To JHCGA’s friends and supporters:

A full agenda of speakers for Global Business Roundtable (GBR) meetings, a new project on clean energy infrastructure in the U.S. Intermountain West, and an impressive energy technology Expo in China set the stage in 2012-2013 for a subsequent JHCGA breakthrough. In June 2014 JHCGA led a bipartisan group of leaders from the Wyoming House of Representatives to China to discuss responsible coal use with their legislative counterparts in Shanxi province. Wyoming and Shanxi are the largest coal-producing states/provinces in their respective countries, and have significant responsibilities with energy production.

The recent delegation to China is an example of how JHCGA, as Wyoming’s only independent, bipartisan public policy research institute (“think tank”) dealing with global issues, brings together policymakers to seek solutions. JHCGA does things that government can’t do. As one of our recent GBR speakers commented, “This is exactly the kind of thing that has to be done to get [the U.S. and China] working together, because if we leave it up to the Federal government, it just won’t get done.” Mary Throne, a member of JHCGA’s delegation as House Minority Leader, stated, “I appreciate it that JHCGA put the trip together and used their relationships in China to open doors for us. It’s not something we could have done ourselves.”

Changes in the use of coal and natural gas have had a profound impact on carbon emissions in the U.S. Partly owing to fuel-switching to natural gas for power generation, carbon emissions in the U.S. have dropped in recent years from 6.0 billion to 5.5 billion tons annually. JHCGA’s Intermountain West Clean Energy Infrastructure project addressed ways to extend this carbon avoidance effect of natural gas to the transportation sector. At the same time, through its U.S.-China Clean Energy Initiative, JHCGA has worked to promote understanding among policymakers and the public of how carbon capture, utilization, and storage technologies (CCUS) can help to reduce carbon emissions from coal in the U.S. and China. Several GBR speakers in 2012-2013 also addressed these priorities.

Support for JHCGA comes through membership fees for the GBR, contributions through Old Bills Fun Run, and gifts from other donors and foundations. This tax-deductible funding enables us to affect policy and build bipartisan support for action on global issues. For over 12 years, JHCGA has been a respected voice on critical issues affecting the community, the state, the nation, and the planet. We seek and need your continued involvement and support.

Sincerely,

David Wendt
President

July 2014
As global carbon emissions continue to rise, the spotlight is on coal, the most carbon-intensive fossil fuel. Coal will continue to play a central role in global energy in the decades to come. Carbon emissions from coal combustion are now 40% of total global carbon emissions, and growing. By 2040 world-wide coal-fired power generation will have grown from 1,600 to 2,600 Gigawatts (GW).

In China, coal-fired power generation, already at over 700 GW, is projected to grow by the end of this decade by another 350 GW, or more than the entire existing U.S. coal-fired generation fleet. Coal combustion in the U.S. and China accounts for 1/5 and 2/3, respectively, of total carbon emissions, for combined coal-fired emissions of over 1/4 of total global emissions from all sources.

This growing focus on coal is propitious. Wyoming produces almost as much coal as all other U.S. states combined. Wyoming and other coal-producing states and provinces in the U.S. and China are looking at ways to add value to coal by converting it to other useful byproducts (e.g., methanol, olefins) and by capturing its carbon content. At the same time, Guangdong and other coal-consuming provinces in China are moving towards carbon emissions trading systems. All of which raises the questions: Can coal be part of the world’s clean energy future? And, if the answer is yes, how can U.S.-China cooperation be part of that process?

To help answer these questions, JHCGA President David Wendt accepted an invitation to speak at an International Symposium on Clean Coal Technology, held in China’s Shanxi province in September 2012. Like Wyoming in the U.S., Shanxi leads its country in coal production. The title of Dr. Wendt’s talk was “The Role of Clean Energy Standards in International Coal Markets.”

Dr. Wendt, JHCGA Director of Communications Olivia Meigs, and Sr. Associate Mark Newcomb also participated at the invitation of the Shanxi Provincial Government in a related conference, “International Energy Industry Expo 2012,” held in Shanxi province that same week. The Expo documented the province’s impressive progress in developing and deploying a range of clean energy technologies, including wind, solar, nuclear, and clean coal.

