

8th Grade Earth & Space Science

Persuasive Essay/Presentation Topics

Air Pollution

The Environmental Protection Agency (EPA) issued several new rules that changed the provisions of the Clean Air Act. Critics attacked the changes, but the administration of President George W. Bush maintained that they would enhance the government's ability to reduce air pollution.

In 1970, the Clean Air Act was signed to combat air pollution. But the Clean Air Act and other laws regulating emissions to curb global warming are controversial, and business and industry interests have challenged them in court. Are such laws necessary to protect the environment? Or do they inhibit innovation and result in increased costs for compliance, which get passed along to consumers in the form of higher prices?

Alternative Energy Incentives

Resolved: The U.S. federal government should substantially increase alternative energy incentives in the United States.

- Supporters of increased alternative energy incentives say: Further incentives would promote the development of renewable energy sources to combat global warming and help the U.S. achieve energy independence. Federal incentives would also encourage companies to convert from nonrenewable sources, such as crude oil.
- Critics of increased alternative energy incentives say: Such incentives curb the free market too much. Many renewable energy sources are too inefficient and expensive to justify increased incentives. Present incentives have not helped to reduce greenhouse gases nor enabled the U.S. to gain energy independence

Learn more about the Pros and Cons of alternative energy incentives and form your own discussion in support and against government incentives.

Arctic National Wildlife Refuge

Since ICOF last covered the Arctic National Wildlife Refuge (ANWR), Congress passed the first new comprehensive energy legislation in over a decade, but the bill did not include a provision for opening the area to oil and gas exploration. Nevertheless, rising gasoline prices brought repeated calls for revising that policy. Is this legislation adequate or should more be done to protect Arctic National Wildlife?

Biofuel

Both the U.S. and the European Union have pushed for an increase in ethanol production. However, ethanol fuel has also been criticized due to its link to the rising cost of food and reports of its negative impact on the environment. There is a lot of information in support of biofuels and in opposition to the use of biofuels available to develop your essay.

Biological Weapons

In recent years, Americans have grown increasingly concerned about the possibility of a biological attack. Biological weapons are living microorganisms that cause deadly, often infectious diseases. Although use of the weapons is banned by an international treaty, the Biological Weapons Convention (1972), many experts believe that the U.S. will likely face an attack in the near future. Information will be available that describe the

biological agents of highest concern to officials, and from which you will form your argument for and/or against the development of biological weapons.

Cloud Seeding

The issue: Is cloud seeding—the practice of spraying certain chemicals into the sky to generate precipitation—a smart means of bringing relief to drought-prone areas of the world? Or could human interference with natural weather patterns create more problems than it solves?

- Critics of cloud seeding say: Despite decades of experimentation, the science and the ecological impact of weather modification remain poorly understood. Attempts to manage the weather could inadvertently cause both short- and long-term environmental problems. Governments should cease seeding clouds until further research proving its safety and effectiveness has been conducted.
- Supporters of cloud seeding say: While cloud seeding does not always produce the intended results, it succeeds often enough to justify its continued use. Among other things, weather manipulation can provide important economic benefits, such as supplying farmers with sufficient water to grow healthy crops. Furthermore, the chemicals used to induce rainfall or snowfall are sprayed in such small quantities that they do not pose an environmental threat

Commercial Whaling

The issue: Should the International Whaling Commission (IWC) replace the commercial whaling ban with a more permissive regulatory system?

Conflict Diamonds

The issue: Has the global trade of conflict diamonds--gemstones used to fund violent strife--died down thanks to increased monitoring efforts? Or do conflict diamonds remain a threat to the stability of countries in Africa and elsewhere?

DDT & Malaria Control

Since ICOF last covered DDT (considered by some to be a dangerous chemical) and malaria control on May 14, 2004, promising reports of malaria treatments were released and the World Health Organization (WHO) made a surprising endorsement of the use of DDT in indoor settings. You will use the information presented to form your support and your criticism of the use of DDT to control malaria.

Ecotourism

The issue: Is ecotourism--leisure travel to ecologically sensitive destinations such as rain forests and glaciers--healthy for the environment? Or does it represent a dangerous trend in international travel that threatens to permanently damage fragile ecosystems?

