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ON THE COVER

The ACC celebrates 30 years of service to the American coal industry.

See page 21.
Walking the line:
Keeping our eyes wide open to the options and opportunities in today’s markets

One of my favorite Johnny Cash songs – admit it, you like him too – is “I Walk the Line”. In one line, Johnny growls that he must “keep his eyes wide open all the time.” Life is no different for us in this industry. With so many things going on, we have to watch the policy world and markets closely because situations can change in a moment, leaving your head spinning and work that was nearly completed, no longer necessary. That was the case in the preparations for this issue.

We have written extensively, in this magazine and our other publications, on the impacts of changing regulations on the coal industry. Our focus remains on that very important subject with regular posts on the Coalblog (www.coalblog.org) and information posted to our social media pages. I had, in fact, initially intended to spotlight this rapidly shifting issue again in this edition of American Coal. However, I was prompted to alter that spotlight article based on revelations that a member of the natural gas community was involved in direct funding of the Sierra Club’s Beyond coal campaign.

Chesapeake Energy, a major player in the natural gas industry and an unrelenting and mulish critic of coal, reportedly injected some $26 million into Sierra Club coffers from 2007 to 2010. Those multiple millions were used to help fund the Sierra Club’s deceptive and insidious anti-coal smear campaign, “Beyond Coal.”

The ACC has endeavored to remain studiously apolitical in the discussion of the natural gas industry’s impact on coal. Put simply, we value fair competition, so when gas developers find new, more efficient means of developing an essential fossil fuel, we understand that the coal industry needs to produce similar (or better) efficiency gains to maintain a competitive advantage. As part of our commitment to open discussion and fair competition, we’ve invited representatives from the gas industry to speak at our conferences and featured them in our publications. We have discussed the issue of natural gas competition in our Issues page and tried to provide even-handed responses to the question of whether or not natural gas could completely replace coal-fueled energy.

Perhaps most importantly for us, several of our member companies are also involved in the gas sector. Therefore, in every instance, the ACC’s dealings in the discussions over coal and natural gas as competing energy options have
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always been above the board and fair. We’re confident that the majority of the natural gas industry holds our view that a friendly competitive rivalry is enjoyed and is healthy for both sectors and our economy.

Chesapeake’s direct involvement in funding inaccurate, multi-million dollar campaigns against the coal industry however, moved into a whole new realm. As I try to “keep my eyes wide open” to pressing issues such as this, I address Chesapeake’s funding partnership with the Sierra Club in my spotlight article.

This edition of American Coal is also about our celebratory attitude this year at the ACC. We’re fun and fit at thirty years old in 2012. A few of us might even manage to throw “tanned” in there after our festivities on the beach at our Spring Coal Forum in Clearwater, FL this March. Janet Gellici’s CEO message matches thirty years of ACC history with thirty innovators and innovations in this industry. Recognizing that our industry cannot afford to rest on its laurels, Janet’s message gives thirty separate indicators that we’re moving forward on our commitment to stay sharp, efficient, and creative.

Charles Matthew’s President’s message takes a look at thirty years of dedicated service to the American coal industry. Charles’ message reviews our history and just a few of our future plans. So we welcome you to join in and sing with us … Happy Birthday to us, Happy Birthday …

After the party dies down, David Ledford of the Appalachian Wildlife Foundation takes the lead in our Features section, providing information on important cooperative efforts of industry and environmental interests represented by the Mine Land Stewardship Initiative. Ledford’s article describes how serious and committed conservationists, wildlife agencies, and landowners are partnering with the coal industry to improve reclamation work on reclaimed Appalachian mine sites.

Ledford works with a wholly different conservation crowd than the extreme environmental industry I describe in my Spotlight article. They are a substantially different bunch than the representatives of the multi-billion dollar, multi-national environmental industry discussed in Greg Walcher’s article. Walcher describes how the actions of a small, select group of influential green power brokers seem to ignore the environment in favor of focusing on membership dollars, large foundation and government-based grants, and their rapidly increasing political influence.

In a move to help both our members and our nation’s mining technology schools, as well as to build new and more effective bridges between the two, I have invited an article from Dr. Robert Wharton, President of the South Dakota School of Mining and Technology (SDSMT). Dr. Wharton’s article describes programs and research ongoing at SDSMT and gives us an update on the young, executive talent that is preparing to enter our industry.

We also dedicate a substantial slice of this magazine to the growing importance of international markets. To kick this section off, we welcome the President of the Coal Association of Canada (CAC), Ann Marie Hann, to share her outlook on Canadian coal production and consumption. Ms. Hann recently took over at the CAC after the retirement of long-time friend and partner of the ACC, former CAC CEO, Alan Wright.

To help us better understand the always dynamic Chinese coal market I am happy to welcome Clayton Fong of L&L Energy. With offices in both the U.S. and Mainland China, L&L Energy provides us with their unique “on-the-ground” view of those markets.

Philip Smith, with the UK based Underground Coal Gasification Association, also joins us to discuss the growing importance of accessing the energy in deep and unminable coal seams. Providing a clean, abundant, and affordable source of previously unreachable energy, the folks at UCGA are once again demonstrating the value of coal wherever it is found.

Moving back to a domestic and policy focus, we close out the magazine with five pieces. First, Chris Newman with Argus Media takes on the challenge of tracking our expanding export markets as he reviews coal transportation trends. I follow Chris up with a look at the recently proposed EPA greenhouse gas rule. Then, move on to an article describing the difference between public relations and public affairs and the role of the two different practices in moving development projects forward. Next, we learn how technologies that allow for on-site Analysis of heavy equipment lubricants and chemicals can save mines on their maintenance and repair budgets by allowing for more efficient scheduling of downtime. Then I wrap things up with a recap of our Spring Coal Forum and the call to action given by the founding Executive Director of the American Coal Council, Dr. Phil Burgess, during his luncheon keynote address.

Walking the line was hard enough for Johnny and his fans in the area of romance. It’s another matter entirely trying to walk the line between the reasonable and extreme factions of the green movement, while also trying to keep track of international and transportation markets, new and improving technologies, trends in education, and rapid changes in policy. We’ve done it though and managed to pack this issue full of useful information, statistics, and policy updates along the way.

Welcome to the spring 2012 issue of American Coal magazine. I hope you enjoy reading it as much as we enjoy preparing it for you.
The power to transform a nation.

As important as coal was in the history of our railroad, it is just as pivotal to our business today. With access to Wyoming’s coal-rich Powder River Basin and to coal fields in Colorado, Utah and Illinois, we move more than 250 million tons of coal each year. Union Pacific is committed to the coal industry and its future.

It’s our future, too.
SPRING COAL FORUM KEYNOTE PRESENTS LISTENERS WITH FOUR CHOICES

A rousing Spring Coal Forum (SCF) keynote speech, given by Dr. Phil Burgess, the founding Executive Director of the American Coal Council (ACC), encouraged listeners to defend the American electricity consumer and the benefits of electrification around the world. Burgess urged the industry to take a stand, recognizing that the war being waged against coal is, in fact, a war against the American economy, jobs, and well being. – coalblog.org

EPA LOSES SECOND MAJOR CASE

The EPA may have to soon admit that they have overstepped their bounds as court cases are beginning to pile up against them and their regulatory assault on property rights and their legal jurisdiction.

A March 21 SCOTUSBlog post detailed a recent Supreme Court decision where all 9 Justices – Yes! Even Ginsburg and Alito agreed on this one – handed the EPA a stinging defeat. […]

In an equally important case, the District Court for the District of Columbia handed the EPA another major defeat. The court considered EPA claims that it had the regulatory authority to retroactively revoke Section 404 Clean Water Act permits that had already been approved by the Army Corps of Engineers. – coalblog.org

50 SENIOR NASA EXPERTS DECRY “ADVOCACY OF EXTREME CLIMATE POSITION” AT NASA

Fifty senior NASA executives, astronauts, scientists, and engineers, with a combined professional experience of over 1,000 years, have come out openly in opposition to the “extreme climate position” of the Agency – as advanced by climate activist and Goddard Institute for Space Studies (GISS) Head, James Hansen.

The letter states clearly that tens of thousands of respected scientists have “publicly declared their disbelief in (NASA’s) catastrophic forecasts,” and requests that NASA cease publishing unsubstantiated and “unproven remarks” in their public releases and on their websites. – coalblog.org

SOMETHING TO DO
Coal Market Strategies Conference
August 20-22, 2012
The Meritage Resort & Spa
Napa Valley, CA

SOMETHING TO READ
Climatism: Science Common Sense, and the 21st Century’s Hottest Topic by Steve Gorham

SOMETHING TO REMEMBER
Even a complete sacrifice of U.S. economic well being and competitive advantage – in the form of shutting all coal-fueled generation – would have no impact on worldwide CO₂ emissions. – coalblog.org
2012 marks three decades of service to the coal industry by the American Coal Council (ACC).

Thirty years of promoting and advocating for coal as an affordable, abundant/secure, and environmentally sound fuel source. Thirty years of advancing the power, the promise, and the pride of America’s coal industry.

Many of our readers may not be familiar with the early years of the ACC and how we came to be who we are today, so I wanted to use this issue’s message to recount the history of our organization.

A little history

The ACC was founded in 1982 as the Western Coal Export Council (WCEC), a private industry trade group designed to promote exports of western U.S. coal to the Pacific Rim. The WCEC arose as a result of the work of a multi-national Task Force, formed under the guidance of the Western Governors’ Association (WGA). In 1981, that Task Force published a study that discussed Western U.S. Steam Coal Exports to the Pacific Basin. Three nations – Japan, Taiwan and South Korea – along with more than 40 U.S. companies participated in the study group.

In 1986, the Western Coal Export Council changed its name to the Western Coal Council to accurately reflect the organization’s focus on expanding both foreign and domestic markets for western U.S. coal. The strengths and practices established in those early years – including a broad-based membership, a partnering, non-adversarial approach to business, excellence in educational programming, and an eagerness to work closely with other groups as an advocate for the coal industry’s interests – continued to foster the WCC’s growth and development.

In the spring of 2002, the WCC took the next step in its development as the membership voted overwhelmingly to form the American Coal Council and to transition the organizational focus from a regional to a national perspective. That national focus and increasingly close ties with national and state organizations, as well as other industry
groups enhanced the ACC’s advocacy efforts, visibility, and information resource base.

The next step in the ACC’s evolution was achieved with the establishment of a Washington, DC office in 2007. This move was made to better advance the Association’s advocacy and liaison objectives. Proximity to public policy decision-makers, industry associations and ACC member companies with a DC presence enhances the ACC’s ability to monitor and report on critical industry issues, and to better support and coordinate ACC advocacy efforts with national associations in DC.

Over our history we have also built a staff of competent individuals to provide the highest level of service to our members. ACC Chief Executive Officer Janet Gellici has effectively led the organization since 1982. Jason Hayes (Communications Director) has been improving our communications since 2005. Michele Rubin (Executive Assistant) has added her superior member relations and database management skills since her hire in 2005. Most recently, Ingrid Abrom (Education and Marketing Director) joined the team in 2011.

In 2011, the ACC completed a strategic planning initiative along with representatives of our member companies. Through this initiative, we reviewed our current slate of programs and developed new and more effective ways to work with our membership. Looking forward to the next thirty years, we are excited to roll out several of these new concepts during our 30th Anniversary celebrations in 2012.

To better reflect our clear focus on education and advocacy, our strategic planning team developed new Vision and Mission statements for the association.

**Vision Statement**

ACC advances the power, the promise and the pride of America’s coal industry.

**Mission Statement**

American Coal Council (ACC) provides relevant educational programs, market intelligence, advocacy support and peer-to-peer networking forums to advance members’ commercial and professional development interests.

