of non-monetary aid includes preventing the misuse of donated funds by the receiving governments.

In order to better manage funds, it is important that there is transparency and communication between governments receiving and donating financial and other resources. Donor governments should know exactly where funds

is as a collective. Whether it be a developing or a developed country, the following policies should be implemented in order to make every nation as ecologically friendly as possible. The policies we propose aim to address the current challenges we face in terms of international aid, such as insufficient aid to developing countries to combat climate change, the corruption of governments receiving aid leading to the misuse of funds, and monetary aid leading to short-term benefits rather than

“We need to provide green and sustainable resources that countries can easily manage and maintain in the long run depending on their needs and not our perceptions of what they should have”

(USA)

have been spent and be able to verify whether funds have been appropriately spent. Increased access to information by donor governments would make corrupt governments accountable for their spendings. It is also imperative that local people are directly involved in deciding where funds need to be spent in their communities so as to avoid interfering with special interests.

*“Aid should be a cooperation between countries rather than a charity that might lead to deteriorated local industries”
(Sweden)*

It is absolutely imperative that the Global North focuses on aiding countries with developing economies, by introducing green initiatives and educating their local people. Mentoring these countries and sending experts from nongovernmental organizations to educate and train them will insure that the aid infrastructure that has been put in place is sustainable and continues to flourish.

Section II: Education

We believe that education is fundamentally important to combat climate change. Ignorance is frequently an impediment to change. We believe that governments must implement policies in our education systems and that youth are motivated to step forward. In order to change government policies, we must first change individual behaviours.

Learning to change our own lifestyles and adapting to sustainable habits on our own soil is a basic principle in becoming involved. Although not everyone will desire change, we must begin to move

"[In the USA] The term Global Warming has become the source of jokes, we need to have a campaign to awaken the public about the facts of climate change"

(South Africa)

water conservation and the reduction of pollution. Provision of education may spread beyond the borders of a single country, through aid campaigns that train workers in developing countries. For example, offering engineers who are trained in building sustainable infrastructure to developing countries would educate local farmers about sustainable agricultural practices.

The education of young people is essential to shifting the public perception towards climate change and motivating individuals to take action. It creates a foundation of knowledge for all future generations, and fosters within these generations an understanding of this issue and a respect for the environment. Climate change is an issue that affects every aspect of our lives, and curriculum should be altered to reflect this. The environment created within schools should also encourage environmental sustainability.

forward and continue to create awareness through radio, print and social media campaigns, as well as volunteer-led communities. Teachings on management and environmental safety must also be implemented, because change is imperative.

Shifting public perception surrounding the issue of climate change is essential to promoting individual action. Public education campaigns are a means by which this can be achieved.

Examples include actions surrounding recycling,

"If our learners care for the environment, they will lead other people to care and then such values begin to ripple through society, nations and the globe"

(Philippines)

Section Three: A Call to Action

Young people from across the globe are taking action to address climate change. We have initiated change in our schools, in our communities, and with our government leaders. But we as youth know we can and must do more. To date, the students involved in this global collaboration project have taken these steps towards bettering our environment in a sustainable way:

Individual Level

- Walk, bike, carpool, or use public transportation whenever possible
- Purchase reusable and sustainable utensils, water bottles, and stationary
- Recycle whenever possible

School Level

- Using reusable plates and silverware in cafeterias.
- Installation of water fountains to eliminate the need for disposable water bottles
- Install solar panels on our schools to help offset our energy consumption
- Vegetarian-only options on one day a week (“meatless Mondays”)
- Plant trees on campuses
- Encourage learners in the schools involved in Earth Clubs or similar to use Facebook, Instagram, Twitter and various other forms of social media.



Regional Level

- Install bike stations around cities
- Replace streetlights with LED light bulbs
- Encourage use of mass transit systems
- Anti-plastic campaigns
- Community cleanups
- Purchase goods from local producers to decrease our carbon footprint

National Level

- Solar-powered streetlights with high efficiency LED bulbs
- Wind farms where feasible
- Media campaigns by government and non-governmental agencies to increase public awareness of climate issues

International Level

- Equip developing countries with resources to grow
- Get youth internationally involved in climate change campaigns



Implementing policies to achieve effective, sustainable change is not an easy feat. The differences that we appreciate and celebrate between our countries may also be the challenges that we face when we try to reach consensus. People may be fearful, apathetic or resistant to change. However, we are highly motivated. To establish cohesive international goals to tackle climate change, we must evoke a desire to act. As youth of the world, we believe this critical shift in perspective and action towards a sustainable and clean environment will come, in part, through increased public awareness.

Social media campaigns are one strategy to mobilize the power of youth worldwide. Their ability to connect and spread knowledge within and across borders, especially among young people, is unparalleled. We believe that further campaigns must enable personal connections and encourage collective global responsibility. Technology can connect young people in a powerful way, and we understand the impact that communications technology can have in spreading knowledge both within and across borders. This technology can and should be used in an effective way to create an awareness that cannot be ignored.

Young people are the path to the future, but we must act in the present. We are aware of the devastating effects of climate change on our people and our environment. Whether it be agriculture, energy, or water, there is no aspect of our society that we have not negatively affected in terms of climate change. Fortunately, we still have the chance to rectify our actions, and we are here today to do something about it. We ask that you join us, as a global collective, in our actions to solve climate change for a healthy and sustainable future.