The JHCGA representatives used the occasion of this visit to explore a number of other cooperative ventures with provincial government agencies. These initiatives included a continuation of the tourism partnership that JHCGA has developed with the province, in cooperation with the Town of Jackson and the State of Wyoming; and an exchange of state and provincial legislators to explore mutual interests in energy production and environmental protection.

The meetings in Shanxi province continued the series of exchanges JHCGA has organized between Shanxi and Wyoming over the past ten years, as part of JHCGA’s “U.S.-China Clean Energy Initiative.” These exchanges have brought several hundred business leaders and policy makers together to explore means of reducing carbon emissions from coal.

Dr. Wendt and Ms. Meigs also helped prepare Wyoming Governor Matt Mead for his own official visit to China in summer 2012 by briefing him on the accomplishments of this partnership. Gov. Mead thanked JHCGA on this occasion for “paving the way for Wyoming in China.”
The U.S. shale gas revolution has, in a few short years, reversed decades-long U.S. trends of increasing energy dependence and growing greenhouse gas emissions. As the nation’s principal energy-producing region, the Intermountain West has an opportunity to take advantage of these and related positive developments in the energy field to build a regional clean energy infrastructure.

In recognition of this opportunity, JHCGA as one of the premier independent, bipartisan public policy research organizations in the region started a process in 2012 of consultation with key policy makers to identify key issues. These consultations included individual meetings with JHCGA Advisory Board members in Cody, Jackson, Salt Lake City, and Washington, D.C.; state energy policy advisors in Cheyenne, Denver, and Salt Lake City; U.S. members of Congress; business leaders in Denver and Washington, D.C.; academic experts in New Haven, CT.; and regional government representatives in Denver.

Based on these consultations, three sets of issues have been identified: a regional fueling infrastructure for natural gas vehicles; transmission of wind power to out-of-state markets; and a regional CO2 pipeline infrastructure for enhanced oil recovery. These issues will be addressed in JHCGA’s Intermountain West Clean Energy Initiative.

JHCGA began work on the first of these issues with a meeting on challenges and opportunities in building a regional natural gas vehicle fueling infrastructure, convened in June 2013 in conjunction with the annual meeting of the Western Governors Association in Park City, UT. The meeting was chaired by Colorado Governor John Hickenlooper. Among the other participants were state energy advisors from Colorado, Oklahoma, and Wyoming, representatives of the Clean Cities program of the U.S. Department of Energy based in Boise, ID, Jackson WY, and Salt Lake UT, natural gas industry leaders, and natural gas fueling station developers.

A second meeting built on this meeting and involved one of its key participants. Dr. Kathryn Clay, Executive Director of the Transportation Collaboration of the American Natural Gas Alliance and the American Gas Association, joined a group of community leaders in Jackson in August 2013 to discuss opportunities to promote natural gas vehicles through public-private sector partnerships in Teton County and Wyoming.

In addition, JHCGA organized a field visit in August 2012 to the Encana natural gas drilling operation outside Pinedale, WY. Seventeen community members, including nine members of JHCGA’s Global Business Roundtable, participated in this fact-finding visit organized by the Alberta-based company.
Global Business Roundtable Presents Speakers on Wide Range of Topics

In 2012-2013 IHCGA convened 17 meetings of its Global Business Roundtable (GBR), a membership program which brings community leaders together with outside speakers to discuss global business, economic, and security trends. The meetings dealt with a wide range of issues, including global and regional security (5), energy (5), China and East Asia (3), Russia (1), global poverty alleviation (1), global human trafficking (1), and the U.S. economic outlook (1).


“Pakistan today is the single most dangerous place in the world. The Pakistani military has used the narrative of enmity with India to preserve its position and power.”

“Younger Chinese have no memory or experience of the Great Cultural Revolution. Nationalism has replaced Communism as the ideology that finds favor in their minds.”

May 2012 – Manny Menendez, President and CEO of Elgin China Ltd. and the founder of MCM Group Holdings, Ltd.: Doing Business in China

June 2012 – Christopher A. Preble, Vice President for Defense and Foreign Policy Studies, Cato Institute: Current National Security Challenges and the Pentagon’s Plans for the Future

“The drug war doesn’t justify the militarization of our southern border.”