- Supporters of ecotourism say: Nature-based travel is an important component of the global tourism industry. Ecotourism promotes environmental awareness among travelers and does not damage sensitive ecosystems, since most tour operators in those areas make environmental conservation a priority and follow precautions to minimize the impact of humans' presence. Furthermore, nature-based travel is lucrative for poor developing countries; it results in the creation of new jobs and helps inject money into local economies.
- Critics of ecotourism say: The growing popularity of ecotourism has placed many ecologically sensitive regions of the world at heightened risk of environmental degradation. Due to the increasing number of visitors to ecotourism hotspots--and the attendant development of tourist infrastructure--natural

landscapes are being damaged, disrupting the habitats of endangered plants and animals. Tourism to environmentally fragile parts of the world should be restricted in order to preserve those regions for future generations.

Extraterrestrial Life Search

Astronomers have detected extra solar planetary systems that could harbor habitable planets. NASA spacecraft on Mars have uncovered evidence that a large saltwater ocean, which could have supported life, once covered a region on the planet. The evidence of water on other planets and the detection of other solar systems, along with new methods applied in SETI, have added vigor to the scientific search for extraterrestrial life. Is there life beyond Earth? The information provided will give you the rationale to support your argument - "pro" or "con"

Factory Farms

Animal rights activists have long protested the mistreatment of animals. In the past, their protests have centered on wearing fur, eating meat and the use of animals in laboratory testing. But recently, some animal rights activists have selected a new target for their protests--large-scale farms, called factory farms, that critics say mistreat animals. Read about the issues – Pro and Con.

Farm Subsidies

The issue: Do the subsidies given to U.S. farmers encourage them to grow crops for the wrong purposes, to the detriment of some Americans and societies in the developing world? Or are those subsidies needed to allow agriculture to remain economically viable?

- Critics of farm subsidies say: Current subsidies primarily benefit large corporate farmers who are already turning a profit. They also harm farmers in developing countries by driving down prices, and make those countries reluctant to drop trade barriers of their own.
- Supporters of farm subsidies say: Subsidies are needed to cover the high risks of farming in the face of economic and environmental challenges, and to maintain a viable food supply in the U.S. and abroad. They are also needed to counteract the economic impact of other countries' subsidies.

Federal Land Use

Since ICOF last covered federal land use in October 1995, U.S. President Bill Clinton (D), late in his administration, engaged in a flurry of designations of federal lands as national monument. There are several issues that you can defend or oppose on this topic. Land and Water use is one of them.

Land and Water Use

The federal government oversees many aspects of public life: It makes laws, determines how the US interacts with foreign nations, and seeks to provide for the poor. But to what extent should government control extend to the land on which people live? Who should be in charge of managing the nation's land, especially when that land could be a valuable natural resource....should government be involved or not?

Forest Management

The issue: Is strategic logging in federally owned forests an effective approach to prevent wildfire damage? Or is wildfire control a guise for easing restrictions on commercial logging in U.S. national forests?

- Supporters say: Strategic logging performed by the timber industry will allow federal agencies to better control the extent of wildfire damage that has afflicted the western U.S. in recent years. As a result, communities bordering woodlands will be safer and national forests will be healthier.

- Critics say: Increased logging is motivated primarily by private interests, rather than a genuine desire to safeguard communities from wildfire and rejuvenate national forests. Allowing timber operations in federally owned forests will have an irreparable effect on the long-term health of U.S. woodlands.

Fuel Economy Standards

Congress passed an energy bill raising CAFE standards, and U.S. automakers have pledged to introduce more hybrid vehicles in order to reduce gasoline consumption and greenhouse gas emissions from motor vehicles.

Supporters tout such standards as a way to diminish the adverse environmental impact of cars. Critics, on the other hand, argue that higher standards are unnecessary, even harmful. Pointing to studies that show links between smaller cars and traffic fatalities, they say that raising CAFE will force manufacturers to make cars that weigh less, and are thus less safe for motorists.

Fuel Prices

The issue: Is a 2004 spike in fuel prices due to the administration's pro-business stance? Or can the record-high price of fuel be blamed on the web of taxes and environmental regulations that drive gas prices higher?

