Climate Action Simulation: Developing Nations

To: **Chief Negotiators for Developing Nations**
(Over 100 nations: Southeast Asia, most of the nations of Central and South America, most African nations, the small island nations, and much of the Middle East)

Subject: **Preparation for the Climate Action Summit**

Welcome to the Climate Action Summit. You and leaders from all relevant stakeholders have been invited by the UN Secretary-General to work together to successfully address climate change. In the invitation, the Secretary-General noted that: "The climate emergency is a race we are losing, but it is a race we can win...The best science...tells us that any temperature rise above 1.5°C will lead to major and irreversible damage to the ecosystems that support us...But science also tells us it is not too late. We can do it...But it will require fundamental transformations in all aspects of society—how we grow food, use land, fuel our transport and power our economies...By acting together, we will leave no one behind."

The goal of the summit is to create a plan to limit global warming to less than 2°C [3.6°F] above pre-industrial levels and to strive for 1.5°C [2.7°F], the international targets formally recognized in the Paris Climate Agreement. The scientific evidence is clear: warming above this limit will yield catastrophic and irreversible impacts threatening the health, prosperity, and lives of people in all nations.

You represent the world's least developed nations. The combined population of your nations is about 2.9 billion, about 38% of the 7.7 billion people in the world, and is growing rapidly. However, collectively, your nations generate only about 16% of world economic output, with lower GDP (Gross Domestic Production) per capita and much more poverty than the developed nations.

Your policy priorities are listed below. You can, however, propose, or block, any available policy.

1. **Subsidize renewable energy (e.g., solar, wind, geothermal, hydropower, and storage).** The renewable energy industry is growing rapidly, but still makes up less than 5% of the world's energy supply. Subsidies will help these industries grow, generating jobs in your nations (if you can outpace wind, solar, and battery technology improvements in the developed nations). Storage (e.g., batteries, thermal storage, pumped hydro) and dynamic load management for electric power allow variable renewables like wind and solar to be integrated into the energy system while providing round-the-clock electric power. Subsidies for renewables, paid for by the developed and rapidly emerging nations such as China, would make these sources of power far cheaper for your nations and speed economic development.
2. **Reduce emissions of methane, nitrous oxide, and other greenhouse gases.** CO_2 is the most prominent greenhouse gas, but other gases cause about a quarter of global warming. These include methane (CH_4), nitrous oxide (N_2O), and a wide range of chlorofluorocarbons and other fluorinated compounds (so-called F-gases). Molecule for molecule, many of the non-CO_2 gases contribute tens, hundreds or even thousands of times more to global warming over the next century than CO_2. Although their concentrations are low, they are growing rapidly. Most of these emissions arise in the developed nations and rapidly emerging economies of the world.
3. **Reduce deforestation.** Deforestation is currently responsible for about 15% of global GHG emissions. Much of that deforestation occurs in the tropical forests of your nations, including the Amazon basin, South and Southeast Asia, and Africa. Protecting forests can reduce those

emissions while also preserving biodiversity and protecting water supplies. However, limiting deforestation also reduces potential use of those lands for logging, food production, bioenergy, and other important uses.

4. **Consider afforestation.** Afforestation is the growth of new forests on land that doesn't have trees, sometimes this is land that was previously deforested or degraded. If implemented on a large scale, afforestation could use land that is needed for crops or livestock, thereby increasing food prices. Consider how much land the afforestation policies you and other groups propose would require.
5. **Consider taxing coal.** Many of your nations are building new coal mines and power plants even though coal is the most carbon-intensive fuel and is also responsible for much of the air pollution that harms millions in your nations today. Taxing, regulating, or even phasing out coal could cut emissions rapidly, reduce dangerous air pollution, and improve public health.
6. **Consider putting a price on CO_2 emissions.** Fossil fuels still dominate the world energy system, and the CO_2 they emit is by far the biggest contributor to climate change. Market prices today do not include the environmental and social harms caused by fossil fuels (their "negative externalities"). Worse, governments around the world, including many of yours, provide $775 billion to $1 trillion annually in subsidies to the fossil fuel industry. Economists agree that a carbon price is the best way to reduce global greenhouse gas (GHG) emissions. Consider supporting a world-wide price on carbon, perhaps phased in over time to give time to adjust. The revenues could be paid out to the public or help offset the costs of other policies. Although carbon prices have been implemented in a few nations, they are far lower than the $30-50 per ton of CO_2, or more, many economists recommend. However, you cannot afford to move too fast—the middle classes in your nations are striving to afford the products and services people in the developed nations take for granted—automobiles, air conditioning, air travel, etc., while the poor in your nations seek reliable electricity, clean water, food, health care, decent housing, and other basic human needs—and will acutely feel rising energy costs.

Additional Considerations

Many people in your nations have no access to electricity or reliable, affordable energy. Your nations are responsible for only about 24% of global greenhouse gas (GHG) emissions today, and emissions per person are far lower than in the developed nations, or even China. However, fossil fuel use in your nations is growing rapidly as your economies develop. The developed nations generated most of the cumulative GHG emissions that created the climate crisis, while your people will suffer the most from climate change and have the least capacity to adapt to it. You believe it is their moral responsibility to cut their emissions, and that policies to address climate change cannot be allowed if they slow your economic development and ability to provide your people with food, jobs, housing, education, health care, and other basic needs that those in the developed nations take for granted.

At the same time, climate change poses grave risks to your prosperity, health, and lives. Air pollution from fossil fuels causes millions of premature deaths in your nations every year. Sea level rise, extreme weather, droughts, crop yield decline, and other harms from climate change increasingly drive conflict and migration, undermining the legitimacy of your governments, and, for small island states, your very existence. Your nations have the opportunity to leapfrog the fossil fuel energy system and jump to a clean, efficient, renewable energy system, just as many of you leapfrogged telephone landlines and jumped straight to mobile phones. Energy efficiency, and renewables like wind and solar, are often profitable, create jobs and economic opportunity, and improve public health.