ACC represents the collective interests of the American coal industry – from the hole-in-the-ground to the plug-in-the-wall – in advocating for
coal as an economic, abundant and environmentally sound fuel source.

ACC serves as an essential resource for industry, policy makers and public interest groups. The Association supports activities and objectives that advance coal supply, consumption, transportation and trading.

To help support our updated vision and mission, we have also updated our logos and tagline. The new look brings the font and style of the logo comfortably into the present, while retaining the familiar ACC brand and history.

As you may have noticed earlier in this article, we also developed a stylized 30th Anniversary logo, which will be used throughout our events and publications in 2012.

Our new tagline – Industry Focused Education, Networking & Advocacy – highlights our organization’s consistent focus on education, advocacy, and relationship building within the coal and energy industry.

Lastly, our completely redesigned flagship publication – American Coal magazine (www.americancoalonline.com) – gives our trusted industry periodical a new look and feel, while retaining our commitment to accurate and balanced information on our industry.

Our new logos, updated publications, tagline, and vision and mission statements demonstrate that while we retain and respect our 30-year history of service to the coal industry, we also eagerly embrace the future and welcome the challenge of meeting the changing needs of our members.

We will continue to seek input and comment from our member companies and the public and request your participation in our outreach attempts – surveys, questionnaires, and calls. We also welcome your direct contact at any other time. Please do not hesitate to contact the ACC with any questions, or comments. You can reach us at 202-765-4540, or by email at info@americancoalcouncil.org.

We look forward to hearing from you.

---

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Pioneering Spirit

“Once an organization loses its spirit of pioneering and rests on its early work, its progress stops.”

– Thomas J. Watson, Former Chairman & CEO, IBM

An acquaintance of mine recently remarked that the coal industry seemed destined for oblivion in light of political opposition, competition from alternative energy resources and the continuing economic downturn’s dampening impacts on electricity demand. I’ve been working in the coal industry for over 30 years now and I’ve seen others make this observation before – only to be proven wrong in time with yet another resurgence of coal power.

It did get me thinking, though, especially because I’ve been in a reflective mood looking back over 30 years as the ACC celebrates its 30th Anniversary in 2012. I started wondering how our industry has upheld Watson’s adage to maintain its pioneering spirit.

I was also thinking of this in the context of our new ACC Vision Statement, recently endorsed by the ACC Board of Directors.

There is still much pioneering work to be done.

“ACC advances the power, the promise and the pride of America’s coal industry.”

We have ample evidence of the power of coal – not only in fueling the majority of our nation’s electric power supply, but in terms of providing good jobs for our citizens, an abundant “energy resilient” domestic resource base, and an economically viable and reliable commodity.

The pride of coal is evident in the many advances and innovations we’ve achieved over the years. In celebration of our Association’s 30 years, I’ve listed 30 innovations I think are among the highlights in our industry’s history. I had help from a number of ACC members in compiling this list. Still, it’s probably not comprehensive, is certainly not listed in any particular order of importance, and there was no analytical approach to my choices.

Taken as a whole, however, I do think it demonstrates that we’ve made significant progress on many fronts throughout the various sectors
of the coal industry represented by the ACC – from the hole-in-the-ground to the plug-in-the-wall. You might disagree with some of my choices; you might have chosen other advances over those I have listed; I most certainly have missed some items. Let me know what you think: jgellici@americancoalcouncil.org.

Finally, the promise of coal resides in our willingness to not “rest on [our] early work” but to continue to strive for a better safety record, more productive mining operations, more efficient and environmentally sound use of coal, and new applications such as carbon utilization and coal liquids. There is still much pioneering work to be done. Oblivion is by no means imminent for US coal.

Cheers.

1) Mine Safety – 2011 had the 2nd lowest number of fatalities since statistics were first recorded in 1910
2) Environmental Record – since 1970 coal use has increased more than 200% while emissions of criteria pollutants have decreased by an average of 90%
3) Coal drying and cleaning – enhancing coal’s quality and heat value while reducing emission of NOx, SO2, Hg and CO2
4) Powder River Basin mining – production from 0 to 400 mta since the 1970s
5) Transportation Safety Advances – including injury and derailment reductions, railcar wheel impact and bearing detection, and rail defect detection systems and processes
6) SO2 Emissions Reduction Equipment – FGD scrubber technologies currently achieve 98% SO2 removal
7) Low NOx Burners, SCR’s and SNCRs – achieved NOx reductions of 82% between 1970 and 2008
8) Coal Ash Recycling – more than 42% of coal ash produced in the U.S. is beneficially used, resulting in conservation of natural resources and energy, in product performance improvements and in reduction of greenhouse gas emissions
9) Reductions in venting of air methane emissions from coal mines by 509,000 metric tonnes of CO2e
10) Coal Trading – including establishing industry standards and Master Agreements facilitating disciplined, liquid and efficient financial transactions
11) Fluidized Bed Combustion (FBC) – more than 170 units are now operating in the U.S. (600 worldwide) resulting in significant emissions reductions

12) Development of materials for highly efficient coal combustion power plants that have 30% lower CO₂ emissions compared to the average U.S. coal power plant

13) Activated Carbon Injection and Amended Silicates technology development for mercury emissions control

14) Advancements in turbine blade and diaphragm design

15) Aluminum railcars

16) Coal blending capabilities at coal terminals

17) Floating Cranes for Coal Transshipment

18) Rail Triple/Quad Tracking in the PRB

19) Application of GPS for enhanced mining operations and barge operations

20) Advances in boiler cleaning devices, such as water lances and water cannons and other boiler optimization technologies

21) Integrated Gasification Combined Cycle (IGCC) technology – over 1400 MW of coal-based IGCC is in operation worldwide

22) AC locomotives and distributed power

23) Modifications to boilers designed for eastern bituminous coal enabling burning of PRB coals

24) Coal quality analyzers

25) Coal dust control technologies, processes and additives

26) Protective weld overlays on boiler furnace tubing to resist corrosive effects of chlorine, sulfur and iron – allowing greater utilization of Illinois Basin coals

27) Productivity advances from longer trains and reduced rail crew size

28) Recovery of coal fines and re-processing gob and tailing ponds – a recycling success story

29) Improvements in bulk material handling – including conveyor and transfer point process, mechanical and chemical applications

30) Reclamation – since 1978, more than 2.2 million acres of mined lands have been restored to their original or better condition. In addition more than 100,000 acres of coal mines that had abandoned long ago have also been reclaimed. 

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Vision Statement
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Mission Statement
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30 Years of Service
to the American Coal Industry

As we noted in Charles’ message from the President, the American Coal Council has a proud history of serving the American coal industry. From its earliest days, as the Western Coal Export Council, under the leadership of Phil Burgess, to its current form with Janet Gellici at the head, the ACC has been a respected voice and advocate for American coal.

<table>
<thead>
<tr>
<th>Year</th>
<th>Event Description</th>
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<tbody>
<tr>
<td>1982</td>
<td>Western Coal Export Council formed to promote the export of western U.S. coal to the Pacific Rim.</td>
</tr>
<tr>
<td>1986</td>
<td>Name changed to Western Coal Council to represent council’s focus on both export and domestic markets.</td>
</tr>
<tr>
<td>2002</td>
<td>American Coal Council formed – Transition from a regional to a national organization, recognizing our growing ties to national and state organizations, and industry groups. The transition also helped enhance ACC advocacy efforts, visibility, and resources.</td>
</tr>
<tr>
<td>2007</td>
<td>Washington, DC office established to better advance the association’s advocacy and liaison objectives.</td>
</tr>
</tbody>
</table>
Past Executive Directors
Phillip M. Burgess
Douglas Linkhart
Janet Gellici

ACC Staff
Janet Gellici, CAE – Chief Executive Officer
Jason Hayes, M.E.Des. – Communications Director
Ingrid Abrom, CMP – Education & Marketing Director
Michele Rubin – Executive Assistant

Past Presidents
1982  John Brooks, Rocky Mountain Energy
1983-1984  Pete Moore, Getty Minerals
1985-1986  Chuck Evans, Shell Mining
1989-1990  Ron Powers, Andalex
1991-1992  Tom Canter, Cyprus Coal Company
1993-1994  Rich Wisniewski, ARCO Coal
1995-1996  Jim McAndrew, Arch Coal
1997-1998  Paul Warner, Coastal Coal
1999  Vaughn Mavers, Peabody Coal
2000  Ron Young, American Electric Power
2001  Jim Sobule, Ameren Services
2002  Mike Bales, Edison Mission Energy
2003  Andy Blumenfeld, Arch Coal
2004  Lance Fritz, Union Pacific
2005  Jim O’Neil, DTE Coal Services
2006  John Ward, Headwaters Resources
2007  Keith Drohan, Dominion Energy
2008  Tom Vorholt, Ingram Barge
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In his keynote address at the 2012 Spring Coal Forum Phil Burgess, founding executive director of the American Coal Council (ACC), argued that coal’s best defense lies in maintaining a strong focus on the national interest and on the benefits that coal provides to electricity users around the world.

This year, our Tomorrow’s Leadership Council (TLC) will focus their annual project on describing the advantages of abundant/reliable, affordable, domestic energy and high-salary technical careers – among a string of other benefits. The TLC group will also develop balancing information aimed at addressing the myths spread by anti-coal special interests.

**Past TLC Projects have included:**

2011 – Social Media for the Coal Industry – making social media work for our industry

2010 – “Coal Unplugged.” – coal is used to produce much more than electricity

2009 – “Coal Fundamentals: An Overview of Coal Supply, Consumption & Transportation”
If you relish the thought of taking an **active role** in the **future of your industry**, we’d encourage you sign on for a 12-month commitment. TLC is a close-knit community of more than 50 ACC member company “graduates” representing the spectrum of the coal industry. As part of the TLC **community**, you will have the opportunity to build your:

- Research and project management skills
- Business and industry experience
- Professional networks and industry contacts
- Leadership skills (through focused training and seminars at key industry events)

Get involved and help build your industry. Improve your knowledge, skills, and career prospects. Gain the respect and recognition of your industry colleagues.

**Sign up for the Tomorrow’s Leadership Council today.**

*For more information on the Tomorrow’s Leadership Council, please visit the ACC website, “Committees” page (www.americancoalcouncil.org). You may also contact Jason Hayes, Communications Director at 202-756-4540, or by email at jhayes@americancoalcouncil.org.*

---

**The TLC program is designed to advance and vest executive talent in the coal industry. TLC provides a meaningful opportunity for up-and-coming executives to enhance their industry knowledge and networks through projects and activities that advance industry-wide objectives as well as professional development goals.**

If you’re new to the industry or are early in your coal industry career, you’d be a **perfect fit for the ACC’s TLC program**.
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CLASS (Coal Leadership Advancement) Seminar Series

June 26-28, 2012 – The Magnolia Hotel
Downtown Denver, CO

Definition: class /klas/
Noun: a course of instruction
Adjective: showing stylish excellence

New to their industry and seeking to make a difference in their lives and places of work, young professionals look for a way to become more involved, better networked, and better educated. The American Coal Council (ACC) is addressing those needs with the Tomorrow’s Leadership Council.

Already well established in their industry, senior executives often seek out a means of giving back, through mentoring and service. ACC provides opportunities for senior executives to serve on our Board of Directors, in our various committees, and event planning.

