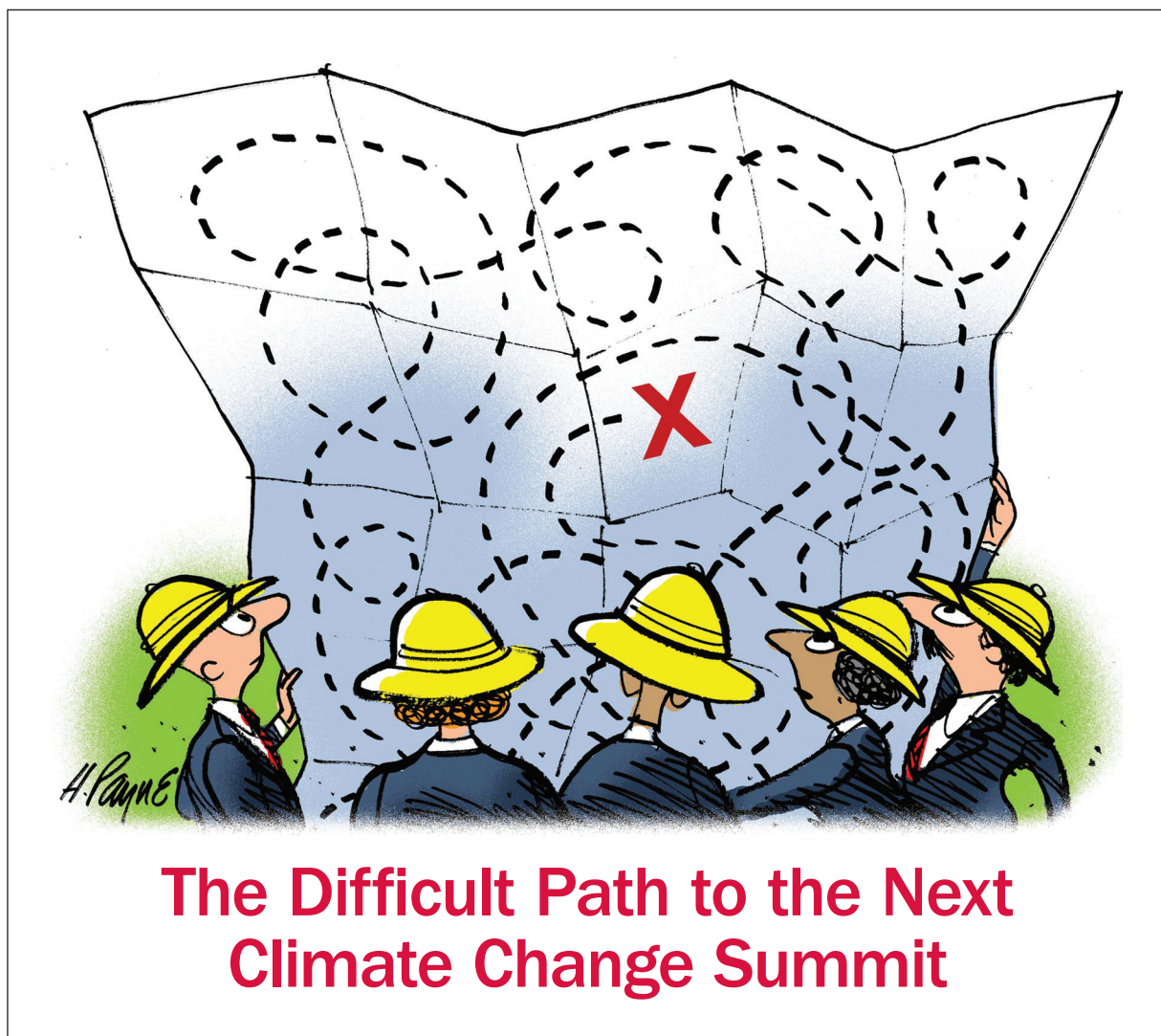


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THE FORUM

A Debate About the Debates: Environment, Energy, and Natural Resources and the Presidential Race

Policy on the environment, energy, and natural resources has seldom figured prominently in a presidential election, all the less so as time elapses since the first Earth Day. To judge by the more than twenty debates thus far in the current presidential campaign, it isn't likely to be on top of the agenda this year. Although regulation itself has been featured in the campaign — recall the criticism of the new lightbulb efficiency standards and of the Solyndra bankruptcy, not to mention rejection of climate change science — broader topics in environmental policy have largely taken a back seat to jobs, the budget, the economy, and foreign relations. Yet environmental policy, properly constructed, can have a positive effect on all these concerns.

