# The Plan

#### United States Department of Agriculture should create a set-aside for Central Appalachia in the Rural Energy for America Program to increase financial incentives for energy production of wind power.

# Adv – Politics

#### Advantage two: progressivism

#### Coal is politically locked in – it causes right-wing dominance of Appalachia

Wilson, 1/13/13 – Reid Wilson, political reporter, editor in chief of National Journal Hotline [“The Shift Of King Coal”. National Journal. http://www.nationaljournal.com/columns/on-the-trail/the-shift-of-king-coal-20130114]

That's because in Appalachia, coal is still king.

Last June, Senate observers were surprised when Rockefeller, a long-time backer of his state's dominant industry, stood on the Senate floor lambasting energy companies for launching "carefully orchestrated messages that strike fear into the hearts of West Virginians." He attacked coal operators for denying the need to address climate change, and for resisting a lower-carbon environment.

Those familiar with Appalachian politics were surprised too -- that Rockefeller, by attacking King Coal, had effectively announced his retirement that day.

The shift away from the Democratic Party underway today isn't the first time Appalachia has changed its political identity. After the Civil War, coal country was reliably Republican. During the war, West Virginia itself seceded from the Commonwealth of Virginia to stay with the Republican Union. Between 1896 and 1928, West Virginia voted as Republican as Northeastern states; it voted Democratic only once, in 1912.

But the Coal Wars of the 1920s helped boost a mine workers' union that grew in size and political influence. And while the union dominated, it supplied a reliable stream of votes to the Democratic Party. Between 1932 and 1996, Republicans won West Virginia only in 1956, 1972 and 1984, all amid national waves. Kentucky, where the coal industry is equally powerful, was similarly a reliably Democratic state; it voted Republican only twice between 1900 and 1952, and it cast its electoral votes for Jimmy Carter in 1976 and Bill Clinton in both 1992 and 1996.

"Appalachia, particularly Kentucky, East Tennessee and Pennsylvania, were very Republican after the Civil War and remained that way for a very long time," said Mike Duncan, the former chairman of the Republican National Committee and a native of Kentucky coal country. "The mining wars and unionization flipped them hard Democrat in the 1930s."

Clinton was the last Democrat to win either state. During his administration, the environmental movement began to gain traction and importance within the Democratic Party, and the party itself gravitated more toward the liberal coasts than it had previously. And the Environmental Protection Agency, a bureau created by a Republican president, began asserting its will more broadly, issuing regulations that the coal industry opposed. That combination of factors, Republicans and Democrats alike agree, conspired to give the impression of a Democratic Party that no longer had Appalachia's interests at heart.

"When you attack guns and coal, you're attacking what they in the mountains consider their birthright," said Jim Cauley, a Democratic strategist and Kentucky native who managed President Obama's campaign for U.S. Senate in 2004. "They'll feel like you're attacking their culture."

The evidence of old Appalachia is still present: 56 percent of Kentucky voters are registered Democrats; 54 percent of West Virginia voters are Democrats. But the evidence of new Appalachia is presenting itself in every subsequent election: In 2010, Republicans won two of the state's three Congressional seats, the first time they claimed a majority since the Reagan wave of 1980. In 2012, an otherwise good year for Democrats, Republican Andy Barr defeated Democratic Rep. Ben Chandler in a Lexington-based district in Kentucky, and West Virginia's Democratic attorney general lost his re-election bid.

That same year, President Obama won just 30 of the 421 counties that belong to the Appalachian Regional Commission, according to a National Journal analysis of election results. Just one of those 30 counties, Elliott, was in Kentucky; Obama lost every county in West Virginia. He only came within ten points of Republican nominee Mitt Romney in three of the state's 55 counties.

"The Democratic Party has lost touch with the working class Appalachian person," Duncan said. Those voters, he added, were the foundation of what Richard Nixon called the Silent Majority.

Democrats still have a presence in Appalachia. The governors of Kentucky and West Virginia are both Democrats, and Democrats control three of the two states' four legislative chambers (Republicans won control of the Kentucky state Senate in 2000). But the region's conservatism means an Appalachian Democrat is much different from a Democrat from another part of the country; as he sought re-election in 2012, Sen. Joe Manchin ran an advertisement in which he literally shot Democratic-backed cap and trade legislation with a rifle.

Rockefeller's retirement opens another opportunity for Republicans to grow their burgeoning Appalachian stronghold. Rep. Shelley Moore Capito, the daughter of the governor whose three terms bookended Rockefeller's in the 1970s and 1980s, announced she would run for the seat even before Rockefeller dropped out.

The arc of history changes some things and leaves others strangely intact. Appalachia has moved from Republican to Democratic to Republican again over the course of post-Civil War America, because even in the era of trans-Canadian pipelines, oil fracking and renewable energies, King Coal still reigns supreme.

#### Wind incentives will short-circuit the conservative rebellion against Obama and empower progressives

**Elk 09** - Union organizer and labor journalist who writes for Harper's Magazine, the American Prospect, the Huffington Post and In These Times. He has appeared as a comme­ntator on CNN, Fox News, and NPR. [[Mike Elk](http://www.ourfuture.org/users/new-4013), “Stop The Teabaggers, Give Them Green Jobs: Lessons From the Coalfields of West Virginia,” Campaign for America’s Future, August 27, 2009 - 4:40pm ET, pg. http://tinyurl.com/mq62jx

West Virginia shows us how we could easily win over this key segment of society, working class whites, with a New Deal-style industrial policy. Currently, [81,000](http://www.ourfuture.org/blog-entry/2009083525/a%20href=) in the United States working as coal miners.

On election night 2000, the biggest shocker for me wasn't Florida, but that West Virginia had voted for a conservative Republican presidential candidate for the first time in nearly 70 years.

For decades, West Virginia, with one of the highest rates of unionization in the country, regularly voted for progressive candidates, even being one of only nine other states in 1988 to vote for the epitome of a Massachusetts liberal - Michael Dukakis. To know the story of West Virginia is to know why the progressive movement is failing to win over white working class voters. Because of their primary concern: jobs.

Driving around West Virginia as a young union organizer with Marshall University labor historian Gordon Simmons, I quickly learned that underneath its beautiful mountain lay a history of exploitation, broken promises and economic degradation. Despite being "the Saudi Arabia of Coal," West Virginia is engaged in a yearly neck and neck race with Mississippi for being [the poorest state in the country](http://money.cnn.com/2007/08/28/real_estate/wealthiest_state).

As a result of coal mining, West Virginia has a cancer rate that is [nearly 70% higher than the national average](http://www.grist.org/article/green-theatre-taking-off-broadway-off-coal/). Every day more than [three million pounds of ammonium nitrate explosives (a highly carcinogenic substance)](http://itsgettinghotinhere.org/2009/02/23/from-west-virginia-to-obama-stop-mountaintop-removal) are exploded in mountaintop removal. This is the equivalent of a Hiroshima bomb worth of explosives being dropped on West Virginia every month. Over [100 billion gallons of toxic sludge](http://news.newamericamedia.org/news/view_article.html?article_id=1bbe4b5f450365c1084c27172d95db6d) are contained in poorly regulated, coal sludge reservoirs from mountaintop mining contaminating local water supplies, leading to mind boggling rates of cancer.

A fact that is equally startling as the destruction of the mountains, is the destruction of jobs in West Virginia. Coal mining jobs have gone [down by 75%](http://www.huffingtonpost.com/daryl-hannah/why-i-was-arrested-in-coa_b_224531.html) with the shift to the highly mechanized, mountaintop removal. In the early 1950’s, there were [145,000 miners employed](http://www.huffingtonpost.com/daryl-hannah/why-i-was-arrested-in-coa_b_224531.html) in West Virginia; in 2004 there were just over [16,000 miners employed](http://www.huffingtonpost.com/daryl-hannah/why-i-was-arrested-in-coa_b_224531.html). While employment has decreased in coal mining, [coal production has actually increased dramatically](http://www.ilovemountains.org/resources/#mtreconomy) as a result of the environmentally destructive procedures of mountaintop removal.

Clearly, West Virginians would prefer jobs that didn't destroy their communities and health, but are forced into coal mining because few other jobs exist. As a result, West Virginians desperately fear losing these jobs. The fossil fuel lobby exploits this fear to kill investments in clean energy jobs. The industry uses events like the upcoming free concert called ["Friends of America"](http://www.huffingtonpost.com/dave-cooper/rocker-ted-nugent-to-emce_b_258696.html) hosted by Sean Hannity, which has press materials implicitly attacking clean energy legislation, hysterically warning, [“we must keep these [coal mining] jobs from being regulated out of existence](http://www.huffingtonpost.com/dave-cooper/rocker-ted-nugent-to-emce_b_258696.html)”.

These industries always say that regulating them will cost jobs - even when it is proven that jobs will be created. This is because they have created a situation where people are hanging on by a thread, paid so little that they desperately cling to what they have and other people are starving in front of them.

The ability of these AstroTurf groups to mobilize people fearing the loss of their jobs led to the dramatic weakening of the Waxman-Markey climate bill and quite possibly health care. We often make fun of teabaggers showing up at town halls, but fail to realize that the reason they are motivated to rebel against change because all change has ever meant to them is job loss and the destruction of their communities.

West Virginia shows us how we could easily win over these key segments of society with a New Deal-style industrial policy. Racial tensions and prejudices in West Virginia have long been as severe as in other places in the South. However as a result of heavy unionization, West Virginians learned to look beyond race to take on the true oppressors - big corporations. West Virginians also remembered the importance that the New Deal played in transforming their lives. It gave them jobs, electricity, roads, and helped to bring the region into the 20th Century.

As result, West Virginians stuck firmly with FDR’s Democratic Party and voted consistently for Democrats for the following five decades. While the once solid Democratic South became the Republican South after passage of Civil Rights legislation, West Virginia -- despite its strong racial tensions -- remained an island of Democratic support, until 2000.

In the 1990s, the generations that had survived the Great Depression, the New Deal, and World War Two began to die out, and a Democratic president forged the job-killing NAFTA trade deal. Support for Democrats in West Virginia suddenly began to weaken. All the new generation knew was rising unemployment and broken promises at the hand of liberal politicians promising them jobs, but instead taking what jobs they had away.

The failure of the progressive movement to advocate for the improvement of the economic conditions of the white working class created a vacuum that allowed right-wing demagoguery to flourish. West Virginians turned to conservative Republicans who promised to protect their country, their most cherished recreational activity - hunting, and the churches at the center of their communities because no one else seemed to be protecting their communities.

In 2000, Republicans in West Virginia portrayed environmentalist Al Gore, who played a key role in passing NAFTA, as a job-killer who would destroy West Virginia's coal-based economy. Ever since then, West Virginia has voted consistently Republican in presidential elections, while at the same time continuing to elect Democratic Senators and Congressman who promised to protect coal producing jobs and fight to keep manufacturing in West Virginia.

In response to the shifting winds against progressives in West Virginia, local activists have called for New Deal-style projects like the [Coal River Wind Project](http://www.coalriverwind.org/) which seeks to create a sustainable, green economy not based on the boom and bust cycles of coal. Recent studies show that Appalachia will be mined out of coal in [20-30 years](http://www.coalriverwind.org). In contrast the wind energy is sustainable industry that is here to stay and could create far more jobs.

It’s estimated that only a $30 billion investment through Senator Sherrod Brown's IMPACT Act [would create 2.5 million jobs](http://www.ourfuture.org/blog-entry/2009083525/%3Chttp://www.ourfuture.org/blog-entry/2009072808/building-clean-energy-economy-impact-act%3E) - many of them high, paying manufacturing jobs. The IMPACT Act could help replace the nearly [2 million manufacturing jobs that have been lost](http://www.bls.gov/news.release/empsit.nr0.htm) since the recession began in December 2007.

A New Deal-style industrial policy is crucial as well for winning over the politically elusive, white working class. The New Deal was successful in creating a lasting political coalition because it created lasting political constituencies. As a result of the wide range of people it helped: Social Security for seniors, labor unions for workers, subsidies for small farmers, and jobs for the unemployed, these groups were brought into the Democratic party and stayed there for nearly forty years.

However, a recent poll of non-college educated white males, showed that [only 35% approved of Obama’s performance](http://www.ourfuture.org/blog-entry/2009083525/%3Chttp://politics.theatlantic.com/2009/08/where_obama_is_losing_ground.php%3E) . Some liberal commentators like Ron Brownstein of the Atlantic Magazine claim that [we don't need the white working class](http://www.ourfuture.org/blog-entry/2009083525/%3Chttp://politics.theatlantic.com/2009/08/where_obama_is_losing_ground.php%3E) to build a lasting progressive movement. Some argue that we shouldn't waste our effort to reach out to them because we can build majority built simply based upon minorities, women, college educated professionals, and youth.

To that I simply say is if the progressive movement wants to have a lasting impact we should include everyone as the New Deal coalition did. By advocating for New Deal - style industrial policies we can bring in the white working class as part of our movement, help with efforts at racial healing, and could create a lasting political movement that could last for another forty years. Such tactics were successful in the past in bringing the white working class into the party and will be successful in the future.

If the progressive movement put as much energy into advocating for a New Deal-style industrial policy as they have attacking and debunking the teabaggers, there wouldn't be teabaggers at these town hall meetings.

Yes, New Deal-style industrial policy will bring people into the progressive movement. But the real reason we why we need an industrial policy is similar to the one we had under the New Deal: it was the right thing to do. The New Deal helped people. made their lives better, created the middle class, set up regulations that protected people ,and created the solid foundations for the economic revival and amazing growth that followed.

It's time that we again as a progressive movement, embrace an aggressive New Deal-style industrial policy. It's important to just to our growth as a movement, but to our economic growth, our efforts at racial reconciliation, and our betterment as a nation. These are the lessons that West Virginia has to offer us.

#### A credible counterweight is key – the GOP has become ideologically polarized

**Mann & Ornstein 12** - Chair and a senior fellow in Governance Studies @ [Brookings Institution](http://en.wikipedia.org/wiki/Brookings_Institution) & political scientist and resident scholar @ American Enterprise Institute [[Thomas E. Mann](http://www.npr.org/books/authors/151524793/thomas-e-mann) & [Norman J. Ornstein](http://www.npr.org/books/authors/151524801/norman-j-ornstein), It's Even Worse Than It Looks, pg. http://tinyurl.com/8ucplnz

Six years ago, we wrote The Broken Branch, which sharply criticized the Congress for failing to live up to its responsibilities as the first branch of government. Based on four decades of watching Congress, ours was a sympathetic perspective, one that reflected our appreciation of the inherent messiness of the legislative process within the constitutional system. Reconciling diverse interests and beliefs in America's extended republic necessarily involves adversarial debates and difficult negotiations.

But there was no denying the impact of broad changes in America's wider political environment — most importantly the ideological polarization of the political parties — on how Congress went about its work. We documented the demise of regular order, as Congress bent rules to marginalize committees and deny the minority party in the House opportunities to offer amendments on the floor; the decline of genuine deliberation in the lawmaking process on such important matters as budgets and decisions to go to war; the manifestations of extreme partisanship; the culture of corruption; the loss of institutional patriotism among members; and the weakening of the checks-and-balances system.

While we observed some improvement after the Democrats regained control of Congress in the 2006 midterm elections, the most problematic features of the system remained. We thought them unlikely to abate absent a major national crisis that inspired the American public to demand that the warring parties work together. America got the crisis — the most serious economic downturn since the Great Depression — and a pretty clear signal from the voters, who elected Barack Obama by a comfortable margin and gave the Democrats substantial gains in the House and Senate. What the country didn't get was any semblance of a well-functioning democracy. President Obama's postpartisan pitch fell flat, and the Tea Party movement pulled the GOP further to its ideological pole. Republicans greeted the new president with a unified strategy of opposing, obstructing, discrediting, and nullifying every one of his important initiatives. Obama reaped an impressive legislative harvest in his first two years but without any Republican engagement or support and with no apparent appreciation from the public. The anemic economic recovery and the pain of joblessness and underwater home mortgages led not to any signal that the representatives ought to pull together, but rather to yet another call by voters to "throw the bums out." The Democrats' devastating setback in the 2010 midterm elections, in which they lost six Senate seats and sixty-three in the House, produced a Republican majority in the House dominated by right-wing insurgents determined to radically reduce the size and role of government. What followed was an appalling spectacle of hostage taking — most importantly, the debt ceiling crisis — that threatened a government shutdown and public default, led to a downgrading of the country's credit, and blocked constructive action to nurture an economic recovery or deal with looming problems of deficits and debt.

In October 2011, Congress garnered its lowest approval rating (9 percent) in polling history. Public trust in the government's capacity to solve the serious problems facing the country also hit record lows. Almost all Americans felt their country was on the wrong track and were pessimistic about the future. The public viewed both parties negatively, and President Obama's job approval rating was mired in the forties. The widespread consensus was that politics and governance were utterly dysfunctional. In spite of the perilous state of the global economy — and with it the threat of another financial crisis and recession — no one expected the president and Congress to accomplish anything of consequence before the 2012 election.

Paradoxically, the public's undifferentiated disgust with Congress, Washington, and "the government" in general is part of the problem, not the basis of a solution. In never-ending efforts to defeat incumbent officeholders in hard times, the public is perpetuating the source of its discontent, electing a new group of people who are even less inclined to or capable of crafting compromise or solutions to pressing problems. We have been struck by the failure of the media, including editors, reporters, and many "expert" commentators, to capture the real drivers of these disturbing developments, and the futility of efforts by many nonpartisan and bipartisan groups to counter, much less overcome, them. We write this book to try to clarify the source of dysfunctional politics and what it will take to change it. The stakes involved in choosing who will lead us in the White House, the Congress, and the Supreme Court in the years ahead are unusually high, given both the gravity of the problems and the sharper polarization of the parties.

In the pages that follow, we identify two overriding sources of dysfunction. The first is the serious mismatch between the political parties, which have become as vehemently adversarial as parliamentary parties, and a governing system that, unlike a parliamentary democracy, makes it extremely difficult for majorities to act. Parliamentary-style parties in a separation-of-powers government are a formula for willful obstruction and policy irresolution. Sixty years ago, Austin Ranney, an eminent political scientist, wrote a prophetic dissent to a famous report by an American Political Science Association committee entitled "Toward a More Responsible Two-Party System." The report, by prominent political scientists frustrated with the role of conservative Southern Democrats in blocking civil rights and other social policy, issued a clarion call for more ideologically coherent, internally unified, and adversarial parties in the fashion of a Westminster-style parliamentary democracy like Britain or Canada. Ranney powerfully argued that such parties would be a disaster within the American constitutional system, given our separation of powers, separately elected institutions, and constraints on majority rule that favor cross-party coalitions and compromise. Time has proven Ranney dead right — we now have the kinds of parties the report desired, and it is disastrous.

The second is the fact that, however awkward it may be for the traditional press and nonpartisan analysts to acknowledge, one of the two major parties, the Republican Party, has become an insurgent outlier — ideologically extreme; contemptuous of the inherited social and economic policy regime; scornful of compromise; unpersuaded by conventional understanding of facts, evidence, and science; and dismissive of the legitimacy of its political opposition. When one party moves this far from the center of American politics, it is extremely difficult to enact policies responsive to the country's most pressing challenges.

Recognizing these two realities and understanding how America got here is key to taking the right steps to overcome dysfunctional politics.

#### The tea party mindset of ideological rigidity has infused Republican politics – its grip has tightened since the election

Kornacki 12/27 (Steve, senior political writer, has been published in several newspapers, including the NYT and WSJ. “Triumph of the Tea Party mindset.” Salon, December 27, 2012. <http://www.salon.com/2012/12/27/triumph_of_the_tea_party_mindset/>.)

Two stories that might seem to contradict each other ran in the New York Times this week. One declared the Tea Party movement “significantly weakened” in the wake of November’s elections and on its way to becoming “just another political faction.” The other noted that Senate Minority Leader Mitch McConnell might be concerned about a potential 2014 primary challenge – enough to filibuster any fiscal cliff plan that President Obama and Democrats draw up, no matter how modest.

The problem, of course, is that the Tea Party’s power resides in Republican primaries, where conservative purists wreaked considerable havoc in the past two election cycles. This included, famously, McConnell’s home state of Kentucky, where the minority leader’s protégé was crushed in a 2010 GOP Senate primary by Rand Paul. Now McConnell has to worry about suffering a similar fate in two years, especially if his handling of the current fiscal impasse evokes cries of treason from the base. How could this square with claims of fading clout for the Tea Party?

Actually, there’s a way. It just depends on how you understand the Tea Party.

Defined as a literal movement, with an active membership pressing a specific set of demands, the Tea Party absolutely is in decline. Tea Party events have become less crowded, less visible and less relevant to the national political conversation. As the Times story notes, the movement’s die-hards are embracing increasingly niche pet issues. The term “Tea Party” has come to feel very 2010.

But if you think of the Tea Party less as a movement and more as a mindset, it’s as strong and relevant as ever. As I wrote back in ’10, the Tea Party essentially gave a name to a phenomenon we’ve seen before in American politics – fierce, over-the-top resentment of and resistance to Democratic presidents by the right. It happened when Bill Clinton was president, it happened when Lyndon Johnson was president, it happened when John F. Kennedy was president. When a Democrat claims the White House, conservatives invariably convince themselves that he is a dangerous radical intent on destroying the country they know and love and mobilize to thwart him.

The twist in the Obama-era is that some of the conservative backlash has been directed inward. This is because the right needed a way to explain how a far-left anti-American ideologue like Obama could have won 53 percent of the popular vote and 365 electoral votes in 2008. What they settled on was an indictment of George W. Bush’s big government conservatism; the idea, basically, was that Bush had given their movement a bad name with his big spending and massive deficits, angering the masses and rendering them vulnerable to Obama’s deceptive charms. And the problem hadn’t just been Bush – it had been every Republican in office who’d abided his expansion of government, his deals with Democrats, his Wall Street bailout and all the rest.

