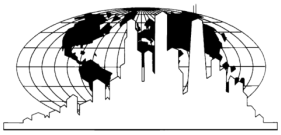

American Model United Nations

United Nations Human Settlements Programme

Report to the United Nations Human Settlements Programme on Cities and Climate Change

Contents

1 Executive Summary

The following report is the result of the substantive work done on Cities and Climate Change by the United Nations Human Settlements Programme. Four official subcommittees were formed in addition to several informal working groups in order to divide the topic into manageable sections that would allow for substantive debate about the possible solutions that have the best potential to help solve the problems addressed by the commission. This report is a summary of the canon of discussions held by delegates from UN Habitat, and does not necessaily provide concrete solutions.

The four official subcommittees formed are detailed below. The urban planning committee handled issues regarding infrastructure, water and waste management, sustainability and disaster risk management. This committee held up certain cities as exemplary models for making strides in climate change efforts.The research committee was formed to highlight the successes and failures of intervention against climate change, which had an emphasis on developing countries. The research committee has held the Kingdom of the Netheralnds up as exemplary, as they are the only nation who give the suggested .7% of gross national income as aid. The research subcommittee also discussed how cities will be affected as the world moves from the Millennium Development Goals to the Sustainable Development Goals. The alternative energy committee discussed issues such as carbon tarriffs, green technology, and other energy infrastructure concerns and the subsequent funding endeavors. This body discussed nuclear energy as a more sustainable energy source, and discussed the implications of a carbon tarriff. A fourth was made to discuss education, international cooperation and establishing a network between communities as methods of combating climate change.

Among the commission there were two informal subcommittees that inserted language. The first rebranded the climate change discussion as a security imperative, discussing mostly the effects of global climate change on urban centers. The second was formed to discuss the reduction of fossil fuels as well as active scientific methods to reduce the current amount of CO2 levels in the air at this time. The work of this final informal subcommittee highlights the cost effectiveness and safety of newly found scientific methods of actively reducing the amount of carbon emissions in the air.

2 Matters calling for action

2.1 Alternative Energy Sub Committee

Members of the body emphasized the need for Member States to assist the transition to sustainability within the global community through facilitating and enhancing the transfer of technology from developed to developing countries, and increasing access to environmentally friendly technologies and adequate financing through the United Nations Framework Concention on Climate Change (UN-FCCC). Member States spoke about the importance of enhancing the predictability and significance of funding for climate change action in order to enable the transfer to clean energy and sustainable cities. Member States suggested this might be achieved through the contribution of financial assistance through the financial mechanisms of the UN-FCCC such as the Green Climate Fund (GCF), and the Global Environment Facility (GEF) which is also comprised of the Least Developed Countries Fund (LDCF), the Special Climate Change Fund (SCCF), and the Strategic Priority on Adaption (SPA), all of which aid in issue areas such as the optimization of green technologies for States, and the provision of funding for adaptation, technology transfer, mitigation, and economic diversification, though further inquiry is required before such a recomendation could be made. The point was also made that states making an active effort to contribute to the sustainable development of orther States, and that the transfer of knowledge empowers countries. Member States also expressed interests in foreign direct investment and the possible benefit it would hold for the development of sustainable projects within cities.The Commission also discussed briefly further consideration for best practices of emission trade/cap and trade, so that countries can learn and benefit from successful cases.

Another solution which members of this Commission discussed was the distribution of green technology in the developing world, seeing as it both improves living standards and decreases carbon emissions. When discussing these technologies, Member States defined them as technologies which increase the standards of living, are cost effective, easy to use, sustainable and easy to produce. One such technology is Greenway ovens, are able to reduce the amount of wood needed to make fire, reduce emissions and imrpove the health of users. SOCCKET, a soccer ball developed by Uncharted Play which uses the motiong ccreated by playing soccer to generate electricity which is used to power a lamp, provides both clean energy and light to people in developing nations. Solar panels, which in rural areas are optimal sources of energy which are direly needed, are another way that developing nations can be aided in reducing their emissions. Another method discussed for expanding access to energy in a green way is Microgrids, which can offer a source of energy to a household, community or LED lanterns. they provide brighter light than the default kerosene lamp and are extremely effective considering the fact that each one replaces thirty kerosene lamps and with a 5 year life time can prevent as much as six tons of carbon emissions per lamp. furthermore, their cost of approximately ten United States Dollars make them very cost effective. One way to harness excess energy is using VOTO, a small and portable machine which captures the heat emitted from an open flame and converts it into portable energy. The Commission also recognized that there are a plethora of other technologies which could be used to aid the developing world while simultaneously fighting climate change. Some Member States suggested that similar technologies could be investigated further by this body.

