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Energy Secure and Pure America (ESPA):

A Plan for Presidential Action Combating Climate Change in the
First Hundred Days of Office



(<http://www.fws.gov/home/hurricane/>)

It is urgently necessary for the United States, the largest emitter of greenhouse gasesⁱ, to address climate change in an immediate, economic, and environmentally sound manner. The 2007 Intergovernmental Panel on Climate Change (IPCC) Report declared climate change to be “unequivocal.” Furthermore, “[a]nthropogenic warming and sea level rise would continue for centuries due to the timescales associated with climate processes and feedbacks, even if greenhouse gas concentrations were to be stabilized.”ⁱⁱ The US must once again put all available resources toward change.

Therefore, I request that the president introduce and implement my plan “Energy Secure and Pure America” (ESPA) in his first hundred days of office. The objectives of my plan include preventing injurious global warming, reducing pollution and emissions to a sustainable level, purifying the air, water, and earth of America, becoming energy-independent, and leading the world in an alternative future by the year 2030. ESPA consists of both international policy directives, and domestic legislation. The president must also take executive action supporting these objectives.

Internationally, America must establish more amicable environmental relations, and work with other industrialized nations to reverse the warming trend. Through the UNEP, it must pledge aid relief to those countries most adversely affected by climate change. It must expand exchanges of debt relief for carbon sequestration.¹ It must increase support for international renewable energy programs. Lastly, it must be an example to the rest of the world in environmental sustainability.

America is the largest producer of greenhouse gases; therefore, domestically is where the most change is needed. Total cost to the federal government of the following

¹ The U.S. has already engaged in debt-for-nature swaps in Belize, Botswana, Colombia, El Salvador, Guatemala, Jamaica, Panama, Peru, and Thailand.

domestic plan will be approximately \$15.604 billion per year.² Domestic ESPA consists of five sections: regulation, competition, incentives, science and technology funding, and education.³ ESPA will not completely dismantle environmental law, but rather complement such previous acts such as the Energy Policy Acts of 2005 and 2007.

There is much needed regulation concerning the production of greenhouse gas emissions. First, ESPA would place a moratorium on building new roads without mass transportation options. Exceptions to this include extremely rural areas and projects already underway. Trees provide the important activity of carbon sequestration. To reduce the amount of logging, the production and trade of commercial hemp, *Cannabis sativa*, would be made legal for paper production. The use of petroleum products for energy production would be limited, so that as emissions standards strengthen, energy companies are forced to look to alternative energy instead of other forms of fossil fuels. Energy companies would also be required to engage in net metering in all fifty states. Oil subsidies would end at \$50 per barrel, and subsidies would be reduced as appropriate when oil use falls. An additional gasoline tax of \$0.46 per gallon would be imposed to equal a total tax per gallon of \$0.97 (reducing emissions by 10% every 15 years).ⁱⁱⁱ The associated revenue to the federal government would be \$26.95 billion per year.^{iv} Lastly, Corporate Average Fuel Efficiency (CAFÉ) standards would be raised 3.8 mpg (enough to reduce gasoline consumed by new vehicles 10%) every five years until 2030 (see

Appendix A).^v

² This figure is likely overstated. Costs are likely overestimated, and reduction in spending due to cuts in subsidies is not included, nor is the savings associated with increased energy security. Specific costs to the economy are unknown. The Stern Review Report states the possibility for the loss of 10% of global GDP due to climate change, potentially more. This would cost the U.S. economy more than \$1 trillion per year.

³ Agricultural reform is not part of ESPA because the infrastructure does not exist to allow an economically feasible shift to environmentally friendly production. However, future legislation (perhaps reliant on carbon sequestration) is obligatory. Also it is suggested that a certain sustainable amount of emissions is acceptable.

A fundamental component of ESPA is a carbon credit trading program between the states in order to provide a venue encouraging emission reduction within the economy. Power companies and factories currently have no significant incentive to curb emissions. If states limit emissions, they put themselves at a disadvantage as companies move elsewhere. As a result, they are encouraged to lower regulations. As of 2004, CO₂ emissions were approximately 6,000.00 million metric tons per year.^{vi} Because states have limited control on travel, emissions related to transportation are subtracted. Thus, the maximum level of CO₂ emissions allowed in 2008 would be 3,404.82 million metric tons.^{vii} The amount of carbon allowed would be reduced by 1,547.65 million metric tons per year, ending at 0 million metric tons in the industrial/power sector in the year 2030.⁴ One credit would equal 10 metric tons of carbon emitted. Based on a price slightly lower than the average price per carbon credit at the Chicago Carbon Exchange, the minimum price per credit would be \$3.00.^{viii} The revenue gained would vary as fewer credits are sold. However, revenue collected has the potential to be significantly larger than projected as states bid the price up and trade among themselves (see Appendix B). Twenty-five percent of the revenue generated would be used to pay for administrative costs and used to aid struggling states as needed.

Regulation and the shift toward renewable systems will cost the economy and U.S. society in both the public and private sectors. Thus, ESPA would provide reasonable incentives to help ease the transition to a renewable energy economy. The remaining 75% revenue grossed from the carbon credit program would be reinvested into alternative energy production tax credits for power companies through the Renewable

⁴ It is assumed that as CO₂ emissions are reduced, so too will NO_x emissions in order to avoid overlapping legislation and to more accurately approximate costs to the federal government. If this is found not to be the case, later regulation can be legislated.