Thus did the Tea Party movement represent a two-front war – one a conventional one against the Democratic president, and the other a new one against any “impure” Republicans. Besides a far-right ideology, the trait shared by most of the Tea Party candidates who have won high-profile primaries these past few years has been distance from what is perceived as the GOP establishment. Whether they identify with the Tea Party or not, conservative leaders, activists and voters have placed a real premium on ideological rigidity and outsider status; there’s no bigger sin than going to Washington and giving ground, even just an inch, to the Democrats.

It’s hard to look around right now and not conclude that the Republican Party is still largely in the grip of this mindset. Yes, since the election, there have been GOP voices – some of them genuinely surprising – speaking out in favor of giving President Obama the income tax rate hike that he’s looking for. But the January 1 deadline is now just days after and, crucially, there’s been no action. And it’s looking more and more like there won’t be.

This is the case even though Obama apparently indicated that he’d settle for only raising rates on income over $400,000, that he’d dial back his new revenue request by $400 billion, that he’d be OK with not extending the payroll tax holiday, and that he’d sign on a form of chained-CPI for Social Security benefits. Oh, and despite the fact that if nothing happens, all of the Bush tax rates will expire on January 1, with no changes triggered for Social Security or any safety net program. Despite all of this, Republicans in the House still said no to Obama last week, and then wouldn’t even allow Speaker John Boehner to bring a bill to the floor to simply extend the Bush rates for income under $1 million. And McConnell and the Senate GOP still seem unwilling to go any farther than their House counterparts.

This is exactly what the Tea Party mindset produces. For one thing, the House GOP conference (and to a lesser extent, the Senate GOP) contains no shortage of Tea Party true-believers – men and women who embody the spirit of the movement and have no qualms about going to war with party leadership if they believe their principles are at risk. And they are backed by a conservative information complex – media outlets and personalities, commentators, activists and interest group leaders – ready to cast them as heroes in any fight with “the establishment.”

All of this is more than enough to instill real fear in Republicans on Capitol Hill who aren’t true believers – but who do like their jobs and want to keep them. McConnell falls in this category. Boehner evidently does too. And so do many, many other Republicans who don’t want to look back and regret the day they cast a vote that ended their careers. The fact that the Tea Party, as a literal entity, seems to be dying is actually a sign of how successful it’s been. Its spirit now rules the Republican Party.

#### Tea Party influence erodes liberal internationalism, causes protectionism, and risks strikes on Iran

**Mead 11** – Professor of Foreign Affairs and the Humanities @ Bard College [Walter Russell Mead, “The Tea Party and American Foreign Policy: What Populism Means for Globalism,” Foreign Affairs, March/April 2011Volume 9o • Number 2

Any increase in Jacksonian political strength makes a military response to the Iranian nuclear program more likely. Although the public’s reaction to the progress of North Korea’s nuclear program has been relatively mild, recent polls show that up to 64 percent of the U.S. public favors military strikes to end the Iranian nuclear program. Deep public concerns over oil and Israel, combined with memories of the 1979 Iranian hostage crisis among older Americans, put Iran’s nuclear program in Jacksonians’ cross hairs. Polls show that more than 50 percent of the public believes the United States should defend Israel against Iran—even if Israel sets off hostilities by launching the first strike. Many U.S. presidents have been dragged into war reluctantly by aroused public opinion; to the degree that Congress and the public are influenced by Jacksonian ideas, a president who allows Iran to get nuclear weapons without using military action to try to prevent it would face political trouble. (Future presidents should, however, take care. Military engagements undertakenwithout a clear strategy for victory can backfire disastrously. Lyndon Johnson committed himself to war in Southeast Asia because he believed, probably correctly, that Jacksonian fury at a communist victory in Vietnam would undermine his domestic goals. The story did not end well.)

On other issues, Paulites and Palinites are united in their dislike for liberal internationalism —the attempt to conduct international relations through multilateral institutions under an ever-tightening web of international laws and treaties. From climate change to the International Criminal Court to the treatment of enemy combatants captured in unconventional conflicts, both wings of the Tea Party reject liberal internationalist ideas and will continue to do so. The U.S. Senate, in which each state is allotted two senators regardless of the state’s population, heavily favors the less populated states, where Jacksonian sentiment is often strongest. The United States is unlikely to ratify many new treaties written in the spirit of liberal internationalism for some time to come.

The new era in U.S. politics could see foreign policy elites struggling to receive a hearing for their ideas from a skeptical public. “The Council on Foreign Relations,” the pundit Beck said in January 2010, “was a progressive idea of, let’s take media and eggheads and figure out what the idea is, what the solution is, then teach it to the media, and they’ll let the masses know what should be done.” Tea Partiers intend to be vigilant to insure that elites with what the movement calls their “one-world government” ideas and bureaucratic agendas of class privilege do not dominate foreign policy debates. The United States may return to a time when prominent political leaders found it helpful to avoid too public an association with institutions and ideas perceived as distant from, and even hostile to, the interests and values of Jacksonian America.

Concern about China has been growing for some time in American opinion, and the Jacksonian surge makes it more likely that the simmering anger and resentment will come to a boil. Free trade is an issue that has historically divided populists in the United States (agrarians have tended to like it; manufacturing workers have not); even though Jacksonians like to buy cheap goods at Walmart, common sense largely leads them to believe that the first job of trade negotiators ought to be to preserve U.S. jobs rather than embrace visionary “win-win” global schemes. Pg. 42-43

#### \*Iran war escalates

White, July/August 2011 (Jeffrey—defense fellow at the Washington Institute for Near East Policy, What Would War With Iran Look Like, National Interest, p. <http://www.the-american-interest.com/article-bd.cfm?piece=982>)

A U.S.-Iranian war would probably not be fought by the United States and Iran alone. Each would have partners or allies, both willing and not-so-willing. Pre-conflict commitments, longstanding relationships, the course of operations and other factors would place the United States and Iran at the center of more or less structured coalitions of the marginally willing. A Western coalition could consist of the United States and most of its traditional allies (but very likely not Turkey, based on the evolution of Turkish politics) in addition to some Persian Gulf states, Jordan and perhaps Egypt, depending on where its revolution takes it. Much would depend on whether U.S. leaders could persuade others to go along, which would mean convincing them that U.S. forces could shield them from Iranian and Iranian-proxy retaliation, or at least substantially weaken its effects. Coalition warfare would present a number of challenges to the U.S. government. Overall, it would lend legitimacy to the action, but it would also constrict U.S. freedom of action, perhaps by limiting the scope and intensity of military operations. There would thus be tension between the desire for a small coalition of the capable for operational and security purposes and a broader coalition that would include marginally useful allies to maximize legitimacy. The U.S. administration would probably not welcome Israeli participation. But if Israel were directly attacked by Iran or its allies, Washington would find it difficult to keep Israel out—as it did during the 1991 Gulf War. That would complicate the U.S. ability to manage its coalition, although it would not necessarily break it apart. Iranian diplomacy and information operations would seek to exploit Israeli participation to the fullest. Iran would have its own coalition. Hizballah in particular could act at Iran’s behest both by attacking Israel directly and by using its asymmetric and irregular warfare capabilities to expand the conflict and complicate the maintenance of the U.S. coalition. The escalation of the Hizballah-Israel conflict could draw in Syria and Hamas; Hamas in particular could feel compelled to respond to an Iranian request for assistance. Some or all of these satellite actors might choose to leave Iran to its fate, especially if initial U.S. strikes seemed devastating to the point of decisive. But their involvement would spread the conflict to the entire eastern Mediterranean and perhaps beyond, complicating both U.S. military operations and coalition diplomacy.

#### Extinction

Giribets 12 [Miguel Giribets, “If US Attacks Iran, Human Survival May Be at Risk (Part III),” Argen Press, 10 January 2012, pg. http://watchingamerica.com/News/141596/if-us-attacks-iran-human-survival-may-be-at-risk-part-iii/]

The dangers of global war are clear. On one side, hundreds of Russian technicians would die working on Iranian nuclear facilities, to which Russia could not stand idly by. According to Chossudovsky: "Were Iran to be the object of a "pre-emptive" aerial attack by allied forces, the entire region, from the Eastern Mediterranean to China's Western frontier with Afghanistan and Pakistan, would flare up, leading us potentially into a World War III scenario. The war would also extend into Lebanon and Syria. It is highly unlikely that the bombings, if they were to be implemented, would be circumscribed to Iran's nuclear facilities as claimed by US-NATO official statements. What is more probable is an all out air attack on both military and civilian infrastructure, transport systems, factories, public buildings.

"The issue of radioactive fallout and contamination, while casually dismissed by US-NATO military analysts, would be devastating, potentially affecting a large area of the broader Middle East (including Israel) and Central Asian region." As an example, a few years ago Burma moved its capital Rangoon to Pyinmana, because it believed that the effects of nuclear radiation caused by an attack on Iran would be less there. Radiation and nuclear winter could have uncontrollable consequences for humans. Put plainly, the survival of the human race would be put at stake if the U.S. attacks Iran.

#### Protectionism causes extinction

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Continuing calls for curbs on the flow of finance and trade will inspire the United States and other nations to spew forth protectionist legislation like the notorious Smoot-Hawley bill. Introduced at the start of the Great Depression, it triggered a series of tit-for-tat economic responses, which many commentators believe helped turn a serious economic downturn into a prolonged and devastating global disaster. But if history is any guide, those lessons will have been long forgotten during the next collapse. Eventually, fed by a mood of desperation and growing public anger restrictions on trade, finance, investment, and immigration will almost certainly intensify.

Authorities and ordinary citizens will likely scrutinize the cross—border movement of Americans and outsiders alike, and lawmakers may even call for a general crackdown on nonessential travel. Meanwhile, many nations will make transporting or sending funds to other countries exceedingly difficult. As desperate officials try to limit the fallout from decades of ill-conceived, corrupt and reckless policies, they will introduce controls on foreign exchange. Foreign individuals and companies seeking to acquire certain American infrastructure assets, or trying to buy property and other assets on the cheap thanks to a rapidly depreciating dollar, will be stymied by limits on investment by noncitizens. Those efforts will cause spasms to ripple across economies and markets, disrupting global payment, settlement, and clearing mechanisms. All of this will, of course, continue to undermine business confidence and consumer spending.

In a world of lockouts and lockdowns, any link that transmits systemic financial pressures across markets through arbitrage or portfolio-based risk management, or that allows diseases to be easily spread from one country to the next by tourists and wildlife, or that otherwise facilitates unwelcome exchanges of any kind will be viewed with suspicion and dealt with accordingly.

The rise in isolationism and protectionism will bring about ever more heated arguments and dangerous confrontations over shared sources of oil, gas, and other key commodities as well as factors of production that must, out of necessity be acquired from less-than-friendly nations, whether involving raw materials used in strategic industries or basic necessities such as food, water, and energy, efforts to secure adequate supplies will take increasing precedence in a world where demand seems constantly out of kilter with supply. Disputes over the misuse, overuse, and pollution of the environment and natural resources will become more commonplace. Around the world, such tensions will give rise to fullscale military encounters, often with minimal provocation.

In some instances, economic conditions will serve as a convenient pretext for conflicts that stem from cultural and religious differences. Alternatively, nations may look to divert attention away from domestic problems by channeling frustration and populist sentiment toward other countries and cultures. Enabled by cheap technology and the waning threat of American retribution, terrorist groups will likely boost the frequency and scale of their horrifying attacks, bringing the threat of random violence to a whole new level.

Turbulent conditions will encourage aggressive saber rattling and interdictions by rogue nations running amok. Age-old clashes will also take on a new, more heated sense of urgency. China will likely assume an increasingly belligerent posture toward Taiwan, while Iran may embark on overt colonization of its neighbors in the Mideast. Israel, for its part. may look to draw a dwindling list of allies from around the world into a growing number of conflicts. Some observers, like John Mearsheimer, a political scientist at the University of Chicago, have even speculated that an “intense confrontation" between the United States and China is “inevitable” at some point.

More than a few disputes will turn out to be almost wholly ideological. Growing cultural and religious differences will be transformed from wars of words to battles soaked in blood. Long-simmering resentments could also degenerate quickly, spurring the basest of human instincts and triggering genocidal acts. Terrorists employing biological or nuclear weapons will vie with conventional forces using jets, cruise missiles, and bunker-busting bombs to cause widespread destruction. Many will interpret stepped-up conflicts between Muslims and Western societies as the beginnings of a new world war.

#### Progressives must be in control to promote an inclusive world order that integrates rising powers and fosters multilateral cooperation

Kupchan, ’12 - Charles Kupchan, Professor of International Affairs at Georgetown, Senior Fellow at the Council on Foreign Relations [“Grand Strategy: The Four Pillars of the Future”. Democracy, Issue #23, Winter 2012. http://tinyurl.com/ccd6y5n]

Making Room for the Rising Rest

As emerging powers continue their ascent, dampening rivalries and fashioning a new rules-based order will require strategic vision and purposeful U.S. engagement. Rising powers, whether democratic or not, will not obediently take their place within the liberal order erected during the West’s watch. The rising rest differ with the West on fundamental issues, including the sources of domestic legitimacy, when and under what conditions violations of sovereignty are warranted, and the relationship between states and markets. Accordingly, they will want to recast the international system in ways that advantage their interests and ideological preferences.

Russia and China do not equate legitimacy with Western standards of liberal democracy, and both powers were critical of NATO’s intervention in Libya and vetoed a UN resolution condemning Syria’s crackdown on protestors. For decades, Turkey aligned itself with Europe and the United States, but Ankara is now charting its own path, flexing its muscles in the Middle East, and adopting a confrontational stance toward Israel. India is ostensibly America’s new strategic partner, but it votes with the United States in the UN General Assembly only about 25 percent of the time.

The task ahead for the West is not corralling emerging powers into the existing international order—a futile undertaking—but instead working together with them to arrive at a new set of global rules. Because progressives appreciate the merits of pluralism, they are well suited to help negotiate a bargain among states that embrace quite diverse conceptions of domestic and international governance. As Adam Mount and I argued in these pages in 2009 (“The Autonomy Rule,” Issue #12), equating legitimacy with responsible rule rather than only liberal democracy, fashioning a more equitable brand of capitalism, and strengthening the capacity and authority of regional institutions are the types of compromises around which a new order is likely to take shape. Progressives understand that pluralism and tolerance help resolve some of the most difficult challenges of domestic governance, and that these values can do the same for international politics.

Progressives should apply the logic of constructive engagement not just to those powers headed for the top ranks. As civil societies in many parts of the Arab world clamor for political freedom and economic opportunity, Washington should encourage and assist democratic movements even as it acknowledges that incremental liberalization is preferable to chaotic change and that more democracy in the Middle East may well mean more political Islam. Progressives should also support patient engagement when dealing with dangerous or unfriendly regimes. The reset with Russia has led to military cooperation on Afghanistan, diplomatic coordination on Iran, and a new pact limiting the size of nuclear arsenals. Obama’s outreach to Cuba has admittedly proceeded in fits and starts, but Havana has introduced a program of economic privatization and released dozens of political prisoners. Washington has been cautiously improving ties with Myanmar as its government relaxes its grip on power. And even if engagement with the likes of Iran and North Korea ultimately leads nowhere, Washington’s prior diplomatic efforts would help provide a political foundation for a more hard-line approach should that prove necessary.

Among Republicans, the ascent of illiberal powers promises to reinforce neoconservative and isolationist tendencies. Neoconservatives recoil at the prospect of working with autocracies like China, Russia, and Saudi Arabia; such regimes, they argue, should be brought to heel and transformed into liberal polities, not treated as stakeholders. Engagement is even less justifiable when dealing with pariahs like Iran and North Korea.

While perhaps emotionally satisfying, the neoconservative preference for regime change is a recipe for self-defeating adventurism; America’s recent forays into nation-building have produced scant benefits at enormous costs. The assumption that illiberal regimes yield only when forced into submission also flies in the face of history. The most notable geopolitical breakthroughs of the twentieth century came not through coercion, but bold diplomacy—Anwar Sadat and Menachem Begin in Jerusalem, Richard Nixon and Mao Zedong in Beijing, Ronald Reagan and Mikhail Gorbachev in Reykjavik. Moreover, stabilizing the global economy, ensuring energy supplies, combating nuclear proliferation and terrorism—these and many other international challenges require working with, not isolating, non-democracies.

The Republican Party’s neo-isolationist wing, rather than seeking to turn illiberal regimes into democracies, would simply shun them. The Tea Party would want to avoid the domestic exertions and diplomatic constraints entailed in engaging rising powers not created in America’s image. Such isolation would, however, not only mean missing opportunities for pragmatic cooperation, but also ceding too much ground to non-democratic regimes. Even as the United States works with illiberal powers to forge a new rules-based order, it must actively promote democracy and liberal values globally. Pluralism, tolerance, and the power of persuasion are as important to advancing liberty and equality abroad as they are at home—something that progressives fully understand.

#### Failure to satisfy rising powers causes nuclear war

Kugler 06 – Professor of world politics @ Claremont Graduate University [Jacek Kugler (Consultant to the IMF, the World Bank, State Department, and Department of Defense. His publications on the causes and consequences of war use formal modeling and empirical analysis), “The Asian Ascent: Opportunity for Peace or Precondition for War?,” [International Studies Perspectives](http://www3.interscience.wiley.com.proxy.library.emory.edu/journal/118516737/home), [Volume 7, Issue 1](http://www3.interscience.wiley.com.proxy.library.emory.edu/journal/118606983/issue), Pages 36-42

Given the fundamental importance of demographic and economic forces in establishing the roster of states capable of fundamentally affecting the structure of world politics, whatever resolution there might be to the Global War on Terror will not alter the major challenge faced by the United States. In the long run, China’s demographic and hence economic power cannot be denied. By the same reasoning, the Middle East has no long-run demographic or economic power. The U.S. courts long-term peril by being obsessively distracted by short-term objectives. To ensure real peace, the U.S. would be much better advised to preserve strong links with the EU, maintain and improve cordial relations with Russia, and most importantly, open a sincere dialogue with India and China designed to maximize their support for the existing status quo. To be sure, positive, but limited, steps have been taken by the United States. American support for China’s entry into the World Trade Organization was important because it helps integrate China’s growing economy more fully into the capitalist world economy. Similar recognition for India, not to mention support for Indian membership on the United Nations Security Council, would also be beneficial. Because Taiwan and Korea have replaced the Cold War’s Berlin as focal points for potential Great Power conflict, finding an accommodation that meets the desires of the main parties with respect to them is central to the preservation of long-term peace. The economic, demographic, and political science research summarized above suggests that American foreign policy attention must center on China and India as the major future contenders for global leadership. Although China retains a political ideology inconsistent with democracy, there are good reasons to expect and thus to work toward change to a participatory system based on increasing prosperity (Feng 2003; Feng and Zak 2003). India is the largest democracy in the world, but like China it is still not a major partner of the Western world. While these relationships may develop and prosper on their own, the relative amount of attention paid to these rising giants compared with the Global War on Terror is simply insupportable.Neither convergence arguments nor power transition theory suggests that future Great Power war between Asia and the West is inevitable. The research described here offers evidence about probabilistic relationships between parity and status quo evaluations on the one hand, and war on the other. Thus, while China's overtaking of the U.S. may be relatively certain, the result of that overtaking is not. Power transition research supports claims that overtakings are dangerous when policy makers fail to accommodate them. A conflict between China or India and the United States as the Asian giants emerge from the shadows of underdevelopment is not inevitable. Rather, the political negotiations among contenders determine whether potential challengers can be made satisfied with the rules and norms governing world politics. If the declining dominant state is able to engineer a satisfactory compromise between the demands of the rising state and its own requirements (as Britain and the U.S. did when peacefully passing the mantle of international leadership), war is not expected. If the two sides remain intransigent, war is expected. It is clear that such a war in the twenty-first century would have a very high probabilityof involving nuclear weapons. A clear counter expectation can be drawn from classical nuclear deterrence arguments. They involve a fundamental assumption that as the costs of war increase, the probability of war decreases. Nuclear weapons are then alleged to alter calculations substantially because they raise the expected costs of war so high that war becomes unthinkable. According to this logic, a global war between a newly predominant China and a declining U.S. will never occur thanks to the pacifying influence of the balance of terror. A new Cold War is anticipated by this nuclear deterrence argument. Consistent with this theory, various scholars have advocated the proliferation of nuclear weapons as one method to prevent wars ([Intriligator and Brito 1981; Waltz 1981; Bueno de Mesquita and Riker 1982](http://www3.interscience.wiley.com.proxy.library.emory.edu/cgi-bin/fulltext/118606987/main.html,ftx_abs" \l "b5)). An odd paradox is raised by the fact that many world leaders accept nuclear deterrence claims, such as that about the stability of mutual assured destruction (MAD), while rejecting the logical concomitant that proliferation of nuclear weapons to more and more states is desirable. What follows logically has stubbornly resisted practical implementation. Thus, using some other logic, leaders of nuclear nations seem to agree that deterrence is stable under MAD but nevertheless also agree that nuclear proliferation must be prevented in order to preserve peace. If decision makers really believed MAD is stable, it is impossible to understand why they would oppose nuclear proliferation to Iran, thereby creating stable nuclear parity in the Middle East. This inconsistency was noted years ago by [Rosen (1977)](http://www3.interscience.wiley.com.proxy.library.emory.edu/cgi-bin/fulltext/118606987/main.html,ftx_abs#b13), but subsequently conveniently overlooked. Theory and policy may frequently be at odds, but seldom when the costs of such logical inconsistency are so high. Power transition theorists are inherently suspicious of MAD arguments about nuclear stability because they essentially resurrect traditional balance of power arguments. Rather than focusing on conventional balance as a pacifying influence, nuclear deterrence proponents of MAD suggest that a nuclear balance will maintain the peace. Given a fortuitous absence of wars among nuclear states thus far, it is impossible to test arguments such as that about MAD. But what we can observe is not promising. It is not only policy makers who doubt the veracity of MAD when they deny the logical consequence of "beneficial" proliferation. Recent formal presentations of deterrence arguments strongly suggest that a preponderance of nuclear capabilities—specifically in the possession of satisfied states—is more amenable to peace than is MAD ([Zagare and Kilgour 2000](http://www3.interscience.wiley.com.proxy.library.emory.edu/cgi-bin/fulltext/118606987/main.html,ftx_abs" \l "b19)). Power transition theorists, informed by their own as well as by decades of demographic and economic research, strongly doubt that nuclear parity between the U.S. and a risen but dissatisfied China could preserve the peace. Conclusions It is entirely reasonable to anticipate that Asia will dominate world politics by the end of the century. The most important issue facing American decision makers is how to handle the anticipated overtaking. The research summarized here indicates that the one element of Asia's ascent that Western decision makers can manipulate is Asia's relative acceptance of the international system's existing norms and values. War is not an inevitable certainty. The opportunity for peace is at hand. If Western decision makers can persuade Chinese and Indian leaders through word and deed to join with the current global status quo, peace and prosperity should endure. If**,** on the other hand, China and India cannot be persuaded to join the existing structure of relations, then the chances for conflict increase around mid-century. The research summarized here suggests this is true even in the face of the enormous costs that reasonably would be anticipated from a nuclear war**.**