Energy policy affects public health, surely a matter of concern to voters and a major ex-

pense, yet it ranks low in polls except for the high cost of gasoline. And energy policy affects foreign policy, as our former commitment in Iraq demonstrates, but energy only seems to matter to voters when they take out their wallets. The same applies for topics in environmental policy and natural resources policy.

But it doesn't have to be that way. We wrote to a select group of American environmentalists with broad policy experience to seek their counsel on a key question: "What should the presidential candidates be discussing concerning the important issues of environment, energy, and natural resources facing the United States' people?" And we sought their suggestions of "What question (or questions) should be asked of the candidates in the presidential debates that will help us learn how they in turn will confront these issues?"



Paul J. Allen

*Senior Vice President and
Chief Environmental Officer*
CONSTELLATION ENERGY



Sherwood Boehlert

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Mark Udall

Member
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Christine Whitman

President
WHITMAN STRATEGY GROUP



David Yarnold

*President and Chief Executive
Officer*
NATIONAL AUDUBON SOCIETY

Clean Energy Is the Foundation of a Prosperous Society

PAUL J. ALLEN

The candidates should be discussing the vital and essential linkage between greater economic prosperity and enhanced environmental protection, both based on wise energy policy.

Candidates must recognize that prosperity and a clean environment are mutually dependent upon the type of energy infrastructure we use to undergird our economy — in short, that clean energy is the sturdiest foundation for the economy.

Candidates must recognize that prosperity is also tied directly to the protection of public health. This means establishing and strongly enforcing science-based limits for safeguarding the quality of our air, water, land, and oceans.

These linkages are clearest in those policies which have harnessed market-based solutions with strong science-based environmental and resource protection rules. A great example is the Acid Rain Program in the federal Clean Air Act, but there are many other examples, including Corporate Average Fuel Economy standards, the Energy Star program, appliance efficiency standards, and even the government auction of radio spectrum (itself a vital natural resource and a great boon to our high tech economy and a key underpinning of the coming clean energy revolution).

Any candidate for president must be able to explain how his or her policies and leadership will yield advances in clean energy technologies and steer the country toward wiser and more frugal uses of natural resources while protecting public health from environmental hazards.

Any candidate for president must be able to explain how he or she

would harness the twin objectives of cleaner energy and resource conservation, and how that would be coupled with competitive markets to spur investment that creates good jobs in sustainable businesses.

Any candidate for president must be able to identify which priorities are most urgent and show the leadership to take action even when the political tides might be at odds with the empirical evidence of pending hazards — the key case in point being regulation of greenhouse gas emissions.

And any candidate for president must be able to tackle the inter-generational nature of these issues by demonstrating to today's voters that while the decisions we make now may not yield all of the fruits of our wisdom until we are gone, the wisdom remains, and it dictates that we make choices now that will protect future generations.

Any successful president will help us identify the harmful externalities of our industries, and help us find the market mechanisms to put proper costs on those externalities, to steer the best investments toward technologies that will have less environmental impact.

In short, a successful president will help us combine the economics of the market with the goals and technology of cleaner energy production and more efficient energy usage to preserve our air, water and unspoiled places.

Climate change is among our most challenging environmental and energy issues. My question for the candidates: "How urgent is the problem posed by emissions of greenhouse gases? Can we wait another four years before taking action? Will you introduce a new approach for federal climate protection legislation — something different than was attempted in 2010?"

Paul J. Allen is Senior Vice President, Corporate Affairs, and Chief Environmental Officer of Constellation Energy.

Republicans Need To Readjust the Course Heading

SHERWOOD BOEHLERT

To be asked what the presidential candidates should be saying about the environment is, for me, to be forced to acknowledge just how far the Republican party is veering off course.

The Republican candidates, whatever their past positions, seem hell-bent on casting energy and environmental policy as divisive and polarizing issues, ignoring areas of public consensus, and, I think, of national need.

So, what I would like is for the presidential candidates of both parties to sign on to a set of fundamental consensus principles to establish the parameters of the debate. My suggested principles would include:

- Protecting air, water, and land is a fundamental federal responsibility. The marketplace, voluntary action, and state regulations are not capable, by themselves, of providing Americans with clean air, pure water, and open spaces.

- The current statutory framework, implemented by the Environmental Protection Agency and other federal agencies, has been highly successful at producing the environmental and health improvements Congress intended at affordable costs.

