

Why "Lessons from the Tobacco Wars"?

- The parallels are remarkable and eerie:
- Well funded, well organized NGO opposition driving regulatory policy, media messaging, and shaping public opinion – often with poor/no science
- Multi-pronged attack: 1) diminish social acceptability; 2) drive up costs and cut profits through massive increase in regulation; 3) cut demand/market access; 4) drive down share prices
- Binary debate with little dialogue: scene from film <u>Independence</u> <u>Day</u>: President to Alien – "What is it you want from us?" Response: "Die".

But Remarkable Differences

- Coal is a beneficial, readily available, natural resource providing reliable and affordable energy and ideally suited to providing base-load electricity
- According to the UN International Panel on Climate Change, Carbon Capture Utilization and Storage (CCUS) is one of the lowest cost mechanisms for climate change abatement, allowing continued reliance on coal in a low carbon future
- Coal industry has not made the bad choices tobacco did and can avoid their mistakes by listening to our critics and engaging in a constructive dialogue about balancing climate concerns and global energy needs.

The Tobacco Wars: Opening Battle

April 1994

Tobacco CEOs testify before Congress "Nicotine is not addictive" Science was right. Nobody cared; imagery – horrible



Phillip Morris Companies 7th Fortune 500 by market cap and 3rd by profits behind ExxonMobil and GE, at \$3.1 billion

"We will fight. Because if you're right and you fight, you will win" - Geoff Bible, CEO Philip Morris Companies Inc.

The Turning Point

- In 1998, Altria (Philip Morris Companies Inc) settled lawsuits with 48 states for \$206 billion and launched an ambitious, if naïve, legislative settlement that would come to fruition almost 10 years later
- Slipped to #9 on the Fortune 500 but \$6.3 billion in profits (Owned Kraft, Miller, PMUSA, PMI, PMCC)
- Agreed to FDA regulation, massive marketing restrictions, and an end to "debate on science". All previously "off limits"
- At the time, it was the End of Days...

Key Lessons

- Even with the vast resources of a top ten Fortune 500 company and +\$6 billion profits, "fight" didn't work
- The right or wrong of the science, economic impact, regulatory fairness – none of it mattered in view of the perceived harm caused to society by smoking
- Even when on the ropes and going down, the industry was relevant to its critics and policy makers – a deal was still possible
- Even after the "End of Days" deal, a much more heavily regulated tobacco industry is viable and profitable
- In analogy tobacco companies are utilities and coal miners are the farmers

What About Coal?

- Coal faces two related existential threats:
 - CO2/Climate driven regulation
 - Competition from <u>Natural Gas</u>
- Situational Analysis
- Options for the Future
- Actions for Options





Situational Analysis - Regulatory 1

- Greenhouse Gas Theory is laboratory proven but the science of global warming is far from settled (and Nicotine didn't meet the *pharmacological definition* of "addiction" in 1994...)
- Climate change activists use "current and catastrophic" as an almost religious credo, despite evolving science;
- Most Americans believe in man-made climate change and that CO2 emissions are contributory. But they don't think it's very important
- Regulatory agencies reflect <u>activist positions</u> rather than those of general public

Situational Analysis - Regulatory 2

- MATS = large number of plant closures and EPA 111(d) means many more. According to a 2014 ACCCE Study, 361 plant closures announced in 2014 alone.
- UWY studies give a range for likely volume declines for PRB coal of 20% – 45% from 111(d) by 2030. Impact on other Western Basins likely much higher.
- Other than Kemper in MS (Southern Company), no coal plants under construction in the US
- May 8 ruling on Colowyo (retro-active permit invalidation) shows mining under serious threat on all fronts
- Plus: Royalties, Leasing, WOTUS, CPP, Ozone, the regulatory environment is extremely hostile

Situational Analysis - Competitive

Natural gas spot prices (Henry Hub)



\$2.61/MMBtu And non-market regulatory drivers of growth

According to EIA*, the levelized cost of electricity for new sources 2020 is:

Conventional Coal \$95/MWh

Advanced Coal with CCS \$144/MWh

Conventional CC NG \$75/MWh

Advanced CC with CCS \$100/MWh

Situational Analysis - Gas/Climate Nexus

- BP and other oil and gas majors acknowledge GHG driven climate change and advocate carbon pricing
- Actively advocate gas switching from coal as climate mitigation strategy. Shell CEO called natural gas "a clean-burning ally to renewables such as solar and wind."
- Gas producers are working with Sierra Club's "Beyond Coal" campaign to help close coal plants around the country
- Current Administration seems to accept gas switching as a viable climate strategy and means of addressing "the single greatest threat to our security"