Germany brought up the idea of a carbon fuel tariff which could be implemented throughout the European Union(EU) and other regional bodies, and individual countries. Member States stressed the notion that a carbon fuel tariff is not a uniformly fitting solution and that each country and/or regional body should consider a carbon fuel tariff with care and taking into account current emissions, stability of the economy and other relevant factors. Furthermore, it was discussed that each country determine the specifics of the carbon fuel tariff individually to make it most suitable to their circumstances, while taking into account recommendations from the United Nations, which several members of this Commission thought should be determined by United Nations General Assembly. The countries of Panama, Kazakhstan and Malaysia brought up the point that countries should take care to not cause unnecessary burden to people living within the countries affected by a tariff. Member States noted that there is an overwhelming consensus amongst economists that a carbon tariff is the best way to reduce demand for carbon based sources of energy. One of the largest benefits of a carbon fuel tariff is that it levels the playing field in the energy market; renewable energy sources become more appealing due to their more equal prices. Though there would be initial shocks to economies, over the long run, a carbon fuel tariff would lead to a more sustainable world overall. Producer countries of oil and other carbon goods would slowly but surely shift their economies to more sustainable resources and consumer countries would come to rely less on carbon. Member States represented on United Nations Human Settlements Prgramme(UN-Habitat) also highlighted that the revenue from such a tariff might be used by the countries to help incentivize or fund the development of alternative energy sources in countries which cannot do so on their own, or within their own countries to expand on already existing renewable energy infrastructure.

Noting that if a nation were to implement a carbon tariff that there would be an increased necessity for sources of renewable energy, the Commission discussed the need for invest in developing countries towards alternative energy infrastructure. Furthermore the Member States of this Commission recognized that an increase in this type of infrastructure could be beneficial to all countries, not just those which decide to implement a carbon tariff. One type of renewable energy that this Commission discussed was the implementation of solar power. In many landlocked countries, there is an abundance of open land which could be used as a location for placing solar panels. Furthermore, smaller solar panels can be used in developing nations to bring energy access to more remote areas when connected to the previously mentioned microgrids. Biogas can be utilized as an energy source that also reduces greenhouse gas emissions while eliminating human waste and other organic wastes. In order to utilize this technology, biogas units must be established where waste can be collected and processed which are relatively inexpensive and have already been implemented in both Asia and Africa. The United Nations Institute for Water, Environment and Health endorses this technology as it enables all persons within the area to have access to clean energy while reducing both water and air pollution. Additionally, the Commission discussed the possibility for countries that have access to open bodies of water to consider investing in offshore wind farms. Many countries in the EU have found that such wind farms are able to take advantage of the faster and more consistent wind speeds on the open seas to provide renewable energy to countries. Even if a nation does not have access to the open seas, based on their climate and terrain, it would be possible to develop onshore wind farms as a method of alternative energy. Members of the Commission pointed out that some countries do not have the financial resources to prioritize this expansion of energy infrastructure and brought up points that more developed countries may consider funding or incentivizing this expansion.

Kazakhstan expressed interest in advocating for the implementation of nuclear energy strategies, citing that proliferation outweighs risks and has relatively little impact on environment with proper disposal procedures. Nuclear energy is a good energy solution for countries transitioning between fossil fuels and renewable energies, especially for countries that have a heavy fossil fuel export base. However, the Germany brought up strong opposition to this idea, noting the disastrous events at Fukushima and stressing that something like that can never be allowed to happen again. Member States discussed nuclear energy and its application to States should also enact appropriate laws to ensure the preservation of the environment and accept regulations of Internationa Atomic Energy Agency. Member States also expressed interests in foreign direct investment and the possible benefit it would hold for the development of sustainable projects within cities.The Committee also discussed briefly further consideration for best practices of emission trade/cap and trade, so that countries can learn and benefit from successful cases.