Recognizing that mid-career executives also require additional career and educational development opportunities, ACC has created the Coal Leadership Advancement Seminar Series (CLASS) to address their interest in:

• Advancing professional career objectives
• Building and enhancing long-term relationships with industry colleagues
• Obtaining timely, in-depth and analytical industry knowledge and resources
• Learning about the operations of, and inter-relationship between various sectors of the coal industry – coal supply, coal consumption, and coal transportation

As part of the CLASS program, mid-career executives seeking that extra push to expand their connections, options, and abilities enjoy in-depth seminar sessions covering a wide variety of key industry topics, such as:

• Environmental policy
• Renewable Energy Mandates
• Smart Grid
• Transportation infrastructure and advances/constraints
• Coal trading
• Industry advocacy

ACC’s annual CLASS seminar brings together coal suppliers and marketers, utility and industrial coal consumers, rail/barge/port transportation management, and coal support service providers. This seminar provides a series of in-depth training sessions on technical, legal, financial and business administration subjects, as well as timely updates on critical marketplace and public policy issues.

Sign up for the Coal Leadership Advancement Seminar Series today.

For more information on CLASS, please visit the ACC Events website (www.accevents.org). You may also contact Janet Gellici, ACC CEO (jgellici@americancoalcouncil.org), or Jason Hayes, Communications Director (jhayes@americancoalcouncil.org) at 202-756-4540.
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Coal Q&A – This year, the American Coal Council is presenting a monthly webcast program that provides you with:

- A forum to learn about and discuss critical issues affecting the U.S. coal industry – coal producers, consumers and transporters
- A topic briefing by a leading industry analyst or representative
- Answers to your burning questions about key industry issues

We have already hosted the following Coal Q&A webcasts:

- January – Air & Water Regulations: Status Report & What’s Ahead for 2012
- February - International Coal Markets: Outlook for 2012
- March - Clean Tech Trends for MATS Compliance
- April – Coal Mine Safety Innovations

Coal Strategy Implications – ACC presents CSI: COAL, a quarterly webcast series that provides you with:

- Information on external situations and factors that are impacting your industry today
- Discussion on opportunities and challenges facing the coal industry
- Expert commentary on the strategic implications for coal suppliers, consumers and transporters
- An in-depth briefing by a leading industry analyst or representative, followed by a Q&A session

This March, we hosted the first CSI: Coal webcast, considering China’s Economic Outlook, with Marc A. Ross, Director Communications & Publications for the US-China Business Council.

Watch accevents.org for information on upcoming ACC webcasts.
Industry/Conservation Group Cooperation:
Promoting Environmental and Wildlife Wellbeing

By David Ledford, Appalachian Wildlife Foundation

Four quail scurried across our path, as we made our way up the gravel road. I slammed on the brakes and jumped out. I had hoped to get video footage of these wild partridges before they flushed. That proved to be a fruitless effort. While we continued our search for the skittish birds, a herd of thirty elk appeared and began grazing on the hillside about a mile across the valley. Below us on the ridge a turkey gobbled, as a deer ran up a nearby hill.

I stopped to drink in the cool, fog-laced morning and the unfolding wildlife spectacle. Within five minutes, I counted the songs of as many as twenty different species of songbird – Wood Thrushes, Northern Parulas, and Red-eyed Vireos in the wooded areas and Prairie Warblers, Grasshopper Sparrows, Yellow-Breasted Chats, and Indigo Buntings in the grassy and shrubby cover.

On this April morning last year, we were not off in an isolated, backcountry park. We were visiting a reclaimed coal mine in Knott County, Kentucky, and were right off Highway 80. This mine site was reclaimed about 12 years before, and is now providing valuable habitat for a variety of different wildlife species.

We very rarely read or hear anything positive about mine lands, so some might be surprised to hear this positive a story about a reclaimed area. We recognize that not every reclaimed coal mine provides high quality habitat, and that there is always room for improvement. The Appalachian Wildlife Foundation is dedicated to addressing this need, so in 2010 we launched the Mine Land Stewardship Initiative (MLSI).
Surface mining for coal has a profound effect on wildlife habitat. At the mine site, vegetation is eliminated, soil and rock is displaced, and many times, mountains are actually moved. While mining is taking place, no wildlife can survive on the mine site, but the actual extraction of coal is done relatively quickly.

After the coal is extracted, the reclamation process begins almost immediately, and reclamation laws and regulations dictate how mines will be reclaimed. Those laws and regulations do not necessarily produce the best wildlife habitat possible. However, by partnering with the coal industry, wildlife agencies, wildlife conservation organizations, other conservationists and landowners, we are committed to helping minimize the negative impacts from mining, restoring high quality habitat, and restoring ecosystem services to mine sites.

When reclaimed properly, surface mines can provide habitat for many wildlife species, some of which are considered imperiled. The species list includes elk, deer, turkeys, bears, quail, grouse, songbirds, raptors (eagles,

"With the right plan, scientific expertise, and adequate resources, habitat can be created for everything from beavers and wood ducks, to elk, deer and honeybees."
hawks, etc.), butterflies and honeybees, and many species of small mammals. With some modifications to current mine reclamation efforts, reclaimed surface mines could provide even better habitat, higher wildlife populations, and a haven for people that enjoy wildlife recreation.

A surface mine can be reclaimed to provide habitat for just about any wildlife species desired. With the right plan, scientific expertise, and adequate resources, habitat can be created for everything from beavers and wood ducks, to elk, deer and honeybees. The first requirement is to decide what we are trying to achieve through the reclamation process. Then, by employing an innovative, scientific approach, habitat can be created and restored to achieve a multitude of objectives.

The ongoing debate over the mining and use of coal among regulators, environmental groups, elected officials, coal operators, and the public is very heated and contentious at times. Indeed, some argue that the future of coal development and use in the United States hangs in the balance. The current re-write of mining regulations and the routine legal challenges to mining activity have created an enormous amount of uncertainty in the coal and utility industries. Concurrently, electric utility companies and banks are questioning coal companies about ecological performance and are demanding performance baselines.

To address these challenges, we believe the private sector can develop a voluntary program that sets those baselines and elevates the overall ecological performance of the coal industry.

The MLSI will create standards to improve:
1) The conservation and restoration of ecosystem services
2) The conservation and restoration of wildlife habitat
3) The protection of water quality
4) Recreational opportunities for mining communities

Companies that choose to participate in the MLSI will agree to adhere to these standards, with performance confirmed through a rigorous third party auditing process. When a company is deemed to have adhered to the standards, the coal they produce can be certified as having met the performance standards.

The performance standards will be created through a collaborative process among coal suppliers, mineral owners, utility companies, conservation groups,
wildlife conservationists, coal community representatives and others as deemed necessary.

We hope to have the standards completed and being implemented by participating companies by 2013. To date, the following organizations have agreed to participate in developing the MLSI:

**Steering Committee:**

<table>
<thead>
<tr>
<th>Natural Resource Partners, L.P.</th>
<th>Alpha Natural Resources, Inc.</th>
<th>Arch Coal, Inc.</th>
</tr>
</thead>
<tbody>
<tr>
<td>American Electric Power</td>
<td>Appalachian Wildlife Foundation</td>
<td>Duke Energy</td>
</tr>
<tr>
<td>TECO Coal</td>
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</tbody>
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We have received input from the following conservation organizations:

<table>
<thead>
<tr>
<th>Wildlife Management Institute</th>
<th>National Wild Turkey Federation</th>
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<tbody>
<tr>
<td>Northern Bobwhite Conservation Initiative</td>
<td>Coal Country Beeworks</td>
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<tr>
<td>Quality Deer Management Association</td>
<td>Rocky Mountain Elk Foundation</td>
</tr>
<tr>
<td>Tennessee Wildlife Federation</td>
<td>University of Tennessee</td>
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<tr>
<td>American Chestnut Foundation</td>
<td>The Nature Conservancy</td>
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<tr>
<td>The Conservation Fund</td>
<td>Wildlife Habitat Council</td>
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<tr>
<td>Theodore Roosevelt Conservation Partnership</td>
<td>Indiana Wildlife Federation</td>
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<tr>
<td>The National Fish and Wildlife Foundation</td>
<td>The Wilds</td>
</tr>
<tr>
<td>ARIES</td>
<td>USGS, Virginia Tech</td>
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</table>
In January of 2012, we hosted a workshop among these companies and most of these conservation organizations along with several more coal and utility companies. The goal of the workshop was to determine where the coal industry and the wildlife conservation community could agree on some common themes that would allow us to develop performance measures for the coal industry.

The themes that jumped to the top included:
1) Conservation planning at the regional, landscape and local scale
2) Protection of water quality
3) Biological diversity
4) Creating and restoring habitat for a wide diversity of wildlife species that require a diversity of habitat types
5) Creating some habitat restoration best practices

Other issues discussed related to research, public access to mine lands for recreation, tourism, public outreach, and dealing with regulations that are actually often detrimental to the restoration of wildlife habitats.

The industry partners are committed to going above and beyond what is required by law regarding the conservation of wildlife and wildlife habitat.

The input we received from these wildlife and habitat conservation organizations will prove to be invaluable in developing the performance standards. As we “write the rules” we will be asking these organizations and others for continuous review and critical analysis of our product so we can develop performance measures that make a real difference in the creation and restoration of wildlife habitat, so these relationships are just beginning.

We are striving to finish writing the performance measures in 2012 and begin implementation in 2013. We need more coal companies and land and mineral owners to join us in this effort. For more information contact me and I’ll be glad to talk with you.

David Ledford is president and CEO of The Appalachian Wildlife Foundation (www.appalachianwildlife.com)
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When the Ends Justify the Means: Corporate Greens Take $26 Million in Gas Dollars to Attack Coal

By Jason Hayes, American Coal Council

A reasonable and ongoing critique of any ideology is that, at a certain point, its adherents must take a step back and consider whether their focus on an end goal is helpful or hurtful. They must consider if blind adherence to the end goal is actually worthwhile when the larger impacts of their campaign begin to take shape and people’s lives begin to be changed. If one looks at the recent history of the environmental industry’s clean air push, one can clearly see the same need for an internal critique.

As green leaders begin to sacrifice the core convictions of their movement in pursuit of convenience, marketing goals, and funding drives, and as they demand ever more political power and influence, they are becoming the thing they claim to hate, and are causing massive disruptions across the country.

Green groups, and groups allied with them in the so-called fight for clean air, are increasingly money-focused, multi-billion dollar, multi-national companies – political powerhouses, dedicated to never-ending marketing and political campaigns to close down the coal industry. Long gone are the grassroots organizations once focused on sounding environmental alarms and conserving natural ecosystems....
organizations once focused on sounding environmental alarms and conserving natural ecosystems. Today, they are more about bringing in the green, than worrying about conserving natural green.

Recognizing and boldly critiquing the lost focus of these groups is especially important for those who have been targeted by their corporate offices. Given their tendencies to use any means – junk science, personal attacks, political power, and massive marketing campaigns – to advance their causes, industry and voters must demand that policy makers take a far more critical approach to reviewing their policy suggestions. Stepping aside and allowing them to continue will result in serious setbacks for our customers, our economy, and our country.

**Selling their souls for $26 million**

Perhaps no example better demonstrates this situation than the early 2012 revelation that the Sierra Club bigwigs OK’d the silent funneling of some $26 million into their Beyond Coal Campaign coffers.

Incredibly, those millions came from natural gas producer, Chesapeake Energy. Chesapeake is a well-known player in the gas industry, and one of the largest producers in the United States. They are also a well-known anti-coal force as their marketing efforts regularly smear coal.

Only a few years after the Sierra Club’s Beyond Coal campaign began in 2002, their corporate group in San Francisco allowed their all-consuming hatred of coal to surpass their desire to stop the production of fossil fuel. The result was a partnership with Chesapeake funding their common goal of “mov(ing) our country away from dirty coal.”