July 2012 – Ken Berlin, Sr. Vice President and General counsel, Coalition for Green Capital: Green Investment Funds

“We need to look at public funding of renewable energy and other emerging industries as a portfolio of investments. The successful loans will make up for the failures.”

July 2012 – John Silvia, Chief Economist, Wells Fargo: U.S. Economic Outlook

“In Europe there will never be a resolution [of the debt crisis]. It will be one temporary solution after another.”

September 2012 – Stephen Krasner, Graham H. Stuart Professor of International Studies, Stanford University; former Director of Policy Planning, U.S. State Department; and Jean Garrison, Professor of Political Science and Director, Global and Area Studies program, University of Wyoming: Future of U.S. Foreign Policy

October 2012 – Charles K. Ebinger, Director, Energy programs, the Brookings Institution: The Future of Energy in South Asia

Pakistan: “If all the mullahs disappeared overnight, we would still wake up tomorrow and Pakistan would be a failed state, because it has no energy.”

“Bangladesh has an inferiority complex with India. They feel whatever they do with India, they will be cheated, because the Indians are smarter than they are.”

March 2013 – David H Shinn, Adjunct Professor, Elliott School of International Affairs, George Washington University (former U.S. Ambassador to Ethiopia and Burkina Faso): China in Africa

“China offers serious competition and an alternative to the West in Africa. It will remain in Africa for the long term. After weighing the positive and negative sides of China’s involvement in Africa, I judge that it has, everything considered, been more positive than negative.”

April 2013 – Bruce McNamer, President and CEO, Technoserve: Business Approaches to Global Poverty Alleviation

“Today there are 4 billion people living on less than $2/day. 900 million go to bed hungry.”


“National policies [on human rights] are only as good as they are implemented.”

June 2013 – Paul Sullivan, Adjunct Professor, Security Studies, Walsh School of Foreign Service, Georgetown University: Whither the Arab Spring?

“The U.S. challenge in the Arab world is to win over the Arab people, not their governments.”

Iran: “The most hope in Iran is the young people. They are the most pro-American people in the Middle East.”

August 2013 – Fiona Hill, Senior Fellow and Director, Center on the United States and Europe, Brookings Institution: Putin’s Russia

Putin: “For Putin as a former KGB operative, the obvious is never true. He is always looking for the hidden hand of the West behind dissent.”

August 2013 – Kathryn Clay, Executive Director, Transportation Collaboration, American Gas Association and American Natural Gas Alliance: Natural Gas Policy Issues

“Policy can only work if it’s aligned with the market.”

September 2013 – Prof. Charles Mason, University of Wyoming: Renaissance or Meltdown: The Economics of Nuclear Power after Fukushima

On the future of oil (quoting former Saudi oil minister Sheikh Yamani): “The Stone Age did not end for lack of stone, and the Oil Age will end long before the world runs out of oil.”

October 2013 – Allan Tessler, CEO, International Finance Group, Inc. and Chairman Emeritus, Hudson Institute: Japan’s Economic Reforms: What Arrows Does Abe Have in His Quiver?

“[Japan Prime Minister] Abe has three arrows in his quiver, and some of these are bazookas.”

“Raising the threat – the fear factor vis-à-vis China – is what got him where he is today.”

November 2013 – Amb. Marc Wall, Visiting Scholar and Diplomats-in-Residence, Global and Area Studies program, University of Wyoming: Flashpoints of Crisis in Middle East Asia

On diplomacy: “Frictions in the world are inevitable. The job of diplomats is to manage them before they flare up in violent conflict and defuse them when they do.”
JHCGA provides a vehicle through its Next Generation Policy Initiative for young activists to become involved in the policy process. Through working with JHCGA on policy projects and developing and implementing ideas for policy projects of their own, young professionals can learn how to identify and research a policy issue, gather views from policymakers, and formulate project proposals addressing this issue.