2.2 G.R.A.S.S. (Global Reform Alliance for Sustainable Solutions)

We, the members of this body, believe bottom-up initiatives, those that combat the effects of climate change, are alone not capable of making a sustainable global difference and wish to emphasize the ability of developing nations to create personalized changes for their states, independent of direct support from developed nations. We recognize the importance of empowering and educating the people of a nation in order to create greater global change while also being fully aware of the reluctance of many national governments to adopt new sources of renewable energy that are able to combat climate change. Strong partnerships between the United Nations and Non-Governmental Organizations, along with public-private partnerships, are of the utmost importance when considering the issue of climate change.

We believe that the issue of climate change would be well served to be re-branded as a security issue and as a direct threat to the well-being of states. This issue would encompass the concerns of a wide variety of nations, such as small-island states and shrinking coastlines, and countries with naval bases threatened by rising sea levels. This may lead to threats to the national security of many countries, such as refugee crises, and the issue should be recognized as such. By informing the international community of how climate change can pose a security threat to Member States, states that are reluctant to take action to combat climate change when they otherwise may have not.

Microloans, to small business owners in developing nationssupported by the World Banks partnerships with microfinance institutionsare a promising avenue for assisting countries whose economies depend heavily on dirty sources of fuel (i.e. diesel, kerosene, charcoal, etc). These microloans have the potential to provide the freedom for a movement towards more sustainable sources of energy.

The education of labor unions and grassroots organizations on the issue of climate change, recognizing their close alliance with political parties and ability to influence local elections in many countries, so that they may

promote the adoption of UN policies through local political elections is another promising mechanism of change. The cultivation of such partnerships in areas with local grassroots consensus would ensure that these international policies are implemented in a way that proves satisfactory to the people they are designed to assist.

2.3 Urban Planning Group

The members of the body have defined urban planning and its facets, as a key points in positively affecting cities and climate change. Outlined below are the ideas of the committee on slum development in terms of climate change, waste and water management, standards upon new facilities, transportation, and infrastructure.Slum residents impact all Member States economically and socially and in addition are extremely environmentally harmful. Slums lack adequate sanitation and their common use of biomass fuels, thus releasing green-house gases into the atmosphere, make these slums a large source of climate change, adding further stress to the situation. With the increasing number of slum dwellers however, their status becomes that of the most vulnerable population to the negative impacts of climate change, making the situation even more dire. Goals to provide citizens with clean water, sewage disposal, and public spaces have long been a part of the UN-Habitat agenda, but now the body would like to emphasize the need to make these efforts environmentally sustainable, to ensure that these efforts last for generations to come. Moreover, despite their issues, slums have become laboratories for remarkable new ideas for sustainable urban planning, particularly in regards to sustainable mass transit and urban infrastructure. It is these small scale efforts that will help to provide the starting examples to future programs for a huge impact on the lives of slum dwellers.

Waste and water management are critically interrelated and must be addressed. Where to store both waste and water is crucial to creating and maintaining an environmentally secure area. Of global methane emissions, 18% come from waste compared to 10% coal mining and manure management, making the need to address methane emissions from waste is crucial. This committee sees an action program of waste reduction, circular recycling, and treatment of biodegradable waste as important to the canon of responses to the crisis at hand. In addition, the committee would reccommend the encouragement of any countries able to take in the waste of other to do so. By encouraging similar initiatives within developing countries we can thusly create new sources of revenue and jobs. Furthermore, this committee emphasizes water use reduction. We favor the promotion projects within local communities as well as major corporations to mitigate the effects of water waste. By supporting local municipalities, particularly in urban areas that have slum housing, to educate their citizens on proper waste management and by aiding these areas in creating proper waste management facilities, we would see a reduction in emissions caused by poor waste management.