In a February, 2012 damage control piece, Sierra Club Executive Director Michael Brune shrugged the responsibility for taking fossil-fueled funding off on his predecessor, Carl Pope¹. He made a point of burnishing his green creed with stories of how – as the new Executive Director of the Sierra Club – he “turn(ed) away millions of dollars” coming from the fossil industry.² However, he immediately went on to undercut his claims of moral and financial purity by bragging about the “unparalleled success” of the Beyond Coal campaign. Amusingly, Brune actually tried to label his organization’s $26 million, fossil-fueled, anti-coal marketing campaign as a “grassroots” effort.

The cognitive dissonance and excuses in Brune’s letter aren’t surprising; we’ve seen this sort of thing from the green industry numerous times. What is surprising and sad, however, is Brune’s complete lack of concern over the destructive impacts of his organization’s Beyond Coal campaign. A 2011 National Mining Association report described how if one accepts Sierra Club claims to have shut down or stopped the construction of 160 coal-fueled power plants, then one must also necessarily recognize their responsibility for stopping the 1.4 million jobs that would have been created if they had been built.

As the Beyond Coal campaign has set aside millions of coal jobs, our economy has staggered under an 8 to 10 percent unemployment rate, with literally millions losing their jobs, their homes, and their means of supporting their families and communities. Despite this struggle, Sierra Club officials colluded with Chesapeake Energy, receiving $26 million to engage in anti-competitive activities that resulted in the loss of almost one and a half million jobs. Compounding this economic malfeasance, reduced access to affordable electricity options is now causing rapid increases in energy costs and half of U.S. families have seen their energy costs nearly double.³

"... Today, they are more about bringing in the green, than worrying about conserving natural green.”
Luke Popovich, Vice President of External Communications at the National Mining Association, accurately described the Sierra Club/Chesapeake collusion saying, “Chesapeake surreptitiously financed opposition to a competing fuel that it couldn’t beat in the marketplace, and (Sierra) Club took dictation and money from the nation’s largest hydraulic fracker.”

Of course, Sierra Club brass are quite comfortable in their jobs with over $26 million rolling in from Chesapeake Energy’s customers, another $50 million from New York mayor Michael Bloomberg, and over $107 million in assets at the end of 2010. With the mortgages of Sierra Club brass comfortably covered and hundreds of millions in the bank, the livelihoods of people working in the coal industry have dimmed in their drive to achieve “unparalleled success” in their ideological campaigns. When an organization puts the success of their marketing ahead of the livelihood of more than a million people, it’s definitely time for them to take a step back and reconsider things.

And They’re Not Alone
Not surprisingly, additional investigation has revealed that Chesapeake energy has partnered with other ostensibly impartial clean air groups to advance their anti-coal agenda. The American Lung Association’s marketing campaigns are an example of how fracking dollars have been used to bankroll “research” studies and marketing campaigns that attacked coal along the same lines as the Sierra Club. Numerous media reports have described how Chesapeake has pumped undisclosed levels of funding into the ALA and ALA has publicly thanked Chesapeake for its “generous” funding. ALA has also admitted that a minimum of $500,000 from Chesapeake had been used to fund their “Clean Air Initiative” in 2008.

Helping to complete the cozy circle between corporate funding, “impartial” public interest organizations, and government regulators, the ALA has played an active role in demanding numerous anti-coal regulations. As the EPA proposed those regulations, ALA representatives have been welcomed to share in the limelight. In March 2011, ALA representatives joined EPA Administrator Lisa Jackson on the stage at the unveiling of the agency’s “Mercury and Air Toxics Standard.”
government officials have not curried ALA's favor, they have been subjected to ALA-funded attacks and media campaigns.8

They Always Hurt the Ones They Love

Sadly, the activities of these groups are having an overall negative impact, as the political campaigns of these groups are making it difficult – if not economically impossible – for utilities to build new, more efficient coal-fueled generation plants, or upgrade their existing plants. This impacts on overall emissions levels, just as fighting to maintain an aging vehicle would keep fuel bills and emissions levels higher than if one were to upgrade to a newer, more efficient vehicle. These groups are fighting for rules that will ensure emissions levels remain static, when new technologies could continue to ensure rapid reductions in coal-related emissions. This reality highlights the critique that they’re not really advocating for cleaner air so much as they are campaigning for the end of coal.

Additionally, the campaigns carried out by these groups are fostering rules that will impact the very constituents they claim to be helping. People living on low and fixed incomes, retirees, union members, rural populations – in fact entire communities9 – are all experiencing doubling electricity costs10, lost incomes, and dwindling job opportunities11, all at the same time as the taxes they have paid throughout their careers are funneled into billions of dollars in loans and subsidies for industries competing against their employers. Companies like the now bankrupt Solyndra, Beacon Power, Ener1, Inc., Range Wood Fuels, and Solar Trust (among many others).

Adding insult to injury, the increased energy prices these people are paying due to fuel switching, are being taken (as noted in the Chesapeake Energy example) to fund the very groups that are attacking their jobs, livelihood, and cultures.

Expressing the frustration of these disenfranchised groups, Cecil...
Roberts, president of the United Mine Workers of America, publicly attacked the changing regulations and motives behind them. Roberts recognized that the expected benefits of changing regulations are not matching up with the costs being imposed. As he stated, “The Navy SEALs shot Osama bin Laden in Pakistan and (EPA Administrator) Lisa Jackson shot us in Washington.”

As we continue to allow the “by any means” methods of special interest groups to heavily impact our energy policy, the regular people will always be the ones made to pay. As we continue to learn that the foundation of this increased regulatory pressure on coal is based in shoddy, activist science and extreme political pressure to move competing energy resources forward, reasonable people have to stand up and say, “enough.”

As Cecil Roberts’ comment demonstrated, it’s time to get the real information out about the long-term damage being done to our energy generation system, our energy prices, our jobs, and our economy. It’s time to do this now – tomorrow may be too late. ◆

Jason Hayes is Communications Director of the American Coal Council

Endnotes
2 In a revealing turn of events, Brune and the Sierra Club have now turned their campaigns against their one-time partner and are now back to attacking fossil fuels wholesale, with a specific campaign aimed at shutting down fracking.
3 “New EPA Regulations are the Latest Attempt to Shutter America’s Coal Industry” www.americaspower.org/news/half-us-families-have-seen-energy-costs-nearly-double-past-ten-years
4 Sierra Club 2010 Annual Report
Dollar amounts taken from 2010 Sierra Club form 990.
6 ALA clean air campaigns have repeatedly pictured children they claim were made sick by the coal industry.
7 The EPA’s “Mercury and Air Toxics Standard” has been widely reviewed and criticized as the most expensive air rule, and the most extensive intervention into the power market ever proposed by the EPA.
9 “The Perfect Storm over Craig, Colorado” – YouTube.com video prepared by Energy for America http://energyforamerica.org/
11 “New EPA Rules Mean Higher Costs, Lost Jobs and Less for the Average Family to Spend” America’s Power www.americaspower.org/EPAndyou
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Mining the Field of Engineering Education:
A focus on the South Dakota School of Mines and Technology

By Robert A. Wharton, Ph.D.

Nestled on the eastern edge of the beautiful Black Hills in Rapid City, the South Dakota School of Mines and Technology (SDSMT) was established in 1885 to meet the growing needs of the area’s primary industry: mining.

The mining industry downturn of the late 1980s was reflected in the school’s mining program enrollment, which eventually dipped to just a handful of students. A bold recommitment to the program by the university, its alumni, and industry partners over the past two decades has resulted in robust growth. The undergraduate Mining Engineering program now has 108 students enrolled.

The Mining Department’s success is the direct result of strong, active partnerships with industry. The university reaps the benefits of a highly engaged Industrial Advisory Board (IAB), which is comprised of CEOs, presidents and other key leaders in mining, many of whom are School of Mines alumni.

“We continue to build upon a rich legacy in mining education and take pride in the growing impact we have on the industry’s future as we prepare mining engineering leaders for tomorrow.”
The IAB and alumni had a vision of the industry bouncing back, and SDSMT has leveraged that opportunity. We are among the top five Mining Engineering programs of the 14 currently in the U.S., relative to academic excellence, and enrollment, with near 100 percent job placement.

Faculty and alumni collaboration with industry greatly enhances program quality. They tirelessly and persistently dedicate time and effort to cultivate and maintain strong partnerships with business leaders. Industry, in turn, helps guide program growth, offers invaluable learning opportunities to students through internships and co-operative experiences, and donates resources to support the program.

Alpha Natural Resources, Barrick Gold of North America, Kiewit Mining Group, Newmont Mining Corp., and Peabody Energy, as well as others, have made significant financial contributions.

MAPTEK has invested in creating a state-of-the-art mine design laboratory with the donation of equipment and software licenses. We recently received a sophisticated laser scanner to assist in surveying and design curriculum. P&H Mining Equipment donated a new equipment simulator that enhances safety and learning, and could potentially improve productivity.

The school’s research expertise includes mine feasibility studies, applied rock mechanics, three-dimensional modeling and analysis, explosives engineering, and underground ventilation engineering. We are one of the nation’s leading universities focusing on 3-D modeling and analysis. Students’ work in this area spans two semesters and simulates a mine operation for 10, 15 or more years into the future, allowing them to determine the quantity of the product that will be extracted over the long term.

A close relationship with the mining industry allows SDSMT to produce the workforce talent it seeks, because we have a deep understanding of industry needs. This understanding has led to the development of a curriculum that combines a strong technical education with a unique emphasis on managerial studies. The direct relevance pays off for our students, as many of the largest global coal and gold producers and several leading mining companies have shown keen interest in hiring SDSMT graduates. Many accept engineering jobs at top companies throughout the world and typically transition quickly into key managerial positions.

Alumnus and IAB member Tony Jensen, president and CEO of Royal Gold Inc., a Denver-based company, is among the highly dedicated and influential industry leaders consulting with us.

“When the IAB helped to restructure the Mining Engineering program over 10 years ago, we considered what industry needs were and how the School of Mines
program could be developed to provide a unique experience. We quickly identified the fact that many mining engineers end up supervising crews of people early in their careers and running multi-million dollar business units before they turn 30. We believe that management and financial skills are essential to the new learning experience to better prepare our students for their careers,” Jensen says.

Alumnus John Hull, vice president of logistics for Peabody Energy and chairman of the IAB, applauds faculty for “… staying in close contact with employers, ensuring that the department structures its classes to the needs of both the students and their future employers. This allows many Mining Engineering graduates to accelerate their experiences once they hit the field and prepares them for early advancement.”

In addition to Jensen and Hull, other notable alumni include Kurt Kost, president of Alpha Natural Resources; Jeane Hull, executive vice president of technical services at Peabody Energy; Dr. Syd Peng, underground longwall specialist and the Charles E. Lawall chair in Mining Engineering at West Virginia University; John Rathbun, international vice president for Austin Powder Co., a privately-held global company based in Cleveland, Ohio; and Randy Baker, president and CEO of P&H Mining.

Student opportunities abound at the School of Mines, thanks to these strong industry ties and the campus’ geographic proximity to Gillette, Wyoming. Seventy-five percent of our Mining Engineering students engage in internships or co-ops. In addition to formal work experience, knowledge is enhanced through on-site learning when professors and students travel to mining operations in Gillette several times a semester.

The Sanford Underground Laboratory at Homestake, just 40 miles away, provides another practical learning environment. School of Mines faculty and students participate in a variety of cutting-edge research projects in the 4,850-foot-deep lab at the former gold mine.