#### Diplomacy solves conflict escalation

**Wright 10** - Executive director of studies @ The Chicago Council on Global Affairs [Thomas Wright (Lecturer of Public Policy @ University of Chicago), “Strategic Engagement’s Track Record,” The Washington Quarterly • JULY 2010, 33:3 pp. 35\_60]

The obstacles to a new international order are not just due to free-riding, barriers to coordination, misunderstandings, or relatively minor differences, which can eventually be overcome in pursuit of the common good. There are also significant divergences in preferences and perceived interests. In the Western order of the Cold War, the closest economic partners of the United States were also its political allies. These allies not only shared the same problems but also had a broadly similar view about how to tackle the problem. In today’s global order, however, the United States needs the support of countries with which it not only disagrees but also views international politics as a relative-sum game. Unlike the geopolitical competition between the United States and the Soviet Union or European great power competition of the first half of the twentieth century, today’s competition takes place within the framework of the existing international order. It is a competition bound by limits and struggle for influence within the order, over the rules, and even limited disputes over borders and boundaries, rather than a struggle against a belligerent revisionist power intent on overthrowing the status quo in its entirety. Henry Kissinger noted this distinction in his book, A World Restored:

A legitimate order does not make conflicts impossible, but it ***limits their scope***. Wars may occur, but they will be fought in the name of the existing structure and the peace which follows will be justified as a better expression of the ‘legitimate,’ general consensus. **Diplomacy** in the classic sense, the adjustment of differences through **negotiation, is possible only in ‘legitimate’ international orders**.49 pg. 54

#### Liberal internationalism defuses a range of transnational crises

Ikenberry 11—Professor of Politics and International Affairs at Princeton University [G. John Ikenberry, Liberal Leviathan: The Origins, Crisis, and Transformation of the American World Order, 2011]

Rather than a single overriding threat, the United States and other countries face a host of diffuse and evolving threats. Global warming, nuclear proliferation, jihadist terrorism, energy security, health pandemics— these and other dangers loom on the horizon. **Any of these** threats **could** endanger Americans' lives and way of life either directly or indirectly by **destabiliz**ing **the global system** upon which American security and prosperity depends. Pandemics and global warming are not threats wielded by human hands, but their consequences could be equally devastating. Highly infectious disease has the potential to kill millions of people. Global warming threatens to trigger waves of environmental migration and food shortages and may further destabilize weak and poor states around the world. The world is also on the cusp of a new round of nuclear proliferation, putting mankinds deadliest weapons in the hands of unstable and hostile states. Terrorist networks offer a new specter of nonstate transnational violence. Yet none of these threats is, in itself, so singularly preeminent that it deserves to be the centerpiece of American grand strategy in the way that antifascism and anticommunism did in an earlier era.15

What is more, these various threats are interconnected—and it is their interactive effects that represent the most acute danger. This point is stressed by Thomas Homer-Dixon: "Its the convergence of stresses that's especially treacherous and makes synchronous failure a possibility as never before. In coming years, our societies won't face one or two major challenges at once, as usually happened in the past. Instead, they will face an alarming variety of problems—likely including **oil shortages, climate change, economic instability, and mega-terrorism**—all at the same time." The danger is that several of these threats will materialize at the same time and interact to generate greater violence and instability "What happens, for example, if together or in quick succession the world has to deal with a sudden shift in climate that sharply cuts food production in Europe and Asia, a severe oil price increase that sends economies tumbling around the world, and a string of major terrorist attacks on several Western capital cities?"16 The global order itself would be put at risk, as well as the foundations of American national security.

What unites these threats and challenges, as I noted in chapter 7, is that they are all manifestations of rising security interdependence. More and more of what goes on in other countries matters for the health and safety of the United States and the rest of the world. Many of the new dangers—such as health pandemics and transnational terrorist violence— stem from the weakness of states rather than their strength. At the same time, technologies of violence are evolving, providing opportunities for weak states or nonstate groups to threaten others at a greater distance. When states are in a situation of security interdependence, they cannot go it alone. They must negotiate and cooperate with other states and seek mutual restraints and protections. The United States cannot hide or protect itself from threats under conditions of rising security interdependence. It must get out in the world and work with other states to build frameworks of cooperation and leverage capacities for action.

If the world of the twenty-first century were a town, the security threats faced by its leading citizens would not be organized crime or a violent assault by a radical mob on city hall. It would be a breakdown of law enforcement and social services in the face of constantly changing and ultimately uncertain vagaries of criminality, nature, and circumstance. The neighborhoods where the leading citizens live can only be made safe if the security and well-being of the beaten-down and troubled neighborhoods were also improved. No neighborhood can be left: behind. At the same time, the town will need to build new capacities for social and economic protection. People and groups will need to cooperate in new and far-reaching ways.

But the larger point is that today the United States confronts an unusually diverse and diffuse array of threats and challenges. When we try to imagine what the premier threat to the United States will be in 2020 or 2025, it is impossible to say with any confidence that it will be X, Y, or Z. Moreover, even if we could identify X, Y, or Z as the premier threat around which all others turn, it is likely to be complex and interlinked with lots of other international moving parts. Global pandemics are connected to failed states, homeland security, international public health capacities, et cetera. Terrorism is related to the Middle East peace process, economic and political development, nonproliferation, intelligence cooperation, European social and immigration policy, et cetera. The rise of China is related to alliance cooperation, energy security, democracy promotion, the WTO, management of the world economy, et cetera. So again, we are back to renewing and rebuilding the architecture of global governance and frameworks of cooperation to allow the United States to marshal resources and tackle problems along a wide and shifting spectrum of possibilities. Pg. 350-353

#### Nuclear terror is equivalent to superpower conflict

**Toon et al 7** – Owen B. Toon, chair of the Department of Atmospheric and Oceanic Sciences at CU-Boulder, et al., April 19, 2007, “Atmospheric effects and societal consequences of regional scale nuclear conflicts and acts of individual nuclear terrorism,” online: <http://climate.envsci.rutgers.edu/pdf/acp-7-1973-2007.pdf>

To an increasing extent, people are congregating in the world’s great urban centers, creating megacities with populations exceeding 10 million individuals. At the same time, advanced technology has designed nuclear explosives of such small size they can be easily transported in a car, small plane or boat to the heart of a city. We demonstrate here that a single detonation in the 15 kiloton range can produce urban fatalities approaching one million in some cases, and casualties exceeding one million. Thousands of small weapons still exist in the arsenals of the U.S. and Russia, and there are at least six other countries with substantial nuclear weapons inventories. In all, thirty-three countries control sufficient amounts of highly enriched uranium or plutonium to assemble nuclear explosives. A conflict between any of these countries involving 50-100 weapons with yields of 15 kt has the potential to create fatalities rivaling those of the Second World War. Moreover, even a single surface nuclear explosion, or an air burst in rainy conditions, in a city center is likely to cause the entire metropolitan area to be abandoned at least for decades owing to infrastructure damage and radioactive contamination. As the aftermath of hurricane Katrina in Louisiana suggests, the economic consequences of even a localized nuclear catastrophe would most likely have severe national and international economic consequences. Striking effects result even from relatively small nuclear attacks because low yield detonations are most effective against city centers where business and social activity as well as population are concentrated. Rogue nations and terrorists would be most likely to strike there. Accordingly, an organized attack on the U.S. by a small nuclear state, or terrorists supported by such a state, could generate casualties comparable to those once predicted for a f**ull-scale nuclear** “counterforce” **exchange in a superpower conflict**. Remarkably, the estimated quantities of smoke generated by attacks totaling about one megaton of nuclear explosives could lead to significant global climate perturbations (Robock et al., 2007). While we did not extend our casualty and damage predictions to include potential medical, social or economic impacts following the initial explosions, such analyses have been performed in the past for large-scale nuclear war scenarios (Harwell and Hutchinson, 1985). Such a study should be carried out as well for the present scenarios and physical outcomes.

#### New unmanaged proliferation causes nuclear war

**Cimbala, 2008**

[Stephen, Distinguished Prof. Pol. Sci. – Penn. State Brandywine, Comparative Strategy, “Anticipatory Attacks: Nuclear Crisis Stability in Future Asia”, 27, InformaWorld]

If the possibility existed of a mistaken preemption during and immediately after the Cold War, between the experienced nuclear forces and command systems of America and Russia, then it may be a matter of even more concern with regard to states with newer and more opaque forces and command systems. In addition, the Americans and Soviets (and then Russians) had a great deal of experience getting to know one another’s military operational proclivities and doctrinal idiosyncrasies, including those that might influence the decision for or against war. Another consideration, relative to nuclear stability in the present century, is that the Americans and their NATO allies shared with the Soviets and Russians a commonality of culture and historical experience. Future threats to American or Russian security from weapons of mass destruction may be presented by states or nonstate actors motivated by cultural and social predispositions not easily understood by those in the West nor subject to favorable manipulation during a crisis. The spread of nuclear weapons in Asia presents a complicated mosaic of possibilities in this regard. States with nuclear forces of variable force structure, operational experience, and command-control systems will be thrown into a matrix of complex political, social, and cultural crosscurrents contributory to the possibility of war. In addition to the existing nuclear powers in Asia, others may seek nuclear weapons if they feel threatened by regional rivals or hostile alliances. Containment of nuclear proliferation in Asia is a desirable political objective for all of the obvious reasons. Nevertheless, the present century is unlikely to see the nuclear hesitancy or risk aversion that marked the Cold War, in part, because the military and political discipline imposed by the Cold War superpowers no longer exists, but also because states in Asia have new aspirations for regional or global respect.12 The spread of ballistic missiles and other nuclear-capable delivery systems in Asia, or in the Middle East with reach into Asia, is especially dangerous because plausible adversaries live close together and are already engaged in ongoing disputes about territory or other issues.13 The Cold War Americans and Soviets required missiles and airborne delivery systems of intercontinental range to strike at one another’s vitals. But short-range ballistic missiles or fighter-bombers suffice for India and Pakistan to launch attacks at one another with potentially “strategic” effects. China shares borders with Russia, North Korea, India, and Pakistan; Russia, with China and NorthKorea; India, with Pakistan and China; Pakistan, with India and China; and so on. The short flight times of ballistic missiles between the cities or military forces of contiguous states means that very little time will be available for warning and attack assessment by the defender. Conventionally armed missiles could easily be mistaken for a tactical nuclear first use. Fighter-bombers appearing over the horizon could just as easily be carrying nuclear weapons as conventional ordnance. In addition to the challenges posed by shorter flight times and uncertain weapons loads, potential victims of nuclear attack in Asia may also have first strike–vulnerable forces and command-control systems that increase decision pressures for rapid, and possibly mistaken, retaliation. This potpourri of possibilities challenges conventional wisdom about nuclear deterrence and proliferation on the part of policymakers and academic theorists. For policymakers in the United States and NATO, spreading nuclear and other weapons of mass destruction in Asia could profoundly shift the geopolitics of mass destruction from a European center of gravity (in the twentieth century) to an Asian and/or Middle Eastern center of gravity (in the present century).14 This would profoundly shake up prognostications to the effect that wars of mass destruction are now passe, on account of the emergence of the “Revolution in Military Affairs” and its encouragement of information-based warfare.15 Together with this, there has emerged the argument that large-scale war between states or coalitions of states, as opposed to varieties of unconventional warfare and failed states, are exceptional and potentially obsolete.16 The spread of WMD and ballistic missiles in Asia could overturn these expectations for the obsolescence or marginalization of major interstate warfare.

#### Pandemics cause extinction

Keating, 9 -- Foreign Policy web editor

(Joshua, "The End of the World," Foreign Policy, 11-13-9, www.foreignpolicy.com/articles/2009/11/13/the\_end\_of\_the\_world?page=full, accessed 9-7-12, mss)

How it could happen: Throughout history, plagues have brought civilizations to their knees. The Black Death killed more off more than half of Europe's population in the Middle Ages. In 1918, a flu pandemic killed an estimated 50 million people, nearly 3 percent of the world's population, a far greater impact than the just-concluded World War I. Because of globalization, diseases today spread even faster - witness the rapid worldwide spread of H1N1 currently unfolding. A global outbreak of a disease such as ebola virus -- which has had a 90 percent fatality rate during its flare-ups in rural Africa -- or a mutated drug-resistant form of the flu virus on a global scale could have a devastating, even civilization-ending impact. How likely is it? Treatment of deadly diseases has improved since 1918, but so have the diseases. Modern industrial farming techniques have been blamed for the outbreak of diseases, such as swine flu, and as the world’s population grows and humans move into previously unoccupied areas, the risk of exposure to previously unknown pathogens increases. More than 40 new viruses have emerged since the 1970s, including ebola and HIV. Biological weapons experimentation has added a new and just as troubling complication.

#### Only the plan solves - Obama must target Appalachia to encourage them to leave the Tea Party

**Eller 08** - Professor of history @ University of Kentucky [Ron Eller, “Obama's 'Appalachian Problem'? It's Not So Easy,” Daily Yonder, 05/16/2008, pg. http://tinyurl.com/5elfq7  
  
Popular stereotypes and misreading of Appalachian history have long provided a convenient excuse to ignore Appalachia or to justify public and private attempts to bring the region into the cultural mainstream. Thus, the argument is offered that Clinton's appeal in Appalachia should not be taken too seriously since mountain voters represent those "other whites" whose heritage has led them to be suspicious, pugnacious, and a little less civilized than the Anglo-Puritan whites of the Northeast.  
Sen. Barack Obama could not possibly succeed among these highly individualistic, uneducated, and unrefined mountain whites whose ancestors resisted slavery and Southern nationalism during the Civil War. This independent spirit, suggest the pundits, will lead the hillbillies to vote for Scotch-Irish Appalachian John McCain, born in Appalachian Mississippi.  
Such characterizations of Appalachia not only obscure the historical diversity of the region and project a static view of human culture but also ignore most of the recent scholarship on Appalachia that contradicts the idea of Appalachian "otherness" and attributes its history and economic problems to political struggles that have shaped the rest of the nation.  
Far from being the repository of Scotch-Irish culture, ignorance born of geographic isolation, or backwardness nurtured by anti-modernism, contemporary Appalachia is a much more diverse and historically complex place. Appalachian poverty, education, health care, and environmental problems are much more a product of the history of development patterns in the region than of any common Appalachian culture, and Appalachian voting patterns are much more a reflection of fundamental class, racial, and gender differences in America than they are of any ethnic heritage within the region.  
Racism does continue to influence the voting patterns of some whites in Appalachia, and the lower levels of formal education in the region do continue to fuel bigotry and prejudice, not only toward blacks but toward Muslims and ethnic immigrants as well. But prejudice is by no means unique to whites in Appalachia, and it is often a reflection of more deeply seated insecurities that are rooted in gender and class.  
For blue collar voters in Appalachia, economic concerns, not Appalachian identity, shaped their decisions at the polls. Job insecurity, rising food and gas prices, and uncertain access to health care and education turned Appalachian voters toward the more working class message of Hillary Clinton, especially among women who occupy the center of the modern mountain economy. Perhaps because of the race issue, Obama conceded West Virginia to Clinton, who was able to use the local Democratic political machinery to her advantage.  
Unlike John Kennedy, who came to Appalachia during the 1960 primary season to confront anti-Catholicism directly, the Obama strategy of side-stepping the race issue (so recently raised by the Reverend Wright controversy) left the playing field to the opposition. Kennedy quickly learned that economic distress was of greater concern to mountain voters than religious difference, and by appealing to those concerns, he carried the state.  
Obama has yet to learn this basic truth about Appalachia. The cultural conservatism that has often fueled a misunderstanding of the region's history and problems is grounded in economic conditions, hopes, and values that reflect those of the larger society. Appalachia is only the "other America" if we want to ignore the contradictions and challenges of our time. We do so at our own peril.

#### An Obama jobs project is key – His timidity emboldens Republicans and gives them media legitimacy

[**Skocpol**](http://www.politico.com/arena/bio/theda_skocpol.html) **10** - Professor of Government and Sociology @ Harvard University [Theda Skocpol, “Obama and the Democrats Need a Jobs and Taxes Argument for National Recovery,” Politico’s The Arena, Sep. 20, 2010, pg. http://www.politico.com/arena/perm/Theda\_Skocpol\_E8BD76F7-7169-44FC-B779-3993550FC1E6.html

Polls and all kinds of measures of the concerns of most ordinary Americans show very little concern about the federal deficit and spending. Americans want jobs and economic growth - and that is what they want D.C. to focus on. The tea Party and its sympathizers are colorful for TV, but they are only about a quarter of Americans at the most. Activists are about 12-15%. Their biggest impact is on frightened Republican officeholders and nominees, but in policy terms they stand for nothing clear besides deep generational and racial anxieties.

Rank-and-file tea partiers are not even opposed to the core of federal spending for defense, Medicare, and Social Security - many of them are living on these programs and believe they are entitled to them after lifetimes of work (as indeed they are)! Tea partiers may think the federal government is spending a lot on other things, but that is just ignorance (deliberately fed by Fox misinformation campaigns). Many of the grass roots tea partiers are going to be plenty surprised after Republicans take over again and hand out more tax breaks and subsidies to millionaires while gutting Social Security and Medicare.  
The timidity of Democrats and the White House is killing them. All we have heard for months are articles about what they are "considering" or fighting about. Pollsters who have told them they should avoid nationalizing this election have given disastrously bad advice. Events in a country determine whether an election is nationalized or not - and the country is in a deep economic crisis that cuts to the heart of home equity and employment, the core of family security. Obama and the Democrats have long ago needed a national message - about jobs and national recovery, what they are fighting to do, and what right-wingers are obstructing.

Instead, they have tried to engage in preemptive concessions (Orszag, Emanuel) and run and hide - which only emboldens crazy right-wingers all the more - and leaves the media free to focus on colorful extremists and side issues.

History will record this as one of the most tragic moments for Democrats - and above all for this White House. In a severe and ongoing national economic crisis, for the President to hide and cower and dither is amazing. Obama needs new advisors, and he needs to find a backbone. He needs a national narrative, not just fingerpoint at scary tea partiers.   
We are facing a turning point for effective democratic governance in the USA - and the tax cut decisions are really all that matters right now. The wealthy interests trying to knock out this White House understand that. Incredibly, Democrats seem to be on the verge of caving - or punting, which is the same - on tax cut extensions for millionaires and billionaires - giveaways of public resources that will ensure deep cuts  in Social Security and all kinds of vital endeavors going forward.

Massive victories for rabidly pro-rich and government-hating Republicans will lead to years more of deadlock and further deterioration of governmental capacities - just as the United States faces intense competition on the international stage. It is a recipe for permanent national decline.   
If Obama dithers through this, he will be a one term president - and much of what he seems already to have accomplished will be undone, including Affordable Care, which will not be repealed but will be eviscerated. He should be making it clear that he wants a vote now on tax cut extensions for the vast majority of Americans - because this will help recovery and do something for hard-hit millions - and at the same time he should tell the House and Senate that if they want to vote separately on tax cuts for millionaires and billionaires, they can do it, but if that passes, he will veto it.

Democrats still have the ability to bring two separate bills to the floor - and they should do it. Obama should not accept the cuts for millionaires and billionaires and he should tell all Americans why, loud and clear. This is both popular and the right thing to do for the country. If Obama made this declaration up front, it would support those in the House and Senate who are willing to oppose tax giveaways for the super-rich.   
Democrats on taxes are trying to use a national interest issue as an ambiguous political wedge, trying to pretend to favor tax cuts for the middle class up until the November election, while quietly preparing to extend tax cuts for the rich, too (or in effect allow that by turning things over to Republicans). It will not work. It never works for a political party to seem to be playing politics rather than focusing on America's needs. And if they extend millionaire/billionaire tax cuts even temporarily, this is a sure sign that they have betrayed the national interest and do not deserve to hold office. That is hard thing for someone with my political sympathies to say, but it is the truth.   
If Democrats are blown out in this election after this kind of cowardly performance, Americans who want a stronger nation need to create an alternative vehicle for a muscular liberalism focused on national greatness - with a prime focus on jobs for all Americans as the first goal. Tea Partiers have shown that they can dismantle and redirect the Republican Party. Meanwhile, soliciters for the DNC, DSCC, and DCCC keep asking for money for - what? Beyond "reelect us," they never say. They fudge - while offering a constant media spectacle of indecision and retreat.

#### Obama will mobilize people in key states to force Congress to compromise

**Dreier 09** - Professor of Politics and Director of the Urban & Environmental Policy Program @ Occidental College in Los Angeles [Peter Dreier, “ARTICLE: ORGANIZING IN THE OBAMA ERA: A PROGRESSIVE MOMENT OR A NEW PROGRESSIVE ERA?,” The John Marshall Law Review, Spring, 2009, 42 J. Marshall L. Rev. 685 [GENDER PARAPHRASED]

What we know already is that if Barack Obama has any chance to be a transformational president, it will require a powerful progressive movement that aligns itself with, but isn't controlled by, the young president and progressive forces in Congress. There is plenty of evidence that Americans want a more activist government to address the problems of economic insecurity, health care, the environment, and U.S. military intervention in Iraq and elsewhere. President Obama will confront fierce resistance from powerful forces in his fight to implement universal health care, labor law reform, and global warming reduction legislation, as well as to stimulate the troubled economy to promote shared prosperity and green jobs.

