

Climate Action Simulation: World Governments



To: Chief Negotiators from World Governments
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.

Your group includes the combined public voice of the people of the world. This includes government ministries from the highest polluting nations – US, EU, China, and India – and representatives from other developing regions of the world in Africa, Asia, South America, and Oceania. There are also representatives from international government groups including United Nations. This alliance is interested in preserving the economic welfare and geopolitical stability of all nations of the world through this period of great transition into the coming century.

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. Storage (e.g., batteries, thermal storage, pumped hydro), and smart grid technology allow variable renewables like wind and solar to be integrated into the energy system while providing round-the-clock power.
- 2. Determine whether to tax fossil fuels and/or set a world carbon price.** While the world must transition away from fossil fuels to limit greenhouse gas emissions, over 80% of world energy is supplied by fossil fuels today. It will be costly and difficult to change the world energy infrastructure. 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 emissions. Consider putting a price on carbon, perhaps phased in over time to give industry and consumers time to adjust. The revenues could be rebated to the public, help offset the costs of other policies, or cut your fiscal deficits. However, you cannot afford to move too fast. A carbon price would increase the cost of energy in the short term, which can be a problem for people in developing countries. A carbon price would also bring capital and stimulate innovation into renewable industries.

3. **Reduce emissions of methane, nitrous oxide, and other greenhouse gases.** CO₂ is the most prominent greenhouse gas, but other gases contribute to about a quarter of global warming. These include methane (CH₄), nitrous oxide (N₂O), and a wide range of chlorofluorocarbons, and other fluorinated compounds (so-called F-gases). Molecule for molecule, many of the non-CO₂ gases contribute tens, hundreds, or even thousands of times more to global warming over the next century than CO₂. Although their concentrations are low, they are growing rapidly.
4. **Consider taxing coal.** Many of your nations are still building new coal mines and power plants even though coal is the most carbon-intensive fuel and is 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.
5. **Reduce deforestation.** Deforestation is currently responsible for about 15% of global greenhouse gas emissions. Much of that deforestation occurs in the tropical forests of your nations, including the Amazon basin, China, India, and Indonesia. 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, and other important uses.
6. **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 afforestation policies proposed would require.

Additional Considerations

You recognize that climate change is real, caused primarily by the burning of fossil fuels, and that it poses grave risks to people around the world—including your own. Climate change is a serious threat multiplier undermining your national security, as the damage from climate change increasingly drives conflict and migration.

World population is now about 7.7 billion, and the UN projects it will reach more than 9 billion by 2050 and almost 11 billion by 2100. The majority of that growth is expected to come from developing nations, where incomes and consumption are low but expected to rise rapidly.

Poverty, malnutrition and disease are common in many developing nations. Your governments seek to develop their economies as rapidly as possible to gain the health, educational, social and economic opportunities enjoyed in the developed world today, but such development could increase use of fossil fuels and other sources of harmful greenhouse gases. Meanwhile, almost one billion people globally still lack adequate energy services and rely on traditional biomass (burning wood) to meet their basic energy needs, leading to environmental degradation and premature deaths for millions of people, especially women and children.

Many in the developing world point out that the rich nations consume a disproportionate share of global resources, have the highest greenhouse gas emissions per capita and contributed the most cumulative emissions since the industrial revolution.