Student proficiencies are proven at global engineering competitions and other venues. Just last year in St. Petersburg, Russia, two students presented papers on mine feasibility. One of them was awarded first place among students who competed from 16 other institutions around the world. Also last year, the School of Mines team
placed second in the International Mining and Mucking Competition. This spring, a Mines student has been selected to present a technical paper on fragmentation in Cambridge, England. Additionally, students have traveled to Australia, South Africa, Chile and Mongolia, generally developing a high-degree of global awareness which serves them well as they enter the global mining workforce.

More than 125 years after its inception, what was originally the Dakota School of Mines has grown into a world-class engineering and science university, offering highly specialized baccalaureate, master’s and doctoral programs to more than 2,300 students. Today, the school offers 16 undergraduate, 14 master’s and seven Ph.D. degree programs. This Fall, we will begin offering a Master of Science in Mining Engineering. The new program was developed to meet industry’s growing need for advanced mining education. An online component for professionals will be a key part of this new program.

We continue to build upon a rich legacy in mining education and take pride in the growing impact we have on the industry’s future as we prepare mining engineering leaders for tomorrow.

Robert A. Wharton, Ph.D., is president of South Dakota School of Mines and Technology, a four-year public university in Rapid City, S.D. He currently serves as a member of the National Coal Council.
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The Canary is Still Singing

By Greg Walcher, Natural Resources Group, LLC

The United States is about to become the first country in history to adopt policies that ensure its own decline.

Melodramatic? Consider that the U.S. is steadily adopting an environmental agenda promoting a lower standard of living for future generations – literally, pushing Americans to travel less, live in smaller and less comfortable homes, give up their cars and eliminate many modern conveniences.

No nation has ever even considered such a future, much less made it official policy, yet that is precisely what America is now doing – at unconscionable expense. We are pursuing an official course of action based on the view that free enterprise is selfish, and that our people must stop much of their production, manufacturing, and especially consumption.

We are headed in this bizarre direction because of the dubious theory that our pursuit of the good life is destroying our environment.

Today’s environmental lobby has created a powerful misconception that we are “subsidizing” fossil fuels to the tune of billions, while failing to invest in renewable energy. The idea that tax credits are “subsidies” is highly debatable, of course, since they merely let people keep more of the money they have earned. But aside from that academic debate about tax policy, we “spend” exponentially more not only in tax credits, but also in direct financial subsidies for renewables, especially when considered in light of the miniscule amount of energy they produce. The DOE reports that gas-fired power generation receives 64 cents per megawatt-hour in subsidies, and coal receives 64 cents. By contrast, wind turbines get over $56 and photovoltaic solar systems over $775. And in direct government outlays, it is estimated that by the summer of 2011 this Administration had spent over $60 billion in the renewable energy sector.

Has it paid off? Only about six percent of the energy in America is produced from all “renewables” combined. That number has been growing slowly for several years because of the rising price of oil, increases in federally-funded research, and continued growth of government mandates. The administration’s

“Well into the 20th century, coal miners in the United Kingdom and the United States brought canaries into coal mines as an early-warning signal for toxic gases including methane and carbon monoxide. The birds, being more sensitive, would become sick before the miners, who would then have a chance to escape or put on protective respirators.”

– Wikipedia
stated goal is to double America’s “renewable energy” supply. Even if that is successful, we will still get 88 percent of all energy from fossil fuels, and nearly 45 percent of our electricity from coal. And the nation’s demand for energy continues to grow, not shrink.

The Minerals Information Institute says every American born today will require 587,000 pounds of coal, 5.7 billion cubic feet of natural gas, and 82,000 gallons of oil to live the same lifestyle we now live. To meet future demand over the next generation with our current mix of energy sources, the country would need to build 747 new coal and gas power plants, 52 new nuclear plants and 1,000 new hydro-electric dams. I do not know a single leader in either party who believes Americans are prepared to do that.
The coal industry in particular is facing opposition like nothing ever seen before. The environmental movement has grown into a gigantic worldwide industry, much of it laser-focused on a battle to end the use of coal.

An analysis by the Sacramento Bee found that by the year 2000, American foundations and corporations were donating to environmental organizations at the rate of $9 million a day. A decade later, these groups are bigger than ever, filing an average of 3 environmental lawsuits every day.

According to 2010 annual reports, the Nature Conservancy has assets of $5.65 billion and annual revenues of over $210 million (no coal mine makes that kind of money). The Sierra Club has annual revenues of over $87 million, over 500 paid staff, and a $100 million foundation. The Environmental Defense Fund (EDF) has assets of $140 million and annual revenue of $101 million. The Wilderness Society has over $53 million in assets and $23 million in revenue. Trout Unlimited showed $20.4 million in revenue, and the Natural Resources Defense Council took in another $114 million. Annual revenue of the National Wildlife Federation is $100 million; Earth Justice, $34 million; Defenders of Wildlife, another $34 million.

There are thousands of environmental organizations – more than 250 involved in mining and climate issues – spending billions in what has become a battle for the hearts and souls of American voters.

The size and success of these organizations, however, does not necessarily mean they represent majority opinion. Indeed, much of their funding comes from a very small elite clique of foundations and wealthy individuals. More than a third of EDF’s 2010 revenue, for instance, came from a single donor. And consider that New York Mayor Michael Bloomberg’s donation of $50 million largely finances the Sierra Club’s anti-coal campaign.

You would think with such resources aligned against the use of America’s abundant coal resources, the environmental industry would be champing at the bit for construction of solar, wind, and biomass plants. You would be wrong.

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The DOE reports that wind turbines receive over $56 per megawatt-hour in subsidies, while coal receives 64 cents.

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“If the agenda is genuine, reasonable people can find common ground. The conversation should focus on how to supply the energy America needs for a prosperous economy – in a clean, responsible, and sustainable manner – not how to simply stop our use of energy.”

In fact, the agenda of many of the world’s top environmental lobbyists has little to do with the environment; it’s more about money and power.

Every place where wind farms or solar plants are planned, there is opposition from these same groups. The use of biomass (which could also help solve a desperate need to thin overgrown and dying national forests) has been all but prohibited on public lands in the West. And the rapid improvement in clean technology for burning coal without polluting the air has been completely ignored by these groups. They could spend huge resources on requirements for cleaner coal technology, but that would actually hinder their overall effort to ban coal.

Taking back the high ground in today’s energy debate requires one very simple strategy – talking about the environment. If the agenda is genuine, reasonable people can find common ground. The conversation should focus on how to supply the energy America needs for a prosperous economy – in a clean, responsible, and sustainable manner – not how to simply stop our use of energy. That might sound good to some people, but in the real world, it would leave the public freezing in the dark.

Greg Walcher is president of the Natural Resources Group, former director of the Colorado Department of Natural Resources, and author of “Backlash: the Theft of the Conservation Movement,” slated for publication this Spring. (www.gregwalcher.com)
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As the thaw of a new spring is occurring in North America, the global economy is slowly thawing from the financial crisis of the last couple of years. And for Canadian coal producers, a recovery trend is occurring as well.

Production and exports are on the rise, Canadian coal is attracting foreign investment, new coal mines are on the horizon and new investment in rail and port infrastructure is helping Canadian coal get to international markets more efficiently than ever before. Along with opportunities, there are challenges facing the industry including proposed regulatory changes to coal-fueled electricity generation and global demographic shifts, including seeing skilled workers retire in greater numbers than ever before.
Canada’s coal mining sector plays an important role in the Canadian economy as a supplier of energy, a direct and indirect employer of almost 30,000 people and a contributor of more than $1 billion to Canada’s Gross Domestic Product. There’s a positive trend occurring in the sector. In 2010, Canada produced 68 Mt of coal, an 8 percent increase, and exports grew over 22 percent. Almost all of the increase was attributed to the global demand for steel-making coal.

As the new President of the Coal Association of Canada, an association that represents a broad spectrum of companies engaged in the exploration, development, use and transportation of coal, I am really encouraged by the trends we’re seeing.

A positive trend also continues in the area of foreign investment. Two companies from Hong Kong and Japan are in the final stages of purchasing Grande Cache Coal, a major metallurgical coal producer in Alberta. Last year, Xstrata and Anglo-American completed acquisitions in western Canadian coal projects, and in 2009, China Investment Corporation acquired almost a 20 percent stake in Teck Resources, Canada’s largest (and the world’s second largest) producer of steel-making coal. Teck plans to re-open its Quintette Mine in British Columbia in 2013.

Canada has several new projects that are in various stages of development. This includes the Raven underground coal project located on Vancouver Island. The joint venture between two companies from Japan and Korea is proposing a clean coking coal project of 1.5 Mt/year and a mine life of 20 years.

On the east coast, the Donkin Coal Project located in Nova Scotia moved a major step ahead in the regulatory process in late 2011. The project, a development between Xstrata Coal Canada and Erdene Resource Development, will have a lifespan of over 30 years and export coking coal to China and India.

“With increased production and demand for Canadian coal, more than ever Canada needs to have efficient and reliable rail and port infrastructure to get our products to market.”
As the global demand for electricity also grows, so too are new plans for exporting Canadian thermal coal. Sherritt Coal re-opened their Obed mine in Alberta, adding over one million tonnes from Coal Valley. Hillsborough Resources just received government approval to expand its Quinsam mine operations on Vancouver Island. Coalspur, a new entrant on the thermal scene, plans to develop a new property, the Vista Coal Project, in Alberta.

With increased production and demand for Canadian coal, more than ever Canada needs to have efficient and reliable rail and port infrastructure to get our products to market. Currently, Canada is one of the leading seaborne hard coking coal suppliers to world markets and almost all of the coking coal is produced in Western Canada. Recent investments will result in an additional 20 million tonnes in handling capacity at major western ports.

By early 2013, west coast terminals Westshore, Neptune and Ridley will see over $1 billion invested in improvements to the efficiency and capacity of their terminals. Provincial Energy Ventures’ President Ernie Thrasher just announced plans to expand the bulk coal terminal in Sydney, Nova Scotia by 3-5Mt. Thunder Bay Terminals, which handles mostly Western Canadian steel-making coal for Great Lakes producers, is also developing as an alternate international shipping route.

Canada’s two major rail operators, Canadian National and Canadian Pacific, are also both making major efforts, including co-operation and track sharing, to keep Canada’s supply chain moving. Combined, the two railways planned to spend almost $3 billion on infrastructure and fleet upgrades in 2011, a significant amount supporting coal shipments.

The future of Canada’s coal industry looks very positive, but there are some challenges as well that could negatively impact its viability.
Thermal coal has come under the global microscope as nations attempt to reduce greenhouse gas emissions (GHG). In summer 2011, the Government of Canada developed draft regulations designed to reduce carbon dioxide emissions from coal-fueled power plants. The proposed regulations set a strict performance standard for new coal-fueled units and those that have reached the end of their useful life. The proposed regulations would come into effect on July 1, 2015.

Although the Coal Association of Canada supports the goal of reducing GHG emissions from power generation, we have serious concerns regarding the proposed Canadian regulations, principally how they fail to strike the right balance among environmental, social and economic interests.

Canada has an abundance of coal that is used to create reliable and cost-effective energy, which contributes to our quality of life and the Canadian economic advantage. Some of the areas that cause me the greatest concern are how the government underestimated the negative economic impacts of the regulation, including future electricity rates, the stranding of capital and coal resources, and the total reliance on only one, as-yet unproven, technology (carbon capture and storage) for coal to meet the new standard.

As the global demand for electricity continues to rise in Asia, at home, governments are intent on restricting coal’s use. This is disappointing considering that, over the last few years, coal producers have stepped to the plate and reduced coal’s environmental footprint considerably through beneficiation and more efficient transportation and other processes related to emissions reduction. Today, millions are still being spent researching new emission reduction technologies, including carbon capture and storage at coal-fueled power plants.
Another challenge in Canada is the increasing shortage of skilled people in the coal industry. The Mining Industry Human Resources Council estimates that the Canadian mining industry will need 100,000 new workers by 2020. Global demographic trends are hitting Canada and other countries hard and we’re going to have to have to focus on a mix of solutions to address our industry’s workforce needs.