- Global climate change is real, is caused largely by human activity, and represents a worldwide threat that needs to be addressed.

- The United States needs to move toward a more energy efficient, clean energy economy to enhance public health, national security, the environment, and our long-term economic prospects.

- That transition will not take place, at least not rapidly enough, without the federal government

playing an active role that includes everything from helping to underwrite research and development to imposing efficiency and renewable energy requirements.

Signing on to such principles would still leave plenty of room for meaningful argument. They don't dictate answers to questions like, "Is EPA going too far with its latest utility emission limits?" or "What system would be best for reducing greenhouse gas emissions?" or "Should the Keystone pipeline be granted a permit?" But if candidates agreed to principles like these, it would shift environmental policy back into the arena of policy debate and out of the maelstrom of ideological warfare.

No doubt, getting such agreement this year is a pipe dream. But the candidates ought to be asked directly where they stand on the basic premises that have guided policy successfully for decades and that much of the public continues to share.

The public needs to understand just how stark a choice is being offered. Reporting that minimizes the extent of the disagreement or that shrugs off fundamental disputes as mere campaign rhetoric does the American electorate a grave disservice. As Ezra Klein noted recently in the *Washington Post*, elected officials generally work to keep their campaign promises. And in any event, what's said in campaigns sets the context and limits for governing. We live in a cynical time, but words still matter.

At the very least, the nation should emerge from the 2012 campaign with a clear sense of which ideas will drive environmental and energy policy over the next four years. Personally, I hope we'll build on, and learn from what's worked in the past. Once, that would have been viewed as conservatism.

Sherwood Boehlert represented New York state in the Congress and chaired the House Science Committee.

We Need an Honest Debate About Priorities

E. DONALD ELLIOTT

“America is broke.” Even President Obama acknowledges that. Government cannot do everything; we need to set priorities.

Today's federal environmental statutes were passed when we still thought we could afford to do it all. They put EPA on autopilot, churning out technology-based regulations without regard to competing national priorities or whether they impose costs disproportionate to their benefits.

Those new federal regulations that require industry to spend money to control tiny theoretical risks kill jobs and harm the poor. But not all federal regulations are job-killers. Preventing real harms that are larger than what the regulation costs benefits the economy, saves lives, and reduces health care costs.

Our current political dialogue is misleading on both sides: one party maintains that every environmental regulation is a “job-killer” while the other claims everything is a necessary “investment” to protect our children and win the future. Both are caricatures. What we need is a more honest, mature dialogue about environmental and energy priorities.

Congress is paralyzed and can't adjust priorities. Executive branch review by the Office of Information and Regulatory Affairs was created to separate foolish regulations from sensible ones. But it too no longer works. EPA has gotten so good at over-estimating risks that no one believes its estimates of thousand of lives saved by each of its rules. Plus as a White House office, OIRA's decisions appear politically motivated.

We need a new, independent, non-partisan environmental and

energy evaluation process to define the scientific and economic facts for debate. Like the Congressional Budget Office or the National Academy of Sciences, it would independently evaluate environmental regulations and energy programs. That's what the National Environmental Policy Act was passed to do: create a credible factual record for policy choices about the environment, but ironically, the most controversial and costly agency, EPA, has a statutory exemption.

The non-partisan regulatory review I propose should not be limited to new regulations. We should also revise or eliminate obsolete rules and those that we can no longer afford. Devolving some authority back to the states helps but is not a cure-all. States cannot judge global or national policies whose benefits accrue outside their borders. The president should have corresponding legal authority to suspend or delay programs if costs are found disproportionate to benefits by independent non-partisan reviewers.

The truth is we have spent too much in some areas and too little in others. Time to strike a better balance but first we have to get the science and the numbers right. That's what a famous philosopher, Confucius, who was also a prime minister, called “the rectification of terms” and he said it was the single most important thing that one can do to improve public discourse.

My question to the candidates: “How will you create an honest, informed dialogue about our environmental and energy priorities?”

E. Donald Elliott is Professor (adjunct) of Law, Yale Law School, and Partner, Willkie Farr & Gallagher LLP, Washington, D.C. He served as General Counsel of EPA and liaison to the Office of Management and Budget (1989–91).