For example, talking during the campaign about the need to forge a new energy policy, Obama explained, "I know how hard it will be to bring about change. Exxon Mobil made $ 11 billion this past quarter. They don't want to give up their profits easily." [n1](http://www.lexisnexis.com.proxy.library.emory.edu/lnacui2api/frame.do?reloadEntirePage=true&rand=1352234505835&returnToKey=20_T15977298755&parent=docview&target=results_DocumentContent&tokenKey=rsh-20.853413.4422267415" \l "n1)

 [\*686]  As President, Obama explained the political forces opposed to his budget proposal in his February 28 radio address:

I realize that passing this budget won't be easy. Because it represents real and dramatic change, it also represents a threat to the status quo in Washington. I know that the insurance industry won't like the idea that they'll have to bid competitively to continue offering Medicare coverage, but that's how we'll help preserve and protect Medicare and lower health care costs for American families. I know that banks and big student lenders won't like the idea that we're ending their huge taxpayer subsidies, but that's how we'll save taxpayers nearly $ 50 billion and make college more affordable. I know that oil and gas companies won't like us ending nearly $ 30 billion in tax breaks, but that's how we'll help fund a renewable energy economy that will create new jobs and new industries. I know these steps won't sit well with the special interests and lobbyists who are invested in the old way of doing business, and I know they're gearing up for a fight as we speak. My message to them is this: So am I. [n2](http://www.lexisnexis.com.proxy.library.emory.edu/lnacui2api/frame.do?reloadEntirePage=true&rand=1352234505835&returnToKey=20_T15977298755&parent=docview&target=results_DocumentContent&tokenKey=rsh-20.853413.4422267415" \l "n2)  
 What does it mean when a President says that he is "gearing up to fight" big business? The character of the next era is yet to be defined. Obama's election has restored hope in America's potential, but presidents cannot change the course of the country on their own. That is what movements do.

For the first time in history, Americans elected a former community organizer as their president. Obama will need all those organizing skills to be an effective leader. Big business will try to undermine any change that threatens its profits and power. To achieve a progressive agenda, Obama will have to win over some reluctant Democrats and a few moderate Republicans. Like FDR, Obama must use his bully pulpit to inspire and educate Americans to help move the country in a new direction. And also like FDR, Obama will need to get the ground troops mobilized in key states and Congressional districts to put pressure on members who might otherwise sit on the fence.

From the outset, the Obama campaign recognized that winning the election on November 4, 2008, was only the first stage of a broader crusade to help change America. They understood the importance of transforming the electoral campaign into a grassroots movement. The campaign trained thousands of people to be organizers, who in turn helped mobilize millions of people, many of whom had never been politically involved before. In addition, many unions, community groups, environmental organizations, and women's groups, among others, helped Obama and other Democrats win their races.

 [\*687]  Political campaigns frequently promise to sustain the momentum after election day but rarely do. The lists of volunteers, email addresses, donors, and other key ingredients get lost or put on the shelf until the next election, when the campaign almost starts from scratch. For several months after the campaign, key Obama staffers and volunteers discussed how to keep that group of people engaged. They held forums, house meetings, and internet discussions, debating whether to form an independent nonprofit group or to bring the campaign apparatus inside the Democratic Party. [n3](http://www.lexisnexis.com.proxy.library.emory.edu/lnacui2api/frame.do?reloadEntirePage=true&rand=1352234505835&returnToKey=20_T15977298755&parent=docview&target=results_DocumentContent&tokenKey=rsh-20.853413.4422267415" \l "n3)

They discussed a number of key questions involved in shifting gears from an electoral campaign to governing coalition. Can they turn campaign leaders into ongoing community leaders? Can they keep many of those organizers employed to sustain and expand the political base that catapulted Obama and Congressional Democrats into office? Can they keep the fragmented mosaic of issue-oriented activists and the Obama campaign volunteers from breaking off into their separate silos, each pursuing their own agendas? Can they agree on a small number of top policy priorities - for the first year, the first term, and the second term - and wage effective campaigns to achieve legislative victories?

On January 17, 2009, three days before his inauguration, Obama announced the formation of a new group, Organizing for America, to transform the political machinery of his campaign into a national network of activists, housed within the Democratic Party. [n4](http://www.lexisnexis.com.proxy.library.emory.edu/lnacui2api/frame.do?reloadEntirePage=true&rand=1352234505835&returnToKey=20_T15977298755&parent=docview&target=results_DocumentContent&tokenKey=rsh-20.853413.4422267415" \l "n4) How that group develops, how Obama campaign supporters respond to its partisan identity, how it aligns with the unions, community groups, and other existing progressive organizations, and whether it can serve as an effective lobbying force to win progressive legislation will partly determine the success of Obama's presidency. Both Obama and progressive activists have to learn how to live together. As Katrina Vanden Heuvel wrote a few weeks after the election:

We need to be able to play inside and outside politics at the same time. This will be challenging for those of us schooled in the habits of pure opposition and protest. We need to make an effort to engage the new administration and Congress constructively, even as we push without apology for solutions on a scale necessary to deliver. [n5](http://www.lexisnexis.com.proxy.library.emory.edu/lnacui2api/frame.do?reloadEntirePage=true&rand=1352234505835&returnToKey=20_T15977298755&parent=docview&target=results_DocumentContent&tokenKey=rsh-20.853413.4422267415" \l "n5)  
  [\*688]  The Obama victory, along with the large Democratic majority in Congress, presents an enormous opportunity for progressive change. What lessons should progressives learn to help figure out how to take advantage of this political opening?

I. Insiders and Outsiders: America's Organizing Tradition  
 Social injustice does not guarantee that people will mobilize for change. People need to believe not only that things should be different but also that they can be different. That is what organizers do. But that is also what political leaders do - or can do if they are so inclined. Having a president who encourages and inspires people to act collectively on their own behalf can make a big difference. It gives people hope and courage to defy obstacles. Two recent union victories suggest that President Obama understands this dynamic.

In December 2008, 240 members of the United Electrical, Radio and Machine Workers of America ("UE"), eighty percent of them Hispanic and most of the others African-American, illegally occupied the manufacturing plant of Republic Windows and Doors in Chicago for six days after their employer abruptly told them that it was shutting down the factory. [n6](http://www.lexisnexis.com.proxy.library.emory.edu/lnacui2api/frame.do?reloadEntirePage=true&rand=1352234505835&returnToKey=20_T15977298755&parent=docview&target=results_DocumentContent&tokenKey=rsh-20.853413.4422267415" \l "n6) Two days later, at a news conference to announce his Secretary of Veterans Affairs, Obama (then still the President-elect) was asked by a reporter about the sit-in in his hometown of Chicago. "When it comes to the situation here in Chicago with the workers who are asking for their benefits and payments they have earned, I think they are absolutely right," [n7](http://www.lexisnexis.com.proxy.library.emory.edu/lnacui2api/frame.do?reloadEntirePage=true&rand=1352234505835&returnToKey=20_T15977298755&parent=docview&target=results_DocumentContent&tokenKey=rsh-20.853413.4422267415" \l "n7) Obama responded. He added, "I think that these workers, if they have earned their benefits and their pay, then [sic] these companies need to follow through on those commitments." [n8](http://www.lexisnexis.com.proxy.library.emory.edu/lnacui2api/frame.do?reloadEntirePage=true&rand=1352234505835&returnToKey=20_T15977298755&parent=docview&target=results_DocumentContent&tokenKey=rsh-20.853413.4422267415" \l "n8)

With that statement, Obama used his bully pulpit to endorse the workers' protest and to put pressure on the Bank of America (which had refused to make a loan to the company) and Republic to meet with union leaders and forge a solution. The employees' bold action worked: [n9](http://www.lexisnexis.com.proxy.library.emory.edu/lnacui2api/frame.do?reloadEntirePage=true&rand=1352234505835&returnToKey=20_T15977298755&parent=docview&target=results_DocumentContent&tokenKey=rsh-20.853413.4422267415" \l "n9) they won their immediate demands (sixty days of severance pay, earned vacation pay, and two months of  [\*689]  health insurance coverage). [n10](http://www.lexisnexis.com.proxy.library.emory.edu/lnacui2api/frame.do?reloadEntirePage=true&rand=1352234505835&returnToKey=20_T15977298755&parent=docview&target=results_DocumentContent&tokenKey=rsh-20.853413.4422267415" \l "n10) This story has a happy ending. The company, the bank, the union, and the city government arranged for the factory to be purchased by another firm that agreed to keep the factory open, including all the jobs, and respect the union contract. Obama's stimulus program helped create a growing demand for energy-saving building products, which guaranteed the company more consumers.

That same month, after a brutal fifteen year organizing battle, workers at the world's largest hog killing plant in Tar Heel, N.C., voted to unionize. The 5,000 workers at the Smithfield Packing slaughterhouse, sixty percent of them African-American, had rejected union membership in 1994 and 1997 after being subjected to the company's illegal harassment and intimidation in a state known for its anti-union climate. [n11](http://www.lexisnexis.com.proxy.library.emory.edu/lnacui2api/frame.do?reloadEntirePage=true&rand=1352234505835&returnToKey=20_T15977298755&parent=docview&target=results_DocumentContent&tokenKey=rsh-20.853413.4422267415" \l "n11) The workers' vote in favor of the United Food and Commercial Workers ("UFCW") was one of the largest private-sector union victories in many years and the biggest in the UFCW's history. [n12](http://www.lexisnexis.com.proxy.library.emory.edu/lnacui2api/frame.do?reloadEntirePage=true&rand=1352234505835&returnToKey=20_T15977298755&parent=docview&target=results_DocumentContent&tokenKey=rsh-20.853413.4422267415" \l "n12) Obama's victory a few weeks earlier offered inspiration to the Smithfield workers. "It feels great," Wanda Blue, a hog cutter, told the New York Times. [n13](http://www.lexisnexis.com.proxy.library.emory.edu/lnacui2api/frame.do?reloadEntirePage=true&rand=1352234505835&returnToKey=20_T15977298755&parent=docview&target=results_DocumentContent&tokenKey=rsh-20.853413.4422267415" \l "n13) Blue, who is African American and has worked at Smithfield for five years, said, "It's like how Obama felt when he won. We made history." [n14](http://www.lexisnexis.com.proxy.library.emory.edu/lnacui2api/frame.do?reloadEntirePage=true&rand=1352234505835&returnToKey=20_T15977298755&parent=docview&target=results_DocumentContent&tokenKey=rsh-20.853413.4422267415" \l "n14)

Ever since the Boston Tea Party, grassroots organizing has been part of the American tradition. After visiting the United States in the 1830s, Alexis de Tocqueville observed in Democracy in America how impressed he was by the outpouring of local volunteer organizations that brought Americans together to solve problems, provide a sense of community and public purpose, and tame the hyper-individualism that Tocqueville considered a threat to democracy. [n15](http://www.lexisnexis.com.proxy.library.emory.edu/lnacui2api/frame.do?reloadEntirePage=true&rand=1352234505835&returnToKey=20_T15977298755&parent=docview&target=results_DocumentContent&tokenKey=rsh-20.853413.4422267415" \l "n15)

Every crusade for reform since then has drawn on that particular organizing tradition - the abolitionists who helped end slavery; the populist farmers who sought to tame the growing influence of the banks, railroads and other big corporations; the  [\*690]  progressive housing and health reformers who fought slums, sweatshops, and epidemic diseases in the early 1900s; the suffragists who battled to give women the vote; the labor unionists who fought for the eight-hour workday, better working conditions, and living wages; the civil rights pioneers who helped dismantle Jim Crow; and the activists who since the 1960s have won hard-fought victories for environmental protection, women's equality, decent conditions for farm workers, and gay rights.

Throughout American history, progressive change has come about when both "inside" and "outside" strategies are at work. To gain any significant reforms, activists and politicians need each other. Boycotts, strikes, civil disobedience, and mass marches - traditional outsider strategies - help put new issues on the agenda, dramatize long-ignored grievances, and generate media attention. This type of agitation gets people thinking about things they had not thought about before and can change public opinion. Movements transform political parties and shape their rhetoric and public policy agendas.

Savvy liberal and progressive elected officials understand that they really need "radical" protestors to change the political climate and make reform possible. When "disruption" is taking place in the streets and grassroots groups are engaged in lobbying and rallying, policymakers can appear statesmanlike [statespersonlike] and moderate when they forge compromises to win legislative victories.

This dynamic has been replayed many times throughout American history. Women gained the right to vote in 1920 only after suffragists combined decades of dramatic protest (including hunger strikes and mass marches) with inside lobbying and appeals to the consciences of male legislators - some of them the husbands and fathers of the protestors.

In the 1930s, workers engaged in massive and illegal sit-down strikes in factories throughout the country. In Michigan, where workers had taken over a number of auto plants, a sympathetic governor, Democrat Frank Murphy, refused to allow the National Guard to eject the protestors even after they had defied an injunction to evacuate the factories. [n16](http://www.lexisnexis.com.proxy.library.emory.edu/lnacui2api/frame.do?reloadEntirePage=true&rand=1352234505835&returnToKey=20_T15977298755&parent=docview&target=results_DocumentContent&tokenKey=rsh-20.853413.4422267415" \l "n16) His mediating role helped end the strike on terms that provided a victory for the workers and their union. [n17](http://www.lexisnexis.com.proxy.library.emory.edu/lnacui2api/frame.do?reloadEntirePage=true&rand=1352234505835&returnToKey=20_T15977298755&parent=docview&target=results_DocumentContent&tokenKey=rsh-20.853413.4422267415" \l "n17)

President Roosevelt recognized that his ability to push New Deal legislation through Congress depended on the pressure generated by protestors - workers, veterans of World War I, the  [\*691]  jobless, the homeless, and farmers. [n18](http://www.lexisnexis.com.proxy.library.emory.edu/lnacui2api/frame.do?reloadEntirePage=true&rand=1352234505835&returnToKey=20_T15977298755&parent=docview&target=results_DocumentContent&tokenKey=rsh-20.853413.4422267415" \l "n18) He once told a group of activists who sought his support for legislation, "You've convinced me. Now go out and make me do it." [n19](http://www.lexisnexis.com.proxy.library.emory.edu/lnacui2api/frame.do?reloadEntirePage=true&rand=1352234505835&returnToKey=20_T15977298755&parent=docview&target=results_DocumentContent&tokenKey=rsh-20.853413.4422267415" \l "n19)

As the protests escalated throughout the country, Roosevelt became more vocal, using his bully pulpit to lash out at big business and to promote workers' rights. Labor organizers felt confident in proclaiming, "FDR wants you to join the union." [n20](http://www.lexisnexis.com.proxy.library.emory.edu/lnacui2api/frame.do?reloadEntirePage=true&rand=1352234505835&returnToKey=20_T15977298755&parent=docview&target=results_DocumentContent&tokenKey=rsh-20.853413.4422267415" \l "n20) With Roosevelt setting the tone, and with allies like Senator Robert Wagner maneuvering in Congress, protests helped win legislation guaranteeing workers' right to organize, the minimum wage, the 40-hour week, laws regulating banks, publics works jobs, and farm subsidies.

Likewise, the civil rights movement and liberal politicians formed an awkward but effective alliance. Today, Reverend Martin Luther King is revered as close to a saint as can be, with his birthday now a national holiday. But even in the early 1960s, many Americans, including President Lyndon Johnson, viewed him as a dangerous radical. He was harassed by the FBI and vilified in the media as an agitator. But the willingness of activists to put their bodies on the line against fists and fire hoses tilted public opinion. The movement's civil disobedience, rallies, and voter registration drives pricked the public's conscience. These efforts were indispensable for changing how Americans viewed the plight of blacks and for putting the issue at the top of the nation's agenda. LBJ recognized that the nation's mood was changing. The civil rights activism transformed Johnson from a reluctant advocate to a powerful ally. At the same time, King and other civil rights leaders recognized that the movement needed elected officials to take up their cause, attract more attention, and "close the deal" through legislation.

Similarly, the victories of the environmental movement starting in the 1970s - such as creation of the Environmental Protection Agency, the Clean Air Act, the Clean Water Act, and the dismantling of nuclear power plants - required activists who knew that a combination of outside protest and inside lobbying, orchestrated by friendly elected officials, was needed to secure reform.

Savvy "outsiders" have understood that legislation is typically a compromise. They have also recognized that compromises can co-opt a movement's ideas and energies with token changes, but they can also be stepping-stones towards more dramatic reform. The impact of legislative reforms depends on the leadership,  [\*692] depth, and persistence of the social movements.

Activists need advocates in the White House and Congress to voice their concerns and pass legislation. But even with such allies, activists have to keep the heat on, be visible, and make enough noise so that policy makers and the media cannot ignore them. To advance a progressive agenda, a widespread grassroots movement - which provides ordinary Americans with opportunities to engage in a variety of activities, from emailing their legislators, to participating in protest - is essential.

# Solvency

#### USDA special category solves development and modeling

**MACED 10** [Mountain Association for Community Economic Development, “Economic Transition in Central Appalachia: Ideas for the Appalachian Regional Development Initiative” April 8, 2010

2. Expand local renewable energy production

Central Appalachia’s historic reliance on coal has also meant little progress in diversifying into renewable energy sources. However, the region possesses real potential for renewable energy from a number of sources. Wind power is possible at a distributed scale and at utility scale on ridgetops in Central Appalachia. At least 3,830 MW of wind potential exists on private land in West Virginia.8 The best wind potential in all of Kentucky is in the counties in the southeastern coalfields.9 A recent National Renewable Energy Laboratory study indicated that at the higher hub heights of modern wind turbines, the wind potential in the region’s states is greater than was often previously assumed.10

Leaders of Kentuckians For The Commonwealth in the towns of Benham and Lynch have launched the Benham and Lynch Community Energy Initiative to address the need for renewable power and energy efficiency in these small former company towns in the heart of the coalfields. The Initiative has partnered with the Massachusetts Institute o Technology and MACED to conduct initial research on the potential of local wind generation. The nearby mountains have the highest wind potential in all of Kentucky. The communities are also pursuing energy efficiency projects, as the town of Benham uses the highest amount of electricity per residential customer of any utility in the state.11 See more about the Benham and Lynch proposal in the appendix. In southern West Virginia, the leaders of Coal River Wind have developed a model and a proposal for a 328 MW wind farm on Coal River Mountain as an alternative to mountaintop removal mining in the same location.12 An economic impact analysis suggests greater long-term jobs and economic impact from the wind farm than from mining--particularly if local production of turbine components can be incorporated.13

Community-scale woody biomass for energy is also a significant opportunity. The ARC estimates that the total annual biomass resources for the Appalachian states at over 108 million tons.14 Solar potential exists in Central Appalachia particularly in distributed applications for solar thermal and solar PV. Small and micro-hydroelectric power has a significant potential. The Idaho National Laboratory has estimated 518 MWa of potential in Kentucky and 484 MWa in West Virginia.15

The region is also a potential site for the manufacturing of components for solar, wind and other energy sources. An ARC report found that counties in Appalachia as a whole currently possess almost 200,000 jobs in parts manufacturing industries that could be modified to produce renewable energy components. Those jobs represent 3,000 manufacturers within the region with the potential to be retooled to become part of the renewable energy industry. 28,000 of those jobs are in counties currently categorized as economically distressed or at risk of becoming distressed.16 Also, non-profits like¶ MACED and the Kentucky Highlands Investment Corporation (KHIC) are providing training, financing and technical assistance for renewable energy entrepreneurs in solar, biofuels and other areas such as through KHIC’s recent Energy Boot Camp program.17

Recommendations:

Provide grant funding and financing for community-scale renewable energy demonstrations in the areas of wind, solar, low-impact woody biomass and low impact hydro.

Community-scale renewable energy production that is locally owned has the potential to maximize the economic benefits of energy production for local communities. In addition, community-scale projects can be high-efficiency, reusing waste heat in the case of biomass projects and minimizing line loss. A program to create local demonstrations across the region, including at public buildings and institutions like hospitals, in small town main street areas, and at a county scale could go a long way in leveraging new beneficial energy activity. A proposal from East Kentucky Biodiesel to create a pilot pyrolysis/gasification facility utilizing biomass grown on former surface mine land, explained on page 19, has the potential to be the first stage of a regional network of community-scale bioenergy production. A wide range of USDA and DOE programs promoting renewable energy and energy efficiency projects could be set aside or repurposed for efforts of this kind.

Expand USDA Rural Utility Service (RUS) financing for renewable energy production (and energy efficiency) to utilities located in Central Appalachia.

President Obama’s 2011 budget proposes additional funds to USDA “to help transition fossil fuel-dependent utilities to renewable energy.”18 Central Appalachian utilities are among the most fossil fuel dependent in the country, reliant on coal in aging power plants for well over 90 percent of their electricity. A 2009 study by the Ochs Center for Metropolitan Studies showed that East Kentucky Power Cooperative, a major provider of electricity in the Appalachian Kentucky, could create 8,750 jobs and inject $1.7 billion into the regional economy through a program of energy efficiency investments and expanded renewable energy capacity.19 A combination of grants and loans through RUS (and similar USDA programs like REDLG) to Central Appalachian utilities could help them begin to make this transition and create new jobs and economic opportunities in the process. One potential step forward in this direction is the new Rural Energy Savings Program legislation filed by in the House by Rep. James Clyburn and in the Senate by Sen. Jeff Merkley.20 It would create a pool of RUS funds for rural electric coops to create on-bill financing programs.

Create a special category and set-aside of USDA Rural Energy for America (REAP) grants and guaranteed loans for renewable energy and energy efficiency projects in Central Appalachia.