Member States recognized the importance of international bodies introducing standards regarding proper sustainable initiatives for new urban facilities and find it relevant to explore options for the Commission on Sustainable Development to establish sustainability standards for new urban facilities to promote sustainable construction measures. The standards created by the committee would emphasize multiple sustainability levels for new facilities and create a competitive accreditation to incentivize private parties, and state parties, to pursue more construction projects with sustainable efforts. Member States, recognizing the need for variability in standards to accommodate for variability in wealth of member states, believed that the creation of the multiple levels of sustainable initiatives through construction of new urban facilities would promote participation among all Member States. Low level standards could include creation of roof-top gardens, LED lighting within select units, facility composting, and facility recycling systems, while high level standards could rest on renewable energy rather than fossil fuels and the use of sustainable building materials. Member States believed that this effort will result in greater participation in sustainable efforts in urban areas.The body is alarmed at the increasing rate of private motorized transportation use. This rapid growth has led to an overwhelming increase in city pollutant emissions. Public transportation offers the greatest potential to mitigate these emissions, while enhancing the status of cities and aiding their people. Public transportation has the potential to reduce emissions, contribute to job creation, utilize alternative energy sources, foster collaboration between different cities and countries and allow for citizens to be fully integrated into the society in which they live. An inclusive and adequate transportation network allows all citizens to be fully integrative and connect with city services like health and education. Formal public transportation, such as subways, buses, and subsidized taxis, as well as non-motorized transportation facilitation such as bike paths and pedestrian walkways, are all included in this discuss of transportation. In large metropolitan areas, it is especially necessary to utilize wide-ranging transportation to include periphery residents in city engagement. In order to facilitate the use of clean transportation, cities must establish institutional, regulatory and policy frameworks. The body supports cities proposing new business models that would fund public transport ranging from neighborhood to municipal levels.

Overall, this body suggests the development of city specific solutions to public transportation based on individual cities geography and landscape, noting the multitude of available options.

There is a multitude of aspects that play into the infrastructure of a city, and all must be equally evaluated. However, given these many elements, there are multiple opportunities to replace old methods with new, sustainable and environmentally friendly efforts. This can include using recycled or eco-friendly building materials, using alternative energies to fuel growth in cities, and building structures specifically adapted to the citys climate and environmental conditions. An improved local infrastructure can also amplify smaller green initiatives, such as recycling campaigns or replacing old equipment with greener materials. The body would like to emphasize that these efforts can be best adapted at local levels. Giving local societies and governments the opportunity to engage and take lead on these efforts can ensure the projects sustainability, and further promote United Nations values of protecting the environment for future generations.

Urban settlements around the globe have been particularly subject to the harmful influences of climate change. Environmental issues such as storm surges, desertification, rising sea levels, and scarcity of natural resources among other phenomena result in an enormous loss of life and long-term negative environmental consequences for vulnerable societies living in cities throughout the world. In order to address these grave concerns, the United Nations Habitat Commission recommends:

Considering that on multiple occasions cities have faced diluted and disorganized assistance in managing the harmful consequences of natural disasters, this committee recommends the development of regional support systems in order to organize the flow between cities of volunteer work when regions are affected by natural disasters.

It is also imperative to consider systems of prevention in order to prepare urban settlements for the possible outcomes of natural disasters. Thus, one of the actions considered by this committee as a possible solution involves developing initiatives with local communities and non-governmental organization with the objective of identifying areas most at risk for natural disasters. In order to do so, this approach proposed the creation of shared knowledge bases on regional climate issues, as well as workforces constituted of government and members of urban communities, which would map urban settlements while recognizing the most vulnerable areas and raising concerns about possible interventions.

While slums and informal settlements are commonly viewed as producers of climate and environmental change, those populations should also be addressed by the international body and member states as major stakeholders and potential victims in the emergence of the increasing number of natural disasters. The concern with the security of marginalized and risk groups directed this body to urge the consideration of local policies in order to incentivize the adaptation of slum infrastructure so to prepare such communities for natural disasters resulting from climate change. These initiatives could include small scale efforts in promoting green infrastructure; such initiatives have been implemented in cities as Rio de Janeiro and Medellin, as even small scale efforts have an outsized impact on the quality of life in slums. This committee finds positive externalities occur when governments not only to enforce regulations and legislation on adequate housing, but also to work with local organizations to address the specific concerns of their cities.