Science Heads List of Candidate Debate Queries

MICHAEL B. GERRARD

Question 1: How would your administration make decisions on questions of science? Those who favor or oppose government action for economic or ideological reasons have taken to hiring their own scientists. Sometimes these experts usefully think outside the accepted boxes and bring fresh insights, but often instead they spread fringe ideas based on flimsy data. These purchased expert opinions can then be used to impede or reverse progress on solving pressing problems.

There are established institutions that can serve as a forum for poring through the existing science and determining what we know and what questions remain, and how much confidence we can have in our theories. The congressionally chartered National Academy of Sciences is in the forefront, but there are many others. Society must be open to new ideas and creative approaches, and distinguishing the transformative thinker from the crackpot is a challenge, but when it comes to setting policy, choices must be made. Mr. Candidate, to whom will you be listening?

Question 2: How will you prepare the country for a changing climate? We are past the point where reducing greenhouse gas emissions will halt climate change. Cutting emissions is absolutely essential, as that could prevent the worst impacts, but for at least the next several decades the earth will continue to warm.

If we go on constructing infrastructure, energy systems, dwellings, and other elements of the built environment as if tomorrow's climate was going to be the same as

yesterday's, we will be wasting huge sums and will be putting our works — not to mention our people — in harm's way. Mr. Candidate, will you ensure that future federal planning will fully account for the changing climate, and will you help state and local governments adapt as well?

Question 3: What is the future of coal, and how will you help shape it? Coal is the source of 46 percent of this country's electricity and 35 percent of its energy-related greenhouse gas emissions, as well as large portions of other air pollutants that imperil public health. Certain methods of extracting it also cause great damage to our land, our waters, and the health of our workers. It faces competition from abundant and inexpensive natural gas, and increasingly stringent air pollution regulations. At the same time, the federal government is leasing large tracts of coal resources, especially in Montana and Wyoming, and preparations are being made to create rail and port facilities to transport the coal west to China to help meet its almost insatiable demand for electricity.

New technologies are being developed — though in fits and starts — to capture and sequester the carbon dioxide from coal burning. So far it looks like the economic, energy, and water cost of applying these technologies would be very high, and the ability to store large quantities of gas for centuries is highly uncertain. But coal is central to the economy of several states, and it is difficult to envision an economy that does not continue to rely heavily on coal for at least the balance of this century. Mr. Candidate, how will you ensure that we can transition away from coal at minimum disruption to the economy, and that the environment will be safeguarded as much as it can while we do?

Michael B. Gerrard is Andrew Sabin Professor of Professional Practice and director of the Center for Climate Change Law at Columbia Law School.

Energy: Abundant, Affordable, Reliable, Resilient

KENNETH P. GREEN

When it comes to energy and environment, the American people face the same challenge we have always faced: how to balance our need for abundant, affordable, reliable, and resilient flows of energy with our desire to protect the environment, and intelligently husband our natural resources.

Striking that balance, however, cannot be done in a situation where our leaders (and would-be leaders) are either ignorant of, or in denial of, the critical role that energy plays in human empowerment, opportunity, productivity, mobility, and competitiveness. We are, in fact, an energy civilization.

To be clear, this is not a purely partisan problem: both sides have their energy fallacies. On the left, there is the belief that renewables such as wind and solar power are ready to displace a significant fraction of our conventional energy supply, both technologically and economically. They are not, as the experiences of Europe (as well as our own renewable debacles such as Solyndra) make crystal clear. On the right, there is an ongoing love of nuclear power that borders on the fetishistic, given reams of analysis suggesting that nuclear power is neither economically nor environmentally beneficial.

Both the left and right wish to pick winners and losers in the energy marketplace; that is, when they're not calling for a nonsensical "all of the above" policy that calls for all forms of energy production regardless of cost. Both sides display an ignorance of how world energy markets work, and misrepresent the power of whatever policies they might bring to bear on things like

the world price of oil.

Here are a few questions that should be asked of our presidential candidates:

First, given the centrality of energy use in American society, what concrete steps will you take to lower the costs of energy, and increase its abundance and reliability?

Second, it is true that government support of basic research and development has promoted many technological breakthroughs. It is equally true that government support of applied R&D is generally a bad idea, displacing private investment and gambling with tax dollars. Will you limit government investment to basic R&D, and stop gambling with tax dollars to subsidize applied R&D at companies such as Solyndra?

Third, America's boom in unconventional natural gas production looks like a game-changing advance in our energy production and consumption. It is already displacing more-polluting forms of energy production, and lowering energy costs for consumers. Will you publicly instruct your EPA and other agencies to refrain from regulating the technology behind this boom (hydraulic fracturing) unless there is a clear and compelling risk to public health that outweighs the obvious benefits of facilitating a natural-gas-powered future?