The USDA REAP program provides valuable, much needed funds for small businesses, farmers and others to pursue renewable energy projects and energy efficiency improvements. Even with expanded funding for this program, however, valuable projects including ones MACED has helped support are being denied funding. Those projects that are receiving REAP grants are creating important models in the region. Organizations like MACED and the Natural Capital Investment Fund in West Virginia can also provide financing to small businesses that can be packaged with REAP grants, which will help leverage federal dollars and increase impact.

Fund community-based wind monitoring efforts to help communities assess the feasibility of wind power.

Wind power along the ridgelines of Central Appalachia is widely recognized as an important regional opportunity. However, there is a lack of site-specific data for communities to understand the actual opportunities for wind development in the region, holding back project development. A program of grants and equipment loans could help communities better assess these opportunities. Support the establishment of renewable energy component manufacturing in the coalfields of Central Appalachia.

Manufacturing of component parts for the wind and solar supply chain offer some of the greatest economic opportunities for the nation as a whole. However, the lack of manufacturing infrastructure in the heart of Central Appalachia threatens to leave the region out of these opportunities. An initiative should be developed with the goal of establishing at least one significant supply chain manufacturer in the coalfields of Central Appalachia. This initiative should include research to identify if there are any opportunities with existing manufacturers in the region. If no such opportunities arise, the focus should be on the feasibility of establishing a new facility. New approaches like the Cleveland model of community-based, worker-owned companies in new green industries are promising ways to create jobs that help low-income workers accrue long-term wealth.21 A project to establish a model facility in a coalfield community could go a long way in creating good opportunities and promoting a needed discussion about the region’s energy future.

Provide competitive grants for school-based renewable energy projects eligible for schools in Central Appalachia.

A number of potential models exist for renewable energy production at the school level, which can save schools money and create important opportunities for student and community learning. The model of Russell High School in Greenup County, Kentucky, is one example of the use of wind and solar demonstrations to save money and provide training for vocational students. Opportunities also exist to fund fuels-for-schools initiatives (like those in the western U. S.) utilizing local, sustainably harvested woody biomass as a building heat source. Support workforce training and enterprise development in the new renewable energy industries.

MACED and other entrepreneurial development organizations like the Natural Capital Investment Fund have worked with a number of entrepreneurs in the region interested in starting new companies in wind, biomass, or solar. These folks lack access to training that would deepen their understanding of the technologies, and often lack the business management skills to make their fledgling enterprises survive. In Kentucky, for example, state tax credits were recently enacted for renewable energy installations like solar panels, but included requirements that installers be North American Board of Certified Energy Practitioner (NABCEP) certified. Only a handful of people in the entirestate have that certification. Federal workforce and business services dollars could support targeted scholarship, training, and technical assistance programs that could help more renewable energy businesses get off the ground. As mentioned in the energy efficiency section above, the Department of Labor green jobs training programs such as the Green Capacity Building program, Energy Training Partnerships, and Pathways out of Poverty program could be allocated for such investments. Pg. 8-11

#### Disads non unique – wind PTC extension

GARDNER 12 – 31 – 12 Roll Call Staff [Lauren Gardner, Obama Suggests Cliff Deal Would Extend Wind Tax Credit, <http://www.rollcall.com/news/obama_suggests_cliff_deal_would_extend_wind_tax_credit-220432-1.html?pos=hln>]

President Barack Obama signaled Monday that a tentative agreement to avoid the fiscal cliff would also extend a critical tax benefit for the wind power industry.

In an apparent reference to the production tax credit set to expire at midnight, the president said White House and Senate negotiators have agreed to “extend tax credits for clean-energy companies that are creating jobs and reducing our dependence on foreign oil.”

The extension would be part of an agreement to avoid automatic across-the-board income tax increases slated to kick in on New Year’s Day if Congress does not act. The agreement would wrap in a package of tax credit extensions already approved by the Senate Finance Committee, including the production tax credit.

Obama said Monday afternoon that a fiscal cliff agreement between the White House and Senate Minority Leader Mitch McConnell, R-Ky., was close but had not been finalized. McConnell said later on the Senate floor that there had been agreement on tax issues but that other matters had not yet been resolved.

Preserving the tax credit would be a major triumph for the wind power industry. Congressional critics have argued that the industry is now mature enough to survive without the tax benefit. The industry has said the tax break remains critical, though even lobbyists for wind producers have proposed a phase-out over the next few years.

#### Criticisms of wind are ideologically biased and ignore flaws in the current system.

**Sovacool 8** (Benjamin K., Assistant Professor at the Lee Kuan Yew School of Public Policy, part of the National University of Singapore. He is also a Research Fellow in the Energy Governance Program at the Centre on Asia and Globalization. He has worked in advisory and research capacities at the U.S. National Science Foundation’s Electric Power Networks Efficiency and Security Program, Virginia Tech Consortium on Energy Restructuring, Virginia Center for Coal and Energy Research, New York State Energy Research and Development Authority, Oak Ridge National Laboratory, Semiconductor Materials and Equipment International, and U.S. Department of Energy’s Climate Change Technology Program. He is the co-editor with Marilyn A. Brown of Energy and American Society: Thirteen Myths (2007) and the author of The Dirty Energy Dilemma: What’s Blocking Clean Power in the United States (2008). He is also a frequent contributor to such journals as Electricity Journal, Energy & Environment, and Energy Policy, The intermittency of wind, solar, and renewable electricity generators: Technical barrier or rhetorical excuse?, ScienceDire, Utilities Policy 17 (2009) 288–296)

3. Assessing the reliability of conventional power plants

To penalize renewables for their variability, however, **may obscure** **equal** amounts of variability inherent in conventional fossil-fueled and nuclear resources. All electricity systems must respond to the complex interplay of constantly changing supply and demand. They are subject to unexpected failures and outages, and influenced by a large number of planned and unplanned events. While it is certainly true that the output from conventional power plants can be measured quite accurately, researchers from the Lawrence Berkeley National Laboratory and the American Council for an Energy-Efficient Economy noted that virtually ‘‘every other aspect of planning for and implementing that resource is **riddled with uncertainty**’’ (Vine et al, 2007). Three types of uncertainty are most common: unexpected outages, variance in construction costs, and variance in demand forecasts.

3.1. Unplanned outages

Conventional outage rates typically vary from 5 to 20 percent, meaning that units are only available 80–95 percent of the time. Looking at coal generation performance in the United States from 2000 to 2004, the North American Electric Reliability Corporation found that coal plants shut-down for scheduled maintenance 6.5 percent of the year and require unscheduled maintenance or experience forced outages another 6 percent of the year. Their study noted that coal-output is guaranteed on average only 87.5 percent of the time in the United States, with a range of 79–92 percent (NERC, 2005). Amory Lovins from the Rocky Mountain Institute adds that an ordinary nuclear plant, even if it runs perfectly, still shuts down completely for refueling an average of 37 days every 17 months (Lovins, 2007, p. 249). The reliability of nuclear power plants thus rarely exceeds 93 percent. Hydroelectric facilities are prone to alterations in output based on changes in the water cycle such as seasonal rain and runoff from snowpack. Biomass is subject to the seasonal rotation and harvesting of plants and energy crops. Wave and ocean energy technologies, if they ever become viable, will vary their output according to tidal movements (every 12 h and 15 min) and the changing gravitational fields of the moon and sun.

According to a study looking at the British electricity sector conducted by the Imperial College of London, for traditional generators as a whole, ‘‘there is, approximately, a one-in-ten chance that unexpected failures (or forced outages) in power plant or electricity transmission networks will cause any individual conventional generating unit not to be available to generate power’’ (Gross et al., 2006, p. iv). In other words, there is a 10 percent risk that a given future hour of capacity from conventional units will be unavailable or limited in capability due to forced outages and mechanical failures.

Electric generating plants are complex machines after all, and accidents do happen. While some of these risks can be reduced in a purchased power scenario through contractual provisions, those extra provisions increase the cost of the resource and, in any case, cannot eliminate all risk. As Meridium (2007), a utility consulting company, put it:

In today’s competitive market, forced or unplanned outages can be devastating to power producers, who can be exposed to the risk of losing a generating unit during peak demand time. Such a loss could necessitate the immediate purchase of backup power at a replacement cost that could be several hundred times the normal price of power.

For newer technologies such as clean coal systems, the study esti- mates that reliability problems can cost as much as an additional $13 million/year for each plant. When a few nuclear plants in Ohio went unexpectedly down in 1998 as the result of scheduled outages and water shortages, wholesale power prices jumped to $3500/ MWh (Murkowski, 2001, p. 82). The August 2003 blackout also stopped 20 Canadian and American reactors instantly and without warning.

**3**.2. Construction cost variance

Conventional baseload generators are ‘‘lumpy systems’’ in the sense that additions to capacity are made in primarily large lumps (gargantuan power plants, new transmission lines that must connect to them). These plants, unlike smaller and more decen- tralized generators, have long lead times and uncertainties, making planning and construction difficult, especially when the balance of supply and demand can change rapidly within a short period of time. They can also be extremely capital-intensive: a typical 1100 MW light water reactor can cost as much as $3 billion when licensing and construction expenses are included (Fertel, 2004).

Large variance exists between the projected costs and actual costs of conventional power plant construction. Experience has shown that there can be project delays and other unforeseen problems that can lead to considerable cost over-runs and even project cancellations. Generally, the larger the project (in terms of installed capacity and thus cost), the longer it takes to complete and the more it is at risk to unforeseen changes (such as interest rates, labor costs, environmental regulations, etc.). The very fact that large power plants take many years to construct and complete dates are imprecise adds uncertainty to the electric system (Vine et al., 2007).

Nuclear plants provide an excellent illustration. While the industry reports average costs of around $2000 per installed kilo- watt, construction costs have varied extensively from about $1000 per installed kilowatt to six times as much. In Argentina, the 698 MW Attucha II reactor cost $6017 per installed kilowatt, but in Brazil the 626 MW Angra I reactor cost $2874. Reactors projects started, but never finished, in Egypt and Iran have cost about $4000 per installed kilowatt, while at the other end of the spectrum in France and Sweden reactors cost about $1200 (Keepin and Kats, 1988). Keeping in mind that the Nuclear Energy Agency reports that close to 60 percent of the investment needed for a new nuclear project goes towards initial construction (Echavarri, 2007), and construction cost variance becomes a huge issue for investors, utilities, and ratepayers.

3.3. Variance in demand forecasts

Larger, conventional baseload generators, because they take longer to build, are also at greater risk of unexpected changes in electricity demand over long periods of time. We have a hard enough time predicting the weather or the outcome of political elections; imagine the difficulty of projecting how an entire society will demand electricity five, ten, or even twenty years from now. Consider the historical record.

In the 1970s and 1980s, excessively high forecasts of growth in demand for electricity led to overbuilding of generating plants and massive electric system cost over-runs in many states. One infa- mous example was in Washington State, where the Washington Public Power System (WPPS) began a construction program for as many as seven new nuclear power plants in the early 1970s. WPPS believed that regional electricity requirements would grow by 5.2 percent each year well into the 1990s and starting building to meet their projections.

At the same time, the massive flood of nuclear power plant orders flowing in after the 1973 oil crisis caused a massive shortage of skilled nuclear engineers and architects (69 plants were ordered in 1973 and 1974). Problems of plant design, poor craftsmanship, and strikes caused even longer delays. Five-year construction estimates lengthened to ten- and twelve-year periods. One WPPS project started in 1970 did not finish until 1984, and the WPPS annual report in 1981 projected that $23.7 billion was needed to complete one of its plants after $5 billion had already been expended, all the while electricity growth dropped 65.4 percent below original projections (Salsbury, 1991).

WPPS faced financial disaster and all but one of the plants was cancelled, leading to the country’s largest municipal bond default at the time. The entire experience came to be called the ‘‘WHOOPS’’ fiasco (as a play on the WPPS acronym) and is an enduring lesson of the risk associated with investing in large power plants. Consumers across the Northwest are still paying for WHOOPS in their monthly electricity bills.

While WHOOPS is perhaps the most spectacular example, similar ‘‘boom and bust’’ cycles in power plant construction and cost-over-runs occurred in many states during the 1980s, and directly produced the high electricity rates that spurred the ‘‘elec- tric restructuring’’ movement of the mid-1990s. In 1983 Cincinnati Gas & Electric announced that it planned to convert the 97 percent finished William H. Zimmer nuclear plant into a coal-burning facility to cut down cost, and managers converted the nearly completed Midland nuclear plant in Michigan to fossil fuels at the last minute. Between 1972 and 1984, more than $20 billion in construction payments flowed into 115 nuclear power plants that were subsequently abandoned by their sponsors (Cavanagh, 1986).

Nor are cost over-runs limited to nuclear reactors or the 1980s. In November 2006, Duke Energy announced that the price tag for the company’s proposed coal-fired power plants near Charlotte, North Carolina had soared to $3 billion. Just two months prior, the company had reported to state utility regulators that the two plants would cost only $2 billion. Charlotte’s daily newspaper speculated that such a substantial cost discrepancy raised the possibility that the total expense for the plants could continue ballooning during the five years that the utility estimated it would take to build the facilities.

Once large projects get built, their output is often subject to rapidly changing patterns in consumer demand (and thus required load). Weather events such as sudden thunderstorms can persuade customers to switch on lights, just as unexpected hours of sunshine can convince them to turn them off. Millions of people are constantly switching on and off equipmentdtelevisions, lights, computersdthat demand instant power (Murawski, 2006). Thus the entire electric utility system is already built to address variability, just of a different type.

4. Assessing the reliability of renewable power plants

The intermittency of renewable resources does have to be managed, but there are many strong reasons why it is **not a justification** to exclude them from power portfolios. As this section notes, operating experience in the United States shows that solar panels displace peaking units and wind turbines displace base load units. Wind and solar often do so more quickly and with shorter construction lead times that minimize the risks associated with unexpected changes in electricity demand. The rising capacity factors for wind and solar generators have drastically improved their output in the past ten years, meaning that most renewable generators have less unplanned outages compared to conventional units, often exceeding the **97 percent** reliability mark.

4.1. Operating experience

Renewable power generators already displace a significant share of baseload generation, contrary to the beliefs of many within the American electricity industry. The U.S. EIA (2002) has deter- mined that ‘‘the imposition of [a national] renewable portfolio standard [a law mandating the use of renewable generators] would lead to lower generation from natural gas and coal facilities.’’ Examinations of fuel generation in several states confirm this finding. The New York State Energy and Research Development Authority (NYSERDA, 2005) looked at load profiles for 2001 and concluded that 65 percent of the energy displaced by wind turbines in New York would have otherwise come from natural gas facilities, 15 percent from coal-fired plants, 10 percent from oil-based generation, and 10 percent from out of state imports of electricity. Alden Hathaway, Director of Green Power Programs at the Envi- ronmental Resources Trust, found that every new kWh of renew- able generation in Virginia would displace a portfolio of coal, natural gas, and oil facilities (Hathaway, 2006). In Texas, the Union of Concerned Scientists noted that renewable energy technologies primarily displace natural gas and coal facilities (UCS, 2005).

Equally important, but often overlooked, is how renewable generation can offset nuclear power in several regions of the United States. A study sponsored by the North Carolina Utilities Commis- sion determined that renewables would displace facilities relying on nuclear fuels and minimize the environmental impacts associ- ated with the extraction of uranium used to fuel nuclear reactors (Winer et al., 2007). In Oregon, the Governor’s Renewable Energy Working Group (2006) projected that every 50 MW of renewable energy would displace approximately 20MW of baseload resources, including nuclear power. Environment Michigan esti- mates that a 20 percent renewable generator penetration would displace the need for more than 640 MW of power that would have otherwise come from both nuclear and coal facilities (Shriberg, 2006). Utilities in Ontario, Canada, are deploying renewable energy systems in an attempt to displace all coal electricity generation in the region entirely. And in Europe, researchers estimate that a network of wind farms over parts of Europe and Northern Africa could displace about 70 percent of the entire generation portfolio (Czisch and Ernst, 2001).

4.2. Construction lead times

The quicker lead times for solar and wind projects enable a more accurate response to load growth, and minimize the financial risk associated with borrowing hundreds of millions of dollars to finance plants for 10 or more years before they start producing a single kW of electricity. Florida Power & Light says it can take as little as 3–6 months from groundbreaking to commercial operation for new wind farms (Flavin et al., 2006, p. 16). In 2005, Puget Sound Energy proved that FPL’s boast was achievable in practice when it brought eighty-three 1.8 MW wind turbines to its Hopkins Ridge Wind Project from groundbreaking to commercial operation in exactly 6 months and 9 days (Garratt, 2005).

Solar panels can be built in various sizes, placed in arrays ranging from watts to megawatts, and used in a wide variety of applications, including centralized plants, distributed sub-station plants, grid connected systems for home and business use, and off- grid systems for remote power use. PV systems have long been used to power remote data relaying stations critical to the operation of supervisory control and data acquisition systems used by electric and gas utilities and government agencies. Solar installations may require even less construction time than wind or geothermal facilities since the materials are pre-fabricated and modular. Ravis (2007), a project finance manager for TD BankNorth, recently told industry analysts that utility-level PV systems can come online in as little as two months if the panels are available.

Utilities and investors can cancel wind and solar plants easier, so abandoning a project is not a complete loss (and recoverable value exists should the technologies need to be resold as commodities in a secondary market). Smaller units with shorter lead times reduce the risk of purchasing a technology that becomes obsolete before it is installed, and quick installations can better exploit rapid learning, as many generations of product development can be compressed into the time it would take to build one giant power plant. In addition, outage durations tend to be shorter than those from larger plants and repairs for reciprocating gas and diesel engines take less money, time, and skill. As Lovins et al., (2002) concluded, ‘‘tech- nologies that deploy like cell phones and personal computers are faster than those that build like cathedrals. Options that can be mass produced and adopted by millions of customers will save more carbon and money sooner than those that need specialized institutions, arcane skills, and suppression of dissent.’’

4.3. Improved capacity factors

A capacity factor is the ratio of a generating facilities’ actual output over time compared to its theoretical output if it were operating at maximum efficiency. The U.S. EIA (2000) estimated that the average capacity factor for all power plants in the United States was approximately 55 percent. That is, over a long period of time, an average power plant actually contributes to the electricity grid only 55 percent of its theoretical maximum output. Nuclear and hydroelectric generators have boasted the highest capacity factors, occasionally exceeding 90 percent. Coal ranks near the middle, with a capacity factor of about 60 percent. Less reliable natural gas generators have much lower capacity factors of 29 percent, in part, because gas-fired plants are often ‘‘peaking’’ units (i.e., they are designed to have a low capacity factor).

Historically, all forms of electricity generation have followed the same general trend: the more the technologies get deployed, the higher their capacity factor (and the lower their costs). The inter- relationship between rising capacity factors and installed capacity suggests that deploying more clean energy technologies will significantly improve their capacity factors, except with renewables, the ‘‘fuel’’ is free for the taking. Recent experience with wind energy seems to confirm this rule. In 2000, wind turbines reported capacity factors in the low teens. But by 2006, when installed wind energy had more than tripled in the United States, wind turbines registered capacity factors in the high 30 percent range and even the low 40 percent range. Newer wind projects in Oahu, Hawaii, and San Gorgonio, California, have even achieved capacity factors of 36 and 38 percent. In a 2006 analysis, the EIA observed that wind turbine capacity factors appeared to be improving over time and concluded that ‘‘capacity factor grows as a function of capacity growth’’ (Namovicz, 2006).

Solar energy appears to follow this same pattern. In the early 1980s, with 10 MW of solar panels installed globally, the average capacity factor was around 9 percent. By 1995, however, after more than 70 MW had been installed, the average efficiency of panels jumped to almost 15 percent, and in the past five years has sur- passed 21 percent (Kammen, 2004). The central lesson seems to be the more wind and solar technologies get physically deployed, the more efficient they become.

4.4. Less unplanned outages

Closely connected to the improving capacity factor of renewables is their high technical reliability. Modern wind turbines and solar panels have less unplanned outages, operating reliably more than **97.5 percent** of the time (IEA, 2005). Moreover, such high reliability is for one wind turbine, so any amount of significant wind power in an electricity system would never see all (hundreds of thousands of turbines) down at the same time. In fact, the IEA (2005) recently concluded that:

Initially, it was believed that only a small amount of intermittent capacity was permissible on the grid without compromising

system stability. However, with practical experience gathering, for example, in the Western Danish region where over 20 percent of the yearly electricity load is covered with wind energy, this view has been refuted. Bigger units of power plants bring with them the need for both greater operational and capacity reserve since outages cause greater disturbances to the system. The higher the technical availability, the lower the probability of unexpected outages and thus the lower the requirements of short-term operational reserve. Wind power plants actually score favorable against both criteria, since they normally employ small individual units (currently up to 5 MW) and have a record of high technical availability (43–44).

Renewable energy technologies also improve overall system reliability because they tend to be dispersed and decentralized. It is considered a general principle in electrical and power systems engineering that the larger a system becomes, the less reserve capacity it needs. Demand variations between individual consumers are mitigated by grid interconnection in exactly this manner.

Just like consumers average out each other in electricity demand, individual wind farms average out each other in electricity supply. As the European Wind Energy

Association concluded:

Wind power is variable in output but the variability can be predicted to a great extent . variations in wind energy are smoother, because there are hundreds or thousands of units rather than a few large power stations, making it easier for the system operator to predict and manage changes in supply as they appear within the overall system. The system will not notice the shut-down of a 2 MW wind turbine. It will have to respond to the shut-down of a 500 MW coal-fired plant or a 1000 MW nuclear plant instantly (EWEA, 2005, pp. 7–9).

In other words, the modular and dispersed nature of technologies such as wind and solar improves overall system reliability because outages, when they rarely to occur, can be better managed.

One study, conducted by the nonpartisan Midwest ISO, pro- jected the operation of 152 wind sites (nominally 40 MW each) in the state of Minnesota, and calculated their operation every 5 min as the simulation progressed through three years. The study found that the additional cost of reserves required to manage the overall system were about one tenth of a cent/kWh. As the study noted:

Wind generation does make a calculable contribution to system reliability in spite of the fact that it cannot be dispatched like most conventional resources . The addition of wind generation to supply 20 percent of Minnesota retail electric power can be reliably accommodated by the electric power system (EnerNex and MISO, 2006, p. xiii, xxi).