Despite these challenges, I think the world is taking notice of the advantages of Canadian coal. Our untapped coal resources, innovative companies and skilled workforce are part of a new value proposition for the coal industry in Canada. As the emerging economies of Asia increase their demand for all forms of coal, Canada is positioning itself to take advantage. As an industry, we need to show that we take our social license to operate seriously. We hope that, with a better understanding of the strengths and advantages of our resources, Canadians will see the importance of coal to our economy and their quality of life.

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Great Opportunity in China, But Do Your Homework

By Clayton Fong, L&L Energy, Inc.

China is the world’s largest coal consumer, accounting for nearly half of the coal used in the world. Eighty percent of China’s electricity comes from coal. Seventy percent of total energy consumption is from coal.

Energy is fundamental to a growing economy and China’s GDP continues to grow at an astonishing 8 to 10 percent per year. Demand for coal in China outstrips supply and that is forecast to continue into the next 20 years.

In 2010, China became a net importer of coal, and imported 182,400,000 metric tonnes in 2011 – up 10 percent over 2010. Most of China’s imports have come from either Indonesia or Australia. The US has begun to export coal to China but additional infrastructure, particularly west coast port capacity, is key to meeting the tremendous potential growth of US coal exports to China. There are several port projects in the works.

This scene from the Zhejiang Province shows the modern face of China.
How does your business partake in the great opportunity in China?

One must do their homework before diving off the deep end of the pool. Doing business in coal country is different from New York City. Doing business in China is an even bigger leap. It requires that you be well prepared to traverse a different culture, language, business environment and political/government environment.

In 1986, I had dinner with the first Chinese ambassador to the USA. While drinking our Coca Colas he told me a story why Coke was so dominant (it still is today). When Coke and the other big soft drink company of the time wanted to break into the Chinese Market, Coke hired him. The other company hired a Madison Avenue firm to design their Chinese marketing campaign. They translated their US marketing campaign, which was focused on the slogan “for a new generation.” However, their slogan got lost in translation – a problem exacerbated by a multitude of Mainland Chinese dialects. Instead of “for a new generation,” their final marketing pitch became something like, “will revive your dead ancestors.”

I’m not sure how much artistic license the ambassador employed while he related that story but a key point is that to be effective in China, you need to get to know China. American paradigms in China are like a square peg in a round hole.

Here are a few additional tips for companies seeking success in China:

• **PARTNERSHIPS** – Perhaps the single most important tip is to find a good partner. A good partner will not only help you get the deal done, but will help you troubleshoot the inevitable challenges that arise once a deal is inked. Even L&L with very strong acumen in China does most of our deals as joint ventures.

• **RELATIONSHIPS** – Relationships are critical. Good relationships and reputations are key to doing business in China. Take time to develop those relationships. Let your business start smaller and grow as you strengthen those ties.
GOVERNMENT RELATIONSHIPS – Strong government ties are very important. The government owns all the land and it owns all the coal. Nearly all of the largest companies are state owned enterprises. Consequently they are likely to be your biggest customer of coal or coal related business. Staying in the good graces of the government is essential. Chinese government officials have much more discretionary authority than here in the US and waivers from regulations are common. One needs to have the political access to resolve the obstacles that will inevitably arise.

LEGAL SYSTEM – Legal systems in the US and China are very different. Complex legal documents can be either an important protection, or a structural impediment. Here in the US, most contracts are hundreds of pages long, and rife with legalese. We try to protect against every conceivable “what if.” If there is a conflict, we arm ourselves with lawyers and go to court. That approach definitely needs to be softened in China, where renegotiating business deals is more common than going to court.

One system is not necessarily
better than the other, but one must understand the ramifications of operating in a different paradigm. Moreover, a typical company in the US will have a hard time using the courts in China to resolve a dispute. Good legal documents must be bolstered with strong and harmonious business relationships and good contacts with government at the local, provincial and national level. The laws and regulatory environment and even the actual legal system are changing fast.

There are tremendous opportunities in China for a coal company. Those opportunities will continue to grow at an astonishing pace as will the Chinese appetite for energy. Companies must do their homework and find a good partner that has experience both in China and in coal, as well as good contacts with government.

Remember, business relationships are critical. ♦

Clayton Fong is vice president – U.S. Operations at L&L Energy, Inc. (http://www.llenergyinc.com/)

A seaside town in Guangdong Province by the South China Sea.
Underground Coal Gasification:
Accessing Buried Energy Cleanly and Efficiently

By Julie Lauder & Phil Smith, Underground Coal Gasification Association

Underground Coal Gasification is finally coming into its own in many parts of the world, but the US market has yet to actively embrace this technology. Could this be about to change?

Many believe the term “clean coal” to be an oxymoron. Despite that resistance, the amount of coal available globally ensures that it will be a mainstay of our energy needs well into the future. Therefore, the challenge facing industry is to find methods that ensure we can extract the energy from coal in as low-cost, safe, and environmentally responsible ways as possible.

That’s Clean Coal, and Underground Coal Gasification (UCG) certainly has a part to play.

Many believe the UCG process of converting coal to energy offers huge potential to clean coal and enable economical access to stranded coal deposits, an estimated 1.7 trillion metric tones (1.9 trillion short tons) globally. It’s not a new idea, but one that is rapidly coming to the attention of policy makers,

“Converting just five percent of U.S.-based coal reserves to liquid fuels would provide an energy resource equivalent to crude reserves of 29 billion barrels!”

Fig. 1
© UCG Potential Gas reserves
as an economical and politically acceptable method to meet growing energy needs.

Mining coal has environmental impacts; so extracting the energy from coal while it is still in the ground makes a lot of sense. Via UCG, coal is directly converted to a synthetic gas – suitable for industrial heating, power generation, hydrogen manufacture, synthetic natural gas, diesel fuel, liquid fuels, fertilizers and other chemical feedstock. Many experts believe UCG could triple or even quadruple recoverable coal reserves globally. See Fig. 1 (left).

Converting just five percent of U.S.-based coal reserves to liquid fuels would provide an energy resource equivalent to crude reserves of 29 billion barrels!

One would expect the developing and energy-hungry nations of India, China and South Africa to be advancing and researching alternative technologies such as UCG. But other nations – Australia, Canada, New Zealand and many in Europe – are now also vigorously investigating commercial deployment of UCG, as the map above shows.

That’s good news for the US, which like many western economies has seen a huge backlash towards coal production, while at the same time an increased demand for domestic energy.

Plus, UCG is not new to the US. Many recent technological and operational developments are a direct result of over 30 extensive US trials that were carried out between 1973 and 1989, in Wyoming, Colorado, and Pennsylvania, under the auspices of the DOE and Lawrence Livermore National Laboratory* (LLNL), which remains a leading authority on UCG.
Additionally, as UCG is a multidiscipline technology, many in the US already possess the skills, knowledge and expertise that the global UCG industry is seeking.

The process of converting coal to gas underground involves using horizontal and directional drilling techniques, where two wells are drilled into the coal. An oxidant – either air or oxygen or air/oxygen, with or without steam – is fed into one well.

The coal is then ignited and partially combusted, and the resultant product gas is brought to the surface for processing via the second well. The process can be halted at any time by stopping the injection of the oxygen or air. Once a particular coal seam is exhausted, new wells are drilled to initiate the gasification reaction in a different section of the coal seam. A pair of wells can last as long as 15 years. The technology also lends itself easily to carbon capture, as the process enables relatively simple, low-cost carbon removal from the syngas, prior to use.

Energy-hungry nations such as India, China and South Africa (pictured above) have been advancing and researching UCG.
Can all coal be gasified underground?

Alas, no. Many factors such as seam depth and thickness, coal grade, groundwater conditions, and seam inclination must all be considered; site selection is paramount for a successful project. Generally, seams between 120m and 2000m (390’ to 6,600’) deep are preferable.

After the coal is converted to syngas in a particular location, the remaining cavity (which will contain the leftover ash or slag from the coal, as well as other rock material) may be flooded with saline water and the wells capped. There is also growing interest in using these cavities to store the carbon dioxide captured from the aboveground processing.

UCG operates at pressures below that of the natural coal seam pressure, thus ensuring materials are not pushed out into the surrounding formations. This is in sharp contrast to hydraulic fracturing in oil and gas production, where pressures significantly above natural formation pressure are used to force fracking chemicals into the formation.

Despite many apparent benefits, obstacles to UCG remain

One obstacle is a lack of funding (due to a lack of coherent licensing and regulatory frameworks) and lack of government interest (mainly due to negative connotations associated with coal). There are also environmental concerns, which hamper
“It is in the interests of all that the UCG process is safe and fully tested, so public and political concerns are acknowledged and explored.”

growth of the sector, such as possible groundwater contamination and subsidence – both of which can be mitigated through careful site selection, project design, and monitoring.

It is in the interests of all that the UCG process is safe and fully tested, so public and political concerns are acknowledged and explored. This is helped by live, active UCG projects currently being conducted in nations around the world and bolstered by a high level of interest in many others.

The Chinchilla and Bloodwood Creek sites in Queensland, Australia and Mecsek Hills site in Hungary have moved the process up a notch as they are now producing syngas for commercial use.

In India, the government is looking at UCG to utilize the 60 percent of its 270 billion tones of unminable coal. In neighboring Pakistan the Thar project in Sindh Province is expected to produce 100MW of electricity by the end of 2013.

In the US, a project at Cook Inlet, Alaska, plans to go commercial in 2015, as does the Swan Hills UCG site in Alberta, Canada. There is also substantial interest for projects in Wyoming, Montana, North Dakota, Colorado, Alaska and many commercial UCG companies are looking to expand operations in the US in the coming year.

As the industry grows, so too does the need to share knowledge surrounding national regulation and non-commercially sensitive technological advancements. The need has never been greater to show both investors and regulators that UCG can play a major role in alleviating the energy crisis by providing low cost, environmentally-sensitive energy for decades to come.

The role of the Underground Coal Gasification Association (UCGA), as the recognized representative industry body, is to promote the interests of its members and champion the acceptance of UCG. It is a wholly independent, not for profit organization focused on providing impartial and unbiased information and training on all aspects of UCG. To find out more, readers are invited to attend the 7th UCG International Conference and Workshop in London on May 2 and 3, 2012, or join now, by visiting www.ucgassociation.org.

Phil Smith, Media & Communications & Julie Lauder, CEO, UCG Association, www.ucgassociation.org

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Fire In the Hole, 2007 – www.llnl.gov/str/April07/pdfs/04_07_2.pdf
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The US coal industry is gearing up as a steady, large-scale supplier of coal to world energy markets; no longer willing to settle as “swing supplier” and countering weak domestic demand.

The industry has enough terminal capacity in the pipeline or planning stages to more than offset lost domestic coal tonnage.

Planned US port expansions could allow US exports to more than double by mid-decade from the 107mn short tons exported in 2011. Estimates vary on what is possible for port installations. An Arch Coal presentation recently told investors US export capacity could reach 270mn tons by 2016, including overland shipments to Canadian and Mexican ports. An Argus tally puts the total even higher at 322mn tons/yr by mid-decade (see tables).

New and expanded terminals would allow US exports to grow by 160mn-200mn tons, easily offsetting the expected retirement of 40-70GW of coal generation this decade, the equivalent of 80-140mn tons/yr if 1GW equals 2mn tons/yr of bituminous coal demand.