Four, environmentalists wish to focus on forcing people to use less energy through "efficiency" and "conservation" measures that are little more than rationing. Do you support energy freedom for Americans, or do you believe that it is government's job to force people to use less energy?

Abundant, affordable, reliable, and resilient energy is vital to America's prosperity. We need leaders who both understand this, and will use rational means to facilitate its production.

Kenneth P. Green is a Resident Scholar at the American Enterprise Institute.

Energy Security and Technology Innovation

ANN R. KLEE

The next presidency of the United States must address the pivotal issue of energy — no issue is more important to our economic and security interests. After decades of environmental regulation, the United States is unquestionably a leader in environmental protection — with stringent programs to ensure clean water, clean air, and responsible management of waste. By contrast, we have no comprehensive energy policy, and certainly not one that recognizes the realities of the 21st century.

In the face of a Congress unlikely to enact comprehensive energy legislation, the question for the 2012 candidates must be: How will you and your administration articulate, and most importantly, secure our energy future? What policies will you implement using existing regulatory authority or partnerships with the states to promote the development of conventional and unconventional energy resources; how will you direct appropriate funding for innovation; how will you facilitate the necessary upgrades to our antiquated infrastructure? All of this can, and should be, accomplished in a manner that lowers the environmental impact and ensures efficient use of resources.

The emergence of unconventional gas offers one of many opportunities for the next administration to work with states to promote innovative technology, reduce greenhouse gas emissions, and grow the economy. In 2010, the shale gas industry supported more than 600,000 jobs; by 2035 that number is projected to exceed 1.6 million. Legitimate issues concerning potential impacts to aquifers, air emissions from equipment, produced water quality, and

chemical use must be addressed, but where states have stepped up, the federal role should be limited.

Approval of the XL Pipeline must also be a priority. The question should not be whether to import oil from Canada, but how to site and build the pipeline safely.

It's also time to make the smart grid a reality. The average voter is unlikely to ask the candidates about energy infrastructure — as Steve Jobs once said, "Consumers don't know what they want until we've shown them" — but we know that advanced electrical infrastructure and energy management systems are critical to accelerate the deployment of renewable energy technologies such as wind and solar, minimize energy loss in transmission, and maximize energy efficiency by the end user. This is not something that can be accomplished one state at a time; it requires federal leadership and can start with a step as modest as the secretary of energy delegating his authority pursuant to the 2005 Energy Policy Act to the Federal Energy Regulatory Commission for congestion corridor siting.

The president must encourage technology advancement by supporting fundamental R&D, protecting intellectual property rights, and removing trade barriers. He must provide direction for EPA to work collaboratively with the states and other federal agencies to promote, rather than stifle, energy technologies. And the next administration must recognize that it is in our national interest to deploy all fuel sources — clean coal, natural gas, nuclear, and renewables.

We are at a crossroad. The United States can continue to be a leader in the development and deployment of technology, a driver of innovation, or it can cede that role to others willing to execute policies that advance growth and new technology and, yes, environmental benefits.

Ann R. Klee is Vice President, Environment Health & Safety, for General Electric Co.

Water and Fracking Should Top the List

KATHERINE MCFATE

In the United States, we've been blessed with an abundance of natural resources. The quality and quantity of these resources have played a large role in the success of our nation. Nowhere is this more evident than in our fresh water supply.

The rivers, lakes, and underground aquifers in the United States provide 349 billion gallons of fresh water per day, to supply drinking water to the American people, irrigate our crops, and enable a wide variety of industry sectors to produce electricity and goods. Unlike at least 80 nations throughout the world, our country is not facing a widespread water shortage — yet.

The massive investment in natural gas extraction underway using hydraulic fracturing — also known as fracking — could change this. Fracking is a method of natural gas extraction that involves punching through layers of rock and then forcing large quantities of water, at high pressures, into the hole to fracture shale to release gas deposits from deep underground. It can take 2 to 10 million gallons of water to fracture a single drilling well in a deep shale bed, and this water is mixed with a combination of largely undisclosed toxic chemicals.

The process diverts enormous quantities of water from other uses (agriculture, ranching, human consumption) and makes that water unsuitable for other purposes. Even more alarming, the toxic chemicals used in fracking often contaminate surface water and groundwater. Once groundwater is poisoned, it's generally poisoned for a very long time.

