Climate Action Simulation: Conventional Energy Supply

To: Chief Negotiators for the Conventional Energy Industry
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 coal, oil, natural gas, nuclear, and electric utility industries that supply most of the world’s energy today. Your group includes publicly traded and national oil and gas (O&G) companies, coal companies, electric utilities reliant on fossil fuels, and firms that supply services and equipment to these industries.

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

1. Oppose a high carbon price. Your economists acknowledge that raising fossil fuel prices to reflect the environmental and social costs of greenhouse gas (GHG) emissions with a carbon price could be the best way to reduce global emissions. However, a carbon price above $25-30/ton of CO₂ would unacceptably harm the fossil fuel industry by raising costs and slashing demand, leading to stranded assets and loss of shareholder value. Although some oil companies publicly state that they favor a carbon price, your industry continues to fund politicians who oppose it and block action. You anticipate pressure from the other groups to enact a carbon price. Take a strong stance against this policy.

2. Oppose taxes on fossil fuels. Your industry wants neither to be regulated nor to pay the costs of mitigating climate change. Since you already anticipate significant business losses as the world transitions away from fossil fuels in the coming century, you cannot bear extra costs that unfairly punish your industry. In fact, you may ask for subsidies for natural gas, which you promote as a bridge fuel because it is less carbon intensive than coal and oil. If regulations are inevitable, it is better to restrict coal than oil and gas. Coal emits the most carbon when burned and is less profitable than oil and gas.

3. Promote new technologies including technological carbon removal, CCS, and biofuels. Your industry supports greater use of natural gas and biofuels, and research to develop carbon removal technology, which removes carbon from the atmosphere and stores it underground. Your expertise in large-scale engineering, geology, and fuel transport can be applied to these fuels and industries. You also support carbon capture and storage (CCS) for coal and other power plants, including biofuel with CCS. CCS could capture 90% of the CO₂ produced from
the combustion of fossil fuels in power plants and industrial processes. The CO$_2$ can then be liquified and pumped underground to enhance production of oil and gas, or, less profitably, pumped into what you assure will be stable geological reservoirs. Carbon removal technology, if it becomes feasible and cost competitive, would help your industry because CO$_2$ could then be removed from the atmosphere, offsetting the emissions from continued use of fossil fuels.

4. **Encourage actions that don’t directly affect your industry.** While you understand that climate change is dangerous, you also need to protect shareholder value. You therefore advocate policies that could reduce GHG emissions without reducing fossil fuel use. Although CO$_2$ from fossil fuel use contributes the most to climate change, methane (CH$_4$), nitrous oxide (N$_2$O) and other gases are potent GHGs, and their impact is growing. Global agriculture and forestry practices contribute greatly to emissions of these gases. You support policies to reduce these other GHGs, primarily emissions from land use, agriculture, and forestry. You support efforts to cut deforestation, and to afforest previously degraded and deforested lands.

**Additional Considerations**

Your own climate science experts agree with the Intergovernmental Panel on Climate Change (IPCC) assessment about the threat of climate change. However, you must balance the imperative to prevent dangerous climate change with the needs of your key stakeholders, including your shareholders, employees, the public (your customers), the policymakers who provide your license to operate, regulate your industry and affect your operating costs, and finally your personal financial interests as leaders of these companies.

Conventional energy sources including fossil fuels and nuclear currently supply the overwhelming majority of the global energy mix. Your industry is simply providing what consumers want and should not be blamed or punished for climate change. Cutting fossil fuel use may be costly to consumers and the economy in the short run. In much of the world, fossil fuel infrastructure is already in place, and in many developing nations new fossil energy capacity is still being rapidly developed. Renewables like wind and solar are intermittent and not yet capable of powering the world economy. Your stance is that fossil fuels are essential to eliminate “energy poverty” and drive economic growth, especially in the developing nations of the world. Don’t allow environmental activists to paint you as people who don’t care about social justice.

Fossil fuel producers, including firms in coal, oil, and gas, will endure severe financial hardship if policies are enacted to limit warming to anything close to 2°C. Firms dependent on fossil fuels will have to reinvent themselves or go out of business. Limiting warming to 2°C means a large fraction of known fossil fuel resources must remain in the ground and will become stranded assets, never generating profits for shareholders or governments. Many jobs will be lost.

At the same time, you know that global emissions must be curtailed to avoid the worst impacts of climate change. Rising sea levels, more extreme weather and the ensuing geopolitical dislocations pose serious risks to existing energy supply assets and the world economy. Increasing climate damage also increases the likelihood of extreme policies and regulations that would harm the fossil industry. While you act to forestall such policies and regulations, you must also explore how you might use your infrastructure, financial capital, and expertise to compete—and survive—in a warming world.