A similar assessment performed by General Electric for the New York ISO investigated a 10 percent wind penetration scenario in New York State, or the addition of about 3300 MW of nameplate wind capacity on a 33,000 MW peak-load system. Researchers also assumed that wind capacity was located across 30 different sites. The study found ‘‘no credible single contingency’’ that led to a significant loss of generation, and that since the system was already designed to handle a loss of 1200 MW due to the unreli- bility of conventional generators, it had more than enough resil- iency to enable the incorporation of wind (Piwko et al., 2005). This could be why even though the United States has more than 12,000 MW of installed wind capacity, not a single conventional unit has been installed as a backup generator (DeMeo et al., 2005).

4.5. Effective load carrying capability

Not all electricity is created equal. A better metric for deter- mining the availability of electricity resources in any given region is the ‘‘effective load carrying capability,’’ or ELCC. The ELCC refers to the difference between the amount of energy a generating unit produces and the amount of energy that can actually be used by consumers at any given time (Perez, 1996). For example, nuclear and hydropower units have relatively low ELCCs because they are producing about the same amount of electricity 24 h a day. In times of low demand, these units are throttled back or shut-down.

Photovoltaics have great value as a reliable source of power during extreme peak-loads. Substantial evidence from many peer- reviewed studies demonstrates an excellent correlation between available solar resources and periods of peak demand. Because solar generators tend to produce the greatest amount of energy during the same times consumer demand is highest, solar has an amazingly high ELCC relative to other technologies (Perez, 1996). In many parts of the country, solar PV has an ELCC above 70 percent. In many parts of the Southeast, solar’s ELCC exceeds 60 percent (Silcker, 2004). Researchers in Sacramento, California, estimated that the ELCC for solar PV within the city was so high that the actual value of solar energy was more than $6000/kW (Robertson and Cliburn, 2006). That is, because solar PV generated electricity at periods of high demand, its value was greater than electricity generated by other units throughout the day.

NREL researchers compared the recorded ELCC of solar PV deployed by utilities in nearly every region of the country to earlier theoretical estimates of ELCC. Not only did NREL find that actual ELCC closely matched expectations, its analysis demonstrates that valuable amounts of solar PV are available in every region of the United States (Perez et al., 2006). In California, a PV array with a capacity of 5000 MW reduces the peak-load for that day by about 3000 MW, cutting in half the number of natural gas ‘‘peakers’’ needed to ensure reserve capacity (Herig, 2002).

4.6. Spatial diversification

Perhaps incongruously, no less than **nine studies show** that the variability of renewables becomes easier to manage the more they are deployed (not the other way around, as some utilities suggest). In one study conducted by the Imperial College of London, researchers assessed the impact that large penetration rates (i.e., above 20 percent) of renewable energy would have on the power system in the United Kingdom. The study found that the benefits of integrating renewables would far exceed their costs, and that ‘‘intermittent generation need not compromise electricity system reliability at any level of penetration foreseeable in Britain over the next 20 years.’’ Let me repeat this conclusion for emphasis: renewable energy technologies can be integrated at any level of foreseeable penetration without compromising grid stability or system reliability.

A second study noted that when done on a regional scale, renewables contribute to overall system reliability slightly more. Engineers in Ontario, Canada, assessed the impact of 20 percent wind penetration on its regional electricity grid (AWS, 2005). The study accounted for seasonal wind and load patterns, daily wind and load patterns, changing capacity value for delivering power during peak-load, and geographic diversity. It used wind and load data for May 2003 to April 2004, and concluded that the more wind that existed on the system and the more geographically dispersed it was, the more it reduced volatilitydin some cases by up to 70 percent.

A third study conducted a meta-analysis of utility experience with large wind farms in six locations: Xcel Energy North in Min- nesota; the California ISO in Northern California; We Energies in Wisconsin; PacifiCorp in Oregon and Wyoming; NYISO in New York; and Xcel Energy West in Colorado (DeMeo et al., 2005). The authors argue that modern wind plants help grid operators handle major outages and contingencies elsewhere in the system, since they generate power in smaller increments that are less damaging than unexpected outages from large plants.

A fourth study from the European Wind Energy Association assessed the wind portfolios of all major European power providers and concluded the same way, noting that:

A large contribution from wind energy . is technically and economically feasible, in the same order of magnitude as the individual contributions from the conventional technologies developed over the past century. These large shares can be realized while maintaining a high degree of system security (EWEA, 2005, p. 13).

In California, Kahn (1979) investigated the reliability and ELCC of arrays of different generators in California, varying from 2 to 13 connected sites. He found that most parameters, such as the availability of wind and capacity factor, improved as the size of the array increased.

Looking inversely at the risk of sudden reductions in wind availability, another study from Stanford University demonstrated that the frequency of zero- and low-wind events over a network of eight sites in the central US was less than 2 percent (Archer and Jacobson 2003). Seventh, the American Wind Energy Association compared wind power capacity factors from individual wind farms with an array of 28 interconnected sites in the central United States and concluded that interconnection reduced variability in energy production by a factor of 1.75–3.4 (Simonsen and Stevens, 2004). The authors also found that the combined energy output from interconnected sites had a smoother diurnal pattern and maximum output in the afternoon, during the peak time of electrical demand.

Eighth, Archer and Jacobson (again from Stanford University) looked at the benefits of interconnecting wind farms at 19 sites located in the Midwestern United States and found that an average of 33 percent and a maximum of 47 percent of yearly averaged wind power from interconnected farms can be used as reliable, baseload electric power. They concluded that almost all parameters from wind power showed substantial improvements as the number of interconnected sites increased, including standard deviations of array-average wind speed and wind power, reliability, and the need for energy storage or reserve capacity. They also found no satura- tion of benefits, meaning that positive marginal improvements always occurred as the number of interconnected farms increased (Archer and Jacobson, 2007).

Ninth, when interconnecting wind and solar farms is not prac- ticable or possible, such systems can be integrated with energy storage technologies to operate as baseload plants. Paul Denholm and his colleagues from NREL note that attaching wind turbines to compressed air energy storage technologies can improve their capacity factor above 70 percent, making them ‘‘functionally equivalent to a conventional baseload plant’’ (Denholm et al., 2005). Pumped hydro storage systems can also improve the potential of renewables to offset baseload generation. Bonneville Power Administration, a large federal utility in the Pacific North- west, uses its existing 7000 MW hydroelectric and pumped hydro storage network to do just that. Starting in 2005, Bonneville offered a new business service to ‘‘soak up’’ any amount of intermittent renewable output, and sell it as firm output from its hydropower network one week later. Such storage technologies can have greater than 1000 MW of capacity (depending on location), and operate according to fast response times and relatively low operating costs. Pumped hydro and compressed air storage systems are already commercially available and offer a combined 22.1 GW of installed capacity in the United States (University of Oregon, 2001).

Each of these studies suggest that significant benefits occur with the geographic dispersion of renewable energy technologies, espe- cially if winds, sunlight, and other renewable fuels vary considerably over large regions. Claiming that the variability of renewable energy technologies means that the costs of managing them are too great has **no factual basis** in light of the operating experience of renewables in Denmark, Germany, the United Kingdom, Canada, and a host of renewable energy sites in the United States.

5. Conclusions

Conventional power systems suffer variability and reliability problems, just to a different degree than renewables. Conventional power plants operating on coal, natural gas, and uranium are subject to an immense amount of variability related to construction costs, short-term supply and demand imbalances, long term supply and demand fluctuations, growing volatility in the price of fuels, and unplanned outages. Contrary to proclamations stating other- wise, the more renewables that get deployed, the more not less stable the system becomes. Wind- and solar-produced power is very effective when used in large numbers in geographically spaced locations (so the law of averages yields a relative constant supply). The issue, therefore, is not one of variability or intermit- tency per se, but how such variability and intermittency can best be managed, predicted, and mitigated.

Given the **preponderance of evidence** referenced here in favor of integrating renewable(s), utility and operator objections to them may **be less about tech**nical limitations and more about tradition, familiarity, and arranging social and political order. The work and culture of people employed in the electricity industry promote ‘‘business as usual’’ and tend to culminate in dedicated constitu- encies that may resist change. Managers of the system obviously prefer to maintain their domain and, while they may seek increased efficiencies and profits, they do not want to see the introduction of new and disruptive ‘‘radical’’ technologies that may reduce their control over the system. In essence, the current ‘‘technical’’ barriers to large-scale integration of wind, solar, and other renewables may not be technical at all, and more about the social, political, and practical inertia of the traditional electricity generation system.

#### ADVANTAGE one: coal

#### Mountaintop removal coal mining is decimating Appalchia. Wind is key to a sustainable transition.

**Haltom 10** - Co-director of Coal River Muntain Watch [Vernon Haltom, “Can a Wind Farm Transform Appalachia's Energy Future?,” Solutions Journal, Volume 1 | Issue 4 | Page 71-77 | Jul 2010, pg. http://tinyurl.com/9e3fyr8

The communities of the Coal River Valley suffered a heartbreaking catastrophe on April 5, 2010, when Massey Energy's Upper Big Branch longwall mine exploded, killing 29 miners in the worst U.S. mine disaster in 40 years. The disaster at Upper Big Branch should remind the nation that with our current dependence on coal for electricity generation comes a responsibility to ensure that miners and the surrounding communities are protected from the negligence of company executives. At Coal River Mountain Watch, we want to take the debate a step further by offering an alternative vision for the community, one that has the potential to transform Coal River Valley and offer a powerful symbol of a viable energy future for the nation.

In March 2008, local residents banded together to fight for a wind farm instead of a mountaintop removal coal mining site operated by Massey. Generations of residents around Coal River Mountain have seen the detrimental effects of reliance on one industry. The boom-and-bust cycles of coal have caused bustling communities to become ghost towns. With the current reliance on technology such as longwall mining and mountaintop removal, miners have largely been replaced with machines and explosives. In 1980, 55,500 miners in West Virginia extracted over 121 million tons of coal, while in 2008, only about 21,000 miners extracted nearly 166 million tons. Comparing a map of the counties that have yielded the most coal to the Appalachian Regional Commission's map of distressed counties illustrates a clear correlation. Contrary to industry claims that coal provides prosperity, economic facts indicate that it provides poverty. Presently the state has a 9.5 percent unemployment rate, while less than 4 percent of the workforce is employed by mining and logging.

The plan for Coal River Mountain would destroy over 6,000 acres of the mountain, bury streams with 18 valley fills, destroy water supplies, and eliminate sustainable resources, including the commercial wind potential. The mountaintop removal operation would provide coal and temporary mining jobs for only 17 years. In contrast, a wind farm would preserve the abundant timber and non-timber forest products, protect the water, allow traditional and new sustainable economic opportunities, and provide clean energy and green jobs forever.

As we call on our leaders to reduce carbon emissions and to invest in the development of clean energy sources, we must also call on them to invest in the future of the miners and the communities that have provided the energy upon which our nation was built and continues to be fueled today. This means asking the federal government to reinvigorate the original intent of the Appalachian Regional Development Initiative, strengthen the capacity and purview of the Appalachian Regional Commission, and invest in the health, education, training, entrepreneurship, and environment of Appalachian communities and residents. It means addressing the root causes of persistent poverty and unemployment in the region and not being afraid to anger the coal industry and the local and state politicians who uphold it to the detriment of the citizens and the miners. But most of all, it calls for making a commitment to a sustainable economic transition for the coalfields and supporting every means possible to achieve it.

Building a Positive Vision

Coal River Mountain lies at the western end of Raleigh County, in the heart of the Coal River watershed, and is bounded by the two major tributaries of the Big Coal River: Marsh Fork on the south and west of the mountain and Clear Fork on the north and east. Kayford Mountain, where thousands of acres of mountaintop have been removed, lies across the Clear Fork to the north, and Cherry Pond Mountain, likewise devastated by mountaintop removal, lies across the Marsh Fork to the southwest. Several small, unincorporated towns—Rock Creek, Naoma, Sundial, Birchton, and Pettus—lie along the Marsh Fork, and the towns of Artie, Colcord, and Dorothy are situated along the Clear Fork. Whitesville, at the eastern edge of Boone County, sits just below the convergence of the two tributaries at the western edge of the mountain. Coal River Mountain itself has long been home to underground mines, a few small, old strip mines, and, since 1995, the Brushy Fork slurry impoundment. However, most of the mountain remains relatively unspoiled and has provided generations of residents with lumber, firewood, berries, ginseng and other valuable medicinal herbs, wild game, and fish. From the air, the Coal River Mountain stands in lush contrast to its barren, dusty neighbors.

The Upper Big Branch mine, the site of the recent disaster, lies beneath the expansive Twilight surface mine complex on Cherry Pond Mountain, just across from Coal River Mountain. In 2006, Massey Energy quietly received approval for the Bee Tree surface mine on Coal River Mountain. In the latter months of 2006, David Orr, a professor at Oberlin College in Ohio and a prominent environmental advocate and writer, worked with CRMW's North Carolina–based ally Appalachian Voices to commission a study of the wind potential on Coal River Mountain. WindLogics, a nationally recognized wind modeling and development firm, conducted the study and found that the ridges along Coal River Mountain exhibited strong Class 4 to Class 7 average annual wind speeds. Class 4 winds serve as a minimum threshold for industrial-scale wind development. When Massey applied for the Eagle 2 Surface Mine, the second of four planned permits on the mountain, Coal River Mountain Watch requested and was granted an informal conference in August 2007 for citizens to voice their opposition to the proposal. Nearly 100 residents attended the hearing, and over 30 spoke out against the permit. None spoke in favor of it. In 1997 and 2001, several Clear Fork residents had endured heavy flooding, exacerbated by runoff from mountaintop removal and valley fills on the opposite side of the Clear Fork. They feared the destruction of their community if both sides of the valley were dominated by streams buried under valley fills. Several citizens voiced support for a wind farm as an alternative to mountaintop removal. Dr. Matt Wasson of Appalachian Voices described the WindLogics study and provided copies to decision makers at the Department of Environmental Protection.

Seizing the opportunity offered by the mountain's wind resources, members of Coal River Mountain Watch, with the support of the Ohio Valley Environmental Coalition, Appalachian Voices, the Sierra Club, and the Student Energy Action Coalition, came together in March 2008 to make plans for a wind farm. Using the WindLogics wind map of the mountain, and with technical advice provided by the National Renewable Energy Laboratory and the American Wind Energy Association, CRMW's wind project coordinator, Rory McIlmoil, constructed a model wind farm utilizing ArcGIS and Google Earth software. The model suggested that Coal River Mountain had enough wind potential and land area to accommodate 220 two-megawatt wind turbines, resulting in a total generation capability of 440 megawatts. Meanwhile, CRMW's community organizer, Lorelei Scarbro, provided information about the project and hosted community meetings that generated substantial local support. The two, along with supportive community members, made presentations to elected and appointed leaders, from the city level to the governor's office, and held a rally at the state capitol that resulted in more than 10,000 signatures on a petition. The project received Co-op America's 2008 Building Economic Alternatives award. CNN reported on the project and interviewed CRMW organizer Lorelei Scarbro at her home and at the adjacent family cemetery on Coal River Mountain.

To determine what was at stake, Coal River Mountain Watch commissioned Downstream Strategies, an environmental consulting firm from Morgantown, West Virginia, to conduct a comparative economic analysis of the costs and benefits of mountaintop removal and wind development on Coal River Mountain.

That study concluded that a 328-megawatt wind farm, enough to power 70,000 homes, would generate more long-term jobs and significantly greater local tax revenues than the proposed mining would, while imposing far fewer costs on human health and the environment. In fact, the study estimated that the externalized costs of the proposed mining, which would be drained from the local economy, would amount to $600 million over the life of the mining and beyond. According to the Downstream Strategies executive summary,

"For each scenario, the local economic benefits are quantified based on increased jobs, earnings, and economic output. In addition to these economic benefits, costs due to excess deaths and illnesses from coal production and local environmental problems are quantified and added to earnings to demonstrate how each scenario impacts the citizens of Raleigh County.

Other externalities—including global environmental costs; forestry; tourism; property values; and gathering, hunting, and heritage—are not quantified in this report. However, quantification of these additional externalities would tend to favor the development of a wind farm over mountaintop removal mines."

The wind farm would provide nearly 50 times the tax revenue to the county that a mountaintop removal site would: $1.74 million per year from the wind farm's property tax revenues, compared to $36,000 per year for 17 years from the mountaintop removal operation. And the wind farm would provide at least 277 temporary construction jobs and 39 permanent jobs, while the jobs provided by the Massey surface mine would fluctuate in number from 79 to 248 and continue for only 17 years. The wind farm would also allow underground mining to continue.

The study also illustrated the root of the social and economic problems that have plagued coalfield communities ever since the coal industry moved in: the only beneficiaries of the mountaintop removal option would be Massey Energy and the two private land companies that own over 90 percent of the land and coal, whereas the wind farm would benefit the people—the residents of the entire county.

When the wind farm project organizers presented the study results to the Raleigh County Commission, they brought as visual aids two giant checks: one for $1.74 million per year forever from a wind farm, and one for $36,000 per year for 17 years from a mountaintop removal operation. The commission refused to take a position that would pit another energy source against coal. Commissioner John Aliff said, "To be quite honest, the coal industry has been good for the commission."

In the 2009 West Virginia legislative session, 41 of the state's 100 delegates co-sponsored a resolution in support of the wind project. This included four of the five delegates representing Raleigh County, where the wind farm is proposed. Again, coal lobbyist pressure and coal-friendly legislators ensured that the resolution died in committee.

However, local, national, and international support rose to new levels. As the threat to the mountain increased, community members lobbied for the wind resolution and joined with other national allies like Rainforest Action Network and Citizens Lead for Energy Action Now (CLEAN) in an e-mail campaign to West Virginia's governor, Joe Manchin, the West Virginia Department of Environmental Protection (WVDEP), the Environmental Protection Agency (EPA), and the White House to halt mountaintop removal and valley fill permits on the mountain. The EPA has responded to the groups' concerns and is currently investigating operations on Coal River Mountain. In February 2009, NASA climate scientist James Hansen posted a short paper entitled "Tell President Obama about Coal River Mountain." He and actress/activist Daryl Hannah spoke at a June 23, 2009, rally for clean energy at the base of the mountain. Robert F. Kennedy, Jr., headlined a December 7, 2009, rally where hundreds gathered to defend Coal River Mountain. Coal River Wind put a public service announcement on hulu.com, where it can be seen by millions, and collaborated with Appalachian Voices and Google Earth to create a virtual flyover tour and description of the Coal River Wind project. The virtual flyover was shown to delegates at the 2009 international climate conference in Copenhagen and is part of a series of Google Earth "tours" that illustrate climate change issues and solutions. The series includes only a couple of projects per continent. The online petition presently has over 17,000 signatures.

Citizen activists have also taken action to shut down the blasting where federal and state officials did not. For nine days in January 2010, two activists associated with the Mountain Justice movement and Climate Ground Zero campaign lived on platforms 60 feet high in trees near the blasting area. In spite of continuous air horn harassment, the two remained until voluntarily coming down in advance of an imminent winter storm. Activists engaged in dozens of other acts of nonviolent civil disobedience in 2009 and 2010 in the Coal River Valley, resulting in over 120 arrests. In addition to the tree-sit, seven actions took place on Coal River Mountain, ranging from simple trespass to activists chaining themselves to equipment.

The Next Steps in the Campaign

Surface mining has now begun on a small portion of Coal River Mountain. But there is still a chance to preserve the mountain for wind power. So far, the CRMW campaign's biggest problem has been the intransigence of Massey Energy. If the cloud created by the Upper Big Branch disaster has any silver lining, it is the national scrutiny brought to bear on mine safety and the belated return of government regulation. As we are finding out, loopholes in mining regulations and lax enforcement allowed Massey Energy to avoid strengthened oversight and inspection, which could have prevented that tragedy.

But federal regulators in the Mine Safety and Health Administration (MSHA), and our elected politicians in Congress and the White House, allowed those loopholes to remain. For example, MSHA regulators ordered Massey to withdraw miners 61 times since the beginning of 2009. In 2009, more than 10 percent of MSHA's enforcement actions at this mine were for "unwarrantable failure" to comply with safety regulations—five times the national average of about 2 percent. In its preliminary briefing to President Obama, MSHA said, "In what is perhaps the most troubling statistic, in 2009, MSHA issued 48 withdrawal orders at the Upper Big Branch Mine for repeated significant and substantial violations that the mine operator either knew, or should have known, constituted a hazard. Massey failed to address these violations over and over again until a federal mine inspector ordered it done. The mine's rate for these kinds of violations is nearly 19 times the national rate." Massey CEO Don Blankenship tried to downplay the severity of the violations, saying that "violations are unfortunately a normal part of the mining process."

A buildup of methane, and possibly coal dust, stands out as a likely cause of the explosion, and the Wall Street Journal reported that the investigation will consider the effects of mountaintop removal blasting above the mine, which may have affected seals. Politicians such as Senator Robert C. Byrd have weighed in, and New York State Comptroller Thomas DiNapoli has called for Blankenship to resign.

In 2008, Massey Energy sought and received permission from the WVDEP to revise a permit on Coal River Mountain. The revision allows coal extraction on a small portion of the mountain without the need for a valley fill. However, the WVDEP did not consider the revision significant enough to allow public comment or a public hearing, and ignored the revision's effects on the remainder of the permit.

On April 1, 2010, the EPA delivered the best news yet for the campaign, issuing strict guidance for limiting water pollution from valley fills. The guidance focused on conductivity, a measure of dissolved pollutants in the water. The limit is so strict that EPA Secretary Lisa Jackson said, "You're talking about no, or very few, valley fills that are going to meet standards like this…. The intent here is to tell people what the science is telling us, which is it would be untrue to say that you can have numbers of valley fills, anything more than, say, very minimal valley fills, and not expect to see irreversible damage to stream health."