Through the use of Information and Communication Technologies or ICTs, countries can more efficiently respond and react to natural disasters whicher are occurring more frequently in a world where climate change makes predicting weather patterns increasingly difficult. ICTs can be instrumental in the creation of early alert systems to help prevent loss of life when natural disasters occur all over the world. According to the World Summit on the Information Society, ICTs have been expected to play an important role in improving the quality of citizens' lives by facilitating the promotion of economic, social, and human development. Today, countries like Japan support ICTs and hope to work cooperatively with other member states to provide these potential life-saving technologies to nations throughout the world. UN-Habitat encourages nations to support the implementation of early alert measures. An early alert program would be beneficial to all countries–espeically those living in coastal cities that are most vulnerable to storm surges and rising sea levels.

Regional guidelines to help train emergency personnel who are part of UN-Habitat Staff as well as private citizens within Member States. Countries around the world often face unexpected natural disasters and well trained individuals through both the UN-Habitat and specific member states would help clean up these catastrophes in a more efficient manner.

The Members of this body are fully aware and alarmed by the effects of climate change. We observe that, through the drafting of resolutions, creation of organizations, and the promotion of sustainable development, there have been great strides made in addressing this issue and would like to affirm actions taken and encourage an

expansion of scope and continuation of research. We keep these in mind in our suggestions to the General Assembly. Having studied the policies of several of the member states, several practices have risen to the top as exemplary models for combatting climate change and its adverse effects on cities. Listed below are country-specific examples brought up during the deliberations for the purpose of contextualizing the individual efforts made by sovereign nation states. The United Nations Human Settlements Programme (UN-HABITAT) views researching existing methodologies that have been proven to work as foundational to any future proposed solutions on the matter.

One example of a successful case study has occcured in Afghanistan, who has worked extensively with non-governmental organizations (NGOs) in regards to water management and distribution, especially in regards to working within infrastructure that has been crippled by war and conflicts to reach citizens in underdeveloped villages. Recognizing the need of other nations to also improve their distribution of precious life sustaining resources such as water, which are increasingly vulnerable to global climate change, Afghanistan supports further research on techniques to improve infrastructure and encourages the cooperation between regional states to ensure access and protection of these resources.

Additionally, the Kingdom of the Netherlands stated that it has been established by the Organisation for Economic Cooperation and Development (OECD) and the Development Assistance Committee (DAC) that the countries that participate in the DAC have agreed to donate at least 0.7% of their Gross National Income (GNI) to Official Development Assistance (ODA). As one of the few countries to actually uphold this agreement, the Netherlands strongly believes that ODA is vital to the growth of the international community. This is especially true in addressing the disconnect between developed nations and developing nations means of approaching climate change. The ODA is given to developing countries in order to assist them. This could be further specified to climate change initiatives within these developing countries. The Netherlands has also brought up the C40 Cities Climate Change Leadership Group. This provides a network for different populous cities around the world to achieve a similar level on adaptation and water, energy, finance and economic development, measurement and planning, solid waste management, sustainable communities, and transportation. It covers many of the issues presented in the discussion that occurred on the topic of Cities and Climate Change. The Netherlands believes that we should take this already established and working program and continue to support its implementation.

China emphasized the importance of Public-Public and Public-Private Partnerships as critical avenues through which to develop and implement sustainable technologies. They noted that the Chinese government has worked with its companies in order to establish relationships with countries that are resource rich but infrastructure poor by giving aid and building relationships with African governments currently unable to realize their resource potential. Much of these investments have resulted in establishing infrastructure and the partnerships have ended up benefiting all involved parties. If these types of partnerships between both private and public entities are encouraged and continue to prosper, emissions and other such disruptions can be lessened. A lot of countries have resources at their disposal, but do not have the ability to take full advantage of these in the most efficient way. China proposes that the world community follow its lead and work with developing nations in order to establish long lasting partnerships for the development and use of more sustainable technologies.

Yemen has found that all member states, both developed and undeveloped, agree on the desire and success of capacity building. To that end, Yemen utilized a compiled list of recent and relevant resolutions, programs, and organizations data that promotes the success of capacity building efforts in all nations around the world and the many shapes it can take. Working heavily with both China and Poland and the Netherlands interviewed many delegates such as South Sudan on recent gains they have made towards the climate initiative as well as the Millennium Development Goals (MDG). In incorporating all willing nations to contribute any and all information, they have available to better depict the information used to reach its decision.