- Critics of Bush administration fuel policy say: High oil prices are the result of the Bush administration's policies, which encourage oil companies to eliminate competition and raise prices. The administration has failed to offer an energy plan that would ease U.S. dependence on foreign oil. Despite increasing frustration among the public, the administration has done little to reverse rising gas prices.
- Supporters of Bush administration fuel policy say: The high price of fuel can be attributed to state and federal environmental regulations and taxes that boost the price of gas, as well as to rising demand and decreasing supplies due to the growing economy. Moreover, proposals pushed forward by Bush's opponents to ease the burden on consumers will likely have little effect on gas prices.

Genetically Modified Food

The issue: Should genetically modified (GM) crops continue to be produced and sold throughout the U.S.? Or do the potential dangers involved in the new technology pose too great a risk?

- Supporters of GM foods say: GM crops are the logical next step in agriculture, and they have never been proven to be harmful to human beings. The next generation of GM crops could produce health benefits--such as vegetables with extra vitamins or fruit containing important vaccines and antibiotics--that would be immensely helpful to developing countries.
- Critics of GM foods say: Interfering with the genes of plants could disturb entire ecosystems and result in unintended environmental and health consequences. Also, because the plight of developing nations is the result of far broader issues of social injustice, no amount of GM food could truly fix the problems there.

Global Warming

The issue: Should the federal government impose mandatory limits on greenhouse gas emissions for U.S. companies in order to combat global warming? Or should businesses' compliance with "emissions caps" remain voluntary?

- Supporters of a voluntary-compliance approach say: Placing government-imposed restrictions on businesses' greenhouse gas emissions would reduce companies' profits and productivity. In turn, jobs might be lost and the nation's economy would likely suffer, making the U.S. less competitive in the global marketplace. Companies should be free to choose whether they want to adhere to emissions caps.

- Critics of a voluntary-compliance approach say: As the world's most powerful economy and the planet's leading polluter, the U.S. has a responsibility to enact environmentally sustainable economic policies. If the federal government placed mandatory restrictions on greenhouse gas emissions, other countries would likely follow the U.S.'s example, and global warming could be significantly reduced. Urging voluntary compliance with emissions caps is insufficient because companies will not limit pollution of their own accord.

Hybrid Vehicles

The issue: Are hybrid cars, which run on both gasoline and electricity, a promising new technology that could ultimately help the environment? Or are the environmental benefits of hybrid cars exaggerated?

- Supporters of hybrid vehicles say: Hybrid cars require less gasoline--and thus emit fewer greenhouse gases--than standard cars. If more people drove hybrids, the world would be cleaner and more habitable. Hybrid cars have also developed to the point where they are roughly the same price as standard, gasoline-powered cars.
- Critics of hybrid vehicles say: There are many hidden environmental hazards associated with hybrid cars, such as the coal-burning power plants that generate the electricity used by hybrids. Hybrids barely solve the problems associated with gasoline-only cars because they themselves use gasoline. The recent popularity of hybrids has impeded new developments in nonemissions-producing transportation technologies, such as hydrogen fuel cells.

Hydroelectric Energy

While denounced by critics as an archaic and environmentally destructive means of generating electricity, hydroelectric power has been steadfastly defended by many utility companies, hydropower engineers and equipment manufacturers. Advocates say that critics have failed to recognize the benefits that hydroelectric dams can bring to citizens and the environment, and contest the claim that hydroelectric dams can be blamed for problems that afflict the nation's rivers. Make your case, both Pro and Con using the online information available.

Marcellus Shale/Natural Gas & Hydrofracking

The issue: Is hydraulic fracturing, or hydrofracking, a safe way to extract natural gas, a much needed energy resource? Or could it contaminate drinking water and cause other environmental damage?

- Supporters of hydrofracking say: There is no proven case of hydrofracking contaminating drinking water, and the process is perfectly safe. Natural gas can revive local economies, reduce U.S. dependence on foreign oil and provide a cleaner-burning fossil fuel. Further regulation is unnecessary and will only prevent an opportunity for the U.S. to develop an alternative energy source and create jobs.
- Critics of hydrofracking say: The chemicals used in fracking fluid are toxic and pose a danger to public health if they contaminate drinking water reserves or leak out of wells. Oil and gas companies are not being honest with the public about the dangers of hydrofracking, and the federal government should apply much stricter, nationwide regulations to ensure that hydrofracking does not cause widespread health problems that could plague the public for generations.