The country’s reduced coal use was supposed to be gradual, but cheap natural gas and a warm winter this year have given the coal industry a preview of things to come and forced it to adapt quickly.

Utilities are reselling unwanted tons, leading to an uptick in over-the-counter coal trade as coal producers, traders and brokers get creative to find ways to move to the coast or make the economics work.
Competition is emerging among ports and transportation providers, and increased competition and flexibility, to which US coal markets are currently unaccustomed, may become permanent features if the market sticks to its current trend.

Eastern railroads CSX and Norfolk Southern have become aggressive on rates in the face of double-digit volume declines as they seek to hold onto business that is increasingly going out of the Gulf coast. There is more competition to the lower Mississippi with barge lines bidding against each other and the railroads for business.

Most capacity announcements are for the New Orleans area that is served by barge lines and six Class I railroads. Shippers could have 10 options for vessel loadings in the region if new entrants Armstrong Coal, Oiltanking, and LDH Energy decide to develop their properties on the river.

The lower Mississippi has to overcome draft restrictions that essentially limit business to Panamax vessels. But exporters are getting creative given that Asian buyers prefer the economics of larger vessels.

One trader is said to be light-loading a Capesize vessel on the lower Mississippi and then topping it off at the deeper Colombian port of Puerto Bolivar. There is even talk of Midwest coals getting barged via the Tennessee-Tombigbee waterway to the Mobile, Alabama, port, which has a deeper channel than New Orleans.

<table>
<thead>
<tr>
<th>Region</th>
<th>Argus</th>
<th>Arch — March 2012</th>
</tr>
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<tbody>
<tr>
<td>West Coast</td>
<td></td>
<td></td>
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<tr>
<td>Ridley</td>
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<td>4</td>
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<tr>
<td>Westshore</td>
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<tr>
<td>Gateway/SSA Marine</td>
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<tr>
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Vancouver, Canada: US exporters are relying on capacity at ports in Canada to ship into the Pacific Basin.
Barge lines could see even more competition from the railroads. A shortline railroad five miles north of Kinder Morgan’s International Marine Terminal (IMT) has proposed an extension to the facility. The only rail-served terminal in the region, Convent Marine Terminal (formerly IC Rail), has filed for permits to raise its exports to 16mn tons/yr, but privately the owner Foresight Energy has said a second shiploader could allow its capacity to reach 24mn tons/yr.

Not to be outdone, United Bulk has further upgrades coming to add 5mn tons/yr capacity, and IMT is securing permits and agreements to add a third phase of upgrades that would take its capacity to 18-20mn tons/yr including domestic shipments, Kinder Morgan commercial director Cees Van de Mortel said in March.

Ambre Energy and Kinder Morgan are moving to add terminal capacity on the Texas coast, and Union Pacific and Kansas City Southern plan to rail coal across the Texas border into Mexico to use its ports closer to Pacific Rim customers.

The East Coast, the major outlet for US coals at 60mn tons of exports in 2011, could quickly bring on brownfield projects and expand existing facilities. Hampton Roads, Virginia, has spare capacity and an old CSX terminal adjacent to DTA that could be redeveloped for exports. CSX has more coal supply on its lines, but Norfolk Southern has several coking coal mines under development that would boost its volumes and justify additional railcar supply dedicated to its Lamberts Point terminal, which lacks ground storage.
If Consol Energy signs long-term coal supply contracts it could double the capacity of its CNX Marine Terminal in Baltimore, but rail lines that share capacity with Amtrak serving the port would need upgrades.

Coking coal exports sputtered out of the Fairless Hills terminal in Pennsylvania last year, but the facility will have its railcar unloader completed in April to give it a 1-3mn nominal short tons/yr of capacity. The terminal is dual served but CSX has rail yard capacity that can support the terminal as well as the dormant Pier 124 coal terminal in Philadelphia’s Navy Yard, an option Arch may be using in its estimate for Pennsylvania capacity at 9mn tons/yr by 2016.
On the West Coast, US exporters are relying on capacity at ports in Canada to ship into the Pacific Basin. But large terminals on the US West Coast may be inevitable, given the 400mn tons/year-plus production of low-cost coals in Montana and Wyoming, and massive reserves yet to be developed.

Environmentalists are fighting the permitting of what would be the two biggest terminals in Washington State, threatening to stretch out the time frame for the projects past mid-decade targets. The Gateway terminal being planned by SSA Marine and Peabody Energy at Cherry Point is halfway through a two-year environmental review. And the Millennium Bulk Terminal planned by Ambre and Arch Coal at Longview restarted a permit process that puts earliest operations by 2014 or 2015.

Oregon is moving faster than its northern neighbor approving leases for Ambre to barge coal down the Columbia River and transfer coal midstream onto vessels at the Port of St. Helens as early as mid-2013. Kinder Morgan also obtained a lease for a terminal at the Port of Westward.

One major strategy is the increased blending of coals at Midwest river terminals to take advantage of the lower costs of Powder River Basin and Illinois Basin coals and the higher quality of higher-cost Central Appalachian and Colorado coals. Great Lakes terminals want to use the same blending formula but so far are mainly exporting single-type coals.

The Superior Midwest Energy Terminal in Wisconsin is exporting Montana coal via a terminal in Quebec, and Xcoal this year will start exporting coal out of two Great Lakes terminals from Ohio, Pennsylvania and New York using a terminal in Nova Scotia to transfer coal to ocean-going Capesize vessels.

Chris Newman is editor of Argus Coal Transportation (www.argusmedia.com).
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On March 27th, the EPA released its Clean Air Act standard for greenhouse gas emissions from new power plants. This rule will effectively require that all new coal-fueled generation meet emissions standards of new natural gas generation technologies.

As noted in the recent Electric Reliability Coordinating Council remarks on this proposed standard:

The GHG rule must be placed in the context of many other rules – such as the air toxics rule, the visibility rule, and the interstate rule – that have the effect of increasing the price of energy for consumers by double digits in some areas, and have the effect of making industry less competitive and destroying jobs as each plant closes.
“If experience with the Stream Buffer Zone Rule is any indication, EPA intransigence on coal issues, highlighted by their attempts to extend their authority to include retroactive revocation of existing Sec. 404 CWA permits, does not bode well.”
Any reasonable review of the EPA’s latest move can see that the GHG rule is just the zombie version of the cap-and-trade, or cap-and-tax legislation that was rejected by Congress, and has now been brought back to life in regulatory form. This rule is a continuation of the effort to push coal-fueled energy out of the country’s generation mix. It is a deliberate move to shrug past the administration’s recent call for an “all of the above energy policy.” So, more and more we see that the “all of the above” strategy is just words, just a marketing strategy, designed to deflect the fallout of the impending EPA regulatory train wreck.

While administration officials hold up carbon capture and storage (CCS) as a workable “path forward” for coal in this proposal, the reality is that CCS technologies – while promising – remain expensive and at a testing stage. Recent experience with the EPA and other federal authorities must also force industry to question the likelihood of government working with industry to approve permits for proposed CCS technologies and operations. If experience with the Stream Buffer Zone Rule is any indication, EPA intransigence on coal issues, highlighted by their attempts to extend their authority to include retroactive revocation of existing Sec. 404 CWA permits, does not bode well. Again, this path forward appears to be “just words” and marketing spin.

Senator Joe Manchin (D-WV) made clear many other problems associated with this proposal.

(This) announcement shows, this EPA is fully engaging in a war on coal, even though this country will continue to rely on coal as an affordable, stable and abundant energy source for decades to come. This approach relies totally on cheap natural gas and we’ve seen that bubble burst before. It might sound good now, but what happens if those prices go up? Your average hardworking families and manufacturers will be left holding the bag of uncertainty – either in the prices they pay or in the reliability of our electrical system. Either way, they’ll face enormous disruptions in their ability to do business and go about their everyday lives.

The GHG rule is a proposal clearly founded in the unstable assumption that natural gas prices will remain at their current low levels. Or, if its authors do remember the historic volatility of gas markets, then they have willingly subjected the strained budgets of a nation still reeling from...
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stockpiling
transloading

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Jason Hayes is Communications Director of the American Coal Council (www.americancoalcouncil.org)
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Public Relations vs. Public Affairs

By Al Maiorino, Public Strategy Group, Inc.

Organizations often seek a relationship with their public and struggle to find the effective way to do so. This is when public relations and public affair firms are hired. Believing that public relations is an umbrella term and public affairs is a mere specialty within it, many organizations jump into hiring a public relations team without knowing the full benefits of both industries. Definitions and firms are completely different. Organizations must acknowledge the differences between public relations firms and public affairs firms to effectively have their message delivered.

Public Relations is ongoing commercialization. It is the practice of managing the flow of information between an organization and its publics. Firms have creative, original ways to grab the target public’s attention amidst thousands of media outlets swarming with messages. Messages help develop a brand, create an image and ultimately provide publicity an organization needs. The communication then becomes more commercialized.

Public Affairs can be more short-lived commercialization. With public affairs, the messages are less commercialized and firms concentrate on localized issues between the people and a legislative body or an organization and its community. The main focus is on obtaining support and debunking opposition through grassroots communication by building relationships with communities.

The main goal of a grassroots campaign is to bridge the gap between companies and the community. In such campaigns, public affairs specialists seek local support to build allies in order to form a supporter coalition. Grassroots campaigns include a wide range of activities – creating and maintaining a database of supporters, sending out informative mailers to local residents, organizing petition drives, and encouraging community members to write letters of support to their elected officials and local newspapers. In the end, the primary goal of a grassroots campaign is to send a positive message about the project through the community or targeted area. When building a relationship with a selected group

“Instead of waiting for the opposition to grow, public affairs concentrates on providing communities with the real facts and advantages of your project.”

– Al Maiorino
of people regarding your company, project or legislative issue, grassroots campaigns are the best way to go.

Public affairs certainly involves public relations techniques in a day to day capacity, but it most often influences the impacts of projects, initiatives and announcements on respective communities. This is where public affairs firms meet “Not In My Backyard” groups. NIMBY groups represent members in communities who debate over nearby developments. Often, these NIMBYs dispute projects regardless of the project’s nature and apparent benefits. The fact that a development might enter their community spurs NIMBYs to action. This action is frustrating for developers and community members who may support the project or even growth in the community.

Very often the opposition stems from misinformation and poor communication between project representatives and the community. Sometimes communities form their negative opinion based on misunderstood facts about the proposed development. In addition, local residents may not know the benefits the project will bring to their community. Public affairs plays on the offensive. Instead of waiting for the opposition to grow, public affairs concentrates on providing communities with the real facts and advantages of your project.

Public affairs firms develop extensive experience in winning land use and zoning campaigns. They are familiar with referendum management, legislative issues, and utilize grassroots campaigns to build a reputation and find common ground with communities and NIMBYs. Some public relations firms aren’t always equipped with the necessary tools and experience in developing rapport with a community. Additional knowledge of government and policies is needed beyond public relations knowledge. Public affairs practitioners foster relationships with communities, their NIMBYs and organizations.

Often, public relations firms do not specialize in NIMBY opposition. Their campaigns tend to target the entire community, create awareness of their client and generate
“Various tactics such as press kits and social media management are used to establish credibility for a company in the minds of targeted consumer groups.”

positive attitudes. There is little negotiation and direct contact with NIMBYs.

Public relations is considered a highly credible form of promotion. According to the Edelman trust barometer, it is more credible to advertising 9:1. Professionals know how to strategically capitalize on the influence of the media to portray messages. Various tactics such as press kits and social media management are used to establish credibility for a company in the minds of targeted consumer groups.

A public affairs firm can use many public relations’ tools to influence public policy. The two types of firms overlap in many areas: relationship building, researching publics, implementing and maintaining their campaigns and measuring impact. Even though they have their similarities, the biggest difference is in each firm’s campaigns and the specialization of their practitioners.