Many nations in the UN-Habitat committee, particularly the developing nations were concerned as to whether or not the MDGs were still in mind of the body despite the goals deadline being 2015. Resolution 69/225 notes the continued effort towards to the post deadline MDGs having made great gains by increased use and promotion of new and renewable sources of energy. Reaffirming to many nations, such as the African bloc, that this body has indeed found that capacity building efforts are the most successful when seeking to increase the primary responsibility of developing nations by increasing levels of investment and sustained financing. This delegation would like to see similar successes in regards to capacity building be upheld by the Sustainable Development Goals, which will begin at the end of this year and last through the year 2030.

Much of the body of questioned as to how developing nations were to achieve the transition to sustainable energy and technologies, this resolution notes how empowerment efforts need to be highlighted to best managed rapid and sustainable expansion. Noting how many nations were unable to acquire statistical data, noting the

uneven availability of even basic statistical data involving sustainable development and the need to improve the quality and quantity of such as well as their availability to all member states as mentioned in Resolution 69/224. With the ever widening technological gap between the developed and undeveloped nations, concerned nations like Malaysia, Lebanon, and New Zealand desired a technology sharing not unlike that currently utilized in the South-South information and technology sharing agreement. With the least developed countries for the decade of 2011-2020 as well as the programme of action for the sustainable development of small island developing states.

A common shared concern among certain regional blocks was the need for cooperation through the sharing of the climate and weather information forecasting and early warning systems related to desertification. The United Nations Platform for Spaced-Based Information for Disaster Management and Emergency Response (UN-Spider) has been highly successful in this regard. Another related program is the Global Framework for Climate Services that develops and provides science based climate information and prediction for climate risk adaptation to climate variability and change.

One major impact of global climate change is that as the earth heats up large arctic glaciers will melt, causing global sea levels to rise. This has the effect of consuming coastlines, which is particularly an issue for states with expansive ocean borders or those that rely on their coasts for tourism or agriculture. Rising sea levels can cause destructive erosion and flooding. This can lead to fresh groundwater being polluted with salt water, making it undrinkable. There is a possibility for this to damage economies that heavily depend on beaches for tourism industries or coastal land for agricultural industries.

All of the above are concerning issues. There are a few paths states can take to adapt to and prevent the effect of global climate change. The most obvious and basic solution is to halt global warming through ending the burning of fossil fuels. Other solutions would include countries taking steps to implement things such as the protection of wetlands and estuaries to prevent flooding and filter out pollutants. Other various flood prevention strategies include flood gates, flood resistant housing programs, warning systems, and forecasting systems. Some other solutions we have discussed include land reclamation, relocation away from coastal area and halting coastal development. The committee wishes to futher research whether to encourage individual Member States to invest in research and development programs concerning adaptation to the rising sea levels as irreversible damage has already been and is being done by rising sea levels. It is important to conduct research and study how nations that depend on coastlines can continue to survive.

In recent years, as the level of carbon dioxide has increased in the atmosphere, scientists around the world have come to the agreement that if nothing drastic is done, humanity is on a road to demise. Having already passed the 440 parts per million threshold, and average warming of one (1) degree Celsius, current proposals and practices are moving at too slow of a pace to have a large effect on the current amount of carbon dioxide in the atmosphere.

Many delegations believe that it is no longer prudent to focus all of our energies on basic proactive solutions as global climate change has progressed beyond a point where nations have begun to experience the negative externalities associated. It is now necessary that we pair all future recommendations with solutions to the problems that confront us today. It is the view of several delegations that carbon capture programs are a viable start to a more reactionary method of dealing with the toxic levels of greenhouse gasses that have already been released into the atmosphere. Many countries proposed an alternate, more efficient way of carbon capture, that of chemically removing the carbon leaving a by-product of oxygen and some other chemically inert substance (at least in the methods proposed by Canada, the United States, Germany, China, Spain and backed by many other countries).