While we think of water as a

renewable resource, it is not unlimited. People in the West and Southwest know this. It is not clear the natural gas industry does. With fracking, we may be trading short-term profits and energy stores for the long-term destruction of our water supplies.

Given all this, here are the questions to ask each of our presidential candidates: Would you require that all natural gas companies disclose the chemicals used in natural gas extraction, including fracking, so that local communities can better understand the potential long-term public health costs of hydraulic drilling? How will you ensure that drilling for natural gas does not lead to long-term damage or the permanent poisoning of our water supplies and land? Would you support requirements that natural gas extraction operations abide by the national standards of the Clean Water Act and the Safe Drinking Water Act to prevent surface and groundwater contamination?

Katherine McFate is President of OMB Watch.

Questions Are Easy; Answering Them Is Hard

GRANTA Y. NAKAYAMA

Your readers know first hand that environmental and energy policy affect our nation's health and economic competitiveness. However, polling consistently indicates "our" issues rank low on the list of voter concerns. Any discussion usually arises within the context of a larger debate over the economy, jobs, or government regulation.

The political discussion can disappoint. Candidates routinely pledge their support of a clean environment, clean energy, energy independence, and affordable energy. These same candidates routinely avoid discussing how to achieve these difficult and costly goals. Is it too much to expect a policy debate to break out during an important national election? How would the candidates respond to the following questions before an audience of environmental and energy practitioners?

Are EPA's efforts to use the Clean Air Act a necessary first step to demonstrate leadership and begin the difficult task of addressing climate change? Or are these efforts misguided due to technical uncertainty and the awkward fit between the statute and the global nature of this issue? Would you sign an international climate accord that does not include limits on emissions from major developing countries?

Is it realistic to set the National Ambient Air Quality Standards at the level with no adverse health effects for non-threshold pollutants (where the negative health impacts scale with exposure)? Wouldn't a literal interpretation of the Clean Air Act mean the NAAQS standard for such pollutants should be zero?

Should the cost of implementing a NAAQS be considered when developing the standards, or is the goal of protecting human health a universal value not for sale?

Should the Clean Water Act's jurisdiction be clarified legislatively? Or should the Supreme Court determine the CWA's jurisdictional reach case by case? What is the proper demarcation of federal jurisdiction over water quality?

Should the Toxic Substances Control Act be reauthorized? Or should additional chemical regulation proceed on an individual basis through targeted state and federal legislation?

Should EPA classify coal ash as a hazardous waste?

Should the federal gas tax be raised? Should the United States continue to rely on the Corporate Average Fuel Economy system to dictate motor vehicle efficiency or allow a free market to decide?

Will you allow the Keystone pipeline to be built? Or is extraction of the tar sand oils and the pipeline path too environmentally risky?

Should hydraulic fracking be regulated by EPA or left to the states?

After Fukushima, should the United States press forward with advanced nuclear reactors? What is your solution for storing the growing volume of nuclear wastes?

Should the U.S. fund specific alternative energy technologies in the wake of Solyndra? Would the government's resources be better directed towards basic research?

With the large federal deficit what will be your policy with respect to sales of public lands?

Should EPA be abolished, remain an independent agency, or be elevated into a department with permanent cabinet status?

Granta Y. Nakayama is Partner at Kirkland & Ellis LLP. He was formerly EPA Assistant Administrator for the Office of Enforcement and Compliance Assurance.

Jobs vs. Public Health Is A False Dilemma

JACQUELINE PATTERSON

Climate change is happening. Carbon dioxide emissions come largely from fossil fuels. Burning them also emits mercury, arsenic, lead, and other toxins, which are responsible for birth defects, respiratory illnesses, heart disease, and learning challenges. Climate change causes sea level rise, which displaces communities, decreases agricultural yields, and increases the number of severe storms.

With these facts established, how have we allowed climate change to become a partisan issue? How have we reached the point where members of one party deny that it exists, while members of another party are often afraid to mention it?

As I consider the upcoming election, I need those vying for my vote to make bold, yet pragmatic commitments to addressing an issue that is critical to the wellbeing of the world and particularly to those who live at the margins of society.

Instead, many decisionmakers appear to be following a false narrative that says that preserving our environment and the health of our communities will kill jobs. I take exception.

First, studies show that a shift to energy efficiency and safe, clean energy production is not an end to work, but a transition, and new jobs will spring up in the communities where such energy is produced. There are many, many jobs waiting to be created in the green energy sector, and green-collar workers' benefit packages will be supplemented by increased longevity and a higher quality of life.