Situational Analysis - Arsenals



- Bloomberg alone has given \$80 million to the Sierra Club's "Beyond Coal Campaign"
- Tom Steyer spent \$74 million of his own money in 7 Nov '14 Senate races. His SuperPAC NextGen spent over \$100 million on 2014 mid-terms. League of Conservation Voters spent \$20 million on 2014 federal elections alone
- CPE Employee PAC spent \$80,000 total in 2014, Peabody Energy PAC spent \$163,000 in 2014 on federal elections, and NMA PAC spent \$379,000 on federal elections.*
- Total coal industry federal election spend <u>under \$2M in</u> 2014

Options for the Future

There IS a *David vs Goliath* struggle going on. But Coal is the David

- We can pursue the "Cher Strategy"
- We can fight regulation but can we fight Natural Gas at \$2.60/MMBtu?
- We can cut a deal while we are still relevant

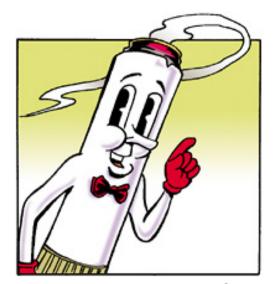
We are not fighting to maintain 38% of fuel share of electricity generation. We are fighting for survival.

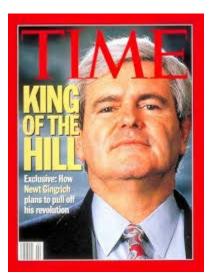
Hope for Change

Cher Strategy - go "all-in" with Republicans, hope for a better Administration in 2016, and then "turn back time."

A Cautionary Tale





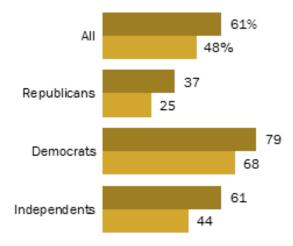


After Bob Dole lost in 1996, having been followed around the whole campaign by a 7 ft tall "Mr. Butts", Newt Gingrich, then Speaker, swore that "nobody gets left of me on tobacco again", and the blocking majority in the House disappeared overnight.

An Inconvenient Poll

Stark Partisan Divide over Global Warming, Threat of Climate Change

- Solid evidence that earth has been warming
- Global climate change is a major threat to U.S.



Surveys conducted Feb. 27-March 16, 2014, and Aug. 20-24, 2014.

PEW RESEARCH CENTER

61% of Americans believe there is "solid evidence" of global warming

48% see climate change as threat to US

Several Republican Presidential candidates softening stance on climate change for elections

"Just say no" an unlikely position for most successful candidates

If not "no", then what?

"To me, I think you'd call it a day and say, 'OK, let's go talk to people about making this thing rational because if it is, then you can avoid all the litigation and all the discourse that will slow the process down." - Nick Akins, Chairman Edison Electric Institute, CEO AEP, on Clean Power Plan

Evaluating Survival

- What are the alternatives to current binary debate?
- Does it matter whether the science is settled on global warming and climate change when 61% of Americans believe it is and the federal government is regulating based on it being true?
- Do we want to be right, but dead or can we envisage coal in a carbon constrained future?
- For global warming, coal is not the problem. CO2 is the problem. Coal power without CO2 is no different than wind, solar, and hydro, from an emissions perspective

Coal in a Carbon Constrained Future

- International Panel on Climate Control (UN) cites Carbon Capture [Utilization] and Storage CCUS, as a "critical and lower cost mechanism for abatement of climate change"
- No way under any climate model to avoid +2C warming without CCUS. No way to achieve President's goal of 80% reduction in CO2 by 2050 without CCUS
- Sadly, based on CPE polling, <u>fewer than 1 in 10</u>
 Americans have heard of CCUS
- Global Warming driven regulation is not a "market factor" and CCUS challenges will not be solved in near term by "market forces"

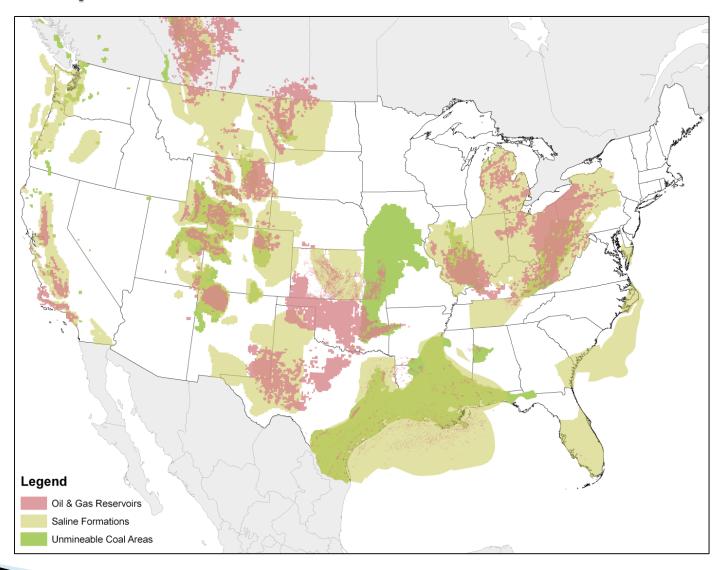
What's At Stake?