Energy Production Incentives Program (REPI).^{ix} As well as supporting current citizen tax incentives, 60% of the revenue gained from the increase in the gasoline tax would provide a tax credit to citizens for buying or producing renewable energy. The remaining 40% would provide a tax credit to those citizens regularly using mass transportation. Furthermore, the tax credit for purchasing fuel-efficient vehicles specified in the Energy Policy Tax Incentives Act of 2005 would be extended to pre-owned vehicles. The bill in general was estimated by the CBO to cost approximately \$4 million per year; therefore, the additional tax credit will cost the federal government less.^x Finally, ESPA would reinstate parts of the Federal Transit Act of 1997. It would give the same approximately \$5 billion per year until the year 2030 for the discretionary grants program, and the clean fuels program.^{xi} Part of the money would be used for the betterment of the Federal Transit Administrations' grant management.⁵

In order to transition to a sustainable renewable energy economy, the necessary technology must be available. Therefore, ESPA would apportion \$50 million per year to renewable energy research under the Department of Energy (DOE). There would be \$250 million per year (under the DOE) dedicated to alternative fuel cars. There would be \$300 million per year dedicated to grants for power companies transitioning to alternative fuel sources. Furthermore, the president must divert 10% of the defense budget to alternative fuel research to reduce dependence of foreign oil and prevent a national environmental and energy emergency.

Education is requisite in order for the country to understand the necessity for the Energy Secure and Pure future. ESPA would instate a national requirement for

⁵ The U.S. General Accounting Office specified the need for reform in its review of the 1997 Federal Transit Act.

environmental education. The more funding that is apportioned for collegiate programs, the more scientists that will be created to lead America to an alternative future.

Consequently, ESPA will allocate an additional \$10 billion to higher education.

Though the federal government cannot impose upon a state's power, it can suggest courses of action. Therefore, in concert with ESPA, the president should recommend that states 1) build tolls where congestion is highest to discourage vehicular activity 2) set limits on emissions per factory and power plant to prevent monopoly by large companies when overall emissions regulations are in place 3) implement Sustainable Natural Alternative Power (SNAP) programs 4) revise zoning to require buildings larger than 15,000 square feet to get 25% of their power from renewable energy and 5) revise zoning laws to create 'walkable communities'.

Lastly, in recognition of the gravity of the situation, and in order to allow for immediate action and a united implementation of ESPA, the president must declare a National State of Emergency in his first hundred days of office. National attention must be focused on climate change, and the president must lead the way.

The United States has an opportunity to revitalize its economy, its environment, and its citizenry. It, along with the rest of the world, is facing a growing menace that has the potential to take lives, distress the world's economy, destroy the global environment, and change our way of life. The new president must take immediate, drastic action to prevent climate change by reducing emissions. He must do so in an economically feasible way. America must once again be an example in environmental sustainability, and lead the world to an alternative future.

Appendix A

Car Fuel Standards	Fuel Standard Cars	Fuel Standard Trucks
2008	31.5	24.5
2009	31.5	24.5
2010	31.5	24.5
2011	31.5	24.5
2012	31.5	24.5
2013	35.3	28.3
2014	35.3	28.3
2015	35.3	28.3
2016	35.3	28.3
2017	35.3	28.3
2018	39.1	32.1
2019	39.1	32.1
2020	39.1	32.1
2021	39.1	32.1
2022	39.1	32.1
2023	42.9	35.9
2024	42.9	35.9
2025	42.9	35.9
2026	42.9	35.9
2027	42.9	35.9
2028	46.7	39.7
2029	46.7	39.7
2030	46.7	39.7

This chart details the gradual strengthening of CAFÉ standards.

Appendix B

Energy Sector Plan	CO2 (metric tons)	Credit (metric tons)	Minimum Price	U.S. Revenue
2008	3404820000.00	10	\$3.00	\$1,021,446,000.00
2009	3250055454.55	10	\$3.00	\$975,016,636.36
2010	3095290909.09	10	\$3.00	\$928,587,272.73
2011	2940526363.64	10	\$3.00	\$882,157,909.09
2012	2785761818.18	10	\$3.00	\$835,728,545.45
2013	2630997272.73	10	\$3.00	\$789,299,181.82
2014	2476232727.27	10	\$3.00	\$742,869,818.18
2015	2321468181.82	10	\$3.00	\$696,440,454.55
2016	2166703636.36	10	\$3.00	\$650,011,090.91
2017	2011939090.91	10	\$3.00	\$603,581,727.27
2018	1857174545.45	10	\$3.00	\$557,152,363.64
2019	1702410000.00	10	\$3.00	\$510,723,000.00
2020	1547645454.55	10	\$3.00	\$464,293,636.36
2021	1392880909.09	10	\$3.00	\$417,864,272.73
2022	1238116363.64	10	\$3.00	\$371,434,909.09
2023	1083351818.18	10	\$3.00	\$325,005,545.45
2024	928587272.73	10	\$3.00	\$278,576,181.82
2025	773822727.27	10	\$3.00	\$232,146,818.18
2026	619058181.82	10	\$3.00	\$185,717,454.55
2027	464293636.36	10	\$3.00	\$139,288,090.91
2028	309529090.91	10	\$3.00	\$92,858,727.27
2029	154764545.45	10	\$3.00	\$46,429,363.64
2030	0.00	10	\$3.00	(\$0.00)

This chart details the amount of carbon emissions sold per year, and the minimum revenue to the federal government.

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