In addition to the impacts on stream chemistry, the guidelines consider environmental justice impacts to human communities. While they are still open for public comment, including comment from pro-coal politicians, and have not been finalized, the guidelines took effect immediately and apply to new permits and renewal permits. Along with the new guidelines, the EPA provided scientific documentation of the impacts mountaintop removal has on stream health, echoing a January 2010 study published in the journal Science by several renowned scientists that calls for a ban on mountaintop removal.

This news greatly improves the odds for Coal River Mountain's survival. Massey's original proposed permits included at least 18 valley fills that would fill a total of nine miles of headwater streams with mining waste laden with toxic heavy metals. If Massey were prohibited from filling the valleys, the scale of surface mining would be drastically reduced, preserving most of the mountain for a wind farm. The new requirements could lead Massey and the land companies to renegotiate their contracts, preserving the surface for a profitable wind farm while still allowing underground mining.

While citizens find encouragement in the EPA's new guidance, they also recognize the fact that mountaintop removal is still allowed and that a new administration could rescind this guidance. To make curtailment of mountaintop removal last, CRMW and other citizen groups are still pushing the Clean Water Protection Act (CWPA) in the U.S. House of Representatives and the Appalachia Restoration Act (ARA) in the Senate, which would curtail mountaintop removal.. The CWPA presently has 170 cosponsors and the ARA has 11. This progress is largely due to citizen lobby days sponsored by the Alliance for Appalachia, a 13-group regional coalition of which Coal River Mountain Watch is a core member. The Alliance conducts an annual lobby week, providing training and congressional meetings for approximately 200 citizens, and several mini-lobby events throughout the year. The Alliance also arranges meetings with government agencies, such as the EPA and the Office of Surface Mining Reclamation and Enforcement.

Appalachian Transition

We still need your help to ensure that the changes taking place through EPA regulation stick. Anyone can take action and sign our petition at [www.coalriverwind.org](http://www.coalriverwind.org). Citizens all over the country can ask the EPA to deny any valley fill permits on Coal River Mountain that may be submitted, and everyone can contact their U.S. representatives and senators and ask them to support the Clean Water Protection Act and the Appalachia Restoration Act.

Coalfield communities need options for employment and livelihood beyond coal. The focus should be on giving them a choice and providing measures and incentives to support the development of those choices. It is time to turn our eyes toward Appalachia as an engine of transition and a model of sustainability, rather than a source of sorrow. If that means that the rest of the country has to pay a higher price for electricity due to a strengthening of oversight and enforcement of coal mine regulations, and if it means having more of our tax dollars go toward supporting economic transition in the coalfields, then for the sake of the miners and the future of Central Appalachian communities, that is a price we should be willing and honored to pay.

Eventually, more likely sooner than the rosy estimates of the coal industry, the coal is going to run out. According to the federal Energy Information Administration, coal production in Central Appalachia is expected to decline by nearly half within the next 10 years due to the depletion of the most accessible, lowest-cost coal seams. Another report by Downstream Strategies, titled "The Decline of Central Appalachian Coal and the Need for Economic Diversification," notes that "should substantial declines occur as projected, coal‐producing counties will face significant losses in employment and tax revenue, and state governments will collect fewer taxes from the coal industry." Without a strong focus on supporting economic transition in Central Appalachia, local economies will rapidly decline along with coal production.

Because of this, the report suggests that "state policymakers across the Central Appalachian region should…take the necessary steps to ensure that new jobs and sources of revenue will be available in the counties likely to experience the greatest impact from the decline. While there are numerous options available, the development of the region's renewable energy resources and a strong focus on energy efficiency offer immediate and significant opportunities to begin diversifying the economy."

The decisions we make now in the region will determine whether we make the best use of those renewable resources or squander the opportunity, whether we provide for long-term sustainability for communities or ravage them, and whether we preserve a planet that can support our civilization or plummet headlong into climate catastrophe. Coal River Mountain still stands as a majestic, tangible symbol of these clear choices, but it requires the decision of more citizens to make that phone call, write that letter, make that donation, and turn off that light in order to remain standing.

#### Two impacts.

#### First, ecosystems.

#### Mountain top removal is a threat to global ecological integrity

**Winston 09** – MS in Environmental Studies from Ohio University [Laurie E. Winston, Clean Coal Technology: Environmental Solution or Greenwashing? A thesis presented to the faculty of the College of Arts and Sciences of Ohio University In partial fulfillment of the requirements for the degree Master of Science, August 2009

Mountaintop removal devastates communities, destroys plant and animal life, and¶ pollutes our water and air. It also results in what may seem like an obvious effect: the removal of entire mountaintops. The central Appalachian regions of West Virginia and Kentucky are home to some of the most diverse plant and animal species on the planet, including many invertebrate species who live in very few locations worldwide and depend on the Appalachian environment (Burns, 2007). The Appalachian deciduous forests are the second most diverse ecosystem in the world behind the tropical rainforest. When mountaintop forests are turned into grasslands, serious ecosystem alteration results, affecting much more than just the Appalachian region. Ecosystem fluctuations cause changes in migrating birds, insects, aquatic species, and mountain runoff, all of which affects surrounding regions and ultimately the increasingly interconnected world. Mountaintop removal in West Virginia alone has resulted in the elimination or disruption of 244 plant and animal species. The people of Appalachia depend on the forest’s diversity, as¶ they harvest many herbs and medicinal plants from it (Pancake, 2006). Pg. 87-88

#### Biodiversity loss causes extinction

Young 10 – PhD coastal marine ecology, [Ruth, “Biodiversity: what it is and why it’s important”, February 9th, <http://www.talkingnature.com/2010/02/biodiversity/biodiversity-what-and-why/>]

Different species within ecosystems fill particular roles, they all have a function, **they all have a niche**. They interact with each other and the physical environment to provide ecosystem services that are **vital for our survival**. For example plant species convert carbon dioxide (CO2) from the atmosphere and energy from the sun into useful things such as food, medicines and timber. Pollination carried out by insects such as bees enables the [production of ⅓ of our food crops](http://www.talkingnature.com/2010/01/biodiversity/bees-pollination/). Diverse mangrove and coral reef ecosystems provide a wide variety of habitats that are essential for many fishery species. To make it simpler for economists to comprehend the magnitude of services offered by biodiversity, a team of researchers estimated their value – it amounted to $US33 trillion per year. “By protecting biodiversity we maintain ecosystem services” Certain species play a *“keystone”* role in maintaining ecosystem services. Similar to the removal of a keystone from an arch, the removal of these species can result in the collapse of an ecosystem and the subsequent removal of ecosystem services. The most well known example of this occurred during the 19th century when sea otters were almost hunted to extinction by fur traders along the west coast of the USA. This led to a population explosion in the sea otters’ main source of prey, sea urchins. Because the urchins graze on kelp their booming population decimated the underwater kelp forests. This loss of habitat led to declines in local fish populations. Sea otters are a keystone species once hunted for their fur (Image: Mike Baird) Eventually a treaty protecting sea otters allowed the numbers of otters to increase which inturn controlled the urchin population, leading to the recovery of the kelp forests and fish stocks. In other cases, ecosystem services are maintained by entire functional groups, such as apex predators (See [Jeremy Hance’s post at Mongabay)](http://news.mongabay.com/2010/0202-hance_toppredators.html). During the last 35 years, over fishing of large shark species along the US Atlantic coast has led to a population explosion of skates and rays. These skates and rays eat bay scallops and their out of control population has led to the closure of a century long scallop fishery. These are just two examples demonstrating how biodiversity can maintain the services that ecosystems provide for us, such as fisheries. One could argue that to maintain ecosystem services we don’t need to protect biodiversity but rather, we only need to protect the species and functional groups that fill the**keystone roles**. However, there are a *couple of problems with this idea*. First of all, for most ecosystems **we don’t know which species are the keystones**! *Ecosystems are so complex* that we are still discovering which species play vital roles in maintaining them. In some cases its *groups of species* not just one species that are *vital for the ecosystem*. Second, even if we did complete the enormous task of identifying and protecting all keystone species, **what back-up plan would we have** if an unforseen event (e.g. pollution or disease) led to the demise of these ‘keystone’ species? **Would there be another species to save the day** and take over this role? Classifying some species as ‘keystone’ implies that the others are not important. This may lead to the non-keystone species being considered ecologically worthless and subsequently over-exploited. Sometimes we may not even know which species are likely to fill the keystone roles. An example of this was discovered on Australia’s Great Barrier Reef. This research examined what would happen to a coral reef if it were over-fished. The “over-fishing” was simulated by fencing off coral bommies thereby excluding and removing fish from them for three years. By the end of the experiment, the reefs had changed from a coral to an algae dominated ecosystem – the coral became overgrown with algae. When the time came to remove the fences the researchers expected herbivorous species of fish like the parrot fish (Scarus spp.) to eat the algae and enable the reef to switch back to a coral dominated ecosystem. But, surprisingly, the shift back to coral was driven by a supposed ‘unimportant’ species – the bat fish (Platax pinnatus). The bat fish was previously thought to feed on invertebrates – small crabs and shrimp, but when offered a big patch of algae it turned into a hungry herbivore – a cow of the sea – grazing the algae in no time. So a fish previously thought to be ‘unimportant’ is actually a keystone species in the recovery of coral reefs overgrown by algae! *Who knows how many other species are out there with unknown ecosystem roles!* In some cases it’s easy to see who the keystone species are but in many ecosystems seemingly unimportant or redundant species are also capable of changing niches and maintaining ecosystems. The **more biodiverse** an ecosystem is, the more likely these species will be present and the **more resilient** an ecosystem is to future impacts. Presently we’re only scratching the surface of understanding the full importance of biodiversity and how it helps maintain ecosystem function. The scope of this task is immense. In the meantime*, a wise insurance policy for maintaining ecosystem services would be to conserve biodiversity*. In doing so, we increase the chance of maintaining our ecosystem services in the event of future impacts such as disease, invasive species and of course, climate change. This is the international year of biodiversity – a time to recognize that biodiversity makes **our survival on this planet** possible and that our protection of biodiversity maintains this service.

#### Err on the side of protecting hotspots

Nautiyal & Nidamanuri 10—Centre for Ecological Economics and Natural Resources @ Institute for Social and Economic Change & Department of Earth and Space Sciences @ Indian Institute of Space Science and Technology [SUNIL NAUTIYAL1 & RAMA RAO NIDAMANURI “Conserving Biodiversity in Protected Area of Biodiversity Hotspot in India: A Case Study,” International Journal of Ecology and Environmental Sciences 36 (2-3): 195-200, 2010

The hotspots are the world’s most biologically rich areas hence recognized as important ecosystems not important only for the rich biodiversity but equally important for the human survival as these are the homes for more than 20% of the world’s population. India got recognition of one of the mega-diversity countries of world as the country is home of the two important biodiversity hotspots: the Himalaya in north and the Western Ghats in the southern peninsula. Policy makers and decision takers have recognized the importance of biodiversity (flora and fauna) and this has resulted to segregate (in the form of protected areas) the rich and diverse landscape for biodiversity conservation. An approach which leads towards conservation of biological diversity is good efforts but such approaches should deal with humans equally who are residing in biodiversity hotspots since time immemorial. In this endeavor, a study was conducted in Nagarahole National Park of Nilgiri Biosphere Reserve, in Karnataka. Our empirical studies reveal that banning all the human activities in this ecosystem including agriculture, animal husbandry has produced the results opposite to the approach ‘multiple values’ of national park. To monitor the impact, existing policies have been tested from an economic and ecological view-point. Unfortunately, the local livelihoods (most of them belongs to indigenous tribes) in the area have received setbacks due to the implementation of the policies, though unintentionally. However, the ecological perspective is also not showing support for the approach and framework of the current policies in the hotspots. Satellite data showed that the temporal pattern of ecosystem processes has been changing. An integrated approach for ecosystem conservation and strengthening local institutions for sustainable ecosystem management in such areas is therefore supported by this study.

#### Second, exports

#### Coal exports are increasing - the Appalachian coal economy is key

Markey, ’12 [Edward Markey, ranking member of the House Natural Resources Committee. “Our Pain, Their Gain”, congressional report. July 19 2012. http://democrats.naturalresources.house.gov/sites/democrats.naturalresources.house.gov/files/documents/Our\_Pain\_Their\_Gain1.pdf]

A more truthful ad would unplug the power cord and replace it with an oceangoing freightliner bound for steel mills and power plants across Europe, South America, China and India. 1 The image of the ship leaving an export terminal would then dissolve into the naked remains of what used to be a majestic Appalachian mountain. As the camera zoomed out to show the buried remains of streams and rivers and hillsides stripped bare by mining, the announcer would tell the viewer about a dramatically changing industry that is depending more and more on exports to survive.

Coal exports have nearly doubled since 2009 to 107 million tons last year, now accounting for almost 12 percent of U.S. production. 2 Three out of every four tons that are exported come from the Appalachian region, 3 and often this coal is produced by mountaintop removal mining—a devastating practice that has blanketed communities with soot, contaminated drinking water, and destroyed 2,000 miles of streams.

The Democratic staff of the House Natural Resources Committee obtained mine-specific export data that show how many of the region’s surface mines, including mountaintop removal mines, have accelerated exports in recent years as the marketplace moves to cheaper and cleaner alternatives to generate electricity. 4

 Ninety-seven mountaintop removal, steep slope and surface mines in West Virginia, Pennsylvania, Kentucky and Virginia exported American coal overseas in 2011, compared to 73 in 2008.

Specifically, the data show:

 Coal exports from surface mines in these four states have grown by 91 percent since 2009

to 13.2 million tons in 2011.

 Twenty-five of these mines exported more than half of their production in 2011. And six of these mines exported nine out of every 10 tons they produced last year.

 Overall, these 97 mines exported 27 percent of their production in 2011. In 2008, mines participating in the export trade sent 13 percent of their production overseas.

The Energy Information Administration and the U.S. Mine Safety and Health Administration provided the data used for this analysis. 5 The data only include coal sold directly from mines— about three-quarters of total U.S. exports in 2011—and does not include coal exported by thirdparty trading and brokerage firms such as XCoal 6 that have become major players in U.S. export markets. That means exports from these mines are even higher than what’s reported here.

Falling U.S. demand for coal is driving this spike in exports. U.S. power plants are shifting away from coal in favor of newly abundant supplies of natural gas and clean renewable energy. Six years ago, coal produced half of America’s electricity. Today, it’s down to a little over a third, and still falling. Electricity from natural gas, meanwhile, has grown from 18 percent of U.S. power to 27 percent. And wind has gone from almost nothing to producing 3 percent of our power.

Appalachian mining companies are at a particular disadvantage in this transition because easily accessible reserves have been mined out after a century of intense production. Coal-fired utilities also prefer lower sulfur coal from Wyoming’s Powder River Basin. However, foreign countries like China, India, and Brazil, which have far weaker clean air standards than the United States, are still ready to buy.

#### Massive coal exports now

WSJ, 2/6/13 [“U.S. Coal Finds Warm Embrace Overseas”. <http://online.wsj.com/article/SB10001424127887323644904578271830563979920.html>]

The rise in American coal exports is yet another side effect of the shale-gas revolution in the U.S., itself a result of advances in drilling techniques.

The glut of cheap natural gas has knocked coal off its dominant perch as a source of fuel for U.S. power plants. Tougher environmental rules are also squeezing coal mining in the U.S., and President Barack Obama's inaugural address hinted at more greenhouse-gas regulation to come.

U.S. coal is finding a ready market in countries where natural gas is three to five times more expensive.

For decades, the U.S. has exported high-quality metallurgical coal used in steel mills. But now the growth is coming from steam coal, the kind that's burned in power plants.

Two years ago, barely one-tenth of the coal exported from the port here, known as Hampton Roads, was steam coal. Through the first nine months of 2012, steam coal accounted for about one-third of the total.

Rick Cole, the president of Dominion Terminal Associates, pointed out evidence of the shift on a recent drizzly morning. He carefully nosed his red Toyota Prius around sludgy puddles toward a ziggurat-shaped, crumbly mountain. "That's good steam coal right there, with all those big lumps in it. I would bet money that coal was mined in East Kentucky," he said.

The coal was waiting to be loaded on ships like the 92,000-ton Crystal Tiger, a Panama-flagged bulk carrier that before sunrise would swallow almost 40,000 tons of coal and head out into the Atlantic. A hand-painted motto dominates the stairway at the terminal headquarters: "Coal for the World."

Environmentalists say exporting coal amounts to sending U.S. greenhouse-gas emissions overseas. Groups such as Greenpeace and the Sierra Club have opposed half a dozen coal-export terminals planned for the West Coast to ship coal to China.

For U.S. coal-mining firms Peabody Energy Inc., BTU +0.20% Arch Coal Inc., ACI -0.68% and Alpha Natural Resources Inc. ANR +0.21% —who together own Dominion Terminal Associates—increased exports offer a way to partially offset declining domestic demand.

St. Louis-based Arch set a record last year with 13.6 million tons exported, nearly double the seven million tons in 2011. It has interests in new export terminals on the West Coast and the Gulf of Mexico, and it hopes to quadruple coal exports by 2020. Arch said this week that exports this year will remain at "elevated levels." Peabody, based in St. Louis as well, is also expanding coal-export terminals on the Gulf Coast.

In all, the U.S. exported $13.8 billion worth of coal in the first 11 months of 2012, including $3.8 billion of steam coal. Lower average prices for each ton of coal left total revenue down slightly from 2011.

Hal Quinn, head of the National Mining Association, said in a press conference late last month that coal exports are a "real bright spot" for the battered industry.

In a January speech, he said global demand for coal would increase by more than one billion tons over the next five years, with more than 80% of that demand being steam coal. Germany, for one, may need more coal because it plans to shut down nuclear-power plants.

#### That derails China’s shift to renewables

Plumer, ’12 - Brad Plumer is a reporter focusing on energy and environmental issues [5/1/12. “How the U.S. could influence China’s coal habits — with exports”. Washington Post. http://tinyurl.com/ac2htbz]

Still, as a recent and fascinating report (pdf) from the Carnegie Endowment explains, Chinese coal imports are likely to grow enormously in the coming years. For one, Chinese coal use has been growing at a rate of nearly 6 percent each year. And China’s domestic production can’t keep pace, thanks to railroad and shipping bottlenecks from mining centers in Shanxi, Shaanxi and Inner Mongolia provinces.

What’s more, the Carnegie report notes, the Chinese government is becoming increasingly sensitive to the ecological damage wrought by domestic coal mining — as well as to the growing number of protests over unsafe mining conditions. According to official statistics, 6,027 Chinese miners died in 2004, though the real number is probably higher. There are real costs to ramping up production in China.

As a result, China will likely try to import a growing share of its coal in the coming years. Much of that will likely come from Indonesia and Australia, since China’s import infrastructure is geared toward those two regions. But many analysts expect the United States to play an increasingly crucial role in coming years. (To date, the U.S. has been supplying China with just small amounts of coking coal, which is used for iron and steel production and which is less readily available in China.)

And if American coal starts pouring into China, that will help keep prices down. If that happens, Chinese power plants and factories will burn even more coal and use the stuff less efficiently than they otherwise would. Grist’s David Roberts points to a recent paper (pdf) by Thomas M. Power, a former economics professor at the University of Montana, finding that Chinese coal habits are highly sensitive to prices:

Opening the Asian import market to dramatic increases in U.S. coal will drive down coal prices in that market. Several empirical studies of energy in China have demonstrated that coal consumption is highly sensitive to cost. One recent study found that a 10 percent reduction in coal cost would result in a 12 percent increase in coal consumption. Another found that over half of the gain in China’s “energy intensity” improvement during the 1990s was a response to prices. In other words, coal exports will mean cheaper coal in Asia, and cheaper coal means more coal will be burned than would otherwise be the case

To some extent, U.S. exports are already having an impact. Coal prices in Asia hit a 16-month low recently, thanks to an overflow of coal from the United States and Colombia. And the Pacific Northwest hasn’t even seriously ramped up its exports yet. (India is another possible market for U.S. producers: As the New York Times recently reported, Indian power companies have been trying to import coal from abroad rather than deal with India’s dysfunctional mining industry, but they’ve been deterred in the past by high prices.)

Now, the global coal markets are complex and it’s still not clear exactly how important U.S. coal will prove to be for countries like India or China. As Michael Levi of the Council on Foreign Relations points out, a lot depends on whether U.S. coal augments or displaces production from countries like Indonesia.

Still, at the margins, supply and demand matters. The point of Thomas Power’s paper is that a deluge of coal from the United States will, in the end, cause Asia to use more coal. Countries like China will have less incentive to develop alternative energy sources or become more efficient. And that, in turn, will mean more heat-trapping greenhouse gases in the atmosphere than there otherwise would be. To put this in perspective, 150 million tons of coal produces about as much carbon dioxide as 60 million cars.

That’s why many environmentalists are looking for ways to, as Roberts puts it, “Keep the damned coal in the ground.” Blocking U.S. export terminals in the Pacific Northwest is one such strategy. Of course, coal-mining firms like Arch and Alpha, now struggling to keep their stock prices aloft, aren’t likely to sit idly by while this happens.

#### Chinese clean tech is key to their internal stability and emissions reductions

Paul Denlinger 10, consultant specializing in the China market who is based in Hong Kong, 7/20/10, “Why China Has To Dominate Green Tech,” http://www.forbes.com/sites/china/2010/07/20/why-china-has-to-dominate-green-tech/

On the policy level, the Chinese government has to perform a delicate balancing act, it has to balance the desire of many Chinese to live a Western lifestyle, together with its high energy consumption and waste, with the need to preserve the environment, since China, and the world, would suffer enormous damage if 1.3 billion people got all their energy needs from coal and oil, the two most widely used fossil fuels. China’s political and social stability depends on finding the right balance, since the party has an implicit mandate: it will deliver economic growth to the Chinese people.

This is why the Chinese government has chosen to invest in developing new green energy technology.