In early 2012, JHCGA initiated a pilot project, the Next Generation Policy Group, to test the interest of young professionals in the valley in learning more about the policy process. Speakers over a three-month period included Wyoming House of Representatives Speaker Pro-temp Keith Gingery; former U.S. Fish and Wildlife Director and Assistant Secretary of State for Oceans, Environment, and International Scientific Cooperation John Turner; and former Wyoming Representative Pete Jorgensen. Two younger scholars assisted JHCGA in organizing this activity, including Adam Fisher of the University of Michigan and Katie Meehan of the University of Indiana Law School.

In 2012 JHCGA also initiated a three-week full time internship program over the “intermester” period (month of January) with Washington Jefferson College in Washington, PA. Two outstanding W&J undergraduates came to Jackson to work with JHCGA in this capacity, including Bayleigh McMenamin in January 2012 and Max Chomas in January 2013. Bayleigh assisted JHCGA Director of Communications Olivia Meigs with a documentary film production and JHCGA President David Wendt with research on use of compressed natural gas as a transportation fuel. Max devoted his efforts to research on organizations involved with China on climate change.

Looking ahead, JHCGA interns made valuable front-end contributions to JHCGA’s future research agenda. Jeremy Wendt, a graduate of the University of Colorado’s MBA program, devoted summer 2013 to research on the issue of transmission of wind power to regional markets. As noted previously (pp. 6-7), JHCHA intends to address this issue as part of its Intermountain West Clean Energy Infrastructure project.

Two younger scholars made a significant difference in JHCGA’s agenda with China on coal. Madeleine Thulin, a University of Pennsylvania undergraduate, assisted with project proposal development that provided the initial impetus for a Wyoming-Shanxi legislative exchange that took place in 2014. Mark Newcomb, who earned a Masters degree in Economics and Finance at the University of Wyoming, also devoted many hours to development of a project proposal on coalmine methane in China, and participated with JHCGA President David Wendt and Director of Communications Olivia Meigs in a project scoping visit to China in September 2012 (p. 5).

My trip to China with JHCGA gave me a chance to see a part of China I’d always been fascinated by but had never been able to witness up close: it’s energy and power sector. In 1988 I studied for six months in China, two in Beijing and four in Nanjing. In those days some parts of Beijing went without power one day a week. Banks would remain open, I recall, with tellers literally counting money by candlelight using abacuses. What would it take, I wondered, to electrify a country with well over a billion people when even their capital city couldn’t provide 24/7 power to its citizens?

The answer was coal, abundant throughout China with a long history of extraction and use as a household and industrial fuel. Coal fueled China’s rise to a global economic power. The scale boggles the mind of someone from a country with a population no larger than a few blocks of one of China’s mega-cities. In a country as populous as China, the few hundred watts of electricity consumed by an individual quickly adds up to many, many megawatts. Add industrial use, and China consumes almost as much coal as the rest of the world combined.

What does this look like? The 360 sq. km Yanchang Coal and Coal Chemical Industrial Park, fed by 5 coal mines located directly beneath its sprawling complexes, is one example. Yanchang employs thousands of engineers and scientists working on cutting edge technology to find the most efficient way to utilize coal and capture its harmful emissions.

There were many key takeaways from the trip. One of the most important was the scale of the shift required to turn the fossil fuel supertanker towards a more secure energy and environmental future. This is not about remembering to turn out the lights when leaving a room. It’s about better coal consumption on the scale of billions of tons, removing pollutants that threaten our environmental security. The Jackson Hole Center for Global Affairs has been working with China on this issue for 12 years.

My second takeaway? That it’s entirely possible to make that shift.

—Mark Newcomb, JHCGA Sr. Associate

“I consider it an exceptional opportunity to be able to talk with such experienced people and to have the chance to pick their brains on the various questions I have about the field they work in almost every day. History, in my mind, is one of the most valuable learning tools human being possess. David and Olivia probably have one of the most illuminating histories in the broad area of politics and more specifically policy that I have ever had access to, and as such it is in these histories where a great deal of my learning has come from.”

—Max Chomas
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## Financial Statement
### January 1 – December 31, 2012

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## Financial Statement
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- Civic activism on climate change and other global policy issues
- Public education in global affairs
- Cultural exchange and awareness
We cannot solve our problems with the same thinking we used when we created them.

-Albert Einstein