Hydrogen Power

The issue: Will current efforts to develop cars powered by hydrogen fuel cells yield benefits for consumers and society? Or are they a misapplication of resources?

- Supporters of hydrogen power say: Hydrogen power has the potential to fuel cleaner cars, which would reduce air pollution and the emission of so-called greenhouse gases that contribute to global warming. Greater use of hydrogen power would also relieve the U.S. of its dependence on foreign oil. Existing problems with hydrogen will be worked out with enough money and effort.
- Critics of hydrogen power say: Hydrogen power is too expensive to be a practical substitute for gasoline. Also, because the process of turning hydrogen into fuel creates pollution, the environmental benefits of the switch from traditional fuel sources would be negated. Other clean-car initiatives are more viable.

Lead Poisoning

A pair of reports from the Environmental Protection Agency (EPA) concluded that blood lead poisoning in children had dropped and that lead levels in the air had declined.

- Since 1989, federal law has required that all children whose health care is paid for by Medicaid (a federal health insurance program for the poor) be screened for lead poisoning. Medicaid recipients face a higher risk of lead poisoning than the general population because they often live in older homes containing lead paint, or near factories that produce lead emissions. Young Medicaid beneficiaries account for an estimated 60% of all children with blood lead levels that are considered unhealthy, and for 83% of children with blood levels high enough to require medical treatment.
- According to critics, mandatory lead screening is a wasteful means of eliminating lead poisoning. Testing all Medicaid recipients, some say, would stretch the resources of local health care facilities and managed health organizations, which are already struggling with personnel shortages and budgetary constraints. Critics also assert that such programs would divert money from lead abatement programs, which could help bring about substantial reductions in the incidence of lead poisoning. Build your case, Pro and Con!

Light Bulbs

The issue: Should the government impose stricter energy-efficiency standards on light bulbs, effectively banning traditional incandescent bulbs?

- Critics of the new light bulb regulations say: The government has no business telling Americans what types of light bulbs they can buy. Instead, the government should step back and allow the free market to determine the kind of light bulbs that consumers prefer. Incandescent bulbs are inexpensive and beloved by consumers; their more efficient replacements, compact fluorescent lights (CFLs), are more expensive and present a health hazard due to their mercury content.
- Supporters of the new light bulb regulations say: CFLs are more energy-efficient than traditional incandescents, and they are less expensive in the long run by virtue of their lower energy costs. Critics vastly exaggerate the alleged risks presented by CFLs because of their mercury content. Much of the opposition to the new light bulb regulations is a politically motivated attempt to capitalize on antigovernment sentiment among the U.S. public.

Logging in National Forests

Since ICOF last covered logging in national forests in April 2003, Congress passed and President George W. Bush signed the first major forest management legislation in a quarter-century. Meanwhile, federal judges in three separate cases ruled against national forest policies initiated by the Bush administration.

Manned Spaceflight

Is manned spaceflight too dangerous? Critics say that the space shuttle program needs to be shelved immediately, critics say, because it is too dangerous and too costly. In just over 20 years, two shuttles have been

lost--one on takeoff and one on reentry. Considering that there have been 113 missions, that is not a stellar safety rate, critics contend. If military jets or commercial airliners had anywhere near the same crash rate, they point out, they would be grounded. Even considering that exiting and reentering the Earth's atmosphere is much more difficult than flying within Earth's orbit, critics say, that does not justify the questionable safety record of the space shuttle program.

Marine Resources

Should the federal government establish an ocean policy substantially increasing protection of marine natural resources ?

Mars Exploration

Exciting evidence has been collected that water had once flowed on Mars, perhaps even in recent times. In addition, a new probe, the Mars Reconnaissance Orbiter, voyaged to Mars in order to carry out surveys of the planet from orbit. Should resources be spent to continue the Mars exploration program?

Mercury Emissions

The Issue: Is the Clean Air Mercury Rule, a new federal rule regulating mercury emissions from power plants, an effective way to reduce pollution? Or does it stop short of what is needed to keep high levels of mercury out of the environment?

- Critics of the Clean Air Mercury Rule say: The rule's approach to curbing emissions, which allows some power companies to avoid making reductions if others make extra cuts, will leave the mercury pollution level in parts of the country unchanged. Mercury is a potent neurotoxin, and all power plants should be required to reduce mercury emissions.
- Supporters of the Clean Air Mercury Rule say: The rule encourages power plants to cut emissions quickly to take advantage of its cap-and-trade system. Reducing emissions from every plant is prohibitively expensive and not technologically feasible.