The country is very fortunate in that most of the discovered deposits of rare earths used in the development of new technologies are found in China. While these deposits are very valuable, up until recently, the industry has not been regulated much by the Chinese central government. But now that Beijing is aware of their importance and value, it has come under much closer scrutiny. For one, Beijing wants to consolidate the industry and lower energy waste and environmental damage. (Ironically, the rare earth mining business is one of the most energy-wasteful and highly polluting industries around. Think Chinese coal mining with acid.)

At the same time, Beijing wants to cut back rare earth exports to the rest of the world, instead encouraging domestic production into wind and solar products for export around the world. With patents on the new technology used in manufacturing, China would control the intellectual property and licensing on the products that would be used all over the world. If Beijing is able to do this, it would control the next generation of energy products used by the world for the next century.

That is the plan. It would be like if the oil-producing nations in the 1920s and 1930s said that they didn’t need Western oil exploration firms and refineries to distribute oil products; they would do all the processing themselves, and the Western countries would just order the finished oil products from them. This is how China obviously plans to keep most of the value-added profits within China’s borders.

Before any Western readers snap into “evil Chinese conspiracy to take over the world” mode, it’s worth pointing out that Chinese rare earth experts and government officials have repeatedly warned Western visitors that this policy change would be introduced. Unfortunately, these warnings have gone largely unheeded and ignored by the Western media and politicians who, it seems, have been largely preoccupied by multiple financial crises and what to do about the West’s debt load.

The debt crisis in the West means that it is very hard for Western green energy companies to find financing for their technologies, then to market them as finished products. New energy technologies are highly risky, and initial investments are by no means guaranteed. Because they are considered high-risk and require high capital expenditure (unlike Internet technologies which are very cheap and practically commoditized), banks are reluctant to finance them unless they are able to find government-secured financing. Because most U.S. banks are recapitalizing their businesses after the debt bubble burst, there are very few, if any western banks who will finance new green energy technologies.

This has opened a window of opportunity for the Chinese government to finance, and for Chinese technology companies to develop, then manufacture these new green products. But just making these technologies is not enough; they need to be competitive against traditional fossil fuels. When it comes to the amount of energy released when coal or oil is burned, the new green technologies are still way behind. This means that, at least in the early stages of adoption, Chinese businesses will still be reliant on coal and oil to bridge that energy chasm before the new energy technologies become economically competitive. Much depends on how much the Chinese government is willing to spend to promote and incentivize these new technologies, first in China, then overseas.

#### That risks another Chinese civil war that will go global – World War II proves

[**Lee**](http://www.demos.org/ann-lee) **12** - Senior fellow @ Demos [[Ann Lee](http://www.demos.org/ann-lee), “Instability in China Would Be Devastating,” New York Times, May 11, 2012, pg. http://tinyurl.com/b8gstqn

The complexity and fragility of China’s political system is something that is often underappreciated by Western observers.

The scandal and rapid downfall of Bo Xilai, a top Chinese government official of Chongqing who was once widely considered for the Standing Committee, was a rare glimpse of the deep political divisions that exist within the Chinese central government. Although these power struggles have usually been shielded from the public, the political battles within the party are no less fierce than in multiparty systems in democratic societies. And while some China observers believe that the ousting of Bo Xilai is a watershed moment for the reformists to continue their development goals unhindered, the reality is that the Maoists could potentially unite and strike back when everyone least expects such an event to happen.

If they are successful in harnessing the disgruntled farmers and unemployed factory workers in China to rally behind them, it is remote but not impossible for the civil unrest to turn into another civil war. In such a scenario, China’s miraculous growth would grind to a halt.

#### Nuclear war

**Yee and Storey 02** [Professor of Politics and International Relations at the Hong Kong Baptist University and Storey, Lecturer in Defence Studies at Deakin University, Herbert Yee, Professor of Politics and International Relations at the Hong Kong Baptist University and Ian Storey, Lecturer in Defence Studies at Deakin University, 2002, “The China Threat: Perceptions, Myths and Reality,” p5]

The fourth factor contributing to the perception of a China threat is the fear of political and economic collapse in the PRC, resulting in territorial fragmentation, civil war and waves of refugees pouring into neighbouring countries. Naturally, any or all of these scenarios would have a profoundly negative impact on regional stability. Today the Chinese leadership faces a raft of internal problems, including the increasing political demands of its citizens, a growing population, a shortage of natural resources and a deterioration in the natural environment caused by rapid industrialisation and pollution. These problems are putting a strain on the central government's ability to govern effectively. Political disintegration or a Chinese civil war might result in millions of Chinese refugees seeking asylum in neighbouring countries. Such an unprecedented exodus of refugees from a collapsed PRC would no doubt put a severe strain on the limited resources of China's neighbours. A fragmented China could also result in another nightmare scenario - nuclear weapons falling into the hands of irresponsible local provincial leaders or warlords.2 From this perspective, a disintegrating China would also pose a threat to its neighbours and the world.

#### Only wind solves – It provides a viable alternative to mountaintop removal

**Haegele 08** [Greg Haegele, “An Alternative to Mountaintop Removal Coal Mining in West Virginia,” Tree Hugger, July 18, 2008, pg. http://www.treehugger.com/renewable-energy/an-alternative-to-mountaintop-removal-coal-mining-in-west-virginia.html

Lorelei Scarbro lives in a place most of us would envy - on 10 acres of lush, green southern West Virginia mountain, where deer, turkeys and other wildlife make regular appearances.

Now Scarbro's land is threatened by mountaintop removal coal mining. If you're not familiar with this practice – it is the most destructive kind of coal mining out there. Companies literally blow up the tops of mountains to reach the coal beneath - leaving a barren, rocky landscape. The companies fill nearby valleys and streams with the waste rock - ruining entire watersheds and frequently the water supplies of nearby communities as well. (You can learn more about this type of mining by visiting our [coal website](http://www.sierraclub.org/mtr).)In Scarbro's case, Marfork Coal Company, a subsidiary of Massey Energy, has applied for four permits (two have been approved) to mine 6,600 acres of Coal River Mountain, including land bordering Scarbro's. The permits would also allow for the construction of at least 19 valley fills, which means mining waste would be desposited in nearly every headwater stream originating from the mountain.

Scarbro and a coalition of environmental and community organizations aren't taking this news from Massey lying down. [Coal River Mountain Watch](http://www.crmw.net) (CRMW) and these groups have an alternative they say the state coal association claims coal opponents never have: [The Coal River Wind Project.](http://www.coalriverwind.org)

The Coal River Wind Project is a proposed 440-Megawatt wind farm consisting of 220 wind turbines to be constructed on the land slated to be blown away for coal mining, and the coalition has done extensive studies on the area to show just how viable an alternative this wind farm would be. According to the project's study, the wind farm would:

• Create 440 megawatts of power, enough to power more than 150,000 homes in West Virginia. • Create more than 200 local employment opportunities during the construction phase, and 40-50 permanent operations and maintenance jobs during the life of the wind farm. • Provide Raleigh County and West Virginia with a source of clean, renewable energy, as well as a sustained tax income that could be used for the construction of new schools for the county. • Allow for concurrent uses of the mountain that could revitalize the local economy and bring sustainable economic development for the surrounding communities.

Adding that the jobs would be longer lasting than the proposed mining jobs, Scarbro said, "This is the viable alternative."

For Rory McIlmoil, who works for CRMW with Scarbro, if the mountain must be developed to meet the growing energy needs of the state, then why wouldn't you choose the option that's less destructive, much cleaner, and creates a more viable economy in the long run?

"This is definitely a 'much lesser of two evils' in terms of environmental impact," said McIlmoil. "The strip-mines will lead to the clearing of over 6,000 acres of native hardwood forest, whereas our maximum estimate for the clearing that would be related to the wind farm is 200 acres."

McIlmoil can get even more detailed in the numbers for turbine siting, just ask him. He's also tallied the wildlife impact.

"And when you talk about the birds and the bats, the loss of 6,600 acres of natural habitat is likely to have a much greater impact on populations than the wind farm would, especially considering the fact that a 10,000-plus acre mountaintop removal site (Kayford Mountain) sits to the north of Coal River Mountain and another 8,000-plus acre site sit to the southwest (the Twilight Mining Complex). So Coal River Mountain is basically a habitat buffer zone between two existing mountaintop removal sites."

Scarbro and other Coal River Wind Project supporters have met with officials from just about every city, state and private agency and organization you can imagine to garner support for the plan - and many like the idea. They also have nationwide support from a number of organizations (including the Sierra Club national and local groups).

McIlmoil added the wind farm isn't just an idea - they even have developers highly interested in it.

Now McIlmoil, Scarbro and the coalition want to meet with Massey Energy and the company that owns the Coal River Mountain property to see if this wind farm plan can become a reality.

"We're hoping (the meeting) happens soon so we can sit down and try to work out possibilities here," said Scarbro.

The coalition behind this wind project has covered all the bases - even answering the question about whether post mountaintop removal land can be used for wind turbines: Scarbro said studies show that post-mountaintop removal land is too unstable for turbines, and trying to stabilize the land would make the building costs exceptionally higher. And because the mountain would be significantly lower than before, building turbines makes no sense due to the dramatic loss of wind power potential.

McIlmoil and Scarbro need all the support they can get, so we urge you to [check out their website](http://www.coalriverwind.org) and help them build a wind farm instead of watching yet another Appalachian mountain get blown away.

"This is not just about green jobs, even though we desperately need those,"said Scarbro. "It's not just about renewable energy, even though we desperately need that. This is about saving the mountain and keeping it intact. We want to save vegetation, wildlife, and continue the Appalachian way of life - hunting, fishing, gathering herbs, and more. These are things we can't do if Massey comes in and destroys everything in its path."

#### Chinese emissions cause extinction

Nagle, ‘11 [John Copeland, John N. Matthews Professor @ Notre Dame Law School. “HOW MUCH SHOULD CHINA POLLUTE?”. VERMONT JOURNAL OF ENVIRONMENTAL LAW, Vol 12. http://www.vjel.org/journal/pdf/VJEL10155.pdf]

China is the world’s worst polluter. It suffers more from air pollution than any other nation, hosting most of the world’s polluted cities. 1 Nearly two-thirds of the country’s 360 million urban residents suffer from unhealthy levels of air pollution. 2 Anecdotal reports by visitors to China frequently refer to the alarming nature of the air pollution there. 3 China’s water is polluted, too. About 100 billion cubic meters of China’s water supply is contaminated. 4 China is also the leading emitter of greenhouse gases that contribute to climate change. 5 China’s carbon dioxide emissions nearly tripled between 1990 and 2008. 6 And China’s pollution is only expected to get worse. 7 It is building unbelievable amounts of coal-fired electric power plants, 8 and the number of cars in China is increasing exponentially. China “is expected to release five times more carbon dioxide over the next twenty-five years than the Kyoto Protocol is projected to save.” 9

That pollution creates problems for three separate entities. First, it is a problem for China itself. The health of the Chinese people suffers from the polluted air that they breathe and the polluted water that they drink. “Air pollution causes the premature deaths of 750 thousand Chinese people every year.” 10 Just one percent of China’s urban residents “breathe[] air considered healthy by the World Health Organization.” 11 China’s pollution also has a profound detrimental impact on the nation’s economy. Economists suggest that China’s staggering economic growth statistics would be much more modest if the economic effects of polluters are included. 12 The health and economic aspects of pollution, in turn, cause domestic unrest that threatens the stability of the Chinese government. There have been numerous protests against pollution from existing or proposed facilities throughout China. 13

Second, China’s pollution also produces an American problem. 14 Pollution emitted in China reaches the United States, sometimes at levels prohibited by the Clean Air Act. 15 China is also the most common antagonist in American debates about climate change. Members of Congress routinely make two arguments about China as a basis for opposing federal climate change legislation or international climate change treaties. The first argument claims that the United States will lose jobs to China if we internalize the costs of emitting greenhouse gases but China does not. The second argument insists that it is unfair for China to be allowed to continue to emit greenhouse gases if the United States is obliged to cap its emissions. Moreover, many American politicians note that the environment itself will suffer if the United States reduces its emissions but China does not. Such concerns persuaded the Senate to vote ninety-seven to zero in 1997 to ratify a resolution proclaiming that “the United States should not be a signatory to any protocol” to reduce greenhouse gas emissions “unless the protocol or other agreement also mandates new specific scheduled commitments to limit or reduce greenhouse gas emissions for Developing Country Parties within the same compliance period.” 16 Numerous Senators pointed to the forthcoming Kyoto Protocol’s treatment of China as justifying the American refusal to endorse that agreement. 17 The United States never did ratify the Kyoto Protocol, and similar concerns about China continue to animate congressional opposition to a new international climate change agreement. 18

Third, the rest of the world suffers because of the inability of China and the United States to agree on a method for reducing their greenhouse gas emissions. Even if the rest of the world were to reach such an agreement, the failure to include China and the United States would doom the project from the start. Together, China and the United States account for forty-one percent of the world’s greenhouse gas emissions. 19 Left unchecked, China’s emissions alone could result in many of the harms associated with climate change. 20 That is why many observers believe that “[t]he decisions taken in Beijing, more than anywhere else, [will] determine whether humanity thrive[s] or perishe[s].” 21

#### Warming causes extinction

**Bushnell 10** - Chief scientist at the NASA Langley Research Center [Dennis Bushnell (MS in mechanical engineering. He won the Lawrence A. Sperry Award, AIAA Fluid and Plasma Dynamics Award, the AIAA Dryden Lectureship, and is the recipient of many NASA Medals for outstanding Scientific Achievement and Leadership.) “Conquering Climate Change,” The Futurist, May-June, 2010

Carbon-dioxide levels are now greater than at any time in the past 650,000 years, according to data gathered from examining ice cores. These increases in CO2 correspond to estimates of man-made uses of fossil carbon fuels such as coal, petroleum, and natural gas. The global climate computations, as reported by the ongoing Intergovernmental Panel on Climate Change (IPCC) studies, indicate that such man-made CO2 sources could be responsible for observed climate changes such as temperature increases, loss of ice coverage, and ocean acidification. Admittedly, the less than satisfactory state of knowledge regarding the effects of aerosol and other issues makes the global climate computations less than fully accurate, but we must take this issue very seriously.

I believe we should act in accordance with the precautionary principle: When an activity raises threats of harm to human health or the environment, precautionary measures become obligatory, even if some cause-and-effect relationships are not fully established scientifically. As paleontologist Peter Ward discussed in his book Under a Green Sky, several “warming events” have radically altered the life on this planet throughout geologic history. Among the most significant of these was the Permian extinction, which took place some 250 million years ago. This event resulted in a decimation of animal life, leading many scientists to refer to it as the Great Dying. The Permian extinction is thought to have been caused by a sudden increase in CO2 from Siberian volcanoes. The amount of CO2 we’re releasing into the atmosphere today, through human activity, is 100 times greater than what came out of those volcanoes.

During the Permian extinction, a number of chain reaction events, or “positive feedbacks,” resulted in oxygen-depleted oceans, enabling overgrowth of certain bacteria, producing copious amounts of hydrogen sulfide, making the atmosphere toxic, and decimating the ozone layer, all producing species die-off. The positive feedbacks not yet fully included in the IPCC projections include the release of the massive amounts of fossil methane, some 20 times worse than CO2 as an accelerator of warming, fossil CO2 from the tundra and oceans, reduced oceanic CO2 uptake due to higher temperatures, acidification and algae changes, changes in the earth’s ability to reflect the sun’s light back into space due to loss of glacier ice, changes in land use, and extensive water evaporation (a greenhouse gas) from temperature increases.

The additional effects of these feedbacks increase the projections from a 4°C–6°C temperature rise by 2100 to a 10°C–12°C rise, according to some estimates. At those temperatures, beyond 2100, essentially all the ice would melt and the ocean would rise by as much as 75 meters, flooding the homes of one-third of the global population. Between now and then, ocean methane hydrate release could cause major tidal waves, and glacier melting could affect major rivers upon which a large percentage of the population depends. We’ll see increases in flooding, storms, disease, droughts, species extinctions, ocean acidification, and a litany of other impacts, all as a consequence of man-made climate change. Arctic ice melting, CO2 increases, and ocean warming are all occurring much faster than previous IPCC forecasts, so, as dire as the forecasts sound, they’re actually conservative. Pg. 7-8

# Extra solvency

#### Appalachia will determine the direction of national politics

**Cassese et al. 12** – Professor of Poli Sci @ West Virginia University [Erin Cassese, Jeremy Zimmerman (PhD Candidate in Poli Sci @ West Virginia University) & Lauren Santoro (PhD Candidate in Poli Sci @ West Virginia University), Political Engagement in Appalachia: Distinctive Regional Subculture or Confluence of Demographic Variables? (2012). Paper for the 2012 Annual Meeting of the American Political Science Association pg. SSRN: http://ssrn.com/abstract=2108204

As one might expect given these characteristics, rates of political participation within Appalachia are lower than those outside of Appalachia. For example, turnout rates among voting‐age residents of Appalachian counties were about 5 percent lower than for non‐Appalachian counties in the 2008 presidential election. While the region isn’t typically recognized for its electoral relevance, it is a mistake to relegate Appalachians to the margins of American political life. In the past two presidential elections, five battleground states – Ohio, Pennsylvania, Virginia, North Carolina and Georgia–contained a significant number of Appalachian counties. Thus the mobilization of Appalachian voters has particular relevance for electoral outcomes in these states, as well as nationally. Pg. 3

#### A REAP set-aside is key to effectively targeted policy

**MACED 10** [Mountain Association for Community Economic Development, “Economic Transition in Central Appalachia: Ideas for the Appalachian Regional Development Initiative” April 8, 2010

I. Introduction and Overarching Recommendations

The Obama administration’s interest in investments in Central Appalachia that would create new opportunities and advance economic transition in the region is timely and welcomed. Central Appalachia has long been among the poorest regions in the United States. The historic and future decline of the coal economy--and the impact that economy has had on the region’s ability to diversify--heightens the need for new visions, strategies and efforts. We are grateful for the opportunity to provide input into this important effort.

Our organizations have developed the Appalachian Transition Initiative to define the situation as we see it in the region and chart paths forward to a more just, sustainable and prosperous future. We recently launched a website, www.appalachiantransition.net, that is a resource for local and regional transition efforts. Included on the website are stories of local projects; reports, studies, websites and organizations related to a variety of transition strategies; and a blog tracking news related to transition topics. A new effort is an essays project in conjunction with the Central Appalachian Prosperity Project that includes 24 white papers on a wide variety of transition ideas, approaches and strategies.

The administration’s approach to promoting economic transition in Central Appalachia should be built on a strong analysis of the current conditions and challenges in the region, and on an understanding of the history of efforts to promote economic development. These issues create challenging dynamics in both the targeting and implementation of efforts. Three issues in particular should be addressed in the approach to this initiative:

1. Develop measures to geographically target resources to those counties that most need the support.

Appalachia as defined by the Appalachian Regional Commission is a very large and diverse area, and should not be conflated with Central Appalachia. Over the last fifty years, there has been real improvement in economic status for much of the Appalachian region. While absolute improvement has also been made in Central Appalachia, the gap between that region and the rest of the country is as large as ever, and the region remains a large pocket of economic distress (see map page 23). There are complex reasons for this, but it was in part the result of historic policy design. The early economic development strategy of the Appalachian Regional Commission was to target resources to larger and more prosperous urban areas on the region’s perimeter and small cities, leaving fewer dollars for poorer rural areas. It was only later that funds began to be targeted to region’s economically distressed communities.

Additionally, coal mining and in particular mountaintop removal does not characterize the economy of the entire region—only a targeted subregion located in Central Appalachia. The area where mountaintop removal mining has been happening is also the subregion with the highest poverty levels. Since this initiative is related to the administration’s approach to regulating mountaintop removal, it is important that geographic targeting of resources take the location of mining jobs and surface mining into account. We strongly recommend that the administration develop a geographic index for targeting resources that takes into account 1) the level of economic distress in the county using the ARC’s existing index; and 2) the existence of mountaintop removal and other coal mining and level of dependence on coal for employment.

2. Design ways to ensure that investments reach low-income people and communities.

Like many high poverty areas, challenging local politics can sometimes make it difficult for outside investments to be most effective in reaching and impacting low-income people and communities. This is an important lesson of numerous past development efforts in the region. The administration should work to design mechanisms that promote broad community participation in planning and decision-making, and should be creative about targeting resources to a variety of entities including non-profits, community-based organizations, and non-traditional institutions where possible or appropriate. The recent announcement of a USDA partnership with the Federation of Appalachian Housing Enterprises for the administration of $25 million in Section 502 housing funds is an excellent example of this kind of non-traditional funding approach.

3. Promote initiatives that build community, leadership and entrepreneurial capacity.

The administration should see itself as a partner with Appalachian communities and people in creating a new and better economy in the region. Using that approach, investments should not simply provide needed services and create jobs, but should be designed in ways that empower local people and organizations to take on new leadership roles and leave lasting business and institutional infrastructure in the region beyond the time in which monies run out. An approach that puts the building of human and social capital at the center will result in better outcomes for the region in the long-term.

II. Green Jobs Policy and Program Options

The region’s tremendous natural assets and long history of environmental degradation mean numerous opportunities for job creation and economic transition in the specific area of Green Jobs. A federal Green Jobs strategy for Appalachia should build upon and link to the efforts of non-profits and community-based organizations in the region. Smart, expanded public investment and support for greening the economy of Central Appalachia could create jobs, reduce poverty, and improve environmental conditions in the region.

In this paper, we outline five Green Jobs strategies for the region and include a list of key policy and program options in each area. In addition to these five strategies, the administration should consider cross-cutting efforts that combine these and other strategies in local and regional efforts. For example, the administration should target a community or communities in the Central Appalachian coalfields as a participant in the new USDA Rural Innovation Initiative, an effort to bring together funding from twenty USDA programs to support comprehensive local approaches to revitalization appropriate to place-based needs and opportunities. Pg. 1-3

\*\*NOTE: Rural Innovation Initiative = USDA geographically targeted set aside for renewable energy