The two methods delegates focused on were purely chemical reactions. The first method, as outlined by the German company Steinfeld, uses calcium oxide (CaO) to absorb carbon dioxide (CO2). Calcium oxide occurs in the commercially available form of quicklime which is used in mortar. The process is done by mixing it in powdered form with steam at four hundred (400) degrees Celsius. Through an endothermic reaction (id est, taking in heat), the mixture condenses into calcium carbonate (CaCO3), which is also known as chalk, and water. This would cost as much as quicklime costs in the local country. Research done by a Russian group showed a cost of about seven thousand five hundred (7,500) Rubles, or about one hundred twelve (112) US dollars per ton of carbon dioxide removed.

The second method, jointly proposed by Spain and Canada, requires the use of sodium hydroxide (NaOH). The Canadian company Carbon Engineering, situated in Calgary, Alberta has performed tests on the proposed method. Through a solution of sodium hydroxide, carbon dioxide is absorbed to produce a dissolved form of sodium carbonate (NaCO3). Since this is a gas liquid reaction, it is exothermic, releasing heat energy that can be used in other ways. This method is even cheaper than the previous method, with about one hundred (100) US Dollars per

ton of carbon dioxide removed. This method is financially backed by Bill Gates and other philanthropists and so would be available to those who are in need of financial help.

Members of the committee emphasized that the chemical byproducts are not harmful and that these methods are very cost effective. The members of the committee also brought up the point that doing more research on such methods would be a sound idea. This is especially true considering the dire need to remove carbon from the atmosphere. Furthermore, some delegates suggested that research should be conducted on the carbon cycle to determine the direct effect of removing carbon dioxide on different models of ecosystems.

While many countries expressed interest in carbon-eliminating technologies, many developing countries also emphasized the merits of utilizing forestry and also plants as carbon sinks that which would naturally adsorb CO2 at no or minimal cost to the state. States could focus on combating deforestation and fostering the creation of natural carbon sinks in order to achieve this.

2.4 Education

The subcommittee for Education believes that education is one of the most impactfulways to enact meaningful change across internation bodies. Cooperation andcollaboration happen best when different bodies become education on each others'needs and specific issues. Establishing a network of such communities would help toestablish a foundation for which developed and developing states can collaborate onunique solutions tailored to their individual cities. Such a program would allow developingnations to reap the benefits of research they may not have access to as well as procurethe proper funding to address issues that might otherwise go unrectified.

This committee suggests the creation of an open, inclusive, intelligent, and creativedialogue between heads of state, leaders, and experts at the local, state, and globallevels in order to facilitate a regular dissemination between Member States of tacticsand strategies that have already been successfully implemented so as to increase thevariety of potential policies that Member States can use when adapting to climatechange and implementing measures focused on its solution. To facilitate the rapidexchange of ideas each separate assembly of this forum should focus on a differenttopic than previous forums. The location, frequency, and duration of these forums couldbe decided by its leading contributors and Member States.

One possible route for establishing such a forum would be the establishment of sister citiesthrough programs like Sister Cities International. Sister Cities forms collaborative researchefforts and long-term relationships that are focused on areas of importance such asbusiness, trade, and educations' effects on the fight against climate change.

We also believe that climate change issues require action and cooperation from theinternational community, and that both should be strengthened in order to properly addressthe problem. While such action is primarily the responsibility of individul sovereigngovernments working within the United Nations system we would like to recognize theimportance of community action and should provide encouragement to individualgovernments that prove determined to take effective action on the issue of climatechange. We believe that the least advantaged, both in rural and urban humansettlements, require special attention and requires the consolidation and reinforcementof the existing United Nations support programs, and we consider this an urgent matterworthy of great priority.

We would like to enumerate that several nations in this body have been very successfulin taking steps to improve education on the topic of climate change, both within theirown state and internationally. Many of these states have identified the specific causesof climate change within their own regions and have taken appropriate measures toaddress those problems. This committee believes these states should offer their findingsto businesses operating inside their borders and encourage them to actively participatein the education of their populace and the creation of a greener environment. Businessesshould also be encouraged to implement policies that are healthier for the environmentand result in fewer negative repercussions vis-a-vis climate change.

It is important that the United Nations set aside funding for educational programs to inform people of this issue that that we havegreat influence over. There are many Climate Change Education (CCE) funding opportunities which are available through numerous public and privateorganizations. Financial support that these organizations, such as The United Nations Alliance on Climate Change (CCE) and private philanthropists, offerinclude grants for schools and community groups, achievement awards for both educators and students and environmental education scholarships.