- Over \$1 billion p.a. in federal revenue from royalties, rents and bonus payments alone
- Over \$5 billion in economic contribution for WY, 7,000 direct jobs, @ 25,000 coal dependent jobs
- Over \$5 billion economic contribution for TX, 7,000 direct jobs and over 41,000 coal dependent jobs
- Over \$2.8 billion economic contribution for CO, more than 6,000 direct jobs, and over 20,000 coal dependent jobs
- Over \$1.5 billion economic contribution for UT, more than 4,300 direct jobs and over 10,000 coal dependent jobs
- Nearly \$700 million contribution MT, including 2,200 direct jobs and nearly 5,000 coal dependent jobs

Protecting State Coal Economic Contributions

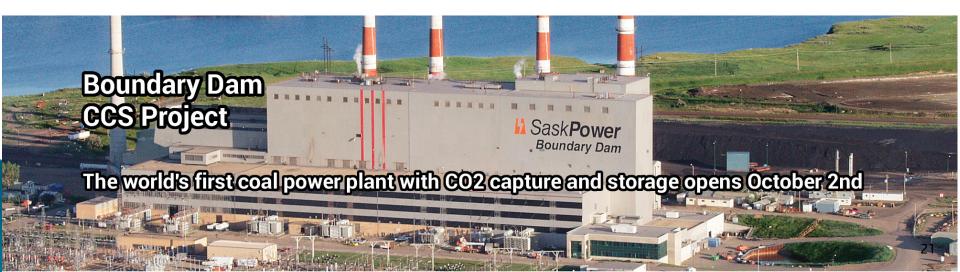
- Will that \$15 billion and nearly 100,000 jobs across five western states be replaced by wind, solar, and hydro?
- So what are our states doing about it? They need to aggressively protect their multi-billion dollar revenue streams and high paying coal jobs
- We need aggressive funding for industry advocacy from the states that stand to lose
- We need aggressive legislative promotion for and funding to incentivize commercial scale CCUS - climate change regulation is a market intervention - so too funding for utilities to build CCUS plants requires a market intervention

EPA Map of CCS Suitable Reservoirs



SaskPower's Boundary Dam Works

- ▶ 110 MW Post Combustion CCUS plant that used an aging conventional coal plant as base (Oct 2014)
- Burns lignite, captures CO2 for use in Enhanced Oil Recovery and saline storage, captures SO2 and sells sulphuric acid, sells Fly Ash for cement manufacture
- Required at least C\$240 from federal government
- ▶ The answer to EPA's 111(d)?



What Needs Doing?

- We need to get out of the binary debate on climate change. Right, but dead, is not a victory
- Focus law makers on simple fact: if climate change "is the single greatest threat to our security", then it demands commensurate resources and focus – and if it isn't, then at what cost do we value the security, reliability, and affordability of coal?
- Acknowledge that Climate Change is not a market force and its impact will not be solved by the market
- According to EIA, in FY2013, wind and solar alone received over \$11 billion in subsidies. According to Bloomberg Financial, \$1.6 trillion was "invested" in clean energy from 2000 - 2012. Ensure a fraction of this funding goes to CCUS investment incentives

What Do We Need to Do?

- A fraction of the annual subsidies for wind and solar could make CCUS for coal economically viable and induce utilities to build coal fired CCUS plants: Advocacy
- Three things stand in our way:
 - Unwillingness to recite the Climate Activist Credo: "Man-Made Climate Change is Current and Catastrophic and We Must Act Now"
 - Insufficient Democratic support to deal with the reality of coal at 39% of electricity production, coal won't just "go away"
 - Insufficient Republican support for the market intervention needed to make
 CCUS for coal viable and attractive to utilities
- Today, survival is victory. What will we do, or, what wouldn't we do to survive?

Call to Action

- End the debate on climate change science
- Get 100% behind CCUS as the way to keep coal a part of America's energy mix in a low emissions future
- Get coal states to put <u>resources behind coal industry advocacy</u> <u>and defense</u>. They can pay now and protect high paying coal jobs or pay later in benefits and programs when those jobs and their revenue streams are gone
- Get <u>both Parties</u> to back large scale intervention and subsidies for utility construction of CCUS coal plants. Start with the states
- Be active. Be advocates. Write to state officials and Congressional delegations. Go to Town Hall meetings. Write letters to editor. Be the Squeaky Wheel.