Second, such a simplistic analysis falsely pits the value of one group's wellbeing over another's. To say

that one should keep a coal plant burning in order to save the jobs of those working inside suggests that the income earned by those workers is more important than the health of the workers, the communities being polluted, and the millions who stand to be affected by extreme weather, sea level rise, and decreased food production.

It is a moot point because no such choice is required.

With our technology, our brilliant members of academia, and the immense resources of this great nation of ours, declaring communities and countries to be expendable while we cling to old technologies and false notions about job loss is criminal.

Between 2009 and 2010 jobs in solar energy doubled and opportunities increased significantly in wind, geothermal, and energy efficiency. And the expansion continues. With political will, we can have an energy portfolio that works for all.

I will use my vote in 2012 to demand that my elected officials stop playing political games with the lives of so many and pursue the bounty of viable options for energy efficiency, energy generation, and economic development by safe and sustainable means. When next I go to a candidate forum I will be asking:

"What are your plans to fulfill the moral obligation you have as the leader of the world's largest superpower to address the scientifically proven existence of climate change?"

"If elected, how will you ensure that this becomes a bipartisan issue?"

"If elected, how will you ensure that we as a nation make aggressive strides to ensure that our energy production does the least harm and upholds the civil and human rights of all, workers and communities alike?"

Jacqueline Patterson is Director of the NAACP Environmental and Climate Justice Program.

We Can Be Prepared For Our Energy Future

MARK UDALL

“**R**egulatory certainty.” “American energy.” “All-of-the-above energy strategy.” These are ideas we’ve heard from candidates talking about their energy proposals on the presidential campaign trail. It’s a critical topic — our national energy strategy is integral to our economic future. In order to win the global economic race, we must seize the opportunity before us to become a global clean energy leader. And that’s why the question I’d like to hear the candidates answer is whether they would support a national Renewable Electricity Standard.

The concept of an RES, which would require a portion of our electricity to be produced from renewable sources, has caught on across the country. My home state of Colorado was on the cutting edge. Almost a decade ago, I led a bipartisan campaign for a ballot measure that would create a statewide standard requiring that 10 percent of our electricity come from renewable sources by 2015. At the time, skeptics decried the standard as unrealistic and costly. But voters approved the measure overwhelmingly, and by 2010, it was so successful that the skeptics had been won over, and the state had upped the standard to 30 percent by 2020.

Today, more than half of all states have an RES. These standards have boosted economies across the country, fueling the design, manufacture, and installation of clean energy technologies, creating jobs, and reducing harmful emissions.

I know that success can be replicated on a national scale. A national RES would strengthen America’s all-of-the-above energy strategy with

no increase in government spending, while greatly improving market certainty for the clean-tech industry and the thousands of jobs they create.

In the last Congress, a bipartisan group of 35 senators introduced a modest but promising bill that would have set a national RES of 15 percent by 2021. Although I believe a more ambitious 25 percent by 2025 standard would better boost our burgeoning clean energy economy, this bill would have been a step in the right direction.

We’re hearing a lot right now about the need for more help for traditional energy sources, particularly oil and gas. I agree we need to continue responsible development of our nation’s oil and gas, but it only makes sense that as we deplete finite natural resources we must simultaneously look to our energy future. We need a balanced policy that represents the realities of our current energy needs while being honest about our energy future and the urgent need to reduce carbon emissions.

We also need a policy that allows Americans to do what we do best — innovate to solve problems and sell that technology to the rest of the world. We can’t afford to wait. Countries like China, Germany, and India are rapidly developing solar, wind, and geothermal technologies. And they are creating jobs and expertise while we debate how to proceed.

The fact of the matter is that the 21st century will bring massive changes in our energy supply whether we are ready or not. We will not have a choice on that matter, but we can choose to be prepared when that time comes by kick-starting our renewable energy future today with a national RES.

Mark Udall (D-Colorado) serves on the Senate Energy and Natural Resources Committee.

Energy the Focus of the Country’s Economic Needs

CHRISTINE TODD WHITMAN

With high unemployment rates, a burgeoning federal debt, and a country still in recession, economic topics have largely overshadowed environmental policy discussions in the lead up to the 2012 election except as a throw-away for all that is wrong with the country. To ignore or demonize environmental issues is to both the candidates’ and country’s peril. When properly implemented, environmental policy can foster economic growth.

