

## Environment in the United States

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The amount of relevance that the condition of the environment exerts over our economy, natural resources, government and day-to-day life is unprecedented, and is likely only going to increase in the years to come. Only with skilled relegation of responsibility to the various levels of our Government, including local, state, and federal governments, and partnership and cooperation with private entities will ensure economic success in the short-term, and the survival of orderly society in the long-term. The Chesapeake Bay Watershed is one of the largest watersheds in the country, and is thus a vital area for assessing our capability to act in defence of such environments. The issues of fracking and alternative, green energy are intrinsically linked, and careful policymaking is required to avoid the dangers of the former and transition smoothly into the latter.

The Chesapeake Bay is one of the largest estuarine watersheds in the nation, spans six states and the District of Columbia, and has the highest land to water ratio of any watershed in the world (14:1). It is a veritable economic hub of the seafood, real estate, shipping, and tourism industries. Furthermore, it is a vital testing ground for environmental restoration and conservation strategies that can be employed in watersheds all across the nation. Given these factors, and the multitude of livelihoods that correlate directly with the Bay's health, it is essential that its management concern the government at the local, state, and federal levels.

While the Federal government has the capability to execute and fund large-scale initiatives, it is more susceptible to party politics. The state governments are still affected by this, to a lesser extent, however they do not possess the resources of the federal governments. Local governments, while small and not substantially equipped, are often more directly exposed to environmental issues and are more willing to act on matters of local concern. Therefore, a program is needed that involves all three of these levels in what is, by nature, a non-partisan matter concerning the survival of our nation and economy. Furthermore, such a plan would also need to harness the potential of private and non-profit organisations, and the citizenry as a whole. A joint fund would be established, shared between the Federal Government, and the State and Local governments of the Watershed, with the aim of funding conservation and restoration projects. While government money would be used to kickstart this fund, it would be swelled by donations and investments from private citizens and companies. The system would be simple: contribute to the Bay fund, and receive a modest tax break. Investors who contribute more currency than what would be covered by the tax break would receive credit, to be paid back by the government in years to come with interest. Since this reserve of money would be shared by all of the levels of government, if a state, local, or even the Federal government would wish to break with the aims of the fund, it would be forced to pay back its share of investors immediately. The Federal government would have the largest share, making its withdrawal the most difficult, followed by state, and local governments. Local governments would be incentivized to stick with the program due to the risk of using their limited funding to pay the price of leaving. Therefore, for any level of government to break with this environmental policy due to partisan squabbles would be a costly decision. Such a program would be implemented

alongside such efforts that we currently are pursuing to save the Bay, hopefully adding financial incentive and keeping the government on track to continue working for the good of the watershed.

Another area where a diligent and persistent effort should be required is cracking down on fracking. Our government, being “by the people, for the people, and of the people” has a priority to ensure the safety of those very people that implement it. Fracking, even with the limited research that has been carried out on the consequences of its release of toxic, carcinogenic, and even radioactive by-products, already looms large as a threat to the health of the American people. How is permitting a practice which contaminates vital drinking water, kills livestock and crops essential for agriculture, involves a risk of violent conflagration, and produces a plethora of known and unknown substances that cause illness and death, any different than permitting a widespread chemical attack on our civilian population? The amount of flowback and treated water, which contains such risks as outlined above, that has already been leached into the environment will take years to clean up properly. If fracking continues to grow at current levels, and continues to abide by the same destructive methods, it will reach the threshold of being an untenable issue concerning our environment very soon. The process of extracting natural gas is a threat to the people of the United States and needs to be restricted or abandoned as soon as possible. Incrementally passing legislation that curtails the profitability of fracking is the key to beginning the process of transitioning off of natural gas. The initial steps to mitigate this would be closing the loopholes in state law that exempt fracking waste from being treated with the proper requirements as hazardous waste. A publicly funded awareness campaign

based around the dangers of fracking is a good start as well; as soon as people are truly aware of the risks, they are more likely to elect officials who pledge to be anti-fracking, and would take firmer stances against fracking companies as special interest groups. Incentives could be given to private and nonprofit environmental organisations if they advocate against fracking, and through local governments and homeowners associations, citizens could be convinced of the negative effects of leasing land for fracking. It is important to rally a large base of public support before tackling the issue of how much natural gas companies influence politics; they need to feel pressured from all sides. Creation of environmentally-minded special interest groups to counteract this, through subsidies to conservation organizations, could level the playing field. Once these first two steps are complete, fracking could be dealt with by heavy restriction or phasing it out in favour of other, safer energy sources. Nuclear power plants, while not without risks themselves, produce *far* less waste than fracking; a single 100-truck fracking waste convoy carries more radioactive material than all of the nuclear power plants in the United States produce in a year. And unlike the natural gas companies, nuclear power plants are mandated to comply with a stringent set of safety and waste disposal protocols. It is also noteworthy that the fracking industry has killed more people in the span of a month than nuclear power has in half a century.

Two other candidates for means of alternative energy are wind turbines and solar power. They both supply clean, renewable, and sustainable energy, but are not without complications themselves. Solar panels are generally low-maintenance, reliable, and cost-effective ways of procuring renewable energy. However, they require large amounts of space to do so. Many

people on Maryland's Eastern Shore are apprehensive due to the threat of agricultural land being bought up and used as solar farms, ergo damaging the economy and culture of the area.

However, to set aside productive agricultural land for solar panels would be terribly wasteful, especially considering the more lucrative alternative locations. These include non productive land, and crucially, developed areas. Maryland does offer a decent bargain on rooftop solar panels, which require only a small loan and will save homeowners money and allow tax cuts. If more public awareness on the excellent deals provided by solar panel companies in the state was provided, it would doubtless attract more customers in towns and developments looking to save on power bills. Responsibility for such advertisements could be relegated to local governments, to avoid contention from the oil and natural gas interest groups that plague the Federal and State governments. Solar roadways are also being developed and discussed in several countries, and given that the United States is covered in over 4 million square miles of roads, not counting parking lots, sidewalks, and driveways, this could be another feasible solar solution that does not involve interfering on economically active lands. Wind turbines are more hotly debated, however. The claims regarding the death toll of birds are heavily exaggerated, as according to the U.S. Fish and Wildlife Service, the total number of bird deaths due to wind turbines annually is between 100,000 and 400,000. At first this may seem large, but when other causes of death are compared to it, the situation rapidly becomes clear. These include buildings, feral and domestic cats, cars, and agricultural pesticides; the deaths from these number in the tens of millions to the billions. As long as care is practiced to avoid placing turbines along migratory paths for birds, there is a small price to pay for clean, sustainable energy. However, the largest obstacles by far to the installation of wind turbines are those of the real estate industry and large or scenic property

owners. Wind turbines cause property values on historic and scenic properties to plummet, and many communities argue that they are visual blights and destroy a sense of place. These are fair arguments, but there are plenty of other potential places for turbines. If a wind power initiative is paired with the abandonment of Fracking as discussed above, the vast plains of “Gasland” out West would be productive regions in which to establish wind farming.

In the United States of America, we are fortunate to have a system of government in which citizens can play an active part. Addressing and solving the issues that threaten our environment, and therefore our economy, and very lives, should be no exception to this philosophy. Ultimately, when it comes to safeguarding the environment, Republicans and Democrats, governments and businesses, and citizens and officials are all on the same side. It can be reasonably said that nobody wants to live in a desolate, dying world with an imploded economy and miserable standards of living. In order to prevent this, we need to harness the true potential of the American system that has led us so far, and have everyone chip in and do their bit.

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