Metric System

The issue: Should U.S. businesses and government agencies be required to use the metric system? Or should conversion to the metric system--known as "metrication"--be voluntary?

- Supporters of mandatory metrication say: The U.S. is the only industrialized nation that has not fully embraced the metric system, which is used by an estimated 95% of the world's population. Adopting the metric system would allow the U.S. business and scientific communities to more easily exchange products and ideas with the international community.
- Critics of mandatory metrication say: The country's existing system of measurement--the "U.S. Customary System"--has served the U.S. well for more than two centuries. Officially adopting the metric system would not significantly benefit the U.S. economically or otherwise. Also, the metrication process would likely cost the government several billion dollars, which would be largely paid for by taxpayers.

National Parks Policy

Since ICOP last covered national parks policy, the National Parks Service released a new management plan that emphasized conservation above recreation and energy development.

National Power Grid

The issue: Should the federal government regulate the production and distribution of electricity on the national power grid? Or are private energy companies more adept at managing the U.S. electricity industry?

- Critics of the current grid system say: Since Congress facilitated the growth of private energy companies in the early 1990s, the nation's power grid has become unnecessarily strained by excess electricity, resulting in major blackouts. Granting the federal government regulatory control over the electricity industry would enhance service reliability and improve grid security.
- Supporters of the current grid system say: The federal government lacks insight into local energy matters, making it difficult for government regulators to manage electricity distribution in a competent manner. Private energy companies, which provide nearly 75% of the nation's electricity, are better equipped to administer electricity to the public because they are more aware of local residents' energy needs.

Natural Disaster Response

The issue: What role should the federal government play in responding to natural disasters? Should money spent on such a response be offset by spending cuts elsewhere?

- Critics of federal natural disaster response say: The government does not have enough money to pay for a federal disaster response without first making budget cuts elsewhere. Local governments respond far better to crises than a large bureaucracy like the Federal Emergency Management Agency (FEMA). Furthermore, limiting federal aid may prompt people to hesitate before choosing to live in disaster-prone areas, where they will continue to need federal assistance and thus be a drain on the federal budget.
- Supporters of federal natural disaster response say: When victims of natural disasters are struggling, the U.S. government should pay for and distribute federal funds without hesitation or debate. Conservative governors who disavow federal spending are often the first ones to ask for disaster relief when their states are impacted by a devastating natural event. Republicans are hypocrites for demanding that disaster aid be paid for but not the wars in Iraq or Afghanistan or tax cuts for the wealthy.

Nuclear Power Plants

The issue: Are nuclear power plants a viable option for meeting the growing U.S. energy needs? Or are they too costly and hazardous to humans and the environment to be considered a major energy source?

- Opponents of nuclear power plants say: Nuclear power plants are expensive to build and maintain, and often cause more problems than they solve. Major drawbacks to using nuclear energy, such as waste disposal and the threat of catastrophic accidents, have never been adequately addressed. The U.S. should explore alternative energy sources, such as solar or wind power, instead of relying more heavily on nuclear power.
- Supporters of nuclear power plants say: Despite its controversial reputation, nuclear power is a safe and relatively "clean" energy source. Nuclear power plants pollute less than fossil fuel-based plants, are more reliable than alternative energy sources and are not nearly as dangerous as critics suggest. The U.S. government and public should support plans to build more nuclear power plants to meet growing energy demands.

Offshore Oil Drilling

The issue: Is expansion of offshore oil drilling an important solution to rising U.S. gasoline prices? Or is it misguided and environmentally dangerous?

- Critics of offshore oil drilling say: According to federal government estimates, many years of offshore drilling would be needed to yield any oil due to the long process of leasing and exploring offshore areas.

Such drilling would ultimately have little effect on oil prices while it would threaten beaches and wildlife with oil spills, among other environmental dangers. The U.S. should be decreasing or eliminating its oil use, rather than looking for more oil.

- Supporters of offshore oil drilling say: Offshore drilling will introduce more oil into the market, causing the price of oil to fall and making gasoline more affordable. Technological advances in exploring and drilling for oil will likely yield more oil than the government estimates, and extracting it will pose less of an environmental hazard than it did decades ago. Offshore drilling can supplement other methods of tackling high energy prices.