There are many trust funds and bodies that currently focus greatly on education, including the European Union and, more specifically, Portugal. This body commends these bodies that have taken similar measures and

would like to further encourage other Member States to participate in similar programs.

3 Consideration of the status

3.1 Dissenting Policy Statements

Several Member States present requested that the following policy statements be included in this commission's report.

The representative from Costa Rica appreciates the collaboration of the Alternate Energy Committee presented in this document, while noting its dissent concerning the emphasis on carbon fuel tariffs. We suggest stronger emphasis on incentivization programs for conservation and sustainable development programs, possibly in the form of tax breaks or grants where appropriate. Furthermore the representatives of Costa Rica, Sudan, The Republic of Ghana, and Nigeria, would like to note our disagreement with the encouragement of proliferation of nuclear power as an alternate energy source. Costa Rica would prefer to see Member States aim to develop more environmentally conscious and sustainable sources of energy.

The representatives from Nicaragua, Sudan, Nigeria, Singapore, and China strongly dissented against the recommendation for a carbon fuel tariff. As a developing nations with a large portion of their gross domestic product in the oil industry, these representatives stressed the dangers economically that would result from any carbon tariff on developing nations. Further, Nicaragua has internally reduced its own carbon emissions below the target levels and as an alternative suggested that all UN member nations follow suit by reducing carbon emissions internally. Singapore also recommends a tax on emissions to encourage nations to install scrubbers and other technologies within factories to reduce Greenhouse Gas emissions while continuing the use of fossil fuels.

The representative from Sudan expressed their strong dissent regarding the language with which the ideas in the report are expressed, because they create a suggestion of infringement on national sovereignty. Furthermore, the Sudan opposes the regional guidelines which disregard the jurisdiction of the State to accept these recommendations.

Nigeria and Sudan would like to express their opinion that the language within lines, 7, 8, 9, and 13 within the discussion of tariffs are rather contradictory. These delegates would also like to note that line 14, regarding actions oil producing countries are presumptuous. Additionally, lines 38, and 39 within the tariff discussion are also presumptuous, with language that assumes the adoption of the proposed tariff.

The delegates from Sudan, Nigeria, Rwanda and Cameroon that lines 16, 17, and 18 within the discussion of tariffs focus on ?what if? scenarios rather than substantive recommendations.

The delegate of Rwanda would like to express dissent with line 12 with the tariff discussion, because of uncertainty of prices that are referenced.

Rwanda, Cameroon, Lebanon, Sudan express dissent with line 13 which limit the causes of environment damage to slums and their production.

Nigeria, Australia, and Singapore express dissent with line 56 which encourages the development of nuclear energy. Singapore notes that the storage of expired reactors poses many safety concerns as they continue to emit high levels of radiation years after they expire.

The delegate from Nigeria would like to express dissent with lines 1, 2, 3, 24, 25, 28, and 29 within the discussion of education because of language which seems to strongly infringe upon national sovereignty. Also Nigeria would like to bring attention to line 44, leaves out clarification on the role of Portugal specifically.

Delegates from the Czech Republic and Kazakhstan express great concern in the lack of available information on the effects of the immediate capture of CO2 from the atmosphere. There has been little to no research on how this will affect the natural order of the ecosystem.

The representative from Nicaragua would like to offer the following dissention to several of the recommendations of this committee. First, Nicaragua does not agree with re-branding of climate change as a security issue because that would pull focus from other security issues that are much more pressing such as drug trafficking throughout South America. Secondly, Nicaragua does not agree with the recommendation to utilize microloans in developing nations since historically these nations have had trouble repaying such loans and targeting small business within those nations will not yield a better result. Finally, Nicaragua rejects the proposal to encourage grassroots organizations such as labor unions and international regulatory bodies to undermine the sovereignty of developing nations such as Nicaragua.

4 Adoption of the report of the Programme on its session

At its meeting, the draft report of the Programme was made available for consideration. The Programme considered the report, and with no amendments, adopted the report by consensus

Passed by consensus, with 0 abstentions