

ATHGO Climate Change Conference: *Change Your Attitude, Not the Weather*

GROUP 8: Policy Proposal

VISION STATEMENT: To effectively enforce legislation at the federal level that seeks to both reduce national carbon dioxide emissions and foster a truly sustainable lifestyle, thus actively combating the dire threat posed by radical climate change.

According to the Fourth Assessment Report conducted by IPCC, the global trend of climate disruption is "unequivocal," with anthropogenic activity noted as "very likely" having been the driving force. More specifically, the exponential increase in greenhouse gas emissions, namely carbon dioxide, has been linked to this sharp rise in the rate of increase in global temperature [$\sim 0.2^{\circ}\text{C}/\text{decade}$]. The excess concentration of greenhouse gases [GHG] enables the atmosphere to trap a greater percentage of the energy present in solar radiation, hence radical global warming. The repercussions of this drastic disruption in the global climate have already been observed. Consider, for example, the melting of the snows atop Mt. Kilimanjaro, the drying of Lake Chad, the strengthening of hurricanes [Hurricane Katrina, 2005], and the 2003 European heat wave to name a few. If this trend is to continue, we can expect to see further extremification of world climates, rising sea levels, and the exhaustion of valuable potable water sources.

Despite the overwhelming evidence in support of global climate disruption, there do exist some pockets of resistance present in the form of [1] scientific skeptics, who argue against the direct correlation between the increase in atmospheric carbon dioxide emission and the increase in global temperature over the past half century, as well as [2] leaders in corporate industry, who view any mandate toward clean energy as a threat to their short term profits.

Attempts have been made in the past to address the threat posed by global warming. Most notable in the US would be California's AB-32, the Global Warming Solutions Act of 2006, which required GHG emissions reporting, proposed emission reduction measures, and introduced an emissions trading scheme. California is now working toward reducing GHG emissions to their 1990 level by the year 2020. The moderate success in California is admirable, but more must be done. A federal decision aimed toward a solution to global warming must be reached. In short, the United States must take the lead in the push for clean energy, more efficient energy usage, and reduction in CO₂ emissions.

As members of the 2008 ATHGO Global Warming Summit, we propose the establishment of a new US judicial-legislative **governmental enforcement body**, the Independent Commission for Sustainability [ICS]. Priorities include the following: overseeing the implementation of renewable energy systems in industry, setting guidelines for acceptable levels of CO₂ emissions, enforcing the requirements, initiating such legislation in Congress, etc. To complement its legislative duties, the ICS will also consist of a new court head by a tenured [lifetime] academic, appointed by the president and approved by a supermajority of the Senate, thus insusceptible to political partisanship. Thus, the composition of this group is two-fold, consisting of both legislative and judicial components.

Let us now focus on the **legislation** that will be aggressively enforced by this newly created body. A national policy of carbon cap-and-trade will be set up. To clarify, initial thresholds will be established, determined by taking into account current carbon emission levels. Any industrial entity that exceeds this cap will be penalized. On the contrary, the elimination of carbon emissions will earn credits which can then be sold/traded to those industrial entities unable to meet the necessary cap. Note that this practice will necessitate industry-wide transparency and the full disclosure of the yearly carbon footprint. With this program in place, we will aim to reduce carbon dioxide emissions by 20% [with respect to 1990 values] by 2020 and by 80% by 2050.

The revenue incurred from the carbon-threshold violation penalties will go on to fund programs that promote the **sustainable lifestyle** through the development of self-sufficient communities. Note that education and community go hand in hand. With this in mind, we will mandate academic programs that promote the sustainable lifestyle. The ICS will engage the youth at all levels of academia – pre-K, elementary, secondary, collegiate. The fundamental backbone of this initiative is the installation of renewable energy systems at these institutions. First of all, installing solar panels, for example, atop the roofs of schools across the nation is in itself a heavy push in the right direction. However, let us take this initiative further. Once in place, coursework at the respective academics institutions will complement the installation of the sustainable energy system. Students will learn about how the renewable energy system works, understand the benefits of using clean energy sources, and become ready to undertake a truly sustainable lifestyle. To further contribute to the sustainable community model, incentives will be provided to decentralized food productions centers, to vertical farming initiatives, to home-installed solar units. And so, under the guidance of the ICS, communities across the nation will be given the opportunity to become truly sustainable.