Organic Food

The issue: Is organic food a healthier and more environmentally friendly alternative to so-called conventional foods? Or are the health and environmental benefits of organic food largely a myth?

- Supporters of organic food say: Because it is produced without the use of synthetic pesticides, herbicides and fertilizers, organic food is better for the environment. Organic food is also safer for consumers because it is not genetically modified and it does not contain growth hormones or antibiotics. Those features alone make organic food well worth their extra cost.
- Critics of organic food say: It has not been proven that organic food is healthier than conventional food. Modern pesticides and fertilizers are biodegradable and pose almost no risk to consumers. Organic farming techniques are far less efficient than conventional farming techniques, meaning that less food is produced.

Overfishing

Disturbing news has been reported regarding the depletion of fish stocks worldwide by illegal fishing fleets. In the U.S., legislation intended to combat the reduction of ocean fish stocks has been signed. Because decisions about the size of catches directly affect people and their jobs, U.S. regional fishery management councils face a troubling task in setting limits. Should limits be set for commercial fishermen or should the depletion of fish stocks be managed in other ways. Explore the issues and controversies associated with this important topic to form your essays – Pro and Con.

Peak-Oil Theory

The issue: Is the inevitable peaking of global oil production--followed by an irreversible decline in production--a cause for concern? Or will technological advancements and market forces naturally correct the problem?

- Skeptics of the peak-oil theory say: Peak oil production will not occur for several decades, by which time new technology will allow the world to cope with any problems such a scenario would create. Peak-oil theorists are merely alarmists, scaring the public for no good reason.
- Believers in the peak-oil theory say: After oil production peaks and declines, the price of oil will skyrocket, causing a vast global recession. World leaders must work now to safeguard the world from that scenario; the free-market solution proffered by skeptics should not be blindly trusted.

Pesticides

The Environmental Protection Agency (EPA) imposed and later lifted a moratorium on studies that used human subjects to test the effects of pesticides, and the confirmation of a new EPA chief was held up partly over a study in which parents were to be paid to expose their children to pesticides. Should the use of pesticides be banned? Explore the issues – Pro and Con – to form your essays in support or against this issue.

Rainforest Destruction

Citigroup Inc. has come under fire for its financing of building projects deemed destructive to rainforests, concerns about deforestation have increased in Peru and Brazil, and Australia has been forced to reexamine its past use of potentially dangerous herbicides. According to ecologists, the ravaging of the rainforests harms not only the trees, animals and people within the forests themselves. Unchecked global deforestation, scientists warn, also threatens to destroy the very balance of the Earth's biological and climatological systems within a matter of decades, posing a threat to people all over the world. Experts have outlined a number of negative effects of continued rainforest destruction, some of which have already begun to become reality. Should stricter regulations exist to protect the rainforests? Build your case, Pro and Con.

Rare Earth Mining

The issue: Should the U.S. Department of Energy (DOE) guarantee loans for rare earth mining projects? Or does rare earth mining pose financial and environmental risks too large for the government to take?

- Supporters of government backing for rare earth mining loans say: Rare earth metals are essential to new, green technologies, and the latest mining methods are environmentally sound. The U.S. must reduce its dependence on foreign sources of rare earth minerals and thereby become more competitive with China—the world's largest producer and exporter of rare earth minerals—in developing green technologies. DOE loan guarantees for rare earth mining would help the U.S. economy, since mining projects that obtain loan guarantees could attract investors, thereby becoming viable and leading to U.S. job creation and growth. Rare earth mining within the U.S. should also be a top security priority, since rare earth metals are used in high-tech weaponry.
- Critics of government backing for rare earth mining loans say: Rare earth mining projects do not qualify for DOE loan guarantees and instead should be supported by the defense industry and the U.S. Department of Defense (DOD). The DOE guarantees loans which may pose huge financial risks, such as those requested by rare earth mining companies, yet taxpayers, whose taxes are used to back the loans, are not told enough about the DOE's decisions. The DOE does not properly investigate projects before awarding loan guarantees, and rare earth mining has been known to produce environmental dangers such as pollution and radioactive waste.