With additional debates for the Republican candidates on the horizon in a few weeks, there exists a prime opportunity for future debate moderators to bring environmental matters into the campaign discussion. Three questions would help voters assess the remaining candidates’ environmental policies in an area of major concern to the country — our energy future:

How would your administration meet our growing energy needs, and balance this demand with environmental protection?

Will nuclear energy play a role in your administration’s proposed energy mix?

How would you encourage energy conservation?

Providing reliable, affordable energy is one of the primary challenges facing our nation. By 2035, America will need 24 percent more power than it consumes today. We need to do much better with efficiency and with renewables, but we will still need power that is available 24/7. Even with conservation efforts, Americans will continue to increase their use of electricity, and we should want it to be affordable and clean.

In addressing both the first and second questions, nuclear energy is one area where I would hope the candidates for president could agree. Nuclear energy provides a reliable, carbon-free source of electricity that costs less per kilowatt-hour than all other major sources of electricity, making it attractive for federal and household budgets alike as well as positive for the environment.

As we examine our economy, one thing is clear: we simply are not creating enough jobs to keep pace with population growth. We continue to lose jobs in many industries to lower cost labor markets. In addition to its cost and environmental benefits, nuclear power brings significant job creation. Each new reactor requires as many as 2,400 workers in peak construction periods, and once operable, 400 to 700 full-time positions need to be filled. These jobs pay substantially more than average salaries, and these jobs cannot be sent offshore. All told, each nuclear plant generates an estimated \$430 million in a year in total output for the local community.

Nuclear power is just one example of where sound policies can benefit consumers, the environment, and the economy. It is by no means the only answer to our environmental challenges, but it should be part of the mix. Unfortunately, environmental issues are not often considered the top concerns of voters, but the upcoming Republican debates as well as those that will be held this fall between President Obama and the other nominees provide an opportunity for voters to examine these vital issues. For the sake of both our environment and our economy, we cannot afford to ignore — or allow the candidates to ignore — environmental policy matters any longer.

Christine Todd Whitman is the President of the Whitman Strategy Group. She was Governor of New Jersey and Administrator of the Environmental Protection Agency.

Will You Balance Conservation and Business Needs?

DAVID YARNOLD

The true wealth of a nation is reflected in the places it has set aside for wilderness and wildlife. Public land and parks enhance the quality of life for communities, help generate tourism revenue, and create local jobs. Annually, outdoor recreation, including bird watching, drives a total of \$730 billion, supporting 6.5 million jobs, or 1 of every 20 jobs in the United States. But it does more than that. Connecting with nature reduces obesity and stress, and instills pride and stewardship of our great natural heritage.

Author Richard Louv has described the burgeoning effects of Nature Deficit Disorder, including attention disorders and depression, for children and teens across the country. What will you tell your grandchildren you did to preserve America's natural resources for them?

Last spring I visited Kearney, Nebraska, to see the famous Sandhill Crane migration. When they took off at dawn — twenty thousand of them — it was just deafening and made the hair on my arms stand up! So if I do have a sound in my soul now, it's the Sandhill Cranes, whose Nebraska habitat would be destroyed by the Keystone Pipeline. At Audubon we know that where birds thrive, you have clean water and clean air, and what's good for birds is good for people.

To the candidates, tell us about one experience that formed your relationship with nature.

Then, please tell us whether you would allow construction of the Keystone XL pipeline.

There are practical solutions to many conflicts between development and conservation. For ex-

ample, Audubon has worked closely with the Department of the Interior and leaders in the wind industry to reach a consensus on new guidelines that will allow renewable energy development to move forward, while safeguarding wildlife and wild places. What are the most important factors you'd consider in evaluating proposed rules or legislation that affect both business and natural resources?

The Environmental Protection Agency plans to take one step toward curbing greenhouse gas emissions from power plants in the coming weeks when it proposes standards for future power plants. But plans to require existing plants to cut their emissions remain murky, despite the administration's stated intentions. Do you support greenhouse gas emission regulations for existing plants?

The Arctic National Wildlife Refuge, which was established to preserve unique wildlife, wilderness, and recreation, is an exceptional example of an unspoiled wilderness. We all know what a disaster the Gulf oil spill was; allowing drilling in the biological heart of a protected national wildlife refuge with rare polar bears, caribou, and millions of birds would risk an ecological catastrophe. Would you permit drilling in the Arctic National Wildlife Refuge?

David Yarnold is President and CEO of the National Audubon Society.