Public relations organizations possess a wide variety of tactics and skills, but when building a relationship with a selected group of people regarding a company, project or legislative issue, public affairs campaigns may be the best way to go. When an organization thinks about hiring a firm, they should always consider their audience, the type of campaign they want and the specializations of the firm’s practitioners. Organizations must acknowledge the differences between public relations firms and public affairs firms to effectively reach their publics. 

Al Maiorino is president of Public Strategy Group, Inc. (www.publicstrategygroup.com).
Save the Date. With a decade of service to the coal sector, COAL-GEN is the industry’s most dynamic event covering the latest topics affecting the design, development, upgrading, operation and maintenance of coal-fueled power plants. With an anticipated attendance of over 4,500 industry professionals and more than 350 exhibitors, COAL-GEN is the industry’s largest event focused on the solutions of today and the technologies of tomorrow.
Mining On-Site Analysis in Minutes, Not Days

Megatrol and P&H use on-site analysis to help maximize mining equipment production

By Del Williams

It didn’t take a six-year federal study to show that miners want fluid analysis equipment on-site for speedy but comprehensive results as part of their equipments’ preventive maintenance programs. But that’s what a 2004 U.S. Department of Energy study concluded, and what an increasing number of respected players in the mining industry, including service provider Megatrol Inc. and equipment provider P&H Mining Equipment, are moving to implement.

“To stay maximally productive, mines need real-time information they can act on as part of their daily planning instead of a periodic checkup,” says Tom Barnes, Product Support Manager of P&H Mining Equipment Inc., a leading manufacturer of surface mining equipment including giant electric shovels, draglines, and blasthole drills. “The reason: Equipment is bigger and more complex, mines are more remote and sophisticated technical help is harder to get, especially in emerging markets.”

Fluid analysis, of course, is vital to the health of all mining equipment, not just the million-dollar ones. But taking and sending hundreds of lubricant samples every month to an off-site laboratory for analysis is a costly management nightmare at more than $20 per sample. That cost is multiplied when mine managers have to wait for results, anywhere from days to weeks, leaving key production equipment susceptible to sudden, unscheduled downtime if needed repairs are not made beforehand.

Real-time on-site analysis is now eliminating that wait and costly sampling with equipment that is as easy to use as an ATM. In 10 minutes or less operators can have comprehensive analysis showing metal wear and contamination before equipment loss and downtime become catastrophic, allowing mine...
Managers to repair their equipment faster and get it back in service more cost effectively than ever.

"Any mechanical piece of equipment can fail if you don’t stay on top of preventive maintenance, especially in a rough and remote mining environment,” says Jon Rose, who has 40 years of experience in the mining industry as owner of Megatrol Inc., a mining equipment management and maintenance solutions provider.

"An extra hour of operation can at times lead to very expensive downtime and that is a prime reason for an on-site oil analysis program,” says Rose. “Waiting for test results from off-site labs is a risk I prefer to avoid due to the very high costs of equipment and the overall expense of down time.”

Since mines are typically in remote locations, sending samples to off-site labs takes time. Even 24-hour turn-around from an off-site lab does not factor in the time to ship the sample through the mail, or via overnight delivery (at additional cost to the sender). Even off-site labs acknowledge that samples degrade over time. Furthermore, samples that are mishandled or damaged during shipping can also affect the integrity of the results.

"Many times off-site oil analysis results are not available due to shipping or performance delays which can result in serious mechanical failures and downtime,” says Rose.

Even cumbersome low-end “on-site analysis” doesn’t measure up to the needs of high-volume mine sites. Although there are smaller and less comprehensive testing devices for on-site monitoring on the market, a more comprehensive analysis of multiple factors, including comparisons against expected equipment wear rate curves, has only been available through fluid analysis at off-site laboratories. Low-end on-site testing equipment has usually been limited to single tests like viscosity and can introduce error if samples must be handled multiple times.

For real-time analysis and repeatability of data that can help maximize mining equipment production uptime, Megatrol has turned to On-Site Analysis Inc. for speedy and comprehensive test results.

The OSA analyzer, for instance, is capable of identifying the presence of 20 metals, measure physical properties such as glycol, TBN, soot (diesel engines only), fuel dilution, water, nitration, and oxidation, and also measure viscosity at 40 and 100c. It has an integrated particle counter and provides comparisons against expected equipment wear rate curves similar to off-site labs.

Megatrol is successfully using two OSA labs at a coal mine in Gillette, Wyoming, testing 600 to 800 fluid samples monthly from a fleet of several hundred vehicles.
including trucks, dozers, scrapers, and support equipment.

“With timely on-site analysis and repair, a high-volume mine site could save thousands by avoiding unscheduled repairs and downtime,” says Rose. “By replacing a $5 hose in time, for instance, you could save a $120,000 engine or $70,000 transmission.

In high-production mines today, every minute of downtime is scrutinized and any unscheduled downtime must be minimized, particularly on key equipment that can adversely affect some portion of production if that equipment breaks down, says Tom Barnes of P&H.

The mining equipment giant has added on-site fluid analysis to its Prevail® Remote Health Monitoring Program, which expedites equipment diagnosis, maintenance, and repair through its MinePro Services network, and is starting to roll it out globally. The Prevail® Remote Health Monitoring Program helps to maximize mine equipment health and productivity by allowing managers and technicians to monitor all key equipment vitals online.

“We’ve added on-site oil and hydraulic fluid analysis, plus an ability to track historic component wear trends with flexible online reporting to our ability to monitor vitals like temperature and equipment fault logs,” explains Barnes. “This gives mine managers and technicians near real-time ability to analyze, diagnose, predict, and respond to needed repair from a one-stop, secure website interface, or to receive critical email alerts. It also allows mine operations to benchmark and develop trends which lead to optimized performance and best practices.”

According to Barnes, the availability of more immediate results allows operators to streamline preventive maintenance programs. By closely monitoring and tracking vitals such as oil, temperature, and vibration with the program, operators can optimize routine maintenance tasks and oil change intervals based on the results. The improvement to machine availability and utilization alone can significantly improve the operation’s bottom line and has the additional benefit of reducing disposal costs and environmental impact.

“Based on higher production uptime; lower maintenance, repair, and environmental costs; as well as eliminating off-site fluid analysis shipping and expediting costs, high production mines could achieve ROI in less than one year with the Prevail Remote Health Monitoring Program, including on-site fluid analysis,” concludes Barnes. ◆

Del Williams is a technical writer based in Torrance, California, writing for www.on-siteanalysis.com.
Arousing Spring Coal Forum (SCF) keynote speech, given by Dr. Phil Burgess, the founding Executive Director of the American Coal Council (ACC), encouraged listeners to defend the American electricity consumer and the benefits of electrification around the world. Burgess urged the industry to take a stand, recognizing that the war being waged against coal is, in fact, a war against the American economy, jobs, and well-being.

The American Coal Council’s Spring Coal Forum is a strategic planning and policy event designed for senior executives in the coal industry. As in the past three years, SCF 2012 was held in March at the SandPearl Resort in Clearwater Beach, Florida. While the focus of the event is always on the industry, policy, new technologies, networking, and personal & professional development, the location of this annual event provides an unparalleled backdrop. One would have trouble finding a more beautiful setting than Florida’s white sand beaches, the sound of the Atlantic Ocean rushing onto the beach, warm sun, and the luxurious SandPearl property.

The theme of this year’s SCF was “The Yin and Yang of Coal,” where the Yin & Yang symbol is representative of the dynamics at play at many levels in today’s global economic, energy and environmental arenas. This year’s Spring Coal Forum program explored the landscape, headwinds and horizons of the coal industry – how these many complementary opposite factors interact within the greater whole of our economic, energy and environmental system.

A key aspect of the event was the ACC’s 30th anniversary celebrations, and the public recognition of the Council’s past presidents. During the celebration, ACC CEO, Janet Gellici introduced each of the Council’s previous...
Presidents (pictured with Janet below) for their insight, effort, and commitment to the ACC over its 30-year history.

With a wealth of information being shared by speakers from across the coal chain, over 175 SCF ’12 attendees had an opportunity to enjoy opening keynote speaker, Robert L. Bradley, Jr., CEO & Founder of the Institute for Energy Research, as he discussed his latest book “Edison to Enron: Markets and Political Strategies.”

Attendees also enjoyed executive briefing sessions on global and domestic coal markets, policy outlooks, natural gas markets, the implications of “junk science” on energy policy, the growing coal export market, CO₂ for use in enhanced oil recovery, and restoring environmental science in coal and energy production. Attendees were also invited to attend an industry roundtable briefing, which investigated new dust control technologies being used by the railroad industry.

In the 30th Anniversary Luncheon celebration, author, President of the Annapolis Institute, and Founding Executive Director of the American Coal Council, Dr. Philip M. Burgess, presented listeners with a stirring call to the coal industry. Telling them they would need to either “sit, fight, join, or run,” Dr Burgess regaled the packed room with stories from the early days of the ACC and his decades of work in energy policy. Drawing from his ample experience, Dr. Burgess described how similar efforts had been mounted in the past to stop coal – carbon taxes and the Kyoto protocol. However, they had been defeated by maintaining a focus on the national interest – “American competitiveness, cost of living,” and the impacts of these policies on “economic growth, and equity.” Burgess asked,

“Why should the US tie one hand behind its back while China, India, Brazil and other rising economic powers were exempted from Kyoto limits – that is, they received a free pass even though these nations were rapidly becoming not just the primary but the overwhelming source of carbon emissions into the global atmosphere.”

Dr. Burgess pressed the attendees to remember the words of Max DePree that “the first responsibility of a leader is to describe reality.” So, he moved on to describe the reality of the coal industry today, arguing that our industry has been at the foundation of an amazing string of achievements spanning from the massive ramp up of production following the 1973 oil shocks, to providing half of the country’s electricity for years, to providing the (consistently) most reliable and affordable source of energy to the country, all while managing huge successes in reducing environmental impacts. He continued by noting that the industry maintained this high level of performance in the midst of an all out war.
Former ACC President Phil Burgess cautioned against “reckless experiments with energy policy that would create unnecessary risks and perhaps pose grave dangers to our supply of reliable and affordable electricity.”

He also pulled back from the concept and term “clean coal.” Burgess described his feelings about the “PR campaigns to make coal warm and fuzzy” as “finger(nails) on a chalk board.” He noted the term diverged from from DePree’s call for leaders to describe reality. Instead he told the listeners that they needed to focus on some realities about coal: it is widely-distributed, plentiful, the least-cost power generation resource, and it is the only resource that can meet our growing electric power needs over the short term. Additionally, he reminded attendees that coal provides hundreds of thousands of jobs, while reducing costs for energy intensive sectors, such as telecommunications, high-tech, and manufacturing – all sectors that give the U.S. “huge competitive advantages”.

Burgess argued forcefully that America’s 600 coal-generating facilities are “a major national asset” that should not be shuttered “before their ‘use by’ date.” Destroying this asset would critically injure the country’s economy and hinder wealth creation. Destroying this asset would amount to “reckless experiments with energy policy that would create unnecessary risks and perhaps pose grave dangers to our supply of reliable and affordable electricity.” He claimed it is now time for a strong coalition of leaders to take on the war against reliable and affordable electricity in America. This coalition will not be able to sit out of the fight. They will not be able to join up with their detractors. They will not be able to run away from the challenges we face. So, the only remaining option will be to take up the fight by educating American consumers about the easy access they have to affordable, reliable electricity, as a result of coal.

Jason Hayes is Communications Director of the American Coal Council (www.americancoalcouncil.org)
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