Renewable Energy (2 issues – Pick one)

Issue #1: Should the U.S. work to make renewable energy--such as solar power, wind power and hydroelectric power--a significant component of the nation's energy supply? Or should the U.S. continue to rely primarily on fossil fuels, such as coal and oil, to satisfy its energy needs?

- Supporters of an increased reliance on renewable energy say: Using fossil fuels to generate energy is environmentally unsustainable, since they generate harmful greenhouse gases that contribute to global warming. The federal government should increase funding for the research and development of renewable energy in order to create a "cleaner" U.S. energy supply for future generations.
- Critics of an increased reliance on renewable energy say: Fossil fuels are far more reliable than renewable energy. Since many renewable energy resources are dependent on the weather, they cannot generate power on demand. In order to meet the growing demand for energy, the U.S. government should utilize greater quantities of domestic oil, coal and nuclear power.

Issue #2: Should the U.S. federal government grant loans and tax breaks to companies that create green jobs in renewable energy industries, or is it wrong to take such risks with taxpayer money?

- Critics of the federal government's investments in green jobs say: The federal government is a poor judge of a company's viability. The application process, which enables the government to fund businesses that could likely find private investors, needs to be reformed. Green technology firms should be allowed to rise or fall on their own merits by competing with similar companies on the open market. Many government initiatives are models of ineffectiveness, so the government should not be trusted to make large investments in other projects, such as green jobs. People in the U.S. do not care enough about clean technology to make an investment in green jobs worthwhile.
- Supporters of the federal government's investments in green jobs say: Throughout U.S. history, the government has taken risks by supporting new technology industries, and that has helped make the country great. Many of those technological developments and industries are now essential parts of life in the U.S. Private investors, by contrast, usually do not have the patience to wait for new technology firms to gain a foothold in their industries. Those employed in green jobs can take great satisfaction in knowing that they are improving people's lives and helping the environment. If the U.S. does not develop green technology, it will be surpassed by countries such as China and Germany, which are already prominent players in the global green energy industry.

Restructuring the Space Program

The issue: Is President Obama's restructuring of the space program a good idea? Should the U.S. pay private companies to take U.S. astronauts into space?

- Critics of restructuring the space program say: Obama's plan amounts to the U.S. ceding supremacy in space to other countries. Private companies will be unable to take astronauts into space as effectively as the National Aeronautics and Space Administration (NASA) does. The Constellation program, with its plan to return to the moon, would have been a source of national pride, once realized, and should not be canceled.
- Supporters of restructuring the space program say: The Constellation program was underfunded and unrealistic. Obama's plan will allow NASA to spend more money on research while letting private companies deal with the practicalities of space travel. Criticism of Obama's plans by Republicans is primarily politically motivated.

Returning to the Moon

The issue: Should the U.S. attempt to return to the moon by 2020, or is such a goal unrealistic and unimportant, in light of budgetary concerns and other, more pressing domestic matters?

- Critics of returning to the moon say: NASA is underfunded, making plans to return to the moon unrealistic. There is greater potential for scientific discovery in sending unmanned satellites deeper into the solar system and beyond.
- Supporters of returning to the moon say: The human race faces a variety of long-term dangers on Earth that may be alleviated by eventually colonizing other worlds, starting with the moon. Additionally, there are many potential benefits to be gained from exploring the moon, including the potential for new sources of energy and scouting ideal locations to erect a deep-space telescope.

Science in the Courtroom – Forensic Science & Coroners in the Courtroom

The issue: Should state governments replace coroners with medical examiners, or would such a move leave death investigation in the U.S. severely understaffed? Should the federal government play a larger role in regulating coroners and forensic science in general?

- Critics of using coroners say: Electing coroners with little medical experience and allowing them to perform autopsies with no real regulatory oversight is a deeply flawed and outdated method for conducting death investigations. Autopsies should be performed only by licensed physicians, preferably those specializing in forensic pathology, and in offices run by certified medical examiners. Furthermore, the U.S. should have a federal department that can impose a uniform set of standards for death investigation in every county, instead of the confusing hodgepodge of systems it has currently.
- Supporters of using coroners say: Because of the extreme shortage of forensic pathologists and licensed doctors willing to work full-time in death investigation, it is unrealistic to expect to be able to replace the coroner system completely. Instead, state governments should provide more funding and training for county coroners so they can do their jobs well with the proper facilities and equipment. Coroners are important elected officials and should not be replaced by appointed medical examiners who are not accountable to the public.

Water Privatization

The issue: Does the privatization of municipal water supplies improve overall water service and quality? Or is access to water a basic human right, one that it would be immoral to exploit for profit?

- Critics of water privatization say: Drinking-water supplies and waste-water infrastructure should be controlled and maintained by local governments, whose only obligation is to provide clean water and reliable service to all of the residents they serve. Private companies, whose goal is to maximize profits, should not control anything as crucial for survival as water. Many cities with privatized water have reported poor service and degraded water quality.
- Supporters of water privatization say: The best way to ensure a high-quality product is to tie its sale and distribution to the free market. Private companies are better equipped than municipalities to run complicated and expensive water infrastructures. Approximately 600 U.S. cities have already privatized their water systems, with minimal complaints from most residents. Americans waste far too much water; private companies can help them conserve water by raising prices, something most public utilities are unwilling to do.

Water Quality – Bottled Water

The issue: Is bottled water harmful to the environment and a waste of consumers' money? Or does it present a convenient, healthy alternative to tap water?

- Critics of bottled water say: Bottled water is seldom cleaner or healthier than tap water. It is subject to less stringent regulations and not held to as high a standard as tap water. Additionally, millions of gallons of oil are required to package and ship bottled water each year, making it bad for the environment.
- Supporters of bottled water say: Bottled water is more convenient to drink than tap water, especially when people are out of the house and do not have easy access to running water. Bottled water companies have recently made great strides in reducing the environmental impact of their products, and now contribute only minimally to industrial pollution each year.

Water Use in the West

Since ICOF last covered water use in the West, Interior Secretary Gale Norton signed the Colorado River Water Delivery Agreement, which directed the use of Colorado River water across seven Western states. There are many environmental issues with this agreement that can be explored.

Wetlands Regulation

Since ICOF last covered wetlands regulation on January 29, 1999, the administration announced plans to remove federal protection from millions of acres of wetlands and streams, but after widespread protests and opposition, said it would not pursue the plans after all. Should wetlands be protected?

Whales and Naval Sonar

The issue: Should there be stronger limitations on the navy's use of sonar in order to protect nearby whale populations? Or should the navy be allowed to conduct sonar tests with only the barest restrictions?

- Critics of naval sonar use say: Sonar clearly has a negative effect on whales, interfering with their own natural sonar and causing them to strand themselves on shore. The navy should take steps to prevent unnecessary whale strandings or deaths due to sonar.
- Supporters of naval sonar use say: There is little concrete evidence that naval sonar harms whales. Establishing limitations on naval sonar exercises would weaken national security by preventing naval personnel from adequately training.

Whaling

The issue: Should the International Whaling Commission (IWC) replace the commercial whaling ban with a more permissive regulatory system?

- Critics of the whaling ban say: The ban was originally intended to protect endangered whale species while their populations rebounded. Most whale stocks are now abundant enough to reinstate controlled hunting. Permitting some whaling can help fishing industries and developing countries by allowing fish populations to recover from overeating by large populations of protected whales. Furthermore, prohibiting whaling in countries with long whaling histories is a form of cultural imperialism.
- Advocates of the whaling ban say: Countries such as Japan, which still hunt whales in large numbers despite the ban, cannot be expected to curb the number of whales they kill if the ban is repealed. It is likely that the overall whale population is still only a fraction of what it once was, and reinstating whaling would drive endangered populations back down to a dangerously low level.

Wildlife Relocation

The issue: Should endangered or threatened animal species be transplanted from one continent to another in order to ensure the species' survival? Or would relocating wildlife to new habitats negatively impact both the local environment and the animals themselves?

- Supporters of wildlife relocation say: In recent centuries, humans have caused widespread environmental destruction that has led to the extinction of many wildlife species. In order to avoid future species losses, people should transport endangered animals to areas where they can be adequately protected. Adopting an "activist" approach to environmental conservation will help create a healthier planet by maintaining high biodiversity levels.
- Critics of wildlife relocation say: Many past attempts at transplanting wildlife from one continent to another have harmed both the environment and the animals. Relocating endangered species is fraught with risk because humans cannot be sure of how animals will react once they are released into a new ecosystem. Environmental conservationists should focus on preserving wildlife in its native environment.