STATEMENT TO THE

WESTERN CAUCUS GREEN NEW DEAL FORUM

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Thank you for allowing me to speak today. Generally, I conclude most of my climate change presentations with the phrase, "It's not about the climate; it never was." Today, I would like to start with that statement. In the brief time I have allotted, I will discuss why carbon dioxide isn't the agent of climate change it is made out to be and why the process was never a search to understand the Earth's climate.

Let me begin with a series of questions. *Is our climate changing?* The answer is clearly "YES" because climate has always changed. We started defining 'climate' as 'average weather' and averages are not supposed to change. If they do, it must be unnatural. Treating the climate as a statistical average further implies that it should be static; in fact, the Earth's climate is dynamic, variable, and ever-changing.

Is global warming real; or, more specifically, has the surface air temperature risen about 0.6 degrees Celsius since the late 1800s? The answer also is "YES" and there is little debate on that.

Do humans affect the Earth's climate? Again, the resounding answer is "YES" with little debate. We can point to the urban heat island – for example, the Washington metropolitan area is warmer than the surrounding countryside due to the urban city and this has been widely studied. Floods and droughts also are affected because of the impervious surfaces and the increased water demand of urbanized areas.

Does carbon dioxide absorb heat energy? Yes, certainly. The Earth's surface is warmer than it would be in the absence of an atmosphere – by about 30 degrees Celsius. But remember, the most important greenhouse gas is not carbon dioxide; it is water vapor. Water cycles fast through the atmosphere, absorbing heat as it evaporates and releasing that heat as it condenses. The current amount of water in the global atmosphere will fall as precipitation in just the next ten days. Its mobility and efficiency in absorbing heat energy makes water fundamental in explaining the climate of the Earth.

If the amount of carbon dioxide in the atmosphere doubles, what will the effect be on global air temperature? This is where the debate begins. We seek to determine something called the equilibrium climate sensitivity; that is, the eventual rise in air temperature due to the global energy balance with a doubling of carbon dioxide. Over the last twenty years, our estimates of the equilibrium climate sensitivity –

based on measurements of the climate system – have decreased substantially. In the early 2000s, estimates were that a doubling of carbon dioxide would result in between a 3- and 6-degree Celsius warming. Since 2010, however, most estimates have placed the equilibrium climate sensitivity at less than 3 degrees Celsius and over the last five years, several independent assessments have placed the sensitivity at less than one degree. What this implies is that the effect of a doubling of carbon dioxide has a much less impact than the models suggest – their sensitivity has remained above 3 degrees Celsius over the last two decades – which helps to explain why their estimates of warming are much higher.

How do we know that carbon dioxide is a very minor player in climate change? Both theory and models tell us that the biggest effect of carbon dioxide on air temperatures should lie in the upper tropical troposphere — the layer of the atmosphere where all weather resides. Over the last forty years, the warming of this layer has been quite modest whereas the models indicate the warming should have been two-and-a-half times greater. This further underscore that climate models grossly overstate the climate warming.

Moreover, theory also indicates that daily maximum air temperatures should rise if carbon dioxide is the main driver of climate change. In fact, daily maxima have not

changed substantially over the last eighty years and before that, air temperatures were much higher during the Dust Bowl of the 1930s. Minimum daily air temperatures have increased, but that is associated with the warming of urban areas. Averaging these two records to get a daily average and then reporting that "this year is the warmest in recorded history" is highly misleading since most stations have a short record length.

Will this warming necessarily lead to more climate extremes – floods, droughts, hurricanes, tornadoes, sea level rise, etc.? I can spend the next hour explaining why these events are not increasing in frequency or intensity and why, under a warmer world, the physics of climate indicate that they should not. Changing land use and increased demand for water are more significant than carbon dioxide in changing the impact of climate on our lives. Extreme weather is slanted by alarmists and the media to give the impression that violent weather is becoming more frequent and intense when the data says otherwise.

Is a warmer climate and more carbon dioxide a net benefit to life on the planet? The answer to this question is "YES". More people die from exposure to cold than heat.

A longer growing season is more beneficial to feeding a growing population as

carbon dioxide is plant food. Under higher carbon dioxide concentrations, virtually all plants grow faster and are more efficient in using water.

So, what is the climatic benefit of spending billions of dollars and fundamentally changing our economy and way of life? As I began, this issue is not about the Earth's climate – it never was. The United Nations has become the modern-day Robin Hood – create wealth redistribution on a global scale. Climate change has become the cause célèbre to move nations to action. Industrialization has made developed nations 'rich' and by using fossil fuels, they have destroyed our climate. Rich nations, therefore, must give much of their wealth to the poorer nations.

The New Green Deal is not about stopping climate change. Climate always changes and always will. The United States has cut back on greenhouse gas emissions by about 13% since 2005 to virtually no effect. The net effect of reducing the United States carbon dioxide emissions by 80% by 2050 will only have an effect of lowering global averaged temperature by 0.1 degrees Celsius in 2100. Even reduction by 100% will have little effect on the climate, but the policies proposed by the New Green Deal would make Karl Marx proud. But realize this; any draconian changes such as these would necessarily change our fundamental way of life. And that, not addressing the ills of climate